Serie Desarrollo de Recursos Humanos No. 36

CUADERNOS DE ADMINISTRACION

REVISION BIBLIOGRAFICA SOBRE ADMINISTRACION DE SERVICIOS DE SALUD

DOCUMENTO DE TRABAJO

PROGRAMA DE EDUCACION EN ADMINISTRACION DE SALUD
DIVISION DE RECURSOS HUMANOS E INVESTIGACION
ORGANIZACION PANAMERICANA DE LA SALUD/ORGANIZACION MUNDIAL DE LA SALUD
FUNDACION W.K. KELLOGG
1981

C O N T E N I D O

P R E S E N T A C I O N

La División de Recursos Humanos e Investigación de la OPS, dentro de la responsabilidad que tiene para colaborar con los esfuerzos de los países para alcanzar la meta "Salud para Todos en el Año 2000", procura desarrollar tres actividades recomendadas por las estrategias globales:

1. Preparación y amplia diseminación de guías y material de entrenamiento orientado al proceso administrativo.

2. Cooperación con los países en el desarrollo, aplicación y provisión de entrenamiento apropiado en el proceso administrativo, particularmente:

   i) Adiestramiento de entrenadores (o profesores) y

   ii) Servidores "senior" de la Salud Pública

3. Mobilización internacional de recursos para reforzar la infraestructura responsable en el desarrollo, aplicación y provisión de entrenamiento en el proceso administrativo.

Los 50 cursos de Administración de Salud de la Región, constituyen una "red" que a través de mecanismos formales e informales de integración, patrocinados por la OPS empiezan a interaccionarse de manera que en un futuro próximo el intercambio directo entre los programas de administración serán naturales y espontáneos.

La Serie de "Cuadernos de Administración", en fase de edición abarcará temas como: Control de Costos, Financiación, Economía de Salud; Planificación y Evaluación de Servicios, Investigación de Operaciones; Comportamiento Organizacional, Epidemiología y Administración Estratégica.

Estos libros de lectura contribuirán a dar apoyo a profesores, alumnos y todos aquellos responsables por la gerencia de servicios de salud que todavía no tienen acceso a publicaciones sobre los temas arriba mencionados en la Región.

El presente "documento bibliográfico" es la punta de un gran iceberg de trabajos e investigaciones sobre gerencias de servicios de salud seleccionado por diferentes expertos. De este material y de otros aportados durante varios talleres organizados por esta División, están siendo seleccionadas publicaciones para ser editadas y ampliamente distribuidas por toda la Región.

Esperamos que esto venga a contribuir decisivamente con las estrategias de mejoramiento administrativo de los Servicios de Salud.

José Roberto Ferreira, Jefe
División de Recursos Humanos
e Investigación

I N T R O D U C C I O N

Humberto de Moraes Novaes, M.D.*

En marzo de 1980, se inició el Programa de Educación para Administración de Servicios de Salud OPS/Kellogg como resultado del acuerdo firmado entre esta Organización y la Fundación W. K. Kellogg. Entre los objetivos de este programa se encuentran:

1. Asesorar los 50 cursos de Administración de Servicios de Salud de la Región (América del Sur, América Central y el Caribe), cuando solicitada colaboración de la OPS.
2. Estimular la Investigación aplicada a servicios de salud.
3. Crear mecanismos de intercambio de información entre profesores.
4. Identificar programas y/o expertos en áreas académicas específicas, agrupándolos en "Directorios".
5. Revisión del Plan de Enseñanza de Disciplinas.
6. Elaborar "Cuadernos de Administración de Salud" o "Libro de Lectura" para apoyo a los profesores y alumnos sin acceso a publicaciones más necesarias en el área, etc.

De esta manera, el proceso de implementación de este programa fué hecho en etapas sucesivas que se iniciaron por el análisis del estado actual de los programas, identificación de países que todavía no tienen programas regulares de administración de salud, publicación periódica en la revista Educación Médica y Salud, de la OPS, de "noticias" sobre los programas, becas o apoyo financiero e investigaciones, etc.

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Una de las áreas fué el desarrollo de talleres orientados a disciplinas con la participación de alrededor de 80 expertos, entre ellos profesores y representantes de instituciones de salud de los países de la Región, en 1981/82. Así, fueron realizados talleres sobre:

- Educación de Teoría y Comportamiento de las Organizaciones, San José, Costa Rica, marzo 81 (Gráfica 1)

- Educación de Economía, Finanzas y Control de Costos, Brasilia, Brasil, mayo 81 (Gráfica 2)

- Educación de Planificación y Evaluación, Bridgetown, Barbados, noviembre 81 (Gráfica 3)

- Educación de Investigación de Operaciones en Cursos de Administración de Salud, Caracas, Venezuela, marzo 82

Estos talleres fueron "alimentados" con material bibliográfico previamente seleccionado por peritos que tienen responsabilidad de seleccionar el material publicado en español y el material publicado en inglés, en los últimos años, y aplicable a la realidad Regional.

La selección de la bibliografía que sigue en este documento de trabajo fué hecho por:

Teoría y comportamiento organizacional, Profesor Duncan Neuhauser, de la "Case Western Reserve University", E.U.A. y Ana María Malik, de la Fundación Getulio Vargas, Sao Paulo.

Economía, Finanzas y Control de Costos: Profesor Jennifer Roberts, "London School of Hygiene and Tropical diseases", Ronald L. Akehurst del "Institute of Social and Economic Research" de York, Inglaterra, y por los Drs. Haino Burmeister del Programa de Administración de Salud de la Fundación Getulio Vargas, (PROAHSA) Sao Paulo, y por el Dr. José Marcos Masson, del Ministerio de Salud, Brasilia.

Planificación y Evaluación: Fué preparada por el Dr. Daniel Purcallas, de Uruguay, y por el Dr. Fred Nunes de la Universidad de West Indies, Jamaica.

Investigación de Operaciones: Profesor George Kastner del Instituto de Estudios Superiores de Administración de Caracas y Profesor R. Schachtman, de la Escuela de Salud Pública de Chapel Hill, EUA.

La composición de los grupos responsables de la revisión de la bibliografía fué orientada a tener siempre el mínimo de dos expertos de manera de poder identificar una muestra representativa, como la punta aparente de un "iceberg" de las publicaciones aplicadas a nuestra realidad y muchas veces desconocidas por los programas de Educación de Administración de Salud.

Durante los talleres el grupo más amplio y diversificado de profesores tuvo oportunidad de revisar esta bibliografía, discutir su aplicabilidad y seleccionar los mejores artículos para publicación por nosotros en "antologías" sobre los temas de comportamiento organizacional, economía, finanzas y costos, y planificación de salud los cuales están en fase de edición para distribución para los cursos de la Región en 1982 por la OPS. Además de esta selección ahora publicada, los participantes de los respectivos talleres agregaron otras no identificadas por los investigadores y el informe final de estos estudios están siendo publicados regularmente por la Revista Educación Médica y Salud de la OPS.

De las cuatro reuniones hubo concenso por los participantes que esta revisión bibliográfica sobre la Administración de Salud debiera ser publicada y diseminada por la OPS, mismo sobre la forma del "Documento de Trabajo" de manera que, con frecuencia, podremos encontrar omisiones involuntarias, pero en el total este documento podrá servir de utilidad a aquellos que este momento se preocupan por la formación de recursos humanos para Administración de Servicios de Salud.

A todos los que están compartiendo con nosotros esta labor, nuestros mayores agradecimientos.

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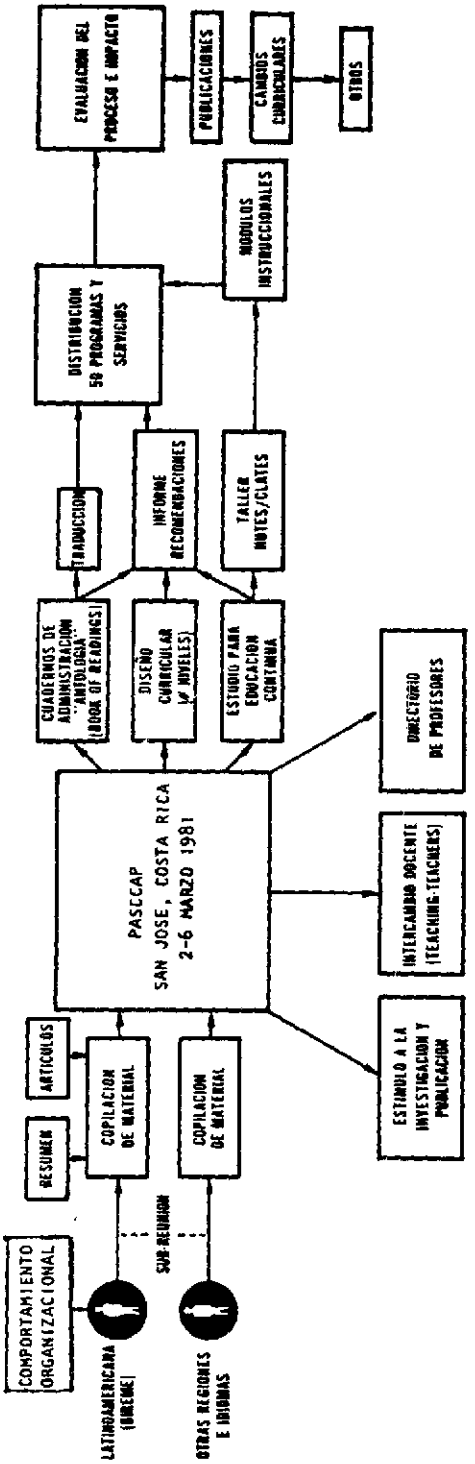
COMPORTAMIENTO ORGANIZACIONAL
LATINOAMERICANA (UNIEME)
OTRAS REGIONES E IBERMAS
SUB-REGIONAL
RESUMEN
ARTICULOS
COPILACION DE MATERIAL
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SAN JOSE, COSTA RICA
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DISEÑO CURRICULAR (4 NIVELES)
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TRADUCCION
INFORME RECOMENDACIONES
TALLER NOTES/CLATES
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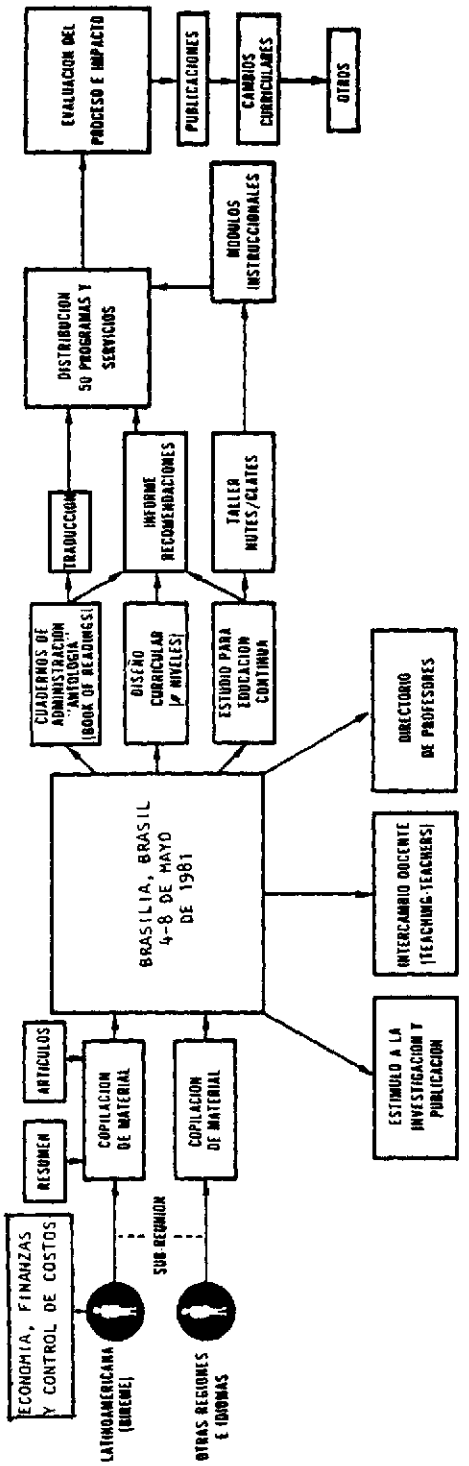
ECONOMIA, FINANZAS Y CONTROL DE COSTOS
LATINOAMERICANA (BUREME)
OTRAS REGIONES E IDIOMAS
SUB REGION
RESUMEN
ARTICULOS
COPILACION DE MATERIAL
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BRASILIA, BRASIL 4-8 DE MAYO DE 1981
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ESTIMULO A LA INVESTIGACION Y PUBLICACION

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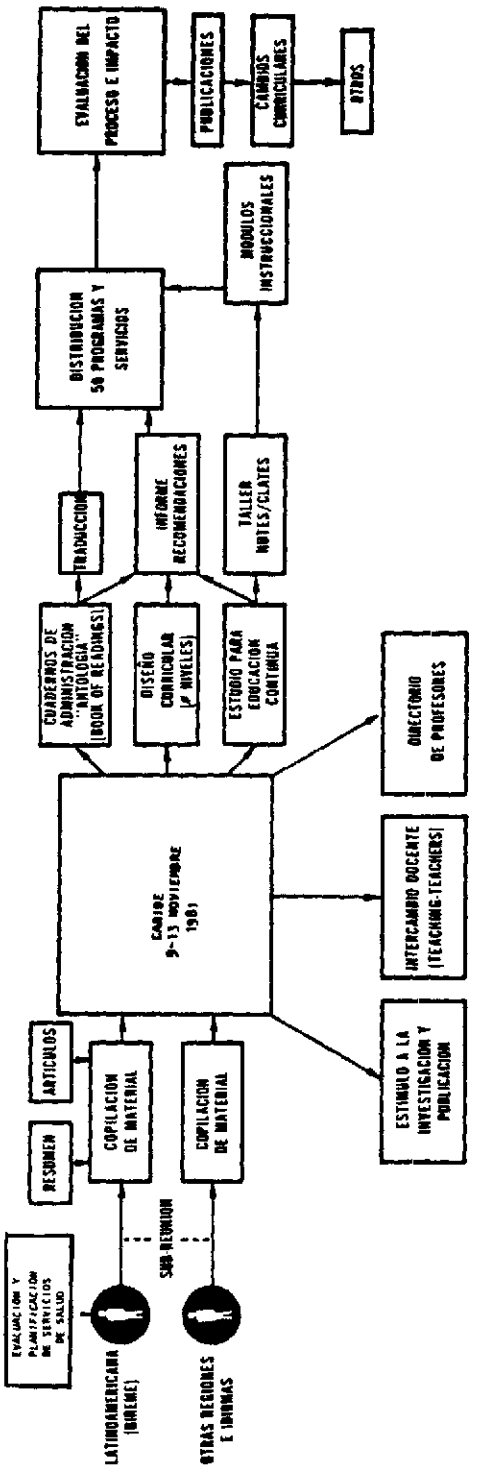
EVALUACION DEL PROCESO E IMPACTO
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CAMBIOS CURRICULARES
OTROS
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EVALUACION Y PLANIFICACION DE SERVICIOS DE SALUD
SUB-REGION
LATINOAMERICANA (BIREME)
OTRAS REGIONES E INMMAS

COMPORTAMIENTO ORGANIZACIONAL

PARTE I

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PREFACIO

La presente reseña bibliográfica tiene por objeto presentar una primera sistematización de la bibliografía latinoamericana sobre el comportamiento organizacional, relacionada con temas análogos de la bibliografía de los Estados Unidos de América y servir como material didáctico para la enseñanza de las asignaturas de organización a los profesionales del sector sanitario.

En esta reseña bibliográfica se entiende el "comportamiento organizacional" en su sentido más amplio dependiente necesariamente de las teorías sobre la administración y de los estudios sobre el medio. En consecuencia, habida cuenta de la gran amplitud del marco conceptual propuesto, las referencias, con criterio operacional, se ha dividido en tres grandes grupos, a saber:

1. Estructura. Comprende la evolución teórica y el análisis de las distintas escuelas y, a veces, su aplicación en la esfera de la salud; se mencionan los modelos de referencia (o esquemas para la exposición de los conceptos teóricos) y la técnica institucional (o la estructura institucional con referencia a la nacionalidad).

2. Función. Se menciona la administración de los recursos humanos; la participación, el poder, el liderazgo y la motivación; la comunicación y la coordinación intrainstitucional e interinstitucional; las funciones del administrador; la adopción de decisiones y la evaluación.

3. Medio. Se examinan los temas vinculados con la organización y su contexto, con especial referencia al "medio" constituido por América Latina.

Dentro de estas esferas se observa la existencia de algunos textos vinculados directamente con la administración de la salud y otros que son artículos totalmente conceptuales (por oposición a los aplicados).

Asímismo, se debe recordar que, por cuanto las tres esferas consideradas no constituyen compartimientos estancos, las referencias se citan en más de uno de los tres grupos. Sin embargo, para facilitar la consulta de los lectores, se separan las esferas de "estructura", "función" y "medio", cada una de las cuales constituye una unidad.

La bibliografía latinoamericana se seleccionó a base de una investigación de periódicos, básicamente en la esfera de la salud, publicaciones no periódicas y publicaciones no vinculadas con la salud. Este criterio justifica la circunstancia de que se mencionen libros, documentos de trabajo e incluso textos mimeografiados.

Por conducto de esta investigación se comprobó sin dificultad el exiguo caudal de textos originales publicados en América Latina en esta esfera específica. Esta realidad es aún más notable cuando se trata de elaborar un paralelo con la bibliografía de los Estados Unidos. En los Estados Unidos se han editado diversos libros con artículos seleccionados, destinados a la enseñanza de las asignaturas de administración a los profesionales de la salud. En materia de publicaciones periódicas existen dos revistas que allegan una proporción significativa de los artículos vinculados con esta reseña bibliográfica, a saber: Health Care Management Review y Hospital and Health Services Administration.

De lo antes expuesto se desprende claramente que no se ha examinado toda la bibliografía existente. En lo que concierne a América Latina, cabe decir que no fue posible abarcar el universo respectivo debido a la dispersión de las publicaciones entre universidades, bibliotecas especializadas y otras instituciones. En cuanto a América del Norte, la concentración de gran parte de los artículos dispensó de consultar otras fuentes. Asimismo, con el objeto de restringir de algún modo el ámbito de la investigación, si bien se sabe de la existencia de publicaciones en esta materia con anterioridad a 1970, se tomó ese año como fecha básica de referencia.

En consecuencia, la presente reseña bibliográfica tiene por objeto constituir una sistematización y compatibilización iniciales de la bibliografía latinoamericana, con la mira de la enseñanza de la organización a los profesionales de la salud que, sin ser definitiva, configure sencillamente una primera aproximación.

En los resúmenes de las referencias se procura básicamente dar una visión objetiva de su contenido. Algunos de los artículos fueron considerados, de manera necesariamente subjetiva, "más adecuados" por los compiladores, teniendo siempre en cuenta la finalidad del presente trabajo. Esta selección tampoco se ha de considerar definitiva en este aspecto.

Por último, se debe señalar que los compiladores de esta reseña bibliográfica redactaron un artículo introductorio con destino a ésta. Su objetivo específico es poner de manifiesto lo que se debe conocer respecto de cualquier organismo antes de incorporarse a una esfera específica como la del comportamiento organizacional.

INTRODUCCION

COMPORTAMIENTO ORGANIZACIONAL PARA LA ADMINISTRACION DE LA SALUD:

Los Administradores de la salud deben de ser capaces de comprender la forma como la gente y las cosas se combinan dentro de las organizaciones. Hay maneras generales para describir todas las organizaciones y sus partes componentes. Esto podría llamarse una historia clínica y examen físico de una organización análoga a la forma como un médico examina un paciente para determinar las condiciones de ese paciente.

En toda organización hay tres secciones: La primera es su estructura comparable al examen físico de un paciente, la segunda es la observación de los procesos evolutivos mediante los cuales la organización se mueve en el tiempo, la tercera sección es el contexto ambiental de la organización.

En la siguiente presentación cada una de estas partes de la organización serán resumidas. Un mayor énfasis del Comportamiento Organizacional será presentado con el propósito de ajustarlo en el contexto del reducido enfoque de alguna literatura sobre organizaciones. El énfasis aqui será primordialmente en la gente de las organizaciones antes que en leyes o normas de la organización, el diseño de equipo, planes arquitectónicos de edificios o el uso de suministros.

El elemento humano es vital para una organización. La estructura física, el organigrama (carta o cuadro de la organización) se establecen de tal manera que la gente se pueda adaptar en ella, y el proceso completo dependería de como la gente trabaje. En lo que respecta a los servicios output o resultados, la forma como la gente trabaja es fundamental. Por ello muchas teorías se han establecido con el propósito de definir las formas de tratar con la gente y, claro está, una vez que un servicio o producto es una salida (output) de la organización, este será destinado al público.

De la misma manera como un médico examina un paciente con una serie de preguntas, nosotros trataremos la organización aqui en este documento. El diagrama 1 muestra los pasos en secuencia a partir de los cuales un administrador se aproxima al problema o un médico se aproxima al diagnóstico y tratamiento. Los pasos son similares, pero las palabras usadas son diferentes.

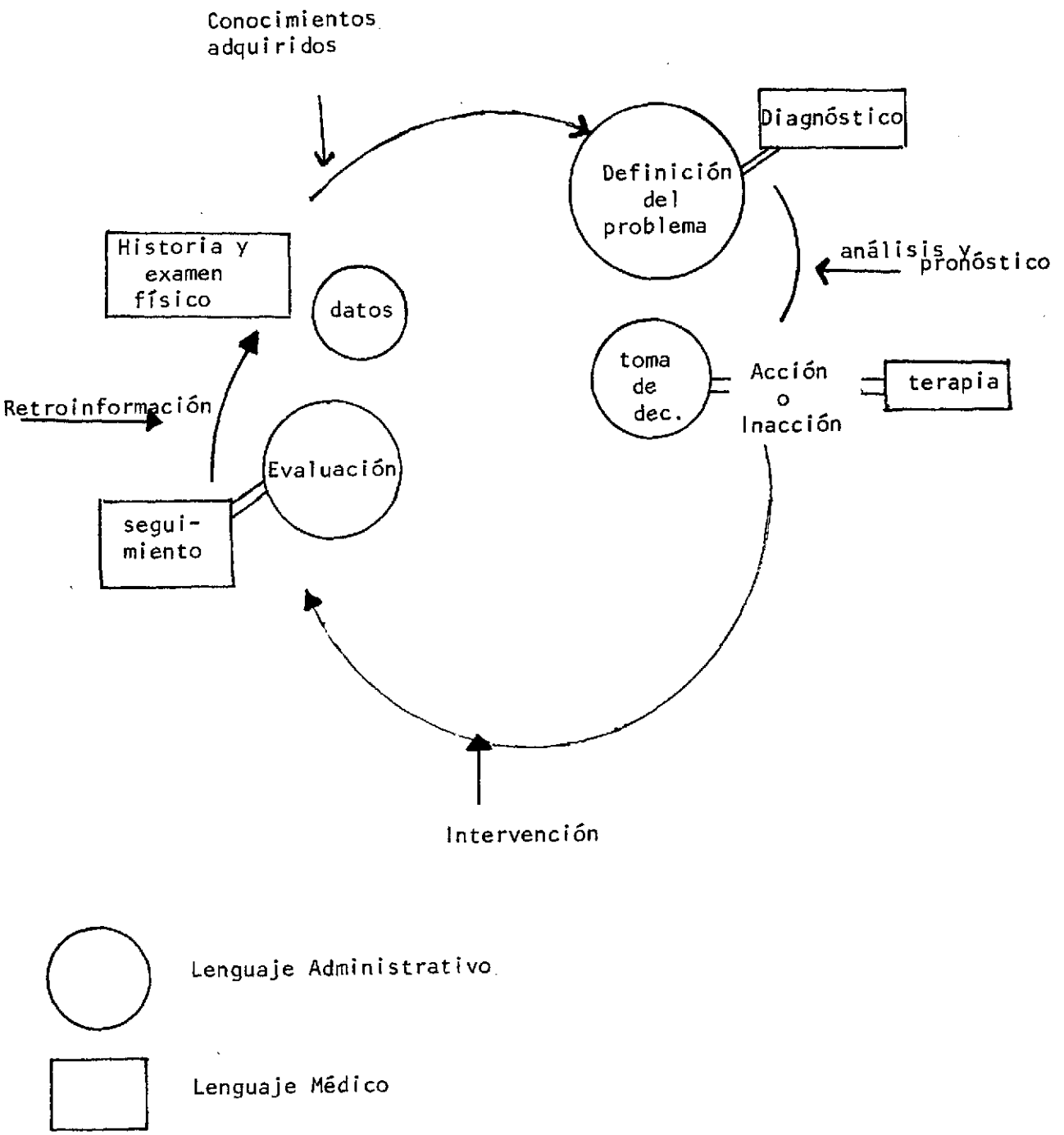
El médico recolecta información mediante la historia clínica y un examen físico. El médico aplica sus conocimientos de enfermedad para llegar al diagnóstico. El administrador también trata de producir una comprensión acerca de las relaciones organizacionales y la "enfermedad". Los datos primarios son transformados por la aplicación de estos conocimientos en información sistemática asociada con un problema definido, si es que lo hay. El análisis de esta información conduce a una decisión administrativa o en el caso del médico, una prescripción de tratamiento. La decisión puede no ser acción, en cualquier caso hay una evaluación o seguimiento para ver si el problema es corregido. De no ser así el ciclo se repetirá.

Diagrama 1

1. Criterios administrativos y clínicos para la solución de problemas
2. Conocimientos adquiridos
3. Diagnóstico
4. Definición del problema
5. Historia y examen físico
6. Datos
7. Análisis y pronóstico
8. Retroinformación
9. Evaluación
10. Toma de decisiones
11. Acción o inacción
12. Terapeútica
13. Seguimiento (follow-up)
14. Intervención
15. Lenguaje administrativo
16. Lenguaje médico

DIAGRAMA 1

Criterios Administrativos y clínicos para la solución de problemas



1. ¿La Organización?

Toda organización tiene un límite o frontera. Las cosas y las personas son definidos como pertenecientes o no a la organización.

a) ¿Quién es el propietario?

Las organizaciones tales como hospitales, clínicas, casas para ancianos, Departamentos de Salud Pública, y laboratorios de drogas tiene una existencia y propiedad legalmente definida. Esta es la distinción entre una organización formal y una organización informal. Es el aspecto jurídico lo que los legitimiza a esa organización. Puede ser de propiedad pública o de estado, o una organización no gubernamental con fines de lucro o no lucro.

b) ¿Cómo se perpetua la propiedad a través del tiempo?

En la historia Europea un rey reemplazaba a otro. Una función de la junta de Directores es planear ordenadamente el reemplazo de los ejecutivos antiguos de alto rango y el de los miembros de la junta.

c) ¿Quién decide como será la Organización,

Diferentes personas o grupos tienen mayor o menor influencia en las decisiones y sobre algunas, deciden antes que otras; esto varia de una organización a otra. Un importante hecho en las organizaciones de salud son los roles relativamente estandarizados de ciertos profesionales tales como los médicos y las enfermeras.

La homogeneidad de tales profesiones hace a los hospitales y clínicas suficientemente similares, tal que un profesional trasladado de un hospital y puesto en otro tendría muy poca dificultad en ajustarse a la nueva organización.

Las organizaciones de salud son únicas en su combinación de características. Sin embargo, estas características raras veces son ecntradas en otras organizaciones. Por ejemplo, los hospitales son como las universidades en donde los profesionales (médicos en los unos y profesores en los otros) juegan un papel importante, aunque la necesidad

de coordinación es mucho mayor en los hospitales. Las teorías generales de la organización pueden ser aplicadas a las organizaciones de cuidados de la salud, pero es necesario cuidar y pensar acerca de las combinaciones especiales de sus características.

II. METAS Y OBJETIVOS

Las organizaciones formales tienen una orientación concreta. Ellas son creadas para alcanzar un objetivo. Los hospitales son creados para curar las enfermedades, prevenirlas, promover conocimiento de la medicina, y formar nuevo personal. La ponderación y selección de las más convenientes entre unas y otras de estas metas varia en el tiempo, y de un hospital a otro. Esta es llamada la Función Objetivo de la Organización.

a) ¿De quién son las metas?

Los propietarios, directivos, personas, usuarios/cliente pacientes y la sociedad pueden todos tener metas con respecto a la organización los cuales pueden ser o no ser similares (identicos). Comprende la similaridad y diferencia en metas equivale a comprender en gran parte el contexto político interno y externo de la organización.

b) El conocimiento de las metas llega a ser la base para evaluar el desarrollo de la organización.

c) El largo plazo versus el corto plazo.

La mayoría de las organizaciones en el campo de la salud podrían usar todos sus recursos rápidamente para suministrar los cuidados necesario. Sin embargo, eso podría agotar sus fondos presupuestados o imponer un volúmen de trabajo excesivo a sus empleados solamente para encontrar luego que no hay fondos y los empleados cansados para trabajar al día siguiente. Todas las organizaciones han de hacer inversiones hoy con el propósito de obtener beneficio mañana. Pueden citarse como ejemplos fondos de depreciación, construcción de capital, educación de empleados. Cabe preguntarse cual es el proceso por el cual se renuncia a

obtención de metas en el corto plazo, para conseguir las metas en el largo plazo. El equilibrio que se establezca es una parte central del proceso de planeación. Los conceptos de descuento anticipado de los contadores y economistas es una técnica formal para lograr tales equilibrios o establecimiento del orden de prioridades entre los problemas de corto y largo plazo puede ser aplicado a otra clase de decisiones. En el campo político uno puede conceder favores hoy en la expectativa de lograr favores mañana. El administrador debe decidir cuanto tiempo gastar en la solución de problemas de corto plazo "apagando incendios" versus la estrategia de largo plazo. El esfuerzo puesto hoy en educación es hecho con la expectativa de futuros servicios y medios de asistencia.

d) Translación de metas abstractas generalizadas en objetivos específicos*

(i) ¿Están bien articuladas las metas generales con los objetivos específicos? Una buena articulación permite reducir la incompatibilidad entre los propósitos y conflictos. Acuerdos en metas en una organización es llamada congruencia de metas. Un aspecto de la educación de los profesionales en salud es la enseñanza de metas similares y congruentes relacionadas a un buen cuidado del paciente. El grado de congruencia de metas permite proceder a la descentralización con la seguridad de que los individuos trabajaron individualmente para lograr las metas organizacionales. Una enfermera o un médico pueden trabajar en un área aislada y asímismo, trabajar para proveer buenos cuidados. La falta de un acuerdo como es citado, puede tener como resultado que los miembros de la organización trabajen en detrimento de esa organización.

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* Una clínica puede ser construída con el propósito de mejorar la salud de la comunidad. Hay muchas maneras de mejorar la salud de la gente de una comunidad. Cuales son las selecciones?, por ejemplo, cuánto esfuerzo es orientado hacia la prevención y cuanto a los cuidados curativos.

III COORDINACION

Las organizaciones son creadas con el propósito de coordinar esfuerzos entre individuos para el logro de un propósito. Si la coordinación no es necesaria, tampoco no habría necesidad de las organizaciones. El grado de complejidad podría variar desde el simple acuerdo en una hora de reunión determinada de una sociedad o tan complejo como las actividades estrechamente interrelacionadas de un grupo de cirugía. Las organizaciones pueden coordinar actividades entre si como es el caso de los acuerdos sobre examen y envío de casos a los servicios competentes.

La coordinación puede en algún grado ser reemplazada por un sistema de tipo comercial. Los hospitales no tienen porque encargarse de la ropa que utilizan sus pacientes. Este servicio puede ser comprado a otra organización. Esta decisión administrativa de "comprar o hacer" determina los límites organizacionales.

La coordinación conduce a la división de trabajo. Esta división ha sido elaborada para las muchas y diferentes funciones profesionales encontradas en cuidados de salud. Con funciones diferentes (diferenciación) vienen diferentes criterios en cuanto al tiempo, y distintos puntos de vista y opiniones de lo que es importante. La organización debe adaptar y ensamblar estas diferentes funciones (integración), y el administrador debe mantener un balance entre diferenciación e integración.

IV ESPECIFICACION DE PROCEDIMIENTOS, REGLAS Y REGLAMENTOS.

Una organización define reglas de comportamiento con el propósito de lograr sus objetivos mediante actividades coordinadas.

a) La organización formal.

(i) La carta de la organización (organigrama) visualmente define la relación jerárquica y departamental. Este es el contexto dentro del cual las relaciones formales se desarrollan. La

descripción de dependencia de cargos en la organización puede ser de gran utilidad para explicar el comportamiento de los individuos. En las organizaciones de salud, tales cartas (organigrama) a menudo tienen un bajo poder de explicación. En un hospital, en los servicios de asistencia a pacientes donde el papel del médico es importantísimo, tales organigramas no son útiles o tienen diferentes significados, los organigramas pueden ser de mayor uso en definir las otras partes del hospital por ejemplo, laboratorios, cocina, mantenimiento, etc. Hay diversos tipos de estructuras organizacionales: organización por producto, por función, por matriz y descentralizada.

(ii) Estructura a base de Comités. Formalmente grupos organizados de directivos y trabajadores pueden ser usados variando los grados y las diferentes formas de transmitir la información, lograr acuerdos y coordinar las tareas.

(iii) En general hay una definición formal de miembros organizacionales. Esto es comunmente definido como aquellas personas quienes están en la nómina de la organización. Usualmente se espera que estas personas cumplan las diversas reglas o desarrollen un comportamiento en intercambio de determinadas prestaciones. En general, y no por razones obligadas, los pacientes no son considerados miembros de la organización, aunque sus influencias en la estructura social informal pueden ser importantes, particularmente en el largo plazo en las instituciones de enfermos crónicos.

(iv) Manuales de procedimientos existen en algunas organizaciones usualmente en las más grandes y con una amplia historia. Aunque estos no pueden perfectamente reflejar el comportamiento actual, ellos pueden estar lo suficientemente aproximados para dar una comprensión de lo que la organización es o está tratando de ser. En muchas organizaciones manuales

no existen o son obsoletos, o son de limitado alcance. Ellos pueden ser algunas veces de valor en la racionalización del trabajo o para definir un concenso entre los trabajadores.

(v) La forma por la cual las reglas son impuestas varía. Las reglas a observar pueden ser exigidas a los empleados renuentes en compensación por el pago que reciben.

Algunos miembros de la organización pueden participar en la definición de reglas. Sin embargo, la participación de los trabajadores da mejores resultados cuando hay algún grado de congruencia de metas. Esta congruencia es alcanzable en las organizaciones de atención de salud donde el personal tiene la meta de prestar una asistencia satisfactoria a sus encargados de los objetivos de los pacientes. Muchos trabajadores de salud son lo suficientemente abnegados, tal que el papel de administrador es no definir reglas sino reducir las dificultades que surgan en el cumplimiento de sus tareas.

b) La organización informal es tanto una respuesta a la organización formal y una expresión del comportamiento que trasciende los límites relacionados con la organización formal.

(i) Las personas que trabajan juntas hablan unas a otras acerca de cosas que no tienen nada que ver con su trabajo mismo. Ellos desarrollan deseos y aversiones, patrones de comportamiento, juegos y ritos, los cuales pueden ayudar a obstaculizar o ser irrelevantes a los objetivos de la organización formal. Los mayores intercambios suceden en un grupo de personas que trabajan juntas, pero con el tiempo puede extenderse a otros grupos inmediatos.

(ii) Redes de comunicación pueden ser observadas y descritas. Tales relaciones pueden ser desarrolladas sobre la base de grupos de afiliación, los cuales son independientes de la organización, tales como miembros de partidos políticas,

miembros de familias extensas o de origen de comunidades similares. Las redes de comunicación y la organización informal están en parte definidas por la distribución especial en el lugar de trabajo.

(iii) Esas relaciones pueden traer como consecuencia que alguna persona asuma papeles de liderazgo informal. Uno de tales liderazgos se relaciona con los sindicatos en el cual será discutido posteriormente.

c) La distribución del poder. Poder es una idea la cual tiene un uso amplio popular. Esta o esa persona se dice es poderosa. Sin embargo, en un examen más detallado este concepto no es totalmente claro. Cuando un superior observa a un subordinado haciendo bien una tarea, y de un modo diferente, y el superior ordena a los otros que hagan lo mismo, entonces quien tiene el poder? Qué tal si el subordinado escoge ocultar su comportamiento innovador? El poder puede ser juzgado y medido preguntando a los miembros de la organización "quien es poderoso". Tal definición social puede llegar a ser auto-suficiente. Una persona creyendo ser poderosa puede encontrar a otros siguiendo sus sugerencias u ordenes. Jerarquía, centralización, descentralización, participación, en toma de decisiones y resistencia al cambio son algunos de los conceptos que están relacionados con la distribución del poder.

d) Fuentes del poder: El principio burocrático es que el poder de una persona y la autoridad están definidos por la posición de la persona dentro de la organización. Una organización puede ser mirada como una manera de distribuir el poder mediante la asignación de autoridad. Sin embargo, hay otras fuentes de poder e influencia las cuales pueden derivarse del acceso a la información, de las relaciones, del carisma, intercambio de favores, o prestigio profesional.

e) Individuos únicos: Cada persona es única, sin embargo, en algunas circunstancias algunas personas juegan y desarrollan papeles especiales, distintos en las organizaciones. Algunas organizaciones son, y aún se dice reflejan el carácter único del fundador o líder.

V. DINERO

a) Fuentes de Fondos: Recibe la organización asignaciones del presupuesto del gobierno, pagos de los seguros de salud o directamente de los pacientes. Hay usualmente acuerdos contractuales asociados con estos mecanismos de pago. El ciclo presupuestal para las organizaciones de gobierno pueden ser de gran importancia para comprender la forma como ellos funcionan.

b) Reportes contables e informes financieros son documentos importantes para comprender las organizaciones.

(i) El estado de cuentas del balance definen los bienes y deudas.

(ii) El estado de ingresos y gastos.

(iii) El flujo de fondos (fuentes y usos del dinero).

Puede establecerse una analogía entre informes financieros y el concepto fundamental de homeostasis. Este es un término biológico que describe la forma como los organismos se autoregulan ellos mismos, y puede ser aplicado a las organizaciones. En las organizaciones, los ingresos o utilidades deben ser iguales o superiores a los gastos para que la organización superviva. Cada miembro de una organización debe tener satisfacciones iguales o mayores a las insatisfacciones en la organización. Los ingresos existen porque la organización suministra suficientes servicios para garantizar de los usuarios el pago. Estos ingresos deben ser usados para pagar trabajadores en una cantidad suficiente y asegurar que ellos continuaron trabajando para la organizacion. Sus deseos de trabajar dependieron de la satisfacción de sus necesidades, primero para subsistencia, luego para satisfacciones personales, y finalmente para autoactualización. Los deseos de trabajar también dependieron de la disponibilidad de mejores alternativas para optar a mejores puestos. El papel del administrador puede ser visto como manteniendo en un mínimo este equilibrio, y quizas buscando que las satisfacciones excedan las insatisfacciones, tal que permita prosperar y

atender mejor sus necesidades de los miembors de la organización. Para muchos trabajadores de la salud, el salario pagado puede ser una pequeña parte de sus satisfacciones que les produce la pertenencia a la entidad.

VI. ADMINISTRACION DE SISTEMAS DE INFORMACION.

La jerarquía formal de la organización necesita ser acoplada con un mecanismo de realimentación que le permita al director juzgar las consecuencias de sus acciones y hacer las correciones con el propósito de lograr los objetivos de la organización (ver diagrama 1).

a) Las fuentes de información varían ampliamente desde observación directa, administración por excepción, o más formal los sistemas de reportes rutinizados.

b) Los centros de responsabilidad acoplan la posición organizacional con la responsabilidad mediante la definición de un centro de costos y algunas veces un centro de utilidades o ingresos. Un administrador de una división de una corporación (una posición en la jerarquía) puede tener responsabilidad para gastos e ingresos y ser juzgado por la relación entre unos y otros. La información puede ser agrupada alrededor de cada centro de responsabilidad. Un laboratorio de un hospital puede reportar los costos de funcionamiento de este departamento, los ingresos generados, el número de empleados, el número de exámenes desarrollados y sus exactitudes. Todos estos items de información pueden ser usados como estandares y medidas para las actividades de este departamento.

c) Un componente importante del sistema de información de una organización formal y grande es el sistema presupuestal. Esta es una manera de proyectar las actividades futuras, comparándolo con la actividad real después de realizada y una forma de detectar las variaciones entre lo real y lo presupuestado.

(i) ¿Quienes participan en el proceso de preposición del presupuesto?

(ii) ¿Con qué frecuencia son preparados los presupuestos, aprobados y revisados?

(iii) ¿Cuál es el contenido y grado de detalle de los presupuestos?

d) Los informes de actividades desarrolladas pueden incluir mucha clase de información, tal como el número de pacientes por día y visitar tipos de pacientes, número de exámenes y procedimientos, número y tipo de empleados, proceso de rotación de empleados, información de satisfacción de pacientes, etc. Las posibles partes y tipos de tal información de actividades desarrolladas puede variar ampliamente.

(i) Cierto tipo de información puede ser recolectada regularmente, tal como cada mes o cada año. Alguna información es recolectada cuando la necesidad es percibida.

(ii) Hasta que punto estas partes de información se reflejan y articulan con los objetivos formales de la organización? El número de pacientes día en un hospital puede estar relacionado, pero no es exactamente lo mismo que el mejoramiento de la salud de la gente en una comunidad.

VII. EL PROCESO DE PRODUCCION

a) ¿Qué producto o servicio aporta la organización?

Una organización puede ser mirada como una manera de combinar trabajo y capital o gente y cosas (equipos, edificio, energía) con el propósito de conseguir algo.

b) ¿Cómo es el producto o servicio producido?

Una operación quirúrgica es una serie muy complicada de acciones interrelacionadas y secuenciales. Hay a menudo una variedad de formas de suministrar un servicio. Un paciente con cáncer, puede ser tratado con cirugía, quimioterapia, radioterapia o una combinación de estos. Otro

paciente con un problema análogo, puede ser tratado de modo diferente dependiendo del doctor, servicio u hospital. Estas diferencias pueden tener un impacto en los costos de la asistencia, cuidados y de los servicios para mejorar la salud. Uno de los hechos importantes del cuidado médico son los estandares a partir de los cuales, un tratamiento apropiado es definido. Detecta este texto esta enfermedad? Con que grado de precisión? Qué tan seguros estamos que este tratamiento es efectivo en el control de esta enfermedad? Estas preguntas son importantes para poder distinguir las prestaciones de servicios de salud desde el punto de vista de un negocio, el cual tiene el objetivo de la satisfacción del consumidor o la utilidad.

(i) ¿Cuál es el papel de la tecnología o automatización? El capital intensivo y la mano de obra intensiva reflejan posibles balances diferentes entre estos dos (inputs) recursos.

(ii) El proceso de producción puede ser evaluado en términos de eficiencia, la cual es la relación entre los costos de los recursos usados y los beneficios alcanzados. Es mucho más fácil medir los costos por paciente día, que medir los costos por calidad ajustada por ano de vida salvada.

c) El sistema de producción puede ser dividido en recursos (inputs), proceso y producto-servicios (output). Es costumbre para las organizaciones de atención de salud medir sus servicios (outputs) en términos de admisiones pacientes días, visitas clínicas, estudiantes graduados, etc. Es demasiado fácil olvidar que estos son contables porque son fáciles de contar. Ellos no son los (outputs) servicios realmente deseados, los cuales son a menudo casi imposible de cuantificar contar y definir. Una razón importante para esto es que muchos factores afectan la cantidad y cualidad de la vida y escapan del control de los cuidados médicos. Esta es una razón por la cual se distingue entre atención médica (médicos, hospitales, enfermeras, drogas, etc.) y atención de salud los cuales incluyen nutrición, promoción de ejercicios, salud ambiental y auto

cuidados, los cuales pueden tener muy importantes efectos sobre la salud. Hay una superposición con los servicios de asistencia social y la anterior definición de cuidados de salud. Mucha gente hace una distinción entre servicios (outputs) de atención médica (pacientes días, etc.) y el efecto (mejoramiento de salud), y entre la eficiencia (costo por paciente visto) y la efectividad (año de vida salvada) con el propósito de enfatizar la diferencia entre lo que nosotros contamos y lo que queremos conseguir. Comprender el proceso de producción de una organización es un factor decisivo para entender la organización.

VIII. MERCADEO

a) ¿Quiénes son los pacientes, clientes o consumidores?
¿Cuáles son sus características?

(i) ¿Qué tipo de enfermedades son tratadas o cuidadas?.

(ii) ¿De donde vienen los pacientes?; ¿cuál es la comunidad servida?
Esta puede ser definida como aquellos pacientes quienes buscan la clínica o los médicos asociados con el hospital. Puede ser definida diciendo que son las atenciones de un hospital para toda la gente en esta área geográfica.

iii) Hay otras maneras de definir pacientes, tales como edad, sexo, ingreso, tipo de empleo, etc.

b) Accesos

Todos los servicios están disponibles para aquellos que los necesitan o desean? Son los servicios disponibles para la gente en áreas rurales, los pobres y otros grupos los cuales frecuentemente no son servidos.

c) Necesidad y demanda

Necesidad es lo que los expertos piensan que la gente debería tener mientras demanda es lo que la gente busca. La demanda varía de acuerdo con la distancia, el precio, la aceptabilidad de los servicios,

etc. Lo que los pacientes estan buscando o comprando puede no ser la misma cosa que la organización está produciendo. Los pacientes pueden venir a buscar seguridad, remedio a los dolores, o temor de morir. El hospital puede percibirse como suministrando buenas cirugías. Estos no pueden ser la misma cosa. Comprender estas diferencias, si existen, puede ser importante para comprender la satisfacción del paciente. La razón de que no acuda a las citas o el motivo que le impulsa a no cumplir el tratamiento prescrito.

d) Precio

Algunos servicios medicos suministrados cobran un precio por los servicios previsto. En todos los casos hay un esfuerzo requerido por el paciente para alcanzar al doctor o al hospital. Quizás el paciente teme que el tratamiento será doloroso o teme que una enfermedad grave le será encontrada, o aborrece los alrededores no familiares de una clínica u hospital.

e) Información

¿Cómo la gente conoce acerca del proveedor de la asistencia?

Es conveniente conocer la localización, las horas cuando el servicio es suministrado, las clases de servicios. Puede ser que los pacientes mantengan una idea acerca de la enfermedad que es diferente de la atención médica científica moderna, y por consiguiente use inapropiadamente los servicios o no los use.

(i) Programas de alcance externo pueden ser usados para atraer o educar a la gente.

(ii) Propaganda puede ser usada.

(iii) Patrones de referencia entre los proveedores de salud pueden ser bien desarrollados tal como en la regionalización formal con escalonamientos entre cuidados primarios, secundarios y terciarios.

IX RECURSOS

Tierra, capital y trabajo es la definición económica clásica de recursos.

a) Capital: este incluye suministros, equipos, edificios, planta física, tierra, reputación, prestigio y buen crédito.

b) Personal: (trabajo) el número, tipo y personal experimentado que pueda ser usado para definir el tamaño y complejidad de la organización.

c) Administración de personal es una parte especializada de la administración, la cual incluye la administración de salarios, sistemas de control, proyección y reclutamiento de personal nuevo, mantenimiento de procedimientos de reclamo y apelación, administración de premios y beneficios desarrollo de descripción de cargos o tareas, etc.

d) En algunas partes, las relaciones laborales (relación con el sindicato), cumplimiento de los requerimientos de los servicios civiles puede ser importante en los hospitales del Estado.

X. MEDIO AMBIENTE

Las organizaciones son parte de un gran medio ambiente y no pueden ser entendidas sin conocer como el medio ambiente influencia a la organización.

a) Restricciones (fuerzas que las influencias)

(i) Historia: el mejor predictor de lo que será una organización mañana es ver lo que ella está haciendo hoy.

(ii) Tecnología: las organizaciones están limitadas por la tecnología disponible. Los cuidados médicos antes de la anestesia, control de infecciones y rayos x, fueron obviamente diferentes. Los hospitales han desarrollado una estructura que adopta fácilmente la nueva tecnología (estrechamende definida)

(iii) Legislación: La organización existe dentro de un marco legal.

(iv) Mercado: Competencia, oligopolio y monopolio definen las diferentes fuerzas del mercado.

(v) El sistema educativo define el tipo de personal capacitado que está disponible.

(vi) Cultura y valores: el deseo de la atención y cuidados médicos varía de una cultura a otra. La cultura define el papel de hombre y la mujer de los jóvenes y de los viejos, esta influencia del cuidado médico, a menudo, de manera tan obvia que nosotors los tomamos como inmutables.

(vii) Recursos de la sociedad: Algunos países tiene más recursos disponibles para proveer cuidados médicos que otros:

b) Adaptación.

Las características organizacionales pueden ser vistas como una adaptación ecológica a su medio ambiente. Como el medio ambiente cambia algunas organizaciones, algunas encuentran más fácil cambiar que otras.

(i) Liderazgo versus administración en estado estacionario. El liderazgo es algunas veces definido como el acto de cambiar la organización.

(ii) La mayoría de las organizaciones de atención especializada agudas, han encontrado fácil tomar una nueva tecnología de atención especializada, pero difícilmente se enfocan a la prevención.

(iii) Cambio proactivo o reactivo según sea su origen. El primero describe el cambio formalmente desde adentro, mientras que el segundo es el impuesto desde afuera.

(iv) El planeamiento puede ser visto como pensar y tomar decisiones con la mente mirando el futuro. Esto es natural a todos los seres humanos. Puede ser visto como un proceso formalmente elaborado para predecir futuros cambios y desarrollo organizacional apropiado, lo cual es justamente raro.

XI. SISTEMA DINAMICO

El papel de la administración y liderazgo requiere comprensión de las interrelaciones de todas las partes componentes descritas anteriormente separadas, porque cada componente de la organización igual que cada parte del cuerpo humano, esta interrelacionada e interdependiente con cada otra parte. El punto de vista del paciente como un todo, es fácil concebir, pero muy difícil ponerlo en práctica en un mundo de especialización y división del trabajo tanto en administración como en cuidados del paciente.

REVISAO BIBLIOGRAFICA DE LITERATURA NO LATINOAMERICANA SOBRE TEMAS DE COMPORTAMENTO ORGANIZACIONAL, APLICADOS/APLICAVEIS A AREA DA SAUDE

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RESUMENES

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AU : SCOVILLE, C.K.
TI : Human resource development: emerging asset for hospital management
PU : Hospital and Health Services Administration
22 (1) 1976: 22-36
RE : Motivating skilled workers will continue to be a central part of the manager's job in order to reduce alienation, boredom, job dissatisfaction, counterproductive behavior and to meet rising employee expectations. One result has been the human resource development (HRD) efforts in industry and in hospitals. Components of a hospital-based HRD function can include patient education, employee education and training, management training and development, organizational development, job development and human resource accounting. Reducing employee turnover can be one positive effect of such efforts.

17.
AU : STERNS, S.N.; BERGAN, T.A.; ROBERTS, E.B. and QUEGLEY, J.L.
TI : Systems intervention: new help for hospitals
PU : Health Care Management Review
1 (4) 1976: 9-18
RE : Systems intervention to solve a complex problem is described using the example of the resignation of a chief of medical services in a hospital. The steps of the systems approach are defining the rules forming a task force, conducting research, preparing flow diagrams, discussion of diagrams, discussion of differing perceptions, sharpening the focus, studying potential solutions, preparing an action plan, and continuing the commitment.

18.
AU : WHITE, K.L.
TI : Organization and delivery of personal health services
PU : In: McKenlay, J.B.
Politics and Law in Health Care Policy
New York, PRODIST, 1973. p. 341-374
RE : This paper examines alleged defects in the present personal health services system from the perspective of the patient and the community, and makes suggestions for improvement. Problems include unequal access to care, too few generalist physicians, health professionals apply their skills inappropriately, lack of communication betweeen professionals, private health care does not always act in the public interest. Answers relate to public policy, organization of care, and education.

FUNCTION

1.
AU : ADIZES, I. and ZUKIN, P.
TI : A management approach to health planning in developing countries
PU : Health Care Management Review
2 (1) 1977: 19-28
RE : Health care service organizations produce too much sophisticated hospital care and too little simple basic services and facilities. Planning is separated from service provision. Health care planning requires planning for four subsystems: marketing, production, human resources and financing, which in turn have to be coordinated with each other.

2.
AU : APPLEBAUM, S.H.
TI : A profile of leadership and motivation within a closed hospital climate
PU : Health Care Management Review
3 (1) 1978: 77-85
RE : To determine the supervisors' readiness for a management development program, a study of leadership styles and motivations was conducted to examine the current climate in a 300 bed hospital. These supervisors were high on need for the basic needs of security and belonging and low on growth needs of ego status and self-actualization. This climate would not support risk taking and creativity, and a management development program related to growth needs would have limited success.

3.
AU : ARGYRIS, C.
TI : Interpersonal barriers to decision making
PU : Harvard Business Review
44 (2) 1966: 84-92
RE : Managers need feddback concerning their decision making behavior and opportunities to develop self-awareness in action. Although the managers studied in six companies said they though innovation, risk taking, flexibility, and trust among its top executives was essential in practice, in fact they behaved quite differently. Suggestions are made to maintain the human motivators in group activities in organizations.

4.
AU : AUSTIN, C.J.
TI : What is health administration?
PU : In: Rakich, J.S. and Darr, K.
Hospital Organization and Management: Text and Readings
New York, Spectrum, 1978, p. 105-116
RE : This paper examines the major roles and responsibilities of health administrators. Health administration is unique, may be viewed in a systems context, and is an emerging profession. Unique features of health care include the delivery of individualized services, professionalism, the complexity of the medical care system, the wide range of delivery facilities, and unusual financial reimbursement arrangements.

5.
AU : BENNIS, W.G.
TI : New patterns of leadership for tomorrow's organization
PU : In: Levey, S. and Loomba, N.P.
Health Care Administration. A Managerial Perspective
Philadelphia, J.B. Lippincott, 1977. p. 156-166
RE : Organizations are changing because of rapid and unexpected change, growth of organizational size, complexity of modern technology, and the psychological threat to managerial values, as we move to more humanistic, democratic processes. Organizations will be temporary systems and new styles and tasks of leadership will be needed. These include integrating individual and organizational goals, the problem of distributing power, the problem of conflict control, of responding to an uncertain environment, commitment to organizational goals, and the problems of growth and decay. Leadership will be more demanding than ever before.

6.
AU : BRANNEN, T.R.
TI : The organization as a social system
PU : Hospital Organization and Management: Text and Readings
New York, Spectrum, 1978. p. 164-168
RE : The primary function of administration is to induce voluntary cooperation on the part of their subordinates and associates. It follows that the most important qualification for administrators is an understanding of shy persons are willing to contribute their efforts and skill in obtaining cooperation from members of an organization in working toward planned objectives.

7.
AU : BROWN, M.
TI : Systems development: trends, issues and implication
PU : Health Care Management Review
4 (1) 1979: 23-32

RE : Hospitals have traditionally been organizaed and managed individually with very little operational control and oversight by a more centralized team of management specialists responsible for numbers of hospitals. Such integrated hospital systems are growing. Such linkages include shared services, consortia, condominium hospitals, mergers and multiunit organizations under single management. Implications of these changes are discussed.

8.
AU : CLELLAND, R.
PU : The human side of hospital administration
Englewood Cliffs, Prentice-Hall, 1974
RE : This is a book of practical suggestions for improving the human aspects of hospital care. Topics include organizing people for results, the nature of change, effective supervision, gaining cooperation and motivation, leadership performance standards, salary control, human relations, effectiveness of nursing care, medical staff, cost control, budgeting, industrial engineering, labor relations and governing board relations.

9.
AU : GARBER, A.B.; SPARKS, L.; KORNGOLD, A.
PU : Hospital crisis management
Germantown, Aspen Systems, 1978
RE : This book offers insight to the basic principles of crisis management along with illustrative case studies of actual situations. Crises are problems which must be dealt with in a few days or less. Problemm areas include leadership, the new administrator, decision making, motivation, communications, unions, finance and board of directos. Expert, practicing administrators give their answer as to how they would responde to these problems.

10.
AU : HERZBERG, F.
TI : One more time: how do you motivate employees?
PU : Harvard Business Review
46 (1) 1968: 53-62
RE : The only way to motivate the employee is to give him challenging work in which he can assume responsibility. Motivation by punishment is a total failure. Good supervisory-employee relations and liberal fringe benefits do not necessarily make someone work harder. Job enlargment is proposed as a way to challenge and motivate workers. (This is not specifically about health care.)

11.
AU : HURKA, S.J.
TI : Need satisfaction among health care managers
PU : Hospital and Health Services Administration
25 (3) 1980: 43-54
RE : A study of personal work-related need satisfaction of a sample of 104 top and middle level managers in Canadian teaching hospitals. These administrators were asked about actual job characteristics, preferred characteristics and their importance associated with the need for security, social support, esteem, autonomy and self-actualization. Middle level managers had less need fulfillment, particularly with respect to self-actualization and autonomy.

12.
AU : KOWALSKI, R.S.
TI : Innovative development of management philosophies: an analysis of evolving practices
PU : Hospital and Health Services Administration
23 (1) 1978: 26-34
RE : Management's efficiency is the result not only of individuals, but also of the system in which they work. Pressures by society, government, organized labor, and individual workers have moved us away from authoritarian and paternalistic management philosopnies and toward participation in decision making. Types of participation include group or committee decision-making, multiple management, the Scanlon plan, and management by objetives.

13.
AU : KREBS, R.L.
TI : Disrespect - a study in hospital relationship
PU : Hospital and Health Services Administration
21 (1) 1976: 67-72
RE : Disrespect was defined as an interaction between people, where at least one person seems very unaware of the other person's communication. Respect is noticing with attention. Outside raters observed thousands of interactions in one hospital where the administrator felt there was too much disrespect. The intervention effort had groups of employees trying to increase respect. After a year long effort much less disrespect was observed.

14.
AU : LAMMERT, M.H.
TI : Power, authority and status in health systems: A Marxian-based conflict analysis
PU : The Journal of Applied Behavioral Science
14 (3) 1978: 321-333

RE : Why have organizational development efforts applied to health care teams had little success? The author proposes that the answer lies in a failure to understand conflict between professional groups deriving from a differential distribution of authority in an organizational context and the conflicting interests that result. Organizational development does not reach far enough to redress these inequities. An example of a neighborhood health center affiliated with a university hospital is given. It is necessary to look hard at the incentives for interprofessional cooperation.

15.

AU : LAWRENCE, P.R. and LORSCH, J.W.
TI : New management job: the integrator
PU : Harvard Business Review
45 (6) 1967: 142-151

RE : Increasing technology in complex organizations results in greater specialization (differentiation), and for tighter coordination (integration). However, these two needs are essentially antagonistic. Usually one can be achieved only at the expense of the other. This has led to the emergence of a new management function to help achieve high differentiation and high integration simultaneously. The role of the integrator is described. (This is not specifically about health care.)

16.

AU : LEVINSON, H.
TI : The changing role of the hospital administrator
PU : Health Care Management Review
1 (1) 1976: 79-89

RE : Health care organizations in general, and mental health care organizations in particular, are shifting from role-orientation to task-orientation. A role-oriented organization is devoted to a defined social role, conflict is regulated by rules and procedures, stability and predictability of behavior are highly valued and change comes slowly. A task-oriented organization focuses on problem solving, on achieving a goal in a complex changing environment, and on the importance of integrating the divergent value systems of different organizational members. There is no separation of administration and patient care since they both affect each other.

17.

AU : LONGEST, Jr., B.B.
TI : Relationship between coordination, efficiency and quality of care in general hospitals
PU : In: Kovner, A.R. and Neuhauser, D.
Health Services Management
Michigan, Health Administration Press, 1978. p. 123-142

RE : Four types of coordination are described: corrective, preventive, regulatory and promotive, which are predicted to affect efficiency and quality of care. A study of 10 hospitals was carried out. The use of all these coordinative mechanisms, except corrective, was found to be associated with efficiency and quality of care. Corrective coordination to rectify errors was found to be inversely associated with efficiency and quality of care.

18.
AU : LONGEST, Jr., B.B.
TI : The contemporary hospital chief executive officer
PU : Health Care Management Review
3 (2) 1978: 43-53
RE : The general hospital has evolved into one of the most complex organizations in modern society. Their management has become increasingly demanding as the environment has become more dynamic. In this light environmental assessment, predicting change, strategy formulation, policy development, organization design, implementation and evaluation and innovation are discussed.

19.
AU : McLAUGHLIN, C.A.
TI : Productivity and human services
PU : Health Care Management Review
1 (4) 1976: 47-60
RE : The primary problem of productivity for the health care manager is one of control. This is difficult in human service organizations where output is difficult to evaluate and measure. Some of the characteristics of health care organizations which provide distinctive challenges for the manager are professionalization, multiple funding, proxy performance measure, and group coalitions within the organization. The manager must have a coherent concept of the system being managed, and of what controls capacity and productivity.

20.
AU : McLAUGHLIN, C.A.; SHELDON, A.; HANSEN, A., and McIVER, B.A.
TI : Management uses of the Delphi
PU : Health Care Management Review
1 (2) 1976: 51-62
RE : The Delphi is a questionnaire which is repeated. It is completed anonymously, and the results are averaged and reported back to each respondent who may modify his answers accordingly. It was developed to avoid interpersonal effects, and frank answers. It can be used to make predictions, survey attitudes, for problem solving, and for airing controversial views. An example is given and the technique is described.

21.
AU : MOORE, T. and WOOD, D.
TI : Power and the hospital executive
PU : Hospital and Health Services Administration
24 (2) 1979: 30-41
RE : Power is defined as the ability to make decisions, take actions, and produce results to satisfy one's desires. Chief executives have a high need for power. There are different types of power; coercive, reward, charismatic, and expert. The hospital manager must work with the board of trustees, medical staff, employees, and community, each of which also have power. The relationships between these groups must be contained so that power struggles between them do not become disruptive.

22.
AU : NASH, A.
TI : Labor-management conflict and change in a hospital
PU : Hospital and Health Services Administration
21 (2) 1976: 44-63
RE : Moderate social conflict between major social groupings in organizations may produce change when backed by the real threat of intensive conflict. A case study of union-hospital relationships is presented. Conflict is reflected by the number of grievances, the percent of these grievances which go into arbitration, and by the number of employee walkouts. Unionization in this hospital has led to many changes. These changes include managerial values, improved economic conditions for union members, and changed administrative structure. They have occured with a low degree of conflict between labor and management.

23.
AU : NELSON, C.W.
TI : The administrator's role in quality assessment and control
PU : Health Care Management Review
2 (1) 1977: 7-18
RE : How might medical care managers improve quality of care? Quality control in industry is compared to health services. Incoming, process and output control are described. Second opinions on surgery, preadmission testing, appropriateness of care, sentinel events, concurrent admission, certification, medical care evaluation studies, and analysis of hospital profiles are discussed. Steps in the quality control process are described.

24.
AU : NEUHAUSER, D.
TI : The really effective health services delivery system
PU : Health Care Management Review
1 (1) 1976: 25-32

RE : This article assumes that the task of the health care manager is to maximize the quanlity of life for a defined population with a fixed budget. The implications of this assignment are followed to their logical and illogical extreme. It requires measuring the quantity and quality of life, understanding the cost-effectiveness of health care, prioritizing programs, and reorganizing medical care.

25.
AU : PLOVNICK, M.S.; FRY, R.E.; RUBIN, I.M.
TI : Re-thinking the "what" and "how" of management education for health professionals
PU : The Journal of Applied Behavioral Science
14 (3) 1978: 348-33
RE : Organizational development (O.D.) is defined as a complex educational strategy intended to change the beliefs, attitudes, values, and structure of organizations. Educational programs as part of O.D. can have a high potential for change in health systems. Characteristics of educational programs are discussed, including program design, what to teach, to whom and how. Two examples are given which match training designs; (here and now, cognitive, classroom, and task-oriented) to participants and objectives.

26.
AU : RAKICH, J.S.; LONGEST, Jr., B.B., and O'DONOVAN, T.
TI : Facilitating Change
PU : Hospital and Health Services Administration
22 (4) 1977: 36-49
RE : Several issues confronting the health care field are discussed. These include consumerism, institutionalization, cost-effectiveness, and quality control. The managerial role is in part that of a change agent encouraging and guiding the organization into the future. There is a list of factors which are expected to affect organizations in the future.

27.
AU : RAKICH, J.S.; LONGEST, Jr., B.B., and O'DONOVAN, T.
TI : Organizational Dynamics
PU : In: Managing Health Care Organizations
Phildelphia, W.B. Saunders, 1977. p. 261-318
RE : (a) (Chapter 11) Motivation of Employees.
This overview of the topic includes definition of motivation theories (Classical Hierarchy of Needs, Two Factor, and Expectancy Theories), and applications of motivational theory (Theories X and Y).

(b) (Chapter 12) Leadership.
Definition of Leadership, who is a leader, dimensions of leader behavior, degree of decision-making authority, and contingency leadership model.

(c) (Chapter 13) Communication.
Definition, organizational communication, communication flows (downward, upward, horizontal), barriers to communication (environmental and personal), and informal communication.

28.
AU : RUBIN, IRWIN M.; FRY, RONALD E., and PLOVNICK, MARK S.
TI : Managing Human Resources in Health Care Organizations: An Applied Approach
Reston, Virginia. Reston Publishing Co., 1978
RE : This textbook is designed to provide health care managers with knowledge and skills needed to manage human resources. Chapters cover personal theories of human resource management, organizational planning and goal setting performance appraisal, clarifying and negotiating role responsibilities, role negotiations within a classroom setting, managerial decision making, managing small group dynamics, personal values and value conflicts, effective interpersonal transactions, working with teams, organizational structure and design, and managing change in organizations. These chapters cover a 13 session course of 2 1/2 hour blocks of time. Problems and readings are included.

29.
AU : RUBIN, I.; FRY, R.; PLOVNICK, M., and STERNS, N.
TI : Improving the coordination of care: an educational program
PU : Hospital and Health Services Administration
22 (2) 1977: 57-70
RE : This paper describes a self-instructional education program based on applied behavioral science concepts and techniques to help health workers improve the coordination of care delivery, called the Health Team Development (HTD) program. Impact of this effort is reflected in more follow through on difficult cases, more creative solutions to problems, more checking between team members, and fewer patients lost due to lack of coordination. Team time and top management commitment to such programs are required for success.

30.
AU : RUSSELL, A.Y.; ZIMMERMAN, S.; and BRUCE, R.
TI : Organizational development at work in a medical center
PU : Health Care Management Review
3 (4) 1978: 59-66
RE : The successfull application of organization development techniques to a 641 bed local government-owed hospital is described. Management teams were formed to promote reorganization and action planning management by objectives (MBO). The transition was from physician-oriented to patient-oriented organization. The change process included dealing with local government and the hospital's community.

31.
AU : SCHULZ, R., and JOHNSON, A.C.
TI : Management of conflict
PU : In: Management of Hospitals
McGraw-Hill, 1976. p. 223-236
RE : Some conflict is beneficial to organizations. It can lead to change and innovation. It can be excessive and destructive. The administrator must be able to manage conflict. Conflict can be individual, interpersonal, and group. Ways to mitigate conflict include comprehensive institutional goal setting, public relations programs, community goal setting, management by objectives, creative problem solving, constructive confrontation, participative management, sensitivity training, and training in a team.

32.
AU : SCOTT, W.R.
TI : Professionals in hospitals: technology and the organization of work
PU : In: Georgopoulos, B.S.
Organization Research on Health Institutions
Michigan, Institute for Social Research, 1972. p. 139-158
RE : Research on hospitals has shifted from case studies to comparative studies, from closed to open system models, and from entrepreneurial to interdependent models. Important research is being done relating technology to organizational structure and the organization of work.

33.
AU : SHELDON.; BARRETT, D.; and GUPTA, A.
TI : Managing multi-instructional collaboration
PU : Faculty Discussion Papers in Health Policy and Management from Harvard School of Public Health
Series I
RE : What skills are necessary to successfully lead a multi-institucional system through various stages of development? The differences between interpersonal, institucional, and multi-institutional systems are formation, developing decision making mechanisms, taking concrete action, and growing.

34.
AU : SPILLANE, E.M.
TI : Anatomy of a decision
PU : In: Rakich, J.S., and Darr, K.
Hospital Organization and Management: Text and Readings
New York, Spectrum, 1978. p. 285-291

RE : The administrator is primarily a decision maker concerned with achieving results and accomplishing objetives. The vital factors comprising a managerial decision are described. Concepts used are: maximization-minimization, limited resource allocation, least expensive mix of scarce resources, non-resource constraints, risk factors, comparison of payoff values with input costs, and the "go" or "no go" decision.

35.
AU : SZILAGYI, A.D.; SIMS, H.P.; and TERRILL, R.C.
TI : The relationship of leadership style to employee job satisfaction
PU : Hospital and Health Services Administration
22 (1) 1977: 8-21
RE : Leadership style at all levels of hospital management is crucial to increasing employee job satisfaction. The type of employee task has a bearing on the kind of leadership style which is effective in determining employee job satisfaction. Theories of leadership are reviewed. A questionnaire study of 1161 employees in a large hospital is reported. Leader initiating structure, leader consideration, role ambiguity and job satisfaction were measured. Leadership consideration was strongly associated with job satisfaction in all groups, but leader initiating structure had a task dependent effect on job satisfaction.

36.
AU : TANNENBAUM, a., and SCHMIDT, W.H.
TI : How to choose a leaderhsip pattern
PU : Harvard Business Review
51 (3) 1973: 162-171
RE : Leadership style is viewed as a continuum from boss centered leadership (autocratic), to subordinate centered leadership (democratic). The right choice of a leadership style depends on forces in the manager (his value system, his confidence in his subordinates, his own leadership inclinations, his feelings of security under uncertainty), forces in the subordinate (expectations, need for independence, tolerance for ambiguity, identification with the goals of the organization), and forces in the situation (type of organization, group effectiveness, the problem, the pressure of time). The successful leader must be aware of these forces. (This article is not specifically about health care.)

37.
AR : VENUNGA, R.
TI : The management of disruptive conflicts
PU : Hospital and Health Services Administration
24 (2) 1979: 8-29

RE : Hospitals exist in an environment which is particularly conducive to misinformation, misunderstanding and disagreement. One of the most important skills of a hospital manager is the ability to resolve disruptive interpersonal and interdepartmental conflict. Three types of resolution are described: win-lose, lose-lose, and win-win. The win-win orientation requires finding high quality-high acceptance solutions, a willingness to foster honest communication and well-defined process-oriented decision making methods. There are five approaches to conflict: withdrawing, smoothing, compromising, forcing, and confronting. Confrontation is most effective and goes with win-win solutions. The win-win process requires six steps: timing, place, definition, listing possible solutions, evaluating solutions, and implementation. Some examples are given.

38.

AU : WEISBORD, MR.

TI : Why organization development hasn't worked (so far) in medical centers

PU : Health Care Management Review
1 (2) 1976: 17-28

RE : Organizational development (OD) methods go under names like team building, process consultation, intergroup problem solving, survey data feedback, and are supposed to help people understand, express, learn about and free themselves from their more irrational constraints. They can achieve a better balance among goals, authority, task interdependence, and measure. Doing it together makes people more committed to making things work, recognizes effort, and improves morale. Medical Centers have few of the formal characteristics of industrial firms where OD was developed. Professional socialization is antithetical to organization. Medical Centers have three different social systems: task, identity, and governance, with tenuous links among them.

ENVIRONMENT

1.
AU : ARNOLD, M.F.
TI : Health in our changing world
PU : In: Arnold, M.E.; Blankenship, L.V.; Hess, J.M.
Administering Health Systems. Issues and Perspectives
Chicago, Aldine-Atherton, 1971. p. 3-14
RE : Change requires planning, either to intervene or to intelligently cooperate. The future of health care is being affected by population trends, expanding knowledge and technology, and ideology trends. Health organizations are changing as are concepts of education, work patterns, and the necessity of making explicit value choices.

2.
AU : ELLING, R.H.
TI : The shifting power structure in health
PU : In: McKinlay, J.B.
Politics and Law in Health Care Policy
New York, PRODIST, 1973. p. 83-107
RE : Social power is defined as the ability to influence the orientation and behavior of others. Power changes relative to physicians, the university health center, the federal government, lay community leaders, and the consumer public are considered along with their implications for the organization of medical care.

3.
AU : JACO, E.G.
TI : Ecological aspects of patient care and hospital organization
PU : In: Georgopoulos, B.S.
Organization Research on Health Institutions
Michigan, The Institute for Social Research, 1972. p. 223-254
RE : This article reviews research which relates the physical and architectural design of hospitals on the care of patients by medical and nursing staffs, on patient and staff satisfaction, or on the organization, structure and function of the hospital itself. Topic areas include design-efficiency studies, sociobehavioral studies, patient care in radial and angular shaped units, and studies of different levels of care (progressive patient care).

4.
AU : KUPST, M.J.; SCHULMAN, J.L.; and DOWDING, J.
TI : Evaluation: attitudes toward patient care and work satisfaction
PU : Hospital and Health Services Administration
24 (1) 1979: 78-82
RE : The use of a survey feedback method to evaluate ongoing functions in a childrens' hospital is described. Questionnaires were sent to 1,400 full-time personnel and a sample of 150 parents of patients. Patient and employee satisfaction with hospital admitting, nursing care, physician care, and other services were elicited. employees were asked about job satisfaction. Responses were summarized and distributed to key managers and used as the basis for making improvements.

5.
AU : LEVIN, L.S.
TI : Self-care: an emerging component of the health care system
PU : Hospitals and Health Services Administration
23 (1) 1978: 17-25
RE : Studies show that 85% of all health care is self-provided. Some examples are given of efforts and improve self-care, and suggestions for the future are made.

6.
AU : LONGEST, Jr., B.B.
TI : An exploration of the relationship between the environment facing community hospitals and their strategies
PU : Center for Health Services and Policy Research
Working Paper 17, 1978.
RE : The external environment facing community hospitals in three different time periods is described in terms of its economic, social, and political components. The author argues that the strategies responses of hospitals to these environmental variable configurations is largely predictable based upon the theoretical underpinnings of the relationship of an organization to its environment. Empirical evidence is provided to show three properties of community hospital strategy: growth, diversification, and coalition formation. In each case, the strategy extant in the three time periods, as reflected in these properties, is consistent with theoretical predictions about them.

7.
AU : MacSTRAVIC, R.E.
TI : Marketing health care services: the challenge of primary care
PU : Health Care Management Review
2 (3) 1977: 9-15

RE : Marketing ideas are new to health care. Marketing focuses on questions such as are appropriate amounts of services being used? Are they the right types and used when most appropriate? These ideas are applied to primary care, and a step-by-step approach to primary care program development is outlined.

8.
AU : MITRY, N.W., and SMITH, H. L.
TI : Consumer satisfaction: a model for health services administration
PU : Health Care Management Review
4 (3) 1979: 7-14
RE : Consumers of health care services are concerned with both the costs and quality of care. The former is concerned with the complete utilization of available medical techniques, resources and labor, and the second is concerned with the needs of the health care consumer; psychological , sociological, and physical. Cost-benefit configurations, accessibility, degree of choice, equity, medical goods versus services, medical research, ethical issues, degree of autonomy, personalized attention and communication are considered in the light of consumer concerns. The health care manager must keep the consumer's satisfaction as a central concern.

9.
AU : ROGERS, E.S.
TI : The ecological pespective
PU : In: Arnold, M.E.; Blankenship, L.V.; Hess, J.M.
Administering Health Systems. Issues and Perspectives
Chicago, Aldine-Atherton, 1971, p. 201-207
RE : Ecology is the science of relating something (organism, species, human, or organization) to its environment. Public health epidemiology has been ecology focused relating man to his environment with specific concern for disease patterns. The ecological perspective can be applied to the health administrator concerned with planning to meet the changing needs of the health care organization's environment.

10.
AU : SCHULZ, R., and JOHNSON, A.C.
TI : The hospital as a sybsystem aof a health care system
PU : In: Management of Hospitals
McGraw-Hill, 1976. p. 3-43
RE : (Chapter 1) Psycho-socio-somatic health (well-being) is affected by heredity, environment, behavior and health care services. Health services include promotion of health, prevention, curative services, and restorative, long-term and custodial care services.

(Chapter 2) Personal Care Delivery models include solo practice, single specialty group practice, multispecialty fee-for-service group practice, prepaid multispecialty group and hospital plan, public service to indigents, and neighborhood health centers. (Chaper 3) Hospital Systems and Functions. Hospital ownership, the hospital as a complex open system, general system theory, hospital functions, and the patient care systems.

11.

AU : WREN, G.R.

TI : An historical view of health administration education

PU : Hospital and Health Services Administration
25 (3) 1980: 31-42

RE : Four landmark reports on education for health administrators (1929, 1948, 1954 and 1975) are reviewed to show the development of educational principles and philosophy for this profession.

REVISAO BIBLIOGRAFICA DE LITERATURA LATINO-AMERICANA SOBRE TEMAS DE COMPORTAMENTO ORGANIZACIONAL, APLICADOS/APLICAVEIS A AREA DA SAUDE

Ana Maria Malik, M.D.

Introdução

E fato que pouco foi escrito sobre aspectos organizacionais na área de Saúde na América Latina. Assim, não foge à regre o tema Comportamento Organizacional. Existe, é verdade, muito material traduzido, mas o acesso a material original é mais difícil.

O campo organizacional, como um todo, é bastante amplo e subdividido dentro das chamadas ciências administrativas. Por sua vez, a área de Comportamento é estudada como parte deste contexto. Os limites deste assunto são, no entanto, apenas aparentes, pois muitas vezes os temas estudados em Comportamento Organizacional se superpõem àqueles discutidos em Organização e Administração ou se confundem com Administração de Recursos Humanos, Desenvolvimento Organizacional, etc.

Tão ou mais problemática ainda se torna a individualização do campo de estudo na abrangência das Ciências Sociais. Não é fácil precisar como situar o Comportamento Organizaional em relação às disciplinas da Sociologia, Psicologia Social, Antropologia Social e outras. Também, as técnicas empregadas podem ser confundidas com aquelas utilizadas pelos profissionais da área das Ciências da Conduta, da Psicologia e/ou da Psicoterapia (grupo, role-playing, análisis transacional, etc.).

Assim, esa pesquisa se propõe a abarcar temas dentro de um marco teórico bastante vasto. Com a finalidade de fazer uma primeira triagem de material bibliográfico de referência, para programas com finalidade básica de ensino para profissionais de Saúde, optou-se por uma divisão operacional em três grandes grupos:

1. Teoria Geral da Administração - onde se aborda evolução teórica e análisis crítica de diferentes escolas e por vezes suas possíveis aplicações em saúde; modelos de referência (ou diferentes enquadres teóricos para apresentação de esquemas) e tecnologia organizacional (ou a organização estruturada de modo a obeceder a um critério de racionalidade). Este tópico recebe o nome genérico de "características estruturais da organização".

2. Teorias do Comportamento - onde se fala em administração de recursos humanos, de participação, poder, liderança e motivação; de comunicação, cooerdenação inter e intraorganizacional; dos papéis do administrador; de tomada de decisões e avaliação. O agrupamento destes ítens se dá sobre a denominação geral de "características funcionais da organização".

3. Análisis Ambiental, onse de discute os temas referentes a "organização e seu contexto."

Dentro destas áreas serão observados alguns textos diretamente vinculados à área da saúde e outros conceituais, não aplicados.

Foi feita uma pesquisa através do material publicado em periódicos basicamente da área da saúde. Foram seleccionados alguns artigos, considerados de maior interesse, de forma necessariamente subjetiva, frente ao objetivo de ensino a que se destina e frente à divisão adotada para o enquadre do tema. Além disso, buscou-se material não da área da saúde e não periódico. Por isto são mencionados neste relatório livros, documentos de trabalho e até material mimeografado.

E, no entanto, necessário ressaltar que não foi possível revisar todo o material existente; afinal, ele se encontra extremadamente disperso, em universidades, bibliotecas especializadas, etc. Pode-se então afirmar que deve haver autores não mencionados. Devido à impossibilidade de ser abranger o universo, foram traçados limites para a Pesquisa Bibliográfica. Assim, não aparecem aqui periódicos com data anterior a 1970. Este ano pode aparecer como aproximadamente demarcatório de uma época em que se começou a produzir material sobre Comportamento Organizacional aplicado à Saúde na América Latina, pelo menos no material revisado. Tampouco foram procuradas teses. Portanto, é dentro destas fronteiras relativamente nítidas e estreitas que esta listagem deve ser analisada.

Os resumos das referências foram feitos com a finalidade de se permitir que se conheça o teor do artigo, do documento ou livro citado. Deve ser lembrado que esta é uma primeira triagem, com finalidade de dar a conhecer o material original publicado. Foi assim seguido o modelo de alguns artigos já impressos com seus resumos.

A sistematização do tema, para fins de pesquisa bibliográfica foi operacional, talvez particular para este trabalho. A escolha do material listado foi subjetiva. Apenas os resumos pretenderam ser objetivos. Novamente, é vinculada a estas três premissas que esta revisão deve ser apreciada.

II. CARACTERISTICAS ESTRUTURAIS DA ORGANIZACAO

Material periódico

1.
AU: BOBENRIETH, M.; PEREDA, C.; MORAGA, E. & CISTERNAS, J.
TI: La organizacion informal: analisis sociometrico de un curso de administracion hospitalaria.
PU: Boletin Oficina Sanitaria Panamericana 80(5): 435-44, 1976.
RE: Este artigo baseia-se em estudos sociométricos aplicados aous alunos de um curso de administração hospitalar. Para tanto, solicitou-se que cada aluno anotasse numa folha os nomes dos companheiros com quem gostariam de formar um grupo de trabalho, bem como os nomes daqueles com quem prefeririam não trabalhar. Passou-se então a montar uma matriz sociométrica, atribuindo-se a cada aluno um número de código a fim de mantener o sigilo. Os alunos aparecem como pessoa escolhida (valor 1), rejeitada (valor -1) e nem escolhida, nem rejeitada (valor 0). Aplicando-se a esta matriz certos sistemas de computação sobre padrões de escolha, comunicação e interação dos componentes de um grupo. Da mesma forma, um dos objetivos básicos da análisis sociométrica é determinar a existência de subgrupos no ambito de um grupo formal.

Outro campo de aplicação da sociometria refere-se ao problema de liderança: tem-se utilizado métodos sociométricos inclusive na seleção e na promoção de pessoal supervisor, fazendo-se efetivo uso dos princípios da participação. São também inumeráveis suas aplicações potenciais no campo da indústria e dos serviços de saúde.

2.
AU: COMPAÑ. M.V.
TI: La toma de deciciones en la administracion hospitalaria.
PU: Boletin Médico del IMSS (México), 19(2): 118-20, 1976.
RE: O autor apresenta a importância do processo de tómada de decisões em meios hospitalares onde os recursos disponíveis estão aquém da necessidade. Assim, ele apresenta um processo cíclico para a administração da atenção médica, que se distribui em fases: previsão, planejamento, organização, integração e direção. Estas fases seriam a unidade elementar do processo, que deve ser submetida a avaliação e controle, introduzindo o conceito de feedback, para complementar o ciclo, dentro do qual a tomada de decisões é elemento "permanente e essencial".

Discute a seguir a vantagem do trabalho em equipe sobre o individual e apresenta como alternativa as decisões por consenso. Dá papel de destaque, nesta estrutura proposta, à figura do Coordenador.

3.
AU: FOGUEL, S.
TI: Desenvolvimento organizacional: uma reposta aos desafios de mudança.
PU: Vida Hospitalar
(São Paulo), 8(5): 206-19, 1974.
RE: O artigo em questão visa apontar alguns aspectos de Desenvolvimento Organizacional, na tentativa de trazer alguma compreensão adicional de seu conceito, funcionamento, intervenções e cronologia. Também busca apresentar algunas diretrizes de ordem prática.

A primeira parte se refere basicamente à origem, ao conceito e aos propósitos fundamentais do Desenvolvimento Organizacional. Na segunda são apresentadas algumas abordagens para a Mudança Organizacional em geral e para a introdução do Desenvolvimento Organizacional em particular. A terceira aborda a ação do "agente de mudança" dentro de um contexto de Desenvolvimento Organizacional.

4.
AU: GARCIA, R.M.
TI: A base de uma administração autodeterminada: o diagnóstico emancipador.
PU: Revista de Administração de Empresas
(EAESP/FGV - São Paulo), 20(2), 1980.
RE: O autor afirma que na análisis de sistemas de diferentes complexidade as diferenças encontradas são mais importantes que as similaridades. Assim, existe sempre o risco de se perder de vista as singularidades das diferentes estruturas 'estudadas (ex.: o homem). Oferece então a visão dos participantes de uma organização como seres humanos autodeterminados, secundados por uma definição de administração que atenda ao critério da autodeterminação' e pela criação de instrumentos que possibilitem sua implantação. Termina por definir administração como descoberta e implementação de recursos estratégicos, ou seja, tomada de decisões por possíveis cursos de ação. Deixa, portanto, clara, a necessidade de conscientização, que não pode existir sem a possibilidade de criação sobre a realidade. Este tipo de diagnóstico deve sempre questionar-se; ele parte da premissa que as atuais formas de vida humana tem conteúdo político social. Deve assim ser considerado este diagnóstico como instrumento

auxiliar. Consequentemente, cabe-lhe rejeitar pressupostos habituais: ajustar grupos ou indivíduos a sistemas ou organizações em "steady state"; retificar condutas consideradas incorretas ou transgressoras; trabalhar apenas a nível de técnicas e de métodos.

5.
AU: GARCA, P.A.
TI: Delegacion de responsabilidad y direccion participativa.
PU: Boletin Medico IMSS
(México), 17(3):119-126, 1975.
RE: O autor apresenta a "ciência da administração" como um método racional de atingir objetivos. Define em seguida objetivo, área de atividade e função, ressaltando que alguém deve ser responsável pelo cumprimento das funções. Apresenta um modelo teórico para responsabilidade, após esclarecer seu conceito. A seguri, analisa a delegação de responsabilidade. Para tal, coloca como básicos os conceitos de informação, identificação psicológica com a instituição e motivação. Finalmente, coloca os diferentes graus de colaboração dentro de diferentes níveis de participação; estes ajudam a determinar as aptidões, as atitudes e a atuação dos membros que se enquadram no seu modelo.

6.
AU: GAVIRIA, E.C.
TI: Notas para una aproximación a la crítica de la "Teoría de los Sistemas".
PU: Revista de la Escuela Nacional de Salud Pública
(Medellín), 1(3): 31- 8, 1975.
RE: O autor apresenta sucintamente a Teoria dos Sistemas e passa a relacioná-la à Saúde, ao conceito de ecossistema. Este seria composto de um sistema sociobiológico ou interno e de um sistema externo natural ou social. Dentro deste, o autor coloca doença e saúde, população e organização social, ambiente e cultura (tecnologia). Em seguida abora a Teoria de Sistemas como produto de uma forma de trabalho sobre a realidade.

Trabalhando sobre a realidade, são então definidos quatro conceitos fundamentais, sem os quais não se pode pensar em sistema: totalidade concreta, contradição, processo e estrutura.

7.
AU: NOVAES, H. de M.
TI: Fatores organizacionais nas crises dos Hospitais de Clínicas.
PU: Revista de Administração para o Desenvolvimento
(Brasil), II(2): 71-84, 1978.
RE: O autor situa o hospital como sistema e coloca a diferenciação do processo dentro destas instituições. Apresenta a seguir a teoria X e a teoria Y, onde "X" seria a concepção clássica de

administração e "Y" aquela baseada nos interesses intrinsecos individuais, ressaltando que nos hospitais as duas formas devem coexistir. Enfoca também o médico como variável de grande peso na administração hospitalar. Neste artigo é colocado outro problema dos Hospitais de Clínicas: metas abstratas, autoridade difusa, pouca interdependência funcional entre departamentos e medidas impcisas de avaliação. Apresenta un modelo com os tres poderes dos Hospitais de Clínicas e através desta abordagem introduz Teoria da Contingência e Organização Matricial.

8.

AU: ORTIZ, G.F.

TI: Administración de la atención médica. Evolución administrativa de los organismos médicos.

PU: Salud Pública (México), XV(6): 909-918, 1973.

RE: O autor coloca os "organismos médicos" como instituições sociais definidas por condutas humanas que interagem continuamente. Ressalta a influência dos fatores externos sobre as transformações por que passam estes organismos. No entanto, a tese definida no presente artigo é a de que as mudanças administrativas são em muito determinadas por sua história.

Ao analisar os elementos da evolução administrativa, coloca cinco fatores a serem levados em conta: idade, tamanho, reestruturação, crise e renovação.

Conceitua também um ciclo de evolução como um processo reestruturação -crise - renovação. Analisa também os tipos de ciclo propostos, a saber: previsão-planejamento; centralização-descentralização-controle; coordenação-comunicação; colaboração.

9.

AU: PEREIRA, F.S.

TI: Crítica à obra da Fayol.

PU: Revista Paulista' de Hospitais (São Paulo), XIX(4): 45-49, 1971.

RE: O autor traça rapidamente uma biografia de Henri Fayol e passa a analisar sua obra, apresentando a "teoria de Fayol". Detem-se mais nas "operações administrativas". Cita e detalha o conceito do autor de que "administrar é prever, organizar, comandar, coordenar e controlar". Após isto, enumera os quatorze princípios gerais da administração, explicando brevemente cada um. Entra finalmente na crítica proposta, citando a total aplicação do Bayolismo no hospital. Reforça seu argumento com a recomendação da OMS no sentido dos grandes hospitais deverem ser dirigidos por especialistas em asuntos administrativos.

10.
AU: SEIXAS, J.C.
TI: Coordenação: função básica do administrador.
PU: Revista Paulista de Hospitais
(São Paulo), XVIII(9): 13- 8, 1970.
RE: O autor parte da variedade de definições dadas aos termos "coordenação" e "administrador". A seguir, conceitua empresa e analisa suas possíveis estruturas.

Passa então a entrar no mérito dos diferentes significados dos termos acima mencionados e chega à definição de coordenação como: controle, supervisão e assessoria.

Coordenação é então discutida a nível horizontal e vertical; controle, supervisão e assessoria são também analisadas em aglum detalhe. Finalmente, o autor chega à conclusão de que coordenação ultrapassa "mando" e "autoridade".

11.
AU: SOUZA, C.C.S.
TI: Deterioração organizacional: alguns exemplos de disfunções.
PU: Revista de Administração de Empresas
(EAESP/FGV - São Paulo), 20(2): 53- 8, 1980.
RE: O autor caracteriza a era atual como "organizacional". Lembra que as organizações ultrapassam seu papel de mero instrumento. Assim, as organizações vem produzindo disfunções o tem contribuído para a alienação. Isto é chamado "processo de deterioração".

Apresenta, então, um esquema do "ciclo destrutivo das organizações", onde este se propõe como ciclo vicioso. Exemplifica também os tipos de disfunções organizacionais a nível de objetivos, políticas e diretrizes (além das estruturais, comportamentais, tecnológicas e contextuais). Mostra também as "disfunções de segundo grau", terminando o artigo com exemplos.

12.
AU: WITT, A.
TI: Tendências do trabalho do administrador hospitalar.
PU: Revista Paulista de Hospitais
(São Paulo), XXVI(11): 490-493, 1978.
RE: O autor define tres áreas de habilidade do domínio do administrador: técnica, humana e conceitual. A seguir, faz uma retrospectiva, citando Taylor, Fayol, a Escola de Relações Humanas e as escolas de Sociologia Administrativa. Incorpora também a Economia, a Antropologia, a Psicologia, a Sociologia e as Ciências Políticas. Assim, termina por sugerir um modelo com dois subsistemas, X e Y, onde X representa variáveis de natureza material e Y de natureza social. O comportamento administrativo seria a resultante da combinação dos 2 subsistemas. Ressalta o fato de que cada hospital tem suas características próprias, exigindo comportamento administrativo particularizado.

Material não periódico

1.
AU: AGUIAR, M.A.F.
TI: Motivação, libertação humana e produtividada na organização.
PU: In: Psicologia aplicada à administração - uma introdução à psicologia organizacional.
São Paulo, Editora Atlas, 1980 p. 143-62.
RE: "Motivação" é o termo comumente utilizado para designar um problema individual. E, no entanto,necessário identificar as condições que a determinam. Motivação pode ser abordada através do princípio do hedonismo, das recompensas e punições, sob o prisma cognitivista, sob o ponto de vista de Freud, etc. Apresenta aqui uma hierarquia das necessidades humanas (Maslow). Também se traz o conceito de Herzberg, onde se faz a distinção da "satisfação" da "motivação" "no trabalho'. Assim, a satisfação dependeria das condições do trabalho (fatores higiênicos) enquanto a motivação seria abordada em relação ao trabalho propriamente dito e influenciaria diretamente na produtividade.

2.
AU: AGUIAR, M.A.F.
TI: Personalidade e organização
PU: In: Psicologia Aplicada à administração - uma introdução à psicologia organizacional.
São Paulo, Editora Atlas, 1980, p. 96-108.
RE: As características psicológicas dos indivíduos são resultado da interação entre os fatores hereditariedade e meio, se se desenvolvem continuamente. A personalidade é um conjunto de traços psicológicos particulares, relativamente permanentes e organizados de forma própria. Embora relativamente estável no tempo, a personalidade sofre a influência do meio, que pode ser profunda.

Frustrações, pressões, stress, podem levar inclusive à desintegração da personalidade e a um desajustamento emocional. A forma mais comun de frustração, é uma barreira ou impedimento à satisfação de um desejo. Distingue-se tres tipos principais de barreira: situacional, interpessoal e intrapessoal.

Hoje em dia, aborda-se personalidade através de traços psicológicos, algum ou alguns dos quais predominam em diferentes situações.

Dentro da organização, a situação de formalidade ao mesmo tempo facilita a interação dos ocupantes e favorece o conformismo e a tendência das características psicológicas do indivíduo se adequarem às exigências da organização. Esta influência depende, é claro, das características de personalidade do indivíduo.

A avaliação da personalidade é um problema complexo, pois as características de personalidade não podem ser medidas. Assim, surgiram técnicas e testos para definir personalidade, que provocam comportamentos em situações aproximadamente controladas. Sua utilização é maior, no entanto, para diagnosticar desajustamentos profundos.

3.
AU: CAMPOS, J. de Q.
TI: Fayolismo no hospital moderno.
PU: In: O hospital e sua organização administrativa.
São Paulo, LTr Editora, 1978, pag. 76-94.
RE: O autor define o "Fayolismo", cita as "operações fundamentais" de qualquer empresa (incluindo-as no contexto hospitalar). Aparece assim a função administrativa, que é detalhada. Como consequência lógica são mencionadas "estruturação de recursos", "atividades de coordenação" e "controle". Finalmente, o autor cita e discute brevemente os "princípios da administração científica": a "unidade de comando", a "divisão do trabalho", "autoridade e responsabilidade", a "disciplina", a "unidade de execução", a "subordinação do interesse particular ao geral", a "remuneração do pessoal", a "centralização", a "hierarquização", a "ordem", a "equidade", a "estabilidade do pessoal", a "Iniciativa" e a "união do pessoal".

4.
AU: ESCOBEDO, J.G.
TI: La teoria de los sistemas aplicada a la administración de salud.
PU: In: Seminario Internacional sobre Administración de Servicios de Salud, 11o.
Washington, OPS/OMS, 1973. 48-67 (Publicacion Científica 271).
RE: O autor justifica a necessidade de racionalização da organização dentro da área da saúde e introduz como alternativa o conceito de sistema. Assim, começa por mostrar uma mudança de enfoque para a administração moderna. Em seguida, aborda o conceito propriamente dito e a teoria de sistemas no campo organizacional. Discute os conceitos de eficiência e eficácia em função da teoria proposta e aborda "ambiente", oferecendo um modelo de composição do ambiente de um sistema de saúde. Discute o problema de mudança adaptação e aborda, a nível de estrutura interna, alguns fatores institucionais' que considera importantes: liderança, doutrina, programas, recursos e estrutura. Passa então a discutir estrutura externa e os tipos de contrato ("enlace") que uma empresa pode estabelecer com o ambiente. Oferece, finalmente, alguns conceitos sobre "tática gerencial".

5.
AU: GARCIA, R.M.
TI: Abordagem sociotécnica - um rápido balanço.
Departamento de Administração
EAESP/FGV, São Paulo, 1979. (mimeo).
RE: O autor oferece uma sucinta visão histórica da abordagem sociotécnica e mostra como duas fontes importantes os estudos de Marx sobre alienação e os de Weber sobre burocracia. Define abordagem sociotécnica como uma síntese cuja finalidade é desvendar os requisitos principais dos sistemas tecnológicos e sua influência sobre o desempenho do sistema social. As contribuições que esta abordagem pode oferecer seriam: oferta de um quadro de referência para análise e avaliação de um processo produtivo, segundo um dado esquema. Assim, haveria duas etapas: avaliação inicial, onde se esclarece a missão da organização e as unidades de operação. A segunda abrangeria a identificação das variações primárias e de suas possíveis interações; a análise do sistema social; a determinação da percepção dos participantes em relação a seus papéis sociais; a especialidade dos fornecedores e dos usuários e propostas de mudança. Pode-se observar que não são esquecidos os valores substantivos e humanos.

O autor coloca a seguir as possíveis limitações da abordagem socio-técnicas: controle de tecnologia sobre o indivíduo, redução da capacidade dos participantes em decodificar problemas existenciais e a falta de um modelo autodeterminado de Ação Humana.

6.
AU: KARPF, L.
TI: Una aproximación a las organizaciones: sus procesos.
PU: In: ALTSCHUL, C.; BERTONI, E.J.; KARPF, L.L.; STUHLMAN, L & SUAREZ, F.M.
La organización: nuevas perspectivas para su conocimiento.
Buenos Aires, Layetana, Ediciones, 1978. p. 37-52.
RE: Neste capítulo são abordados os processos de aproximação às organizações. O autor começa definindo organização e mostrando que cada nível organizacional possui suas próprias regras. Propõe um modelo de estudo dentro do enfoque sistêmico, com vistas ao entendimento global das organizações. Descreve, a seguir, quatro processos básicos de análise: formal; presuntivo; existente; requerido. Finalmente, menciona os níveis organizacionais básicos, onde estuda a homogeneidade/heterogeneidade entre eles e outros fatores.

7.
AU: KREIMER, E.P.: STUHLMAN, L.
TI: La relación hombre-oranización - una revista crítica y un esquema de análisis.
Buenos Aires, Editorial El Coloquio, s.d.p.

RE: Estuda-se na primeira parte deste livro o vínculo homem-organização, sob diferentes aspectos; a estrutura da organização é enfocada, assim como a socialização dos funcionários. Dá-se realce à organização como fonte de satisfação das necessidades humanas, ao contrato psicológico, ao poder, à alienação e à caracterização de alguns tipos de organização. Na segunda parte, o esquema de análise destas relações: algumas das escolas que estudaram o tema e a noção de contexto; a história organizacional.

O esquema de análise finalmente proposto parte da premissa que os processos sociais institucionais sãi múltiplos e complexos. Assim, são estudados ao mesmo tempo processos psicológicos, sociais e técnicos. Seus objetivos são inserir as relações homem-organização num enfoque amplo e chegar à resposta a uma pregunta básica: a organização serve o Homem (participante ou usuário) ou é fonte de alienação?

8.
AU: RIVERO, D.T.
TI: La Administración de los Servicios de Salud.
PU: In: Seminário sobre Capacitacion Administrativa en los Servicios de Salud.
Maracay (Venezuela), OPS/OMS, 1969.
RE: O autor comoça com uma introdução referente à administração moderna, citando escolas e fazendo uma análise das mesmas, detendo-se na teoria de sistemas, dentro de um enfoque ecológico. Aborda também o problema tecnológico, dentro de "contexto". Cita em seguida as mudanças estruturais ocorridas nos países em desenvolvimento, com ênfase no campo da saúde. Entra, finalmente, no campo da saúde em si, como "setor social produtor, principalmente, de serviços", conceituando-o como sistema multisetorial.

Analisa a seguir os diferentes subsetores, inserindo-os na América Latina. Aborda, consequentemente, a Administração de Saúde, ressaltando a formação de profissionais.

9.
AU: SONIS, A.
TI: El enfoque sistémico en la administración de salud.
PU: In: Medicina Sanitaria y Administración de la Salud.
Vol. II., Buenos Aires. El Ateneo Editorial, 1978. p. 118-36.
RE: O autor aborda alguns aspects conceituais da Teoria Geral de Sistemas e em seguida tenta analisá-la em função da área de saúde. Justifica-a pela grande complexidade e diversidade dos fatores envolvidos. Afinal, o enfoque sistêmico permite estudar cada um dos componentes do processo global segundo sua contribuição ao objetivo proposto. Permite, assim, uma análise a nível institucional, regional, setorial ou social.

As limitações da aplicação deste enfoque também são abordadas, com especial ênfase na necessidade de grande especialização dos profissionais e de alto grau de organização das comunicações.

Finalmente, o autor coloca o estudo da aplicação do enfoque sistêmico à administração de saúde como função de uma visão interdisciplinar que amplia conceitos tradicionais.

10.
AU: SUAREZ, F.; AURELIO, J.F. & RIGAL, L.A.
TI: Alienación profesional en contextos transicionales.
s.d.p. (mimeo).
RE: Neste artigo se apresenta um marco de referência considerado apropriado para descrever os processos da institucionalização de novas provissões em contextos transicionais. E examinado o modo em que a conjunção do processo de institucionalização e a pertinência a contextos transacionais geram situações problemáticas para os sistemas profissionais. O autor discute a legitimidade das estruturas de poder, o grau de consenso sobre os critérios de avaliação, o grau de incongruência entre os tipos individuais de identificação, o sistema das comunidades profissionais e sua participação. Discute, também, a capacidade de absorção das informações pela estrutura profissional, o grau de difusão das expectativas dos profissionais e o grau de compatibilidade entre treinamento recebido pelo indivíduo e necessidades sociais a que tem que dar resposta. Estos fatores são analisados em termos de sua contribuição para o desenvolvimento de atitudes alienadas.

Também as respostas individuais e coletivas a esta situação alienante são estudadas: migração profissional, ritualismo, mudanças de papéis profissionais. As respostas grupais estudadas são a formação de comunidades "endodirigidas" e a emergência de comunidades ideologizadas.

11.
AU: SUAREZ, F. & FELCMAN, I.
TI: Tecnología y organización.
Buenos Aires, Editorial El Coloquio, s.d.p.
RE: Neste livro é estudada basicamente a Tecnologia. Fala-se em transferência de tecnologia, transformação, geração e circulação de conhecimentos (incluindo Tomada de Decisões). Também são objetos de estudo algumas tecnologias organizacionais (autores estudados: Thompson, Perrow, Woodward e Triest). Para a análise da tecnologia administrativa é oferecido um marco teórico alternativo. Também aparece um modelo de introdução de tecnologia de gestão para as organizações, marcando a diferença com um modelo de incorporação acrítica. Finalmente, são lançadas preguntas visando situar a tecnologia a nível de sua influência sobre a organização, consciente ou não, e se sugere algumas linhas de ação.

12.
AU: SUAREZ, F.; FELCMAN, I & STUHLMAN, L.
TI: Organización y Contexto.
Facultad de Ciências Econômicas, Universidad de Buenos Aires, 1974 (memo).
RE: Os autores colocam o tema como de difícil inserção dentro da literatura. Assim, eles se propõem a elaborar um esquema onde se enquadrem as organizações, suas relações e suas influências. Dentro deste esquema conceitual eles colocam um modelo de análise onde se estuda os condicionantes, segundo sejam internos (intraorganizacionais) e externos (do contexto). Dividem a seguir os condicionantes em indiretos (ou fatores macrossociais) e diretos (insumos elementos reguladores, usuários e produtos). Em seguida, estudam as ações da organização sobre o contexto e sugerem algumas estraégias para manejá-lo. Finalmente, mostram os problemas metodológicos e suas possíveis abordagens.

13.
AU: STUHLMAN, L.
TI: Métodos y técnicas para el diagnóstico organizacional - algunos comentarios.
PU: In: ALTSCHUL, C.; BERTONI, B.J.; KARPF, L.L.; STUHLMAN, L & SUAREZ, F.M.
La organización: nuevas perspectivas para su conocimiento. Buenos Aires, Layetana Ediciones, 1978. p. 54-77.
RE: Neste capítulo são discutidas técnicas e métodos para o diagnóstico organizacional. Após explicitar os objetivos do trabalho, o autor parte para a definição metodológica do diagnóstico organizacional e para a justificativa dos objetivos, métodos e técnicas diagnósticas. Detém-se a seguir para explicitar as disciplinas que interferem neste tipo de estudo, a saber, Sociologia, Psicologia Social, Antropologia, Teoria Geral de Sistemas, Pesquisa Operacional e outras. Frente a esta multiplicidade são ainda citadas as variáveis envolvidas neste tipo de estudo. Chega-se assim à definição de unidades de análise de seus determinantes. O último ítem específico abordado se refere aos instrumentos de diagnóstico. Finalmente, o autor justifica quaisquer métodos de análise, quantitativos ou qualitativos, pois segundo Bunge "a exatidão não se reduz ao campo numérico".

II. CARACTERISTICAS FUNCIONAIS DA ORGANIZACAO

Material Periódico

1.
AU: ACUÑA, A.E.
TI: Organización del trabajo en el equipo de salud.
PU: Pediatra
(Santiago), 22: 62-69, 1979.
RE: O enfoque desenvolvido enfatiza a análise da equipe de saúde como um sistema social aberto. Isto pressupõe que o trabalho da equipe precisa, para ser bem sucedido, basear-se em relações harmoniosas entre os elementos envolvidos: pessoas, estrutura, tecnologia, lideranças, metas e ambiente.

Sobre as pessoas, mostra-se que as condições do grupo, interferem na motivação intragrupais. Em termos de estrutura são definidos dois modelos - mecânico e orgânico - estabelecendo-se que o emprego de cada um destes deveria estar de acordo com as condições específicas dos tipos de tarefa, da tecnologia, das pessoas e do ambiente.

A tecnologia é observada como um fator que incide na natureza rotineira das tarefas de grupo, afetando, principalmente as pessoas e as estruturas. Em seguida, o autor se interessa pela forma de influências. O comportamento das pessoas distingue estilos de liderança, assinalando aspectos a serem observados em seu emprego. As metas são analisadas quanto à sua ação sobre o grupo, destacando que quando elas não estão bem definidas geram situações de conflito.

Finalmente, o autor centraliza sua atenção na relação grupo-ambiente, indicando como as relações com outros grupos ou organizações restringem a autonomia de ação e induzem estratégias voltadas para o contexto.

2.
AU: AYALA, E.Z.L.
TI: Como conseguir melhor rendimento do trabalho em equipe.
PU: Revista Paulista de Hospitais
(São Paulo). XXVII (7): 219-27, 1979.
RE: O autor faz referência à Escola de Administração Científica (Taylor, Fayol e Gantt) e à Escola de Relações Humanas. Sai do campo conceitual para se concentrar na adaptação do trabalho ao homem, do homem ao trabalho, às aptidões, aos processos psicotécnicos, às comunicações e ao moral do grupo de trabalho. Finalmente, já em termos de "equipe", discute motivação, liderança e valorização do ser humano.

3.
AU: BASTIAN, E.M.
TI: Motivação, aplicação à supervisão.
PU: Revista Paulista de Hospitais
(São Paulo), XXII (1): 20- 4, 1974.
RE: A autora define motivação e analisa "motivos" (básicos, coletivos e individuais). Coloca também os "motivos em conflito".

A seguir, cita alguns experimentos em motivação: o papel do reforço-recompensa; elogio versus crítica; conhecimento dos resultados da aprendizagem; castigo e recompensa; competição e reconhecimento social; medo e motivação. Finalmente, conceitua motivação positiva e negativa.

4.
AU: BOBENRIETH, M.
TI: Comunicaciones en el hospital.
PU: Boletín Oficina Sanitaria Panamericana
71 (1): 13-20, 1971.
RE: Depois de definir comunicação como um intercâmbio de fatos, idéias, opiniões ou emoções entre duas ou mais pessoas, assinala barreiras que se opõem à transferência de informações de uma pessoa a outra. Assim, menciona a tendência de avaliar prematuramente, mensagens mal expressadas, recepção e retransmissão defeituosas, perda por pobre retenção, falta de atenção, suposições não classificadas, falta de confiança em quem comunica, incapacidade de comunicar-se.

Para estabelecer boa comunicações devem ser respeitados quatro princípios: clareza, atenção, integridade e uso estratégico na organização informal. Analisa-se três tipos de comunicação: como processo oral (falar); como processo de escutar (ouvir); como processo de comunicação de decisões antes de sua execução.

Termina analisando comunicação escrita e oral, em termos de vantagens e desventagens.

5.
AU: BOBENRIETH, M.; PEREDA, C.; MORAGA, E. & CISTERNAS, J.
TI: La organización informal: análisis sociométrico de un curso de administración hospitalaria.
PU: Boletín Oficina Sanitaria Panamericana
80(5): 435-44, 1976.
RE: Este artigo baseia-se em estudos sociometricos aplicados aos alunos de um curso de administração hospitalar. Para tanto, solicitou-se que cada aluno anotasse numa folha os nomes dos companheiros com quem gostariam de formar um grupo de trabalho, bem como os nomes daqueles com quem prefeririam não trabalhar. Passou-se então a montar uma matriz sociométrica, atribuindo-se a

cada aluno um número de código a fim de mantener o sigilo. Os alunos aparecem como pessoa escolhida (valor 1), rejeitada (valor -1) e nem escolhida nem rejeitada (valor 0). Aplicando-se a esta matriz certos sistemas de computação, determina-se a relação real vigente entre os integrantes de um grupo de trabalho. Assim, mediante a sociometria, é possível analisar a informação sobre padrões de escolha, comunicação e interação dos componentes de um grupo. Da mesma forma, um dos objetivos básicos da análise sociométrica é determinar a existência de subgrupos no âmbito de um grupo formal.

Outro campo de aplicação da sociometria refere-se ao problema de liderança: tem-se utilizado métodos sociométricos inclusive na seleção e na promoção de pessoal supervisor, fazendo-se efetivo uso dos princípios da participação. São também inumeráveis suas aplicações potenciais no campo da indústria e dos serviços de saúde.

6.
AU: CARVALHO, G.P. de P.
TI: Chefia e Liderança.
PU: Revista Paulista de Hospitais (São Paulo), XXIII (3): 101-108, 1975.
RE: O autor começa por conceituar chefia e liderança. A seguir, aborda o "chefe" e discute meios para sua seleção: antiguidade, eleição, livre escolha e escolha condicionada.

Estabelece então requisitos para chefia: qualidades, assessoramento, condições, aptidão, especialização, cultura geral. Analisa também chefia, delegação de poderes e grau de confiança nos subordinados. Finalmente, menciona Maslow e cita escalas de prioridades de necessidades humanas.

7.
AU: CASTRO V.F. & SEGOVIA, M.
TI: El desarrollo institucional de los servicios de salud.
PU: Boletín Oficina Sanitaria Panamericana. 79(6): 469-84, 1975.
RE: Registra-se no âmbito dos administradores dos programas de saúde um grave deficit de habilidades e capacidades gerenciais, o que reduz sensivelmente a função de combinar e utilizar com eficácia os recursos que compõem sua organização de trabalho. Por isto, considera-se urgente empreender um processo institucional intensivo nos serviços de saúde.

O desenvolvimento institucional é um processo de ações racionalmene ordenadas. Desenvolver uma instituição equivale a dotá-la de capacidade de funcionamento e de possibilidade de crescimento harmônicos.

Para proceder a uma reforma administrativa deve-se estabelecer um reordenamento integral dos objetivos, políticas, estruturas, sistemas, normas e procedimentos de todas as funções e atividades da instituição; devem ser também cumpridas algumas condições básicas: existência de um programa nacional ou setorial de reforma administrativa; decisão política de realizar o processo no serviço de saúde; criação de um órgão encarregado da condução técnica do processo; planejamento e programação do processo; assessoria técnica para a realização dos trabalhos; suficiente participação e treinamento.

A existência de um programa nacional ou setorial nos países facilita imensamente a reforma administrativa. O primeiro proporciona diretrizes, orientação, assistência técnica, supervisão e avaliação do processo a nível institucional; o segundo contribui para a unidade de propósitos e para a coordenação necessária para que as instituições estabeleçam planos comuns, definam suas jurisdições e desenvolvam a organização do trabalho sem atritos ou duplicações.

O processo de reforma administrativa implica na criação de um órgão encarregado de sua condução técnica, que não deve dispor de poder de decisão. Indispensável para realizar com segurança o processo de desenvolvimento institucional, a assistência técnica pode ser local ou estrangeira, bi ou multilateral.

8.
AU: COMPAÑ, M.V.
TI: La toma de decisiones en la administración hospitalaria.
PU: Boletín Médico del IMSS (México), 19(2): 118-20, 1976.
RE: O autor apresenta a importância do processo de tomada de decisões em meios hospitalares onde os recursos disponíveis estão aquém da necessidade. Assim, ele apresenta um processo cíclico para a administração da atenção médica, que se distribui em fases: previsão, planejamento, organização, integração e direção. Estas fases seriam a unidade elementar do processo, que deve ser submetida a avaliação e controle, introduzindo o conceito de feedback, para complementar o ciclo, dentro do qual a tomada de decisões é elemento "permanente e essencial".

Discute a seguir a vantagem do trabalho em equipe sobre o individual e apresenta como alternativa as decisões por consenso. Dá papel de destaque, nesta estrutura proposta, à figura do Coordenador.

9.
AU: CORDEIRO, H. & ZAVALETA, H.
TI: Análisis de la práctica médica actual en América Latina: alternativas y tendencias.
PU: Revista Centro Americana de Ciencias de la Salud 13:111-31, 1979.

RE: Os autores colocam as alterações ocorridas na prática médica, atualmente mais voltada para a "simplificação", visando uma maior cobertura da população. Para tal, aparece a ideologia da racionalização. Deve ser observada, no entanto, a utopia da "racionalidade perfeita", em que devem ser excluídos todos os conflitos intraorganizacionais e do contexto. Os autores ressaltam a necessidade de ser trazer para dentro do setor a lógica do funcionamento do sistema económico, os critérios objetivos de decisão, a análise do custo-benefício, o controle da produção e uma política racional.

Fala-se também neste artigo sobre a vinculação da reforma médica à sociedade. E sugerido, como caminho para a solução da crise latinoamericana no setor, um comjunto de técnicas capazes de tornar possível uma tomada de decisões racional, com definição clara de objetivos e escolha de meios eficazes.

Os diferentes sub-setores do setor saúde latinoamericano são também analisados, chegando a uma confrontação direta entre opções técnicas e opções políticas.

10.
AU: GARZA, P.A.
TI: Delegación de responsabilidad y dirección participativa.
PU: Boletín Médico IMSS
(México), 17(3):119-126, 1975.
RE: O autor apresenta a "ciência da administração" como um método racional de atingir objetivos. Define em seguida objetivo, área de atividade e função, ressaltando que alguém deve ser responsável pelo cumprimento das funções. Apresenta um modelo teórico para responsabilidade, após esclarecer seu conceito. A seguir, analisa a delegação de responsabilidade. Para tal, coloca como básicos os conceitos de informação, identifição psicológica com a instituição e motivação. Finalmente, coloca os diferentes graus de colaboração dentro de diferentes níveis de participação; estes ajudam a determinar as aptidões, as atitudes e a atuação dos membros que se enquadram no seu modelo.

11.
AU: GONCALVES, E.L.
TI: Estrutura organizacional e áreas funcionais do hospital.
PU: Revista de Administração
(FEA/USP - São Paulo), 12(1):7-15, 1977.
RE: Primeiramente, o autor descreve as diversas funções exercidas pelo hospital, em relação à comunidade; analisa o aspecto médico-assistencial, a reabilitação e as funções de ensino, pesquisa e educação sanitária. O hospital deve ter uma estrutura conveniente para cumprir estes objetivos. Assim, os setores

operacionais do hospital são agrupados em tres divisões maiores: médica, técnica e administrativa. Pode-se dizer que a "divisão" médica é a responsável pelas atividades fins, enquanto as atividades de apoio são da responsabilidade da "divisão" técnica. A "divisão" administrativa é responsável pelas atividades burocráticas essenciais, relativas ao funcionamento do hospital. A expansão permanente da estrutura hospitalar e de sua complexidade operacional provocou a necessidade de participação de um novo tipo de profissional: o administrador hospitalar. Portanto, em todos os países vem se canalizando esforços para o desenvolvimento de cursos e e outras atividades que visam a preparação deste profissional e sua constante atualização.

12.

AU: HESKETH, J.L. & CARNEIRO, W.M.

TI: Determinantes psicológicos de comportamiento gerencial.

PU: Revista de Administração de Empresas (EAESP/FGV - São Paulo), XX(2):19-23, 1980.

RE: Os autores iniciam citando obras que convergem no que tange à concordância em relação à idéia de que as pessoas tendem a se engajar em ações que manten sua imagen.

Estabelecem então um conceito para a "expectativa" e um para "posição existencial", em termos de "percepção do eu" e de 'percepção dos outros". Apresentam um modelo explicativo de comportamento do líder, baseado em análise transacional. Em seguida, expões a metodologia de seu trabalho: viariáveis (OK, não OK), amostra, instrumentos e procedimentos. Fianlmente, nos resultados e nas conclusões, apontam que pessoas como "posição existencial não OK" não se encontram em cargos de chefia.

13.

AU: MACHADO, F. de A.

TI: Participacion del personal en la dirección de um servicio de salud publica.

PU: Boletín Oficina Sanitaria Panamericana. 84(6):471-80, 1978.

RE: No Centro Regional de Saúde do Vale do Jequitionhonha, Estado de Minas Gerais, foi iniciada em 1975 uma experiência de modificação da estrutura administrativa do Centro e de sua relação hierárquica com as autoridades estaduais de saúde, mediante a utilização do modelo de participação comunitária (no caso, representada pelo pessoal do Centro).

A reforma administrativa iniciada em 1969, em Minas Gerais, havia criado unidades sanitárias a nível municipal. Nessas unidades surgiram conflitos, gerados, entre outros fatores, pela resistência às reformas projetadas. Contudo, o pessoal assumiu uma atitude positiva que, até certo ponto, o levou a superar tais conflitos.

O resultado mas original desta experiência de participação, decorrente da própria iniciativa do pessoal, foi a criação do Conselho Técnico Administrativo, integrado por representantes do pessoal, democraticamente eleitos. O Conselho, constituído, de início como órgão consultor da direção, passou depois a participar plenamente do processo decisório. A importância do Conselho pode ser apreciada pelas iniciativas que dele partiram e por sua bem-sucedida aplicação: a adoção de horário flexível para o pessoal, que solucionou problemas de abusos de licenças, atrasos e ausências; a elaboração de um ante-projeto de Manual dos Serviços do Centro, que definia as normas de prestação de serviços; a participação na solução de problemas de seleção, recrutamento e lotação de pessoal; a análise do tempo de real atividade do pessoal e dos equipamentos, etc.

Os resultados positivos da participação do pessoal no processo decisório refletiram-se em maior eficiência dos serviços.

14.
AU: OLIVEIRA, S.A.
TI: Corpo Clínico e o Administrador hospitalar.
PU: Revista Paulista de Hospitais (São Paulo), XXIII(4):140-50, 1975.
RE: O autor coloca o hospital como organização especial e ressalta a singularidade de sua estrutura, com dois tipos de autoridade: um, centralizado no Corpo Clínico e outro a nível institucional. Tenta explicar os fatores que influenciam esta estrutura e ressalta aqueles que considera de mais difícil superação. Caracteriza, a seguir, Corpo Clínico, inclusive em termos de tarefas e chrigações relaciondas ao administrador hospitalar. Em seguida, analisa o administrador hospitalar propriamente dito, em termos de requisitos e de relacionamento com o Corpo Clínico.

Finalmente, menciona as "bases de uma política para a melhoria do relacionamento do Corpo Clínico com o administrador hospitalar", em todas as áreas consideradas "de Recursos Humanos".

15.
AU: OROZCO, R.G.
TI: La coordinación institucional en el campo de la salud pública.
PU: Salud Pública México XIII(2):223-28, 1971.
RE: O autor define saúde pública e aponta problemas decorrentes da descoordenação entre seus serviços; ressalta a necessidade de estabelecer formas de colaboração e de comunicação para evitar duplicação de funções, gastos desnecessários, etc.

Passa, em seguida, a discutir coordenação, em cinco níveis:

- com os governos estaduais e municipais

- com as instituções de seguridade social

- com outras Secretarias de Estado

- com outras instituções

- com organismos internacionais.

16.
AU: STOEBER, C.
TI: Comunicações administrativas no hospital.
PU: Revista Paulista de Hospitais (São Paulo), XXIV(3):120-25, 1976.
RE: A autora justifica comunicação como instrumento administrativo. Apresenta alguns conceitos e definições e aborda o tema das comunicações administrativas dentro do hospital. Mostra, assim, sua abrangência e suas diferentes formas: formal, informal, vertical (descendente e ascendente), horizontal, escrita, oral, bilateral.

17.
AU: TORRES, M.T.A. & VILA, O.C.
TI: La psicología aplicada a la administración.
PU: Revista Cubana de Administración de Salud 2:61-80, 1976.
RE: Neste artigo são expostos os diferentes aspectos do relacionamento das ciências administrativas e as ciências psicológicas, cujos objetivos são atingir as etapas mais avançadas e plenas do desenvolvimento humano e social. São analisadas, sob o ponto de vista psicológico, as implicações destas disciplinas dentro das funções do ciclo administrativo. São, assim, abordadas sob tres aspectos fundamentais: os processos psíquicos; as características pessoais e os fenômenos psicosociais, e a forma em que estes se manifestam em cada uma das funções administrativas. Finalmente, é destacada a importância destes conhecimentos psicológicos como meio científico-técnico de otizimar a gestão administrativa em geral, e em particular aumenta a eficiência das pésoas em cargos de direção.

Material não periódico

1.
AU: AGUIAR, M.A.F.
TI: Liderança: processos grupais e o comportamento organizacional.
PU: In: Psicologia aplicada à administração - uma introdução à psicologia organizacional.
São Paulo, Editora Atlas, 1980. p. 163-90.
RE: A unidade "grupo", como entidade psicosociológica própria, foi incorporada' à Psicologia Social. O grupo é visto de formas diferentes pelas várias teorias que o abordam. Genericamente, no entanto, utiliza-se o termo para designar dois ou mais indivíduos que partilham um conjunto de normas, crenças e valores e que mantem relações definidas; de tal forma que o comportamento de cada um tem consequências sobre os demais.

No grupo, o líder é entendido como aquele que ocupa o cargo de direção, ou como aquele que exerce influência sobre os outros. O exercício das funções' de liderança pode influir no grupo sob diversas formas: autocrática, democrática e de laissez-faire. A liderança autocrática torna o grupo dependente do líder, reduz a comunicação interpessoal e torna o grupo mais vulnerável. A liderança democrática contribui para o envolvimento e para a participação dos membros no grupo, fortalecendo sua estrutura.

Não existe estilo de liderança melhor ou pior; os estilos podem ser mais ou menos adequados.

Nas organizações, constata-se a predominância do conceito de liderança como propriedade do indivíduo. A teoria contingencial da liderança propõe estilos diversos de liderança, como consequência da interação de fatores situacionais, grupais e individuais.

2.
AU: BERGAMINI, C.W.
TI: Desenvolvimento organizacional: as possoas como ponto central.
PU: In _____ Desenvolvimento de Recursos Humanos - uma estratégia de Desenvolvimento Organizacional.
São Paulo, Editora Atlas, 1980 p. 102-24.
RE: Desenvolvimento Organizacional abriga a intervenção no contexto organizacional, através das pessoas. Somente as pessoas podem ser desenvolvidas. Assim, só é possível colocar em andamento um programa de Desenvolvimento Organizacional se se contar com a adesão dos que trabalham numa organização.

O ambiente empresarial é caracterizado por um grande desenvolvimento tecnológico, e por ser extremamente dinâmico e mutável. Assim, são necessárias mais habilidades das pessoas. Isto levou a uma preocupação mais centrada no homem.

Pode-se dizer, inclusive, que os objetivos organizacionais só podem ser convergentes com os das pessoas, mesmo que de pequenos grupos. O que pode existir são "defrontamentos": organização-ambiente; grupo-grupo e homem-organização.

Para se falar em Desenvolvimento Organizacional é necessário localizar o estágio de desenvolvimento, ou de mudança, das principais organizações envolvidas; quando se parte para o diagnóstico e para o planejamento de uma estratégia comportamental cada pessoa deve ser considerada como um elo da psico-estrutura empresarial.

Um objetivo a ser considerado é o final das tensões. Assim, mostrar que não existem verdades, ou modelos "corretos" de comportamento, é uma estratégia' a ser considerada. Deve ser também lembrado que são as pessoas que decidem, finalmente, as metas de uma organização e o meio de atingí-las.

3.
AU: BERGAMINI, C.W.
TI: Motivação e desenvolvimento organizacional.
PU: In: Desenvolvimento de Recursos Humanos uma estratégia de Desenvolvimento Organizacional.
São Paulo, Editora Atlas, 1980, p. 125-37.
RE: Motivação estuda usualmente "como" e por que" as pessoas agem. No entanto, para a autora, deve-se partir de uma premissa básica: "ninguém motiva ningém". Assim, o que se pode fazer é "detectar os objetivos que estão em jogo, discriminar quais deles são mais importantes para o subordinado em questão....para que se realize o ato motivacional".

No entanto, há que ser lembrada a existência, na organização formal, das características que impedem a autorealização das pessoas: protanto, é inviável trabalhar com pessoas motivadas, dentro deste tipo de clima. A autora aborda, finalmente, o tema Desenvolvimento Organizacional e Desenvolvimento Humano.

4.
AU: BERTONI, E.J.
TI: El operador como vehículo de la intervención dianóstica.
TI: In: Altschul, C.; Bertoni, E.J.; Karpf, L.L.; Stuhlman, L. & Suárez, F.M.
La organización: nuevas perspectivas para su conocimiento.
Buenos Aires, Layetana Ediciones, 1978. p. 95-110.

Neste artigo é estudada a intervenção diagnóstica através do "operador", definido como alguém que determina na organização um processo de mudança. A seguir é analisada a intervenção organizacional, função que criou a necessidade de um novo profissional, o "analista organizacional" formado a partir' de um pool de conhecimentos de diferentes disciplinas.

Este nove profissional é analisado à luz de um pergunta básica: "as chamadas ciências do comportamento são realmente ciências?" O papel deste especialista é descrito em dois níveis: o de "agente de ajuda" e o de "agente mobilizador". Finalmente, são introduzidos critérios de avaliação de intervenção deste profissional, ressaltando a necessidade de uma formação profissional rigorosa, ordenada e permanente.

5.
AU: CALDERON, M.B.
TI: Organización.
In: Sonis, A. Medicina Saniutaria y Administración de Salud, vol. II. Buenos Aires, El Ateneo Editorial, 1978. p. 527-43.
RE: O autor descreve o processo administrativo em hospitais e em outras unidades de atenção médica. Passa em seguida à análise de organogramas, discutindo a departamentalização dos diferentes serviços. Todos estes fatos são akqui estudados à luz de oito princípios de organização, enumerados e analisados. Emseguida é fornecido um panorama geral da organização de um hospital, privilegiando controle, serviços de apoio, normas e procedimentos (manual), recursos humanos e comunicações.

Sob a óptica de "controle", "serviços de apoio" e "comunicação", são abordados diferentes aspectos da utilização do computador na administração médica. Finalmente, é mencionado o serviço de administração de unidades.

6.
AU: CAMPOS, J. de Q.
TI: A dinâmica da administração hospitalar.
PU: In: O hospital e sua organização administrativa. São Paulo, Ltr Editora, 1978. p. 205-29.

O autor estuda a dinâmica da administração hospitalar através de alguns grandes grupos: dinâmica, propriamente diata, envolvendo as "características da administração científica", as "responsabilidades gerais do órgão diretor do hospital", as "precauções do órgão normativo", a "delegação de competência" e "o administrador hospitalar e a Mesa Diretora".

Após delinear estes aspectos, passa a particularizar, analisando "o profissional", "os condicionamentos da profissão de administrador", "as qualidades' do administrador hospitalar", "os conhecimentos legais necessários" e "os aspectos formais da

profissionalização". São, em seguida, abordados alguns' aspectos do "relacionamento do administrador com o corpo clínico do hospital" e de suas ligações com os demais servidores, a partir dos "problemas' de uma organização complexa", da "comunicação administrativa" e dos "fluxos de informação".

Finalmente, o autor discute "o administrador hospitalar, o paciente e a comunidade".

7.
AU: FOGUEL, S. & SOUZA, C.C.S.
TI: Organizações como sistemas sócio-técnicos abertos.
PU: In: Desenvolvimento e deterioração organizacional. São Paulo, Editora Atlas, 1980. p. 83-157.

O modelo funcional apresentado se compõe de seis variáveis: estrutura, tecnologia, comportamento, teleologia, ambiente e mudança.

A muda e pode ser por sua vez subdividida em tres grupos: social, de concepção dos indivíduos sobre o trabalho, de naturaleza organizacional.

A variável comportamento deve ser melhor estudada, especialmente sob três pontos de vista: o que aflora versus o que não aflora: comportamento consciente versus inconsciente normalidade versus patologia comportamental. Valeria à pena este estudo pois os problemas comportamentais são reconhecidos como frequentes, de difícil resolução e, principalmente, recebendo diferentes significados.

Assim, deveriam ser guardados, segundo o autor, alguns pontos, como a predominância de determinados padrões comportamentais "auto-oclusivos"; estes padrões podem ser pouco ou viesadamente percebidos e reforçados por atitudes' gerenciais. Mais importante, estes padrões refletem a predominância de estágios de desenvolvimento, não a natureza humana.

8.
AU: GALLART, M.A.; ORTEGA, E.H. & SUAREZ, F.
TI: La inserción de las organizaciones en los procesos sociales. Buenos Aires, Editorial El Coloqui, s.d.p.
RE: E apresentado neste livro um marco teórico para o estudo da organização em relação ao contexto. Aborda-se contexto interorganizacional, contexto global e depedência tecnológica. São assim apresentados os diversos tipos de organização social. E enfatizado o hospital, num capítulo onde é discutido' juntamente com escolas.

Este livro permite obter uma análise das diferentes organizações, num quadro que as define segundo tipo, finalidade, dependência principal, possibilidade de ação sobre o contexto, vias de ação do contexto sobre a organização, estrutura, fontes externas de poder e possíveis alterações de finalidade.

9.
AU: KREIMER, E.P. & STUHLMAN, L.
TI: La relación hombre-organización - una revisión crítica y un esquema de análisis.
Buenos Aires, Editorial El Coloquio, s.d.p.
RE: Estuda-se na primeira parte deste livro o vínculo homem-organização, sob diferentes aspectos: a estrutura da organização é enfocada, assim como a socialização dos funcionários. Dá-se realce à organização como fonte de satisfação e à caracterização de alguns tipos de organização. Na segunda parte, o esquema de análise destas relações: algumas das escolas que estudaram o tema e a noção de contexto; a história organizacioal.

O esquema de análise finalmente proposto parte da premissa que os processos sociais institucionais são múltiplos e complexos. Assim, são estudados ao mesmo tempo processos psicológicos, sociais e técnicos. Seus objetivos são inserir as relações homem-organização num enfoque amplo e chegar à resposta a uma pergunta básica: a organização serve o Homem (participante ou usuário) ou é fonte de alienação?

10.
AU: LOPES, T. de W.M.
TI: Motivação no trabalho.
Rio de Janeiro, Editora da Fundação Getúlio Vargas, 1980.
RE: Motivação é um problema complexo, dinâmico, mutável e fluido. Ela varia no tempo e no espaço, de acordo com a situação e com o indivíduo. Varia na mesma pessoa, em épocas e situações diferentes.

Os motivos humanos tem forças diferentes, em pessoas distintas ou na mesma pessoa em situações diversas. Os motivos dependem, portanto, basicamente da personalidade do indivíduo e da situação (leva-se em conta fatores intrinsecos e ambientais).

A motivação é o principal fator de êxito na ação de qualquer indivíduo ou empreendimento coletivo. Assim, todo administrador deve ser inteirar do problema e ter ao menos uma idéia de seus pontos positivos e negativos, conjuturais e diferenciais de suas diferentes abordagens.

11.
AU: MOHR, J.P.
TI: Grupo tecnico en metodologia de inventarios de instituciones de atencion de Salud.
Washington, OPS/OMS, 1977.
RE: São fornecidos neste documento elementos para se analisar as instituições que prestam atenção à saúde, através de um enfoque sistêmico. E sugerido um tipo de abordagem global onde se analisa o ambiente, as portas de entrada, os processos e a estrutura, as saídas e a avaliação do sistema. E estudado' este modelo como componente de um sistema de avaliação; são propostas formas de identificação e são oferecidos de questionários, de inventários e de definições.

12.
AU: NOWINSKI, A.; RIPA, J.C. & VILLAR, H.
TI: Autoridades - Gobierno de Hospital.
PU: In: Sonis, A. Medicina Sanitaria y Administración de Salud. Vol. II. Buenos Aires, El Ateneo Editorial, 1978 p. 544-64.
RE: Os autores definem escalões da autoridade hospitalar. Citam a Junta Diretiva, de função normativa; a direção, como função executiva e o diretor, como especialista em administração médica.

Administração médica é abordada como especialidade que abrange administração Sanitária e Administração Hospitalar, tocando também Administração de Serviços de Saúde.

Discute-se também neste capítulo a direção uni ou pluripessoal, dando relevo especial ao trabalho em equipe. O problema de diretor médico ou não médico é também abordado.

Finalmente é discutida a posição hierárquica do diretor e seu posicionamento no que tange às relações com a "junta diretiva".

Existe também no capítulo em questão uma análise sobre quais os dez maiores problemas que ocupam o tempo do diretor e sobre quais suas qualificações gerais.

13.
AU: SONIS, A.
TI: Caracterización de las funciones hospitalarias.
PU: In: Medicina Sanitaria y Administración de Salud. Vol. II. Buenos Aires, El Ateneo Editorial, 1978 p. 447-52.
RE: O autor define as diferentes funções de um hospital, ressaltando a importância desta definição por parte da instituição para que se faça uma análise mais correta da mesa. Aborda também o problema da absorção da tecnologia administrativa pelas organizações hospitalares, a par da absorção de tecnologia básica.

Finalmente, insere o hospital como organização complexa, à luz da aparição de novas especialidades, de novos especialistas e, portanto, da sua caracterização como um conjunto de grupos que devem atuar de maneira harmônica para atingir seus objetivos ou cumprir suas funções. Também deve ser considerado como um subsistema do Sistema Social onde está inserido, e como sistema, então, necessariamente aberto.

14.
AU: SONIS, A.
TI: Organización de la atención de salud.
PU: In; Medicina Sanitaria y Administración de Salud
Vol. II. Buenos Aires, el Ateneo Editorial, 1978, p. 20-33.
RE: O autor menciona os novos campos que surgiram para a atuação da chamada "Saúde Pública", levando em consideração a imitação de um país a outro, impulsionada pela relação entre os profissionais de uma mesma especialidade. Esta expensão imitativa teria se formalizado em âmbitos sócio-políticos concretos provindos das realidades contextuais de cada país. E discutido o surgimento de padrões organizacionais distintos para diferentes países e diferentes âmbitos do setor público, entrelaçãos para linhas de ação não claramente definidas. Estas heterogeneidades tem sido potencializadas, a ponto de se poder falar, hoje em dia, em "estado de mudança". Um dos aspectos levados em conta é "centralização- descentralização", além de distribuição", além de distribuição de funções. Os "fatores de mudança" são analisados também como vinculados a todo tipo de variável do contexto. Segundo esta linha, é estudada a participação crescente do Estado na atenção à saúde. São descritos, em seguida, programas verticais e horizontais, e a separação organizacional de atividades preventivas-curativas.

Fetia esta introdução para os sub setores prestadores de atenção, passase a uma análise da tendência a se atingir "serviços integrados de atnção". Finalmente é feito um estudo do papel das instituições de seguridade social, inseridas neste modelo integrado.

15.
AU: SUAREZ, F. & FELCMAN, I.
TI: Tecnología y Organización.
Buenos Aires, Editorial El Coloquí, s.d.p.
RE: Neste livro é estudada basicamente a tecnologia. Fala-se em transferência de tecnologia, transformação, geração e circulação de conhecimentos (passando pela Tomada de Decisões). Também são objetos de estudo algumas tecnologias organizacionais (autores estudados: Thompson, Perrow, Woodward e Triest). Para a análise

da tecnologia administrativa é oferecido um marco teórico alternativo. Também aparece um modelo de introdução de tecnologia de gestão para as organizações, marcando à diferença com ummodelo de gestão acrítico. Finalmente, são lançadas perguntas visando situar a tecnologia a nível de sua influência sobre a organizaçãoi, concreta ou não, e se sugere algumas linhas de ação.

16.
AU: TESTA, M.
TI: Modelos de Salud: las condiciones para su desarrolo.
PU: In: Conferencia Panamericana sobre Planificación de Recursos Humanos en Salud.
Ottawa, OPS/OMS, 1973.
RE: O autor coloca qualquer atividade de saúde como baseada em recursos cuja composição é determinada pela tecnologia utilizada. Estabelece a seguir o modelo referencial dos países da América Latina: sub desenvolvimento e economia de mercado, ou seja, máxima complexidade, máxima indefinição do mesmo e máxima multiplicidade de centros decisórios para a apropriação do recursos em condições de oferta conflitiva.

Analisa, então, a utilização e a formação de Recursos Humanos e sua interferência no planejamento de saúde. Assim, a composição da equipe de saúde adquire, na América Latina, um aspecto particular. Ressalta que a tomada de decisões deve ser necessariamente derivada das condições de contexto. Finalmente aborda uma proposta de modelo.

III. A ORGANIZACAO E SEU CONTEXTO

Material Periódico

1.
AU: BERTRAND, W.E. & MICKLIN, M.
TI: Prestigio y las ocupaciones de salud - evaluaciones sociales del personal de salud en países en vías de desarrollo.
PU: Acta Médica del Valle (Colombia), 8(1):35-9, 1977.
RE: Os autores discutem os atuais sistemas de serviços de saúde através disponibilidade de profissionais treinados. Para tanto querem determinar três pontos básicos referentes à estrutura de prestígio ocupacional na qual vão operar estes profissionais: a) Os usuários aceitam ser tratados por profissionais não médicos? b) os usuários conhecem as diferentes profissões da saúde e seus níveis respectivos? c) como atrair pessoal para as novas profissões?

Apresentam em seguida uma listagem feita com 30 profissões distintas, classificando-as segundo índices obtidos a nível de classificação pela população e depois revendo-as à luz das profissões de saúde.

2.
AU: CASTRO, V.F. & SEGOVIA, M.
TI: El desarrollo institucional de los servicios de salud.
PU: Boletín Oficina Sanitaria Panamericana 79(6):469-84, 1975.
RE: Registra-se no âmbito dosadministradores dos programas de saúde um grave deficit de habilidades e capacidades gerenciais, o que reduz sensivelmente a função de combinar e utilizar com eficácia os recursos que compõem sua organização de trabalho. Por isto, considera-se urgente empreender um processo institucional intensivo nos serviços de saúde.

O desenvolvimento institucional é um processo de ações racionalmente ordenadas. Desenvolver uma instituição equivale a dotá-la de capacidade de funcionamento e de possibilidade de crescimiento harmônicos.

Para proceder a uma reforma administrativa deve-se estabelecer um reordenamento integral dos objetivos, políticas, estruturas, sistemas, normas e procedimentos de todas as funções e atividades da instituição; devem ser também cumpridas algumas condições básicas: existência de um programa nacional ou setorial de

reforma administrativa; decisão política de realizar o processo no serviço de saúde; criação de um órgão encarregado da condução técnica do processo; planejamento e programação do processo a nível institucional; o segundo contribui para a unidade de propósitos e para a coordenação necessária para que as instituições estabeleçam planos comuns, definam suas jurisdições e desnvolvam a organização do trabalho sem atritos ou duplicações.

O processo de reforma administrativa implica na criação de um órgão encaregado de sua condução técnica, que não deve dispor de poder de decisão. Indispensável para realizar com segurança o processo de desenvolvimento institucional, a assistência técnica pode ser local ou estrangeira, bi ou multilateral.

O proceso de desenvolvimento administrativo deve ser realizado segundo as seguintes etapas: diagnóstico, determinação de soluções e implantação.

3.
AU: CORDEIRO, H. & ZAVALETA, H.
TI: Análisis de la práctica médica actual en América Latina: alternativas y tendencias.
PU: Revista Centro Americana de Ciencias de la Salud 13:111-31, 1979.
RE: Os autores colocam as alterações ocorridas na prática médica, atualmente mais voltada para a "simplificação", visando uma maior cobertura da população. Para tal, aparece a ideologia da racionalização. Deve ser observada, no entanto, a utopia da "racionalidade perfeita", em que devem ser excluídos os conflitos intraorganizacionais e do contexto. Os autores ressaltam' a necessidde de ser trazer para dentro do setor a lógica do funcionamento' do sistema econômico, os critérios objetivos de decisão, a análise do custo- benefício, o controle da produção e uma política racional.

Fala-se também neste artigo sobre a vinculação da reforma médica à sociedade. E sugerido, como caminho para a solução da crise latinoamericana no setor, um conjunto de técnicas capazes de tornar possível uma tomada de decisões racional, com definição clara de objetivos e escolha de meios eficazes.

Os diferentes sub-setores do setor saúde latinoamericano são também analisados, chegando a uma confrontação direta enre opções técnicas e opções políticas.

4.
AU: NOVAES, H. de M.
TI: Fatores organizacionais nas crises dos Hospitais de Clínicas.
PU: Revista de Administração para o Desenvolvimento (Brasil), II(2): 71-84, 1978.
RE: O autor situa o hospital como sistema e coloca a diferenciação do processo dentro destas instituições. Apresenta a seguir a teoria X e a teoria Y, onde "X" seria a concepção clássica de administração e "Y" aquela baseada nos interesses intrinsecos individuais, ressaltando que nos hospitais as duas' formas devem coexistir. Enfoca também o médico como variável de grande peso na administração hospitalar. Neste artigo é colocado outro problema dos Hospitais de Clínicas: metas abstratas, autoridade difusa, pouca interdependência funcional entre departamentos e medidas imprecisas de avaliação. Apresenta um modelo com os tres poderes dos Hospitais de Clínicas e através desta' abordagem introduz a Teoria da Contingência e Organização Matricial.

5.
AU: SOUZA, C.C.S.
TI: Deterioração organizacional: alguns exemplos de disfunções.
PU: Revista de Administração de Empresas (EAESP/FGV - São Paulo), 20(2): 53-8, 1980.
RE: O autor caracteriza a era atual como "organizacional". Lembra que as organizações ultrapassam seu papel de mero instrumento. Assim, as organizações vem produzindo disfunções e tem contribuído para a alienação. Isto é chamado "processo de deterioração".

Apresenta, então, um esquema do "ciclo destrutivo das organizações", onde este se propõe como ciclo vicioso. Exemplifica também os tipos de disfunções organizacionais a nível de objetivos, políticas e diretrizes (além das estruturais, comportamentais, tecnológicas e contextuais). Mostra também as "disfunções de segundo grau", terminando o artigo com exemplos.

Material não periódico

1.
AU: DONNANGELO, M.C.F.
TI: Medicina e Sociedade.
São Paulo, Enio Guazzelli e Cia. Editora, 1975.
RE: A autora faz uma análise da sociedade em função do profissional prestador' de atenção médica. Detem-se primeiramente na atuação do Estado sobre asistência à saúde, desde suas origens até as modalidades de participação. Aborda a seguir a força de trabalho, citando cifras de 1971, a vinculação' desta ao desenvolvimento científico-tecnológico e as diferentes formas sociais do trabalho médico propriamente dito. Finalmente, discute a profisão médica e o mercado, desde os valores incorporados à profissão (ideologia), como a "busca da autonomia", até as expectativas dos profissionais frente ao mercado.

2.
AU: FOGUEL, S. & SOUZA, C.C.S.
TI: Organizaçoes como sistemas sóciotécnicos abertos.
PU: In: Desenvolvimento e deterioroção organizacional.
São Paulo, Editora Atlas, 1980. p. 83-157.
RE: O modelo funcional apresentado se compõe de seis variáveis: estrutura, tecnologia, comportamento, teleologia, ambiente e mudança.

A mudança pode ser, por sua vez, subdividida em tres grupos: social, de concepção dos indivíduos sobre o trabalho; de natureza organizacional.

A variável comportamento deve ser melhor estudada, especialmente sob tres pontos de vista o que aflora versus o que não aflora; comportamento consciente versusinconsciente, normalidade versus patología comportamental.

Valeria à pena este estudo pois os problemas comportamentais são reconhecidos como frequentes, de difícil resolução e, principalmente, recebendo diferentes significados.

Assim, deveriam ser guardados, segundo o autor, alguns pontos, como a predominância de determinados padrões comportamentais "auto-oclusivos"; estos padrões podem ser pouco ou viesadamente percebidos e reforçados por atitudes' gerenciais. Mais importante, estes padrões refletem a predominância de estágios de desenvolvimento, não a natureza humana.

3.
AU: KREINER, E.P. & STUHLMAN, L.
TI: La relación hombre-organización - una revisión crítica y un esquema de análisis.
Buenos Aires, Editorial El Coloquio, s.d.p.
RE: Estuda-se na primeira parte deste livro o vínculo homem-organização, sob diferentes aspectos; a estrutura da organização é enfocada, assim como a socialização dos funcionários. Dá-se realce à organização como fonte de satisfação das necessidades humanas, ao contrato psicológico, ao poder, à alienação e à caracterização de alguns tipos de organização. Na segunda parte, o esquema de análise destas relações: algumas das escolas que estudaram o tema e a noção de context; a história organizacional.

O esquema de análise finalmente proposto parte da premissa que os processos sociais institucionais são múltiplos e complexos. Assim, são estudados ao mesmo tempo processos psicológicos, sociais e técnicos. Seus objetivos são inserir as relações homem-organização num enfoque amplo e chegar à resposta a uma pergunta básica: a organização serve o Homem (participante ou usuário) ou é fonte de alienação?

4.
AU: RIVERO, D.T. de.
TI: La administración de los Servicios de Salud.
PU: In: Seminario sobre Capacitación Administrativa en los Servicios de Salud.
Maracay (Venezuela), OPS/OMS, 1969.
RE: O autor começa com uma introdução referente à administração moderna, citando escolas o fazendo uma análise das mesmas, detendo-se na teoria de sistemas, dentro de um enfoque ecológico. Aborda também o problema tecnológico, dentro do "contexto". Cita em seguida as mudanças estruturais ocorridas nos países em desenvolvimento, com ênfase no campo da saúde. Entra, finalmente, no campo da saúde em si, como "setor social produtor, principalmente, de serviços", conceituando-o como sistema multisetorial.

Analisa a seguir os diferentes subsetores, inserindo-os na América Latina. Aborda, consequentemente, a Administração de Saúde, ressaltando a formação de profissionais.

5.
AU: SONIS, A.
TI: Perfeccionamiento en administración de los profesionales del sector salud.
PU: In: Seminario sobre capacitación administrativa en los servicios de salud.
Ottawa OPS/OMS, 1973.
RE: O autor inicia com o enquadre de referência da pirâmide profissional, relacionando a ela a necessidade de conhecimentos de dministração nos diferentes níveis. Esclarece em seguida a necessidade e a importância do aperfeiçoamento dos profissionais em termos de capacitação administrativa, exemplificando dentro do setor público latino-americano. Ressalta que qualque tentativa de organização deve ter como primeiro passo a melhora do nível de eficiência das instituições do setor saúde e para tal, se torna indispensável a formação de administradores de alto nível. Este aperfeiçoamento deve, segundo o autor, ser visto dinamicamente, em função das mudanças dos conceitos que envolvem o setor. O administrador deve conhecer o ambiente, devido às instituições e ao pessoal.

São a seguir definidos critérios de escolha quanto a quem deve ser submetido à formação.

Finalmente, o autor mostra a necessidade de haver relação entre organismos prestadores de serviços no setor saúde e organismos formadores de pessoal para o setor, e descreve de maneira sucinta a metodologia a ser empregada.

6.
AU: SUAREZ, F.
TI: Problemas relativos al processo de emergencia y profesionalizacion del rol de experto en "desarrollo organizacional".
PU: In Altschul, C.; Bertoni, E.J.; Karpf, L.L.; Stuhlman, L. & Suárez, F.
La organización: nuevas perspectivas para su conocimiento.
Buenos Aires, Layetana Ediciones, 1978 p. 81-92.
RE: Neste capítulo são discutidos problemas relativos a processos de emergência e profissionalização do papel de expert em Desenvolvimento Organizacional. O primeiro tópico abordado envolve os dois tipos de tecnologia organizacional. "tecnologia central" (para um hospital as práticas médicas vigentes) e as "tecnologias administrativas", cujo objetivo final é a tomada de decisões.

O Desenvolvimento Organizaional é apresentado como resultado da reunião das tecnologias administrativas, interdisciplinares, para a produção de uma mudança planejada para a organização. A seguir, é apresentado um esquema mostrando o "transplante acrítico de tecnologia", não incomum nos países da América Latina.

Assim, é introduzido o conceito de especialista em Desenvolvimento Organizacional, sugerido como útil sempre que se produza uma revisão crítica e criativa dos objetos organizacionais, gerando e adaptando tecnologias que possam dar reposta aos problemas reais vividos em organizações lati

7.
AU: SUAREZ, F. & FELCMAN, I.
TI: Tecnología y Organización.
Buenos Aires, Editorial El Coloquio, s.d.p.
RE: Neste livro é estudada basicamente a tecnologia. Fala-se em transferência de tecnologia, transformação, geração e circulação de conhecimentos (pasando pela Tomada de Decisões). Também são objetos de estudo algumas tecnologias organizacionais (autores estudados: Thompson, Perrow, Woodward e Triest). Para a análise da tecnologia administrativa é oferecido um marco teórico alternativo. Também aparece um modelo de introdução de tecnologia de gestão para as organizações, marcando a diferença com um modelo de gestão acrítico. Finalmente, são lançadas perguntas visando situar a tecnologia a nível de sua influência sobre a organização, concreta ou não, e se sugere algumas linhas de ação.

8.
AU: SUAREZ, F.; FELCMAN, I & STUHLMAN, L.
TI: Organización y Contexto.
Buenos Aires, Facultad de Ciências Econômicas (UBA), 1974 (mimeo).

RE: Os autores colocam o tema como de difícil inserção dentro da literatura. Assim, eles se propõem a elaborar um esquema onde se enquadrem as organizações, sus relações e suas influênmcias. Dentro de seu esquema conceitual eles colocam um modelo de análise onde se estudam os condicionantes, segundo sejam internos (intraorganizacionais) ou externos (do contexto). Dividem, a seguir, os condicionantes em indiretos (fatores macrosociais) e diretos (insumos, elementos, reguladores, usuários e produtos). Em seguida, estudam as ações da organização sobre o contexto e sugerem estratégias para manejá-lo. Finalmente, mostram os problemas metodológicos e possíveis abordagens.

9.
AU: TESTA, M.
TI: Modelos de Salud: las condiciones para su desarrollo.
PU: In: Conferencia Panamericana sobre Planificación de Recursos Humanos en Salud.
Ottawa, OPS/OMS, 1973.
RE: O autor coloca qualquer atividade de saúde como baseada em recursos cuja composição é determinada pela tecnologia utilizada. Estabelece a seguir o modelo referencial dos países da América Latina: sub desenvolvimento e economia de mercado, ou seja, máxima complexidade, máxima indefinição do mesmo e máxima multiplicidade de centros decisórios para a apropriação de recursos em condições de oferta conflitiva.

Analisa, então, a utilização e a formação de Recursos Humanos e sua interferência no planejamento de saúde. Assim, a composição da equipe de saúde adquire, na América Latina, um aspecto particular. Ressalta que a toma da decisões deve ser necessariamente derivada das condições de contexto. Finalmente, aborda uma proposta de modelo.

EVALUACION Y PLANIFICACION DE SERVICIOS DE SALUD

PARTE II

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SELECCION BIBLIOGRAFICA DE ARTICULOS EN PUBLICACIONES PERIODICAS LATINOAMERICANAS ACERCA DE LA PLANIFICACION EN SALUD.

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INTRODUCCION

El presente trabajo intenta reunir parte del material bibliográfico publicado en América Latina acerca de la planificación de salud, en base a una selección realizada entre el acervo disponible en la Biblioteca Regional de Medicina y Ciencias de la Salud (BIREME), la que obviamente dispone de todo el material aquí citado.

El objetivo primario ha sido el reunir en un único trabajo aporte de las muchas obras difundidas en las diferentes publicaciones periódicas editadas en nuestro continente, para realizar lo cual han sido definidos como parámetros: el que fueran publicadas en español o portugués y en los años que van de 1970 a 1980.

El trabajo comprende 100 títulos, de los que se incluye resúmenes originales, en la imposibilidad de adoptar - por su extensión - los existentes en las propias obras, si bien es necesario explicitar que esta reducción se realizó no sin pérdida de contenido; no obstante, se insistió en ese criterio, al considerar que la importancia del resumen en un trabajo de este tipo está dada en la medida en que éste da una idea del contenido de la obra en cuestión, y no por lo exhaustivo que sea en alcanzar este propósito. Con un criterio similar, se incluyeron como resúmenes los índices de algunas de las publicaciones más extensas.

Las obras seleccionadas han sido agrupadas en un índice que es a su vez producto de aquellas, es decir que no responde a una elaboración teórica, sino a la enumeración de aquellos temas que han sido más trabajados en América Latina en los últimos diez años. Muchos de los trabajos seleccionados se ocupan de más de un aspecto, siendo algunos de ellos mencionados al final de acápite, remitiéndose al lector al item donde se encuentra el resumen correspondiente.

Se incluye asimismo una lista de revistas consultadas - gran parte del material existente en BIREME dentro de los parámetros anteriormente explicitados - y una lista de las publicaciones, según el grado en que han sido utilizadas.

Finalmente, resta decir que el presente trabajo no pretende ser exhaustivo, sino que significa apenas un ordenamiento que permite al lector aproximarse a una serie de temas acerca de la planificación en América Latina.

INDICE DE TEMAS

1. HISTORIA DE LA PLANIFICACION DE SALUD EN AMERICA LATINA

AU : ACHWEFEL, DETLEF
TI : Planificación, administración y organización de los servicios de salud
PU : Revista Centroamericana de Ciencias de la Salud
No. 1 Mayo-Agosto 1975 pp.91-105
RE : La evolución de la concepción del desarrollo desde el fin de la segunda guerra, ha implicado cambios en el peso relativo que se ha dado en la planificación a los aspectos económicos y sociales. Así, desde un primer momento, donde las acciones de salud solo tenían sentido en la medida en que los problemas que pretendían superar significaran un cuello de botella al aumento de la productividad económica, se pasa, a partir de la Conferencia de Punta del Este, a una visión de ambos aspectos como complementarios, y por lo mismo, de la planificación como una actividad integrada.

En el sector salud, se destaca en esta etapa el llamado método CENDES/OPS, que se propone ofrecer recomendaciones sobre el mejor uso de unos recursos siempre limitados, confrontando entre sí diferentes alternativas de decisión.

A pesar de ello, la influencia de la planificación de salud en la determinación de la política de salud nacional, se ha mostrado en la última década extremadamente débil. La planificación tecnocrática no ha logrado ni siquiera coordinar la política de salud con la política de desarrollo, de la que teóricamente forma parte.

Los planificadores en el sector no han sabido llevar a un mismo plano los conceptos de eficiencia y factibilidad, desarrollando solo el primero, e introduciendo por esta vía un nuevo factor de estancamiento en la estructura del sector salud.

El método CENDES/OPS simplifica demasiado la realidad social, su lógica técnica es solo un fragmento de la lógica social; los problemas de decisión que el método promete resolver, solo pueden serlo en un diálogo con la población, para lo cual es necesaria por un lado la organización de la población, y por otro, administradores del sistema de salud que sean simultáneamente planificadores, que dominen los aspectos técnicos, administrativos, políticos y sociales de la problemática de salud.

AU : ISAZA, PABLO A.
TI : La planificación de la salud en América Latina
PU : Revista de la Escuela Nacional de Salud Pública
Medellín, Colombia Vol. 2 No. 2 Julio-Diciembre 1976 pp.99-107

RE : La evolución del proceso de planificación en América Latina ha estado íntimamente ligada al desarrollo de los servicios de salud, dentro de la dinámica de los fenómenos sociales y económicos de los países.

A partir de la aparición de los seguros sociales en los años 30 y de los programas cooperativos con los Estados Unidos, la administración de salud se encausa en busca de un mejor ordenamiento de sus objetivos y acciones. La Carta de Punta del Este en donde se incluye a la salud como sector del desarrollo, crea la coyuntura apropiada para que un grupo de administradores de salud y economistas diseñe un método de planificación de salud, que pasará a ser conocido como OPS/CENDES.

El método OPS/CENDES, basado en el concepto de eficacia, tuvo gran importancia en la formulación de planes de salud hasta el año de 1970, en que empieza a caer en desuso. Se abren entonces nuevos conceptos en el manejo de la planificación y se utilizan técnicas de análisis de sistemas, diagnósticos institucionales y sectoriales, definición de políticas y se incluye el componente financiero y de inversiones. El Plan Decenal de las Américas, formulado en 1972, durante la III Reunión de Ministros de Salud, marca un jalón, al utilizar la técnica del análisis de sistemas en un plan de alcance continental, basado en el concepto universal de la salud, y sistematizando por un lado la situación de salud, y por otro, la cantidad, calidad y organización de los recursos y métodos para superarla.

Finalmente, ante los planteamientos hechos por la OMS y la OPS en el sentido de utilizar la comunidad como parte integrante del proceso de planificación y como forjadora de su propio desarrollo, surgen los conceptos de planificación de base y planificación participante, utilizados hoy en muchos países de América Latina.

La planificación como cuerpo de doctrina y herramienta de trabajo, ha sido factor fundamental en el desarrollo de los servicios de salud y es mucho lo que cabe esperar aún de ella.

AU : OPS/OMS
TI : La planificación de salud en la América Latina
PU : Publicación Científica No. 272
1973
RE : Los autores presentan una relación histórica de la planificación de salud en América Latina, conjuntamente con comentarios y apreciaciones acerca de las razones histórico-políticas que fueron generando, en el período considerado, las diferentes concepciones acerca del papel de la planificación y su metodología.

Se destacan así las causas del fracaso de la planificación de salud en América Latina, desde el punto de vista conceptual, analizando las limitaciones teóricas de cada uno de los enfoques que existieron de 1950 en adelante.

2. POLITICAS DE SALUD.

2.1. RELACIONES ENTRE PLANEAMIENTO ECONOMICO Y DE SALUD.

AU : CIBOTTI, RICARDO
TI : Introducción al análisis del desarrollo y de la planificación
PU : Educación Médica y Salud
Vol. 4 Nos. 1 y 2 Enero-Junio/1970 pp. 14-48
RE : La condición de subdesarrollo abarca elementos relacionados con aspectos sociales, políticos, culturales y demográficos de los países. Desde el punto de vista económico, se identifica con la baja disponibilidad de bienes y servicios.

El desarrollo, por su parte, podría definirse como un proceso de crecimiento más cambio, no solo de naturaleza económica, sino también social y política. La estructura de los países subdesarrollados, se caracteriza por predominio de actividades primarias, inestabilidad y dependencia en cuanto al funcionamiento de sus economías, una estructura social donde el poder de decisión se encuentra limitado a grupos minoritarios y un sistema político especialmente inestable.

La planificación del desarrollo económico es una herramienta de los países, mediante la identificación de los factores que retardan el proceso, y el análisis de las posibilidades de removerlos.

Entre los planes sectoriales que ocupan un lugar destacado, están los correspondientes a los sectores sociales, principalmente salud y educación, ya que el bienestar, tanto individual como colectivo, es uno de los fines del proceso, y por otro lado, un elevado nivel de salud y educación repercuten en la eficiencia de las actividades de producción.

Se apuntan algunas metodologías tendientes a la medición del proceso de desarrollo, y se discuten los principales aspectos de la financiación del sector salud.

AU : GUZMAN OROZCO, RENALDO
TI : La planificación de la salud en los países en vías de desarrollo
PU : Salud Pública de México
Epoca V Vol. XV No. 6 Noviembre-Diciembre 1973
pp.807-811

RE : Siendo la salud uno de los fines básicos perseguidos por todo intento de conseguir mejores niveles de vida, y siendo indiscutible que un elevado nivel de salud asegura mano de obra apta para el trabajo, contribuyendo a la eficiencia de las actividades productivas, resulta indispensable incorporar en los planes generales de desarrollo los programas nacionales de salud.

La planificación del desarrollo económico y social requiere de la participación coordinada de los diferentes sectores, así como de la comunidad misma, con el fin de que la organización de todos los recursos disponibles actúe sinérgicamente.

Por otra parte, la planificación de la salud debe constituirse en un conjunto de acciones con características de factibilidad, continuidad, unidad y permanencia, cuyo propósito supere el establecimiento de una estructura administrativa, para constituirse en una herramienta de estudio de las relaciones recíprocas entre salud y desarrollo.

2.2. FORMULACION DE POLITICAS DE SALUD.

2.2.1. FORMULACION DE POLITICAS GENERALES DE SALUD.

AU : BACKETT, E. MAURICE
TI : La cuestión de la política de salud: los cambios más importantes en nuestra actitud frente a los problemas de salud
PU : Boletín de la Oficina Sanitaria Panamericana
84(4), 1978 pp. 313-323
RE : Los cambios ocurridos en la atención de salud en los últimos 50 años, plantean la necesidad de replantear nuestra actitud frente a los problemas de salud y enfermedad.

El progreso tecnológico ha oculatado la simplicidad de los padecimientos básicos de las poblaciones, y lo innecesario que resulta esta tecnología para resolverlos, y se propone, en cambio, el traslado de la responsabilidad del cuidado de la salud, desde el nivel médico, al nivel familiar e individual, y el desarrollo de una tecnología de bajo e intermedio nivel, que esté de acuerdo con las necesidades que pretende cubrir.

Desde este punto de vista, la participación en el desarrollo - incluído el fortalecimiento de los servicios de salud - tal como lo considere cada cultura, debería ser el objetivo en lugar de la imposición de nuestras propias estrategias.

La cuestión planteada es la desmistificación de la asistencia médica, y al mismo tiempo, el mejorar la calidad del cuidado a la salud que la propia comunidad se presta, para lo cual es preciso montar investigaciones conjuntamente con la población consumidora

de las acciones de salud, así como modificar la dirección actual en que se desarrolla la educación de los recursos humanos, en base a un análisis de las necesidades y exigencias de la población interesada.

AU : DURAN, HERNAN
TI : Enfoque y perspectivas de la planificación de la salud como parte del desarrollo en América Latina
PU : Boletín de la Oficina Sanitaria Panamericana
Enero 1970 pp. 41-50
RE : La planificación de salud en Améirca Latina constituye indudablemente una importante herramienta para el desarrollo, la que, a pesar de ser aceptada en la generalidad de los casos, cuenta aún con grandes dificultades en cuanto a su implementación y los resultados que ha obtenido, si bien son promisorios, no han alcanzado lo que se esperaba de ella.

Las condiciones del desarrollo socio-económico actual de América Latina hacen impostergable la puesta en marcha de la planificación de salud.

Las decisiones principales que componen una política de salud se relacionan con: 1) la elección de las instituciones y recursos con los que ha de operar el sector salud; 2) las áreas geo-económico-sociales que se han de tomar en cuenta; 3) los grupos de población que se han de atender preferentemente; 4) la prioridad de determinados problemas de salud; 5) las reformas que han de adoptarse para el manejo de los servicios, y 6) la prioridad que se conceda a la atención de necesidades actuales de salud o a las previsiones para el futuro.

En cuanto al cumplimiento de la planificación son fundamentales: a) una actitud favorable frente a ella: b) la existencia y funcionamiento de un sistema que cuenta con personal capacitado, unidad de planificación, datos estadísticos, planes nacionales de salud y mecanismos administrativos adecuados y métodos que permitan determinar la asignación de los recursos en el plan de acuerdo con los términos de la política de salud.

AU : MAHLER, HALFDA
TI : Las estrategias epidemiológicas para la salud en un mundo cambiante
PU : Boletín de la Oficina Sanitaria Panamericana
Vol. LXXXIV No. 2 Febrero 1978 pp. 95-107
RE : Si tuviéramos todo el conocimiento actual, y lo pudiéramos usar sin restricciones, difícilmente encaminaríamos las actividades de salud del mismo modo que ahora.

Los sistemas de atención de salud tienen por características: el que los recursos de que se dispone, no son asignados de forma apropiada a la solución de los problemas de la población total; que no está científicamente probado que la mayor parte de las intervenciones médicas sean verdaderamente eficaces; que los sistemas de salud no están estructurados para proporcionar acciones válidas, oportunas, de bajo costo, a los grupos de mayor riesgo y de una forma aceptable.

Los países ricos todavía soportan esto, en tanto que los pobres no pueden darse el lujo de adoptar la tecnología de aquellos. Sería utópico esperar mejoramientos sustanciales de salud en estos países, si antes no se eliminan o mitigan las condiciones restrictivas ambientales, sociales y económicas que la encuadran. Hay que dejar de ver el mundo a través del color del cirstal de los profesionales médicos, dejar de creer que la salud es el resultado del avance de servicios de salud y pensar que es el resultado del avance de todo el frente socio-económico. Rara vez se consideran accesibilidad y aceptabilidad de la extensión de cobertura. La salud no es un producto que se da; se debe generar desde adentro, no puede ni debe ser un esfuerzo impuesto desde afuera: debe ser una respuesta de la comunidad a los problemas que percibe.

Es hora de que comprendamos que el concocimiento de la estrategia de inicio de un cambio social es un instrumento tal útil para el mejoramiento de la salud, como el conocimiento de la tecnología médica. En la atención de salud, se deben reemplazar los conceptos de complejidad, eficiencia y profesionalismo, por los de pertinencia, eficacia y aceptabilidad. Resulta evidente que no existe una solución ideal para el problema, sino solo variantes apropiadas a las condiciones vigentes.

AU : MAHLER, HAFDAN
TI : Obstáculos frente a la asistencia primaria de salud
PU : Saúde em Debate
No. 6 Enero-Feb.-Mar. 1978 pp. 27-31
RE : En el sector salud, la medida más importante para reducir algunas de las flagrantes desigualdades frente a la enfermedad y la muerte, es tal vez el fomento de la asistencia primaria, concebida como un derecho humano, sin descriminación social o económica alguna.

El sistema médico se debate en una profunda crisis, en la confusión entre medicina y salud.

La atracción por una tecnología avanzada, ha llevado a una preocupación obsesiva por lo que podría llamarse enfermedades marginales, preocupación que equivale a una distorsión de la noción misma de salud.

El acto terapéutico aislado, por más veces que se repita, es antieconómico e ineficaz, desde el punto de vista general del fomento a la salud.

La formación de profesionales y la investigación siguen iguales pautas, perpetuando así la distorsión de la acción sanitaria, apoyados por el vasto imperio de la industria médica.

Nos encontramos entonces con un sistema médico cerrado, donde se han dejado de lado los objetivos de la comunidad, en función de los del propio grupo profesional, que tiende a trabajar en las fronteras de su disciplina, y que alimenta una cada vez mayor mistificación de la atención médica.

Si queremos fortalecer la asistencia primaria de manera que las aptitudes y responsabilidades desciendan hasta el dirigente comunitario y la célula familiar.

La atención primaria de salud deberá tener los siguientes principios generales:
- Adaptarse a la comunidad y atender sus necesidades y aspiraciones.
- Formar parte del sistema nacional de salud.
- Estar integrada con otros sectores del desarrollo comunitario.
- Permitir el diálogo continuo entre usuarios y servidores.
- Usar recursos disponibles en la comunidad con la máxima eficiencia.
- Ser un sistema integrado y equilibrado, preventivo curativo de promoción y rehabilitación de salud.
- Escoger el personal de salud y adiestrarlo.
  -Asegurar la formación y funcionamiento de equipos de salud.

OBRAS CITADAS EN OTRA PARTE DE ESTE TRABAJO:

AU : CONFERENCIA DE ALMA-ATA
TI : Conferencia de Alma-Ata sobre Atención Primaria de Salud
PU : Salud Pública de México
Vo. XX No. 6 Noviembre-Diciembre 1978
pp. 683-699

Ver item 2.2.2.

AU : NEWELL, K.W.
TI : La salud por el pueblo
PU : Educación Médica y Salud
Vol. 9 No. 3 1975

Ver item 2.2.3.

2.2.2. FORMULACION DE POLITICAS DE ATENCION PRIMARIA EN SALUD.

AU : CONFERENCIA DE ALMA-ATA
TI : Conferencia de Alma-Ata sobre Atención Primaria de Salud
PU : Salud Pública de México
Vol. XX No. 6 Nov.-Dic. 1978 pp. 683-699
RE : Considerando que más de la mitad de la población mundial no recibe una asistencia de salud adecuada, y persuadida de que la salud es un derecho humano fundamental, la Conferencia pidió que estos problemas se abordaran con nuevo nuevos criterios, para reducir el abismo que media entre los privilegiados y los desposeídos.

La atención primaria está basada en métodos y técnicas prácticas y socialmente aceptables, para todos los individuos, con la participación de los mismos y a un costo soportable. Es parte del sistema nacional de salud, así como del desarrollo económico y social. Es el primer contacto de los individuos con el sistema y viceversa, todas las personas tienen el derecho y el deber de participar en la planificación y organización del sistema.

Las actividades de atención primaria deben estar coordinadas en todos los niveles con el resto de los sectores, al mismo tiempo que es preciso realizar actividades en las áreas de nutrición, producción, empleo, etc.

El desarrollo de la comunidad comprenderá la organización y movilización de grupos, la selección de personal voluntario o no, su formación, supervisión y apoyo logístico.

Se aplicará una tecnología adecuada en cuanto a su utilización y costo, con equipos, materiales, medicamentos simples y vacunas; y apoyo de niveles superiores para referencia de casos, investigaciones y estadística.

Se estimó que la adopción por los gobiernos de estos propósitos representa una manifestación histórica y colectiva de voluntad política, inspirada en la justicia social de la que la salud forma parte, para todos los pueblos, donde cada país adoptaría la estrategia más conveniente.

Se hizo hincapié en el carácter multisectorial del desarrollo de la salud. El sector sanitario tomará la iniciativa y velará porque los factores relacionados reciban la atención que merecen. Los países pueden aprovechar unos de otros, por lo que es importante el intercambio de información, experiencias y conocimientos técnicos entre ellos y con los organismos internacionales, dentro de los principios de autorresponsabilidad y autodeterminación nacional.

La Conferencia finalizó adoptando veintidós recomendaciones concretas para los gobiernos.

AU : DONALD, J.F.
TI : Em que consistem os cuidados de saúde primários
(Princípios Gerais)
PU : Revista da Fundaçao SESP
San Pablo Vol. XXIV No. 2 Año 1979 pp. 85-88
RE : El principio de los cuidados de salud primarios consiste en ofrecer a la comunidad, o a cada individuo, un conjunto de servicios de cuidados preventivos y curativos para promoción y recuperación de la salud.

Estos cuidados deben realizarse por parte del sistema nacional de salud, desarrollando un conjunto integrado de servicios, tanto en cuanto a las actividades del sector, como en cuanto a la integración de otros sectores del desarrollo comunitario que reposen en los recursos locales, haciendo que la mayoría de las intervenciones médico-sanitarias se desarrollen en el escalón más periférico de los servicios y con la participación activa de la comunidad, tanto en la concepción de la problemática como de las posibles medidas a tomar.

AU : ESCUELA NACIONAL DE SALUD PUBLICA DE LA UNIVERSIDAD DE ANTIOQUIA, MEDELLIN, COLOMBIA
TI : Atención de la salud en el nivel primario
Aspectos conceptuales
PU : Revista de la Escuela Nacional de Salud Pública
Medellín. 2(6) Enero-Junio 1976 pp. 63-68
RE : Es preciso un nuevo enfoque en la atención a la salud: no es posible continuar con los mismo mecanismos y estrategias aplicados en los países desarrollados. No es cuestión de introducir un poco más de habilidad técnica, sino de efectuar cambios drásticos y reformas radicales, y en este sentido, la atención primaria a la salud parece ser el programa prioritario.

Como características destacables de los niveles primarios de atención, se citan:

a) Integración.- Toda la población de un área debe ser considerada como una unidad, siendo su salud de responsabilidad de los servicios locales, donde la unidad de los mismos debe ser una característica principal.

b) Participación de la comunidad.-, que se define en base al modelo operacional adoptado en Antioquía, Colombia.

c) Adaptación a las necesidades, condiciones y recursos locales.-, donde se describen los servicios básicos a realizar y a adoptar en cada situación.

d) Sectorización y regionalización.

Los sistemas de salud, y en especial los servicios de nivel primario, han sido usados en muchas ocasiones como atenuadores de las tensiones sociales, procurando reproducir así las condiciones que permiten la permanencia de un sistema de combinación por parte de una determinada clase social. Pero, los técnicos pueden llegar a engranar mecanismos de diferente índole, y especialmente políticos, que tiendan a enfrentar el sistema dominante, y transformar el estado de cosas.

Habrá que construir una organización para el Sistema de Servicios de Salud, que apele a las raíces del pueblo, que aproveche sus valores y conocimientos, y entienda a la población como el primero y más importante de los elementos en cualquier proyecto social.

OBRAS CITADAS EN OTRA PARTE DE ESTE TRABAJO:

AU : CASTELLANOS, JORGE
TI : Situaciones de cobertura, niveles de atención y atención primaria
PU : Boletín de la Oficina Sanitaria Panamericana
Vol. LXXXII No. 6 Junio 1977 pp.478-493

Ver item 2.2.3.

AU : OPS/OMS TI : Extensión de cobertura de los servicios de salud con las estrategias de atención primaria y participación de la comunidad
PU : Boletín de la Oficina Sanitaria Panamericana
Vol. LXXXIII No. 6 Diciembre 1977
pp.477-507

Ver item 2.2.3.

AU : VALDEREZ BORGES, MARIA
TI : Consideraçoes sobre a enfermagem na assiténcia primaria de saúde
PU : Revista de la Fundaçao SESP
Vol. XXV No. 1 1980 pp.71-90

Ver item 2.2.2.1.

2.2.2.1. FORMULACION DE POLITICAS DE FORMACION DE RECURSOS HUMANOS PARA LA ATENCION PRIMARIA EN SALUD.

AU : GARZA, STEPHEN y BELTRAN, OVIDIO
TI : Problemas del personal auxiliar de salud en América Latina
PU : Educación Médica y Salud
Vol. 5 No. 3 Julio-agosto-septiembre 1971
pp. 236-253
RE : Dada la reconocida importancia que tiene la formación de personal auxiliar de salud, se discuten los aspectos de nomenclatura, categorías y funciones, formación y adiestramiento, intentanto no solo describir algunos de los esquemas y definiciones adoptados, sino fundamentalmente levantar una serie de preguntas que contribuirían al esclarecimiento de los aspectos mencionados.

Finalmente se destaca la importancia de estimular la formación y utilización del personal auxiliar de salud, (que parte de una programación integral basada en el análisis previo de las condiciones socioeconómicas y de los recursos existentes), en proyectos de investigación que contribuyen al conocimiento y desarrollo de nuevas modalidades de servicios. Será también importante desarrollar criterios para la delimitación de responsabilidades entre las diversas áreas profesionales, así como apra la clasificación del personal auxiliar de salud.

AU : OPS/OMS
TI : Enseñanzade enfermería en salud comunitaria
PU : Publicación Científica No. 332 OPS/OMS 1976
RE : Contenido:

I. Introducción
II. Síntesis de la problemática de la enfermería en salud comunitaria en América Latina
III. Conceptos de enfermería en salud comunitaria
IV. Tendencias en las prestación de servicios de salud, necesidades de salud en América Latina, y su significado para la enfermería en salud comunitaria
V. La enseñanza de la enfermería en salud comunitaria
VI. Función y características de un libro de texto y fuentes de consulta para enfermería en salud comunitaria

AU : OPS/OMS
TI : El papel de la enfermera en la atención primaria de salud
PU : Publicación Científica No. 348 OPS/OMS 1977
RE : Contenido:

I. Introducción
II. Atención primaria
III. Nueva concepción de las funciones y responsabilidades de la enfermera en atención primaria

IV. Medidas que se deben tomar para validar el papel de la enfermera en la atención primaria
V. Preparación de la enfermera para su nuevo papel en la atención primaria de salud
VI. Medidas que se deben tomar para facilitar la preparación de la enfermera
VII. Supervisión de la enfermera en atención primaria

AU : VALDEREZ BORGES, MARIA
TI : Consideraçoes sobre a emfermagem na *assisténcia primária de saúde*
PU : Revista de la Fundacao SESP
Vol. XXV No. 1 1980 pp.71-90
RE : Es esencial desarrollar estrategias destinadas a corregir distorsiones y a innovar los sistemas vigentes en beneficio de las grandes mayorías. La asistencia primaria de salud es una de esas estrategias, e intenta dar una nueva dimensión a los servicios, ampliando su capacidad y mejorando la calidad de la atención prestada.

No es posible esperar que la implantación de la atención primaria sea fácil, ni que por sí sola logre establecer componentes funcionales que, como el trabajo en equipo, la regionalización institucional, etc., no están consolidados en nuestra dinámica de trabajo.

Un sistema de salud basado en la asistencia primaria es la única estrategia que puede extender los cuidados básicos de salud a toda la población en el Brasil, y propiciar una referencia racional a los niveles de asistencia más complejos. Parece ser por otra parte, la tendencia de la política de salud, al estar implementándose una serie de programas que consolidados, significan extender la cobertura a 45.000.000 de habitantes, y al estar previsto un nuevo programa a nivel nacional.

La enfermería parece ser una profesión con las características exigidas por los programas de atención primaria, aunque está en la actualidad desdibujada su función, fundamentalmente a causa del grado de organización alcanzado en los servicios, donde se ha visto reducida a actividades complementarias, sin una función claramente definida.

AU : PILLET, JUAN V.
TI : El desarrollo de los recursos humanos para la atención materno-infantil
PU : Condiciones de Salud del Niño en las Américas
Publicación Científica No. 381 OPS/OMS 1979 pp.106-112

Ver item 2.2.4.

2.2.2. FORMULACION DE POLITICAS DE EXTENSION DE COBERTURA DE LOS SERVICIOS DE SALUD.

AU : CASTELLANOS, JORGE
TI : Situaciones de cobertura, niveles de atención y atención primaria
PU : Boletín de la Oficina Sanitaria Panamericana
Vol LXXXII No. 6 Junio 1977 pp.478-493
RE : El concepto de cobertura de salud sobrepasa los límites tradicionales de una simple proporción numérica, ya que, aceptando el enfoque integral de la salud, una población solo estará cubierta con servicios de salud, en la medida en que sus necesidades básicas estén recibiendo atención, efectiva y suficiente, dentro de la posibilidad que ofrecen los recursos de su situación particular.

En América Latina, son múltiples las razones que explican la baja cobertura de los servicios, (40% de la población no tiene acceso a los mismos), entre las que se destacan: inapropiada distribución geográfica; multiplicidad de instituciones, tanto públicas como privadas; desarrollo anárquico y aislado de los subsistemas hospitalarios; uso de sistemas anacrónicos de organización y administración; e inadecuación tecnológica.

Para dar acceso real de la población a los servicios de salud, no basta con cubrirlos geográficamente, sino que es preciso garantizar una atención igualitaria para cada miembro de la comunidad, además de que la disponibilidad de los mismos debe estar en relación con la mayor o menor frecuencia de los problemas. El concepto de niveles de atención parte de la base de la existencia de una relación entre la complejidad de una situación de salud y la complejidad de los métodos y recursos para atenderla, e implica el reconocimiento de la complejidad progresiva de las situaciones de salud. Desde este punto de vista, el procedimiento más apropiado para la determinación de niveles, es la identificación y clasificación de los problemas de salud en base a un análisis epidemiológico, y la categorización de la atención correspondiente.

Se pone énfasis en el concepto de atención primaria, al que se le define como el primer contacto del individuo con el sistema de prestación de servicios de salud, exista un servicio institucionalizado o no, siendo sus características variables en función de la disponibilidad de recursos, pero incorporando en todos los casos la participación de la comunidad. Para finalizar, se comentan los aspectos de estructura organizacional y recursos humanos para la atención primaria.

AU : NEWELL, K.W.
TI : La salud por el pueblo
PU : Educación Médica y Salud
Vol. 9 No. 3 1975

RE : Se examinan algunas de las ideas espuestas en la obra del mismo nombre, donde se relatan las experiencias de nuevos métodos para la prestación de asistencia sanitaria en nueve diferentes países, especialmente en el medio rural y con participación de la comunidad.

Se presentan tres diferentes tipos de programas pero con puntos coúmnes: transformación nacional en Cuba, China y Tanzania; ampliación de los servicios existentes en Irán, Niger y Venezuela; y desarrollo de colectividades locales en Guatemala, India y Bangladesh.

En todos los casos hubo decisión política de cambio. En el primer grupo, formó parte de una ideología política general, se rebasaron los límites de salud, y los resultados se vieron rápidamente debido a la atención primaria, saneamiento y nutrición. No completamente resueltos quedaron la formación de personal, la referencia de pacientes y los problemas referentes a medicamentos.

En los países que ampliaron los sistemas existentes, se plantearon métodos que serían provisionales, y que no se basaban en la necesidad de cambio social, ya que éste no se consideraba imprescindible.

En cuanto al tercer grupo, desarrollo de las colectividades locales, los servicios de salud no recibieron la máxima importancia; los programas se basaban en el presupuesto de que los éxitos en materia de desarrollo concordaban perfectamente con las metas nacionales, y en ellos los proyectos eran independientes de los servicios oficiales, incluso de salud, pero con algunas relaciones.

Considerados los proyectos como éxitos, no hay medios para decir cuál de ellos es mejor: permitieron un cambio espectacular del estado de salud, y se destaca que han generado la posibilidad de que las poblaciones puedan ayudarse a sí mismas.

Los del tercer grupo no parecen estimular la repetición, ni áun en zonas vecinas, al no estar destinados a transformar el país, sino a resolver problemas locales o hacer demostración de soluciones nuevas, lo que hace sospechar de los proyectos pilotos.

Hay muchas preguntas sin respuestas. El autor señala varias. No obstante, no hay motivos para esperar responderlas. No debemos deternernos en buscar "la solución óptima", ya que hoy disponemos de medios de acción progresivos para encontrar una solución aceptable.

AU : OPS/OMS
TI : Extensión de cobertura de los servicios de salud con las estrategias de atención primaria y participación de la comunidad
PU : Boletín de la Oficina Sanitaria Panamericana
Vol. 83 No. 6 Diciembre 1977 pp.477-507
RE : Documento presentado en la IV Reunión Especial de Ministros de Salud (Washington, 1977)

Desde que se reconoce la salud como un derecho esencial del hombre, los planes de atención a la salud deben ser parte de los planes nacionales de desarrollo socio-económico.

El análisis de la situación de salud en América Latina, nos pone en la necesidad de realizar planes de extensión de cobertura, donde la atención primaria de salud y la participación de la comunidad significan valiosas estrategias.

Se discuten los conceptos de: desarrollo, cobertura de servicios de salud, atención primaria, participación de la comunidad, tecnología, sistema de servicios de salud y desarrollo de recursos humanos, extendiéndose en consideraciones acerca de las características, modalidades y viabilidad de las estrategias propuestas.

AU : VIDAL, CARLOS
TI : Medicina comunitaria: nuevo enfoque de la medicina
PU : Educación Médica y Salud
Vol. 9 No. 1 1975 pp.11-47
RE : La medicina comunitaria, entendida como el conjunto de las acciones de medicina integral, intra y extrahospitalarias, realizado por un equipo de salud y con participación activa de la comunidad, constituye un nuevo enfoque de la medicina.

La medicina integrada considera al hombre en su triple dimensión: física, psíquica y social, en su interrelación con el medio ambiente; así realiza acciones donde los aspectos curativos, preventivos, educativos, etc., están integrados, realizados por un equipo de salud multidisciplinario que tiene como marco de acción el contexto global y ecológico del ser humano.

Es preciso desarrollar un sistema de salud en el cual las acciones sean fundamentalmente extramurales, sin dejar de lado la atención hospitalaria capaz de dar una respuesta adecuada a los problemas de la enfermedad que así lo requieran.

La participación comunitaria es la contribución conciente, crítica continua y permanente de los miembros de la comunidad para el logro de objetivos comúnes, y debe constituírse en una de las bases fundamentales de los programas de salud, partiendo de la propia planificación participativa, para lo que los técnicos de

salud deberán constituirse en agentes de cambio, identificándose con los intereses y problemas de la comunidad. Es preciso también, para instrumentar estos programas, plantear cambios en la enseñanza de los profesionales de la salud que tiendan a familiarizarlos con los aspectos curativos y preventivos de los problemas más comúnes de salud, a desarrollar en ellos la capacidad de la autoformación y a inculcarles una actitud de servicio y de visión de la comunidad como un elemento indispensable para su actuación.

2.2.4. FORMULACION DE POLITICAS DE FORMACION DE RECURSOS HUMANOS EN SALUD.

AU : ACUÑA, HECTOR R.
TI : El papel del hospital en la formación del médico general para la atención primaria
PU : Boletín de la Oficina Sanitaria Panamericana
Vol. LXXXII No. 3 Marzo 1977 pp.191-196
RE : Es posible identificar, en relación a la prestación de servicios de salud, los siguientes problemas: parcialidad y desigualdad en el acceso a los servicios, incremento de la demanda en cuanto a cantidad y calidad de los mismos, creciente complejidad de los métodos utilizados, e incremento constante de los costos.

Frente a esta problemática y el compromiso de extender la cobertura a los grupos menos privilegiados, se imponen las estrategias de: atención de nivel primario que intente reorientar la demanda; redefinición de las tecnologías a ser utilizadas; y mejora de la utilización de los recursos de que se dispone.

La prestación de servicios de salud requiere el empleo de recursos humanos integrados en equipos de trabajo multidisciplinarios, formados en base a la reasignación de funciones y provistos de una delegación de autoridad efectiva, lo cual plantea la necesidad de coordinar los servicios de salud y la educación médica a través de la integración docente-asistencial.

El conocimiento de los riesgos de salud en base a la información epidemiológica y de la tecnología disponible para enfrentarlos, permite diseñar un sistema regionalizado de servicios que se fundamente en el nivel primario, el que es capaz de solucionar por sí solo el 66% de los casos.

Es a este nivel primario entonces donde hay que dirigir los esfuerzos y en donde el médico general de familia, nuevo modelo de profesional, deberá desarrollar su labor, siendo el entrenamiento de este tipo de profesional la tarea prioritaria a encarar por los centros médicos universitarios.

AU : NERI, ALDO CARLOS
TI : La formación del recurso humano y las necesidades de los servicios de salud
PU : Educación Médica y Salud
Vol. 9 No. 3 1975 pp.272-284
RE : Afirma el autor que son raros los casos en que un enfoque integral para lograr cambios globales del recurso humano en salud, haya sido nuestro en práctica en la mayoría de los países americanos.

Al realizar este análisis, dos problemas parecen destacarse: uno, la relación del recurso humano en salud con el sistema organizativo que lo absorbe; y otro, que se refiere a la estructura de las diferentes fuerzas que definen en nuestros países la política de recursos humanos.

Se apuntan las características de la planificación en las Américas, que a juicio del autor son relevantes para entender el problema: las limitaciones de una planificación sectorial, la imprecisión en la imágen de futuro de los servicios de salud, y la búsqueda de soluciones a través de planteos numéricos de dudosos resultados.

Se hace necesario encontrar mecanísmos idóneos para formular políticas que permitan unificar criterios alrededor de una fórmula única en cada país, con una clara idea del sistema de salud que se pretende alcanzar, y sin dejar de analizar el replanteo que pueden merecer las diferentes profesiones, a partir de una redefinición de funciones.

AU : ORGANIZACION PANAMERICANA DE LA SALUD
TI : Seminario Panamericano sobre Educación y Atención a la Salud
PU : Educación Médica y Salud
Vol 12 No. 3 1978 pp.253-295
RE : El propósito del seminario fue establecer y diseminar una motivación sobre la responsabilidad y el papel del componente educacional en la prestación de los cuidados de salud.

Para alcanzarlo, se trataron los siguientes temas:

1) Necesidad de la coordinación entre educación y servicios y de salud.
2) Sistemas actuales de interrelaciones.
3) Mecanísmos para una interrelación positiva.
4) Plan de acción.

Por otra parte, los planes de coordinación deberán reconocer la especificidad de cada realidad, y en base a éstas diseñarse. Se destacó la importancia en estos planes no solo del nivel de decisión política, sino del nivel operativo, el que ha constituído hasta el presente su más frecuente falla.

Se definió que la coordinación no debe limitarse a la prestación de los servicios, sino que debe cubrir todas las fases: formulación de políticas de salud, definición de actividades, determinación del tipo de personal necesario, diseño de programas, desarrollo de tecnología y evaluación.

Se sugieren cinco aspectos básicos, que debieron ser considerados en el enfoque de las responsabilidades conjuntas:

1) La educación de los profesionales de la salud como medio para satisfacer las necesidades de salud de la población.
2) La participación de la comunidad en la organización y prestación de los servicios.
3) La necesidad de responder ante la comunidad por las acciones desarrolladas.
4) El trabajo en equipo multiprofesional y multidisciplinario.
5) La búsqueda de la igualdad en la prestación de los servicios, en base al derecho que tiene todo miembro de la comunidad a demandar cuidados de salud.

AU : PILLET, JUAN V.
TI : El desarrollo de los recursos humanos para la atención maternoinfantil
PU : Condiciones de Salud del Niño en las Américas
Publicación Científica NO. 1381 OPS/OMS 1979
pp.106-112
RE : A partir de la elaboración del Plan Decenal de Salud para las Américas de 1972, el objetivo central de la política de salud de la mayoría de los países ha sido la extensión de cobertura de los servicios a toda la población.

En la atención pediátrica, dos aspectos son relevantes a esta estrategia: uno, la extensión de cobertura en su aspecto cuantitativo, en el cual no caben dudas acerca de la necesidad de brindar atención médica a la totalidad de la población infantil; y otro, la extensión de cobertura en su aspecto cualitativo, donde a pesar de las divergencias, las estrategias se dirigen a montar niveles básicos de atención a la totalidad del país, para posteriormente en la medida que aumentan los recursos, aumentar la complejidad de los servicios.

Partiendo de la definición de los tres niveles de atención para la organización de los servicios de salud, se discuten aspectos relacionados con la formación y utilización de los recursos humanos, resaltando la importancia de este modelo, tanto por la demanda que implica de auxiliares de salud, como por los cambios que deberán operarse a nivel curricular de las profesiones más tradicionales. La supervisión es un elemento indispensable en cualquiera de los niveles de atención, pero cobra especial importancia en la atención primaria, a pesar de lo cual se realiza a menudo de forma muy superficial y esporádica.

La educación continua, en particular del personal técnico y auxiliar, plantea dificultades de organización y también metodológicas, tanto de forma como de contenido, sugiriéndose algunas líneas de trabajo que permitirán superarlas.

AU : SANTAS, ANDRES A.
TI : EL rol de la educación médica en la política sanitaria
PU : Medicina y Sociedad
Vol. 1 No. 2 Mayo-Junio 1978 pp.73-80
RE : La educación y la asistencia médica están íntimamente relacionadas; por un lado, ambas giran alrededor de un objetivo común: la salud del pueblo, y por otro, ninguna de las dos estará en condiciones de alcanzar sus propios fines por sí misma.

La salud ha pasado a ser reconocida como un derecho universal, inherente a la persona humana, por lo que corresponde a la sociedad su protección y cumplimiento; el Estado tiene la obligación de garantizarla.

En la medicina actual, en la medida en que se ha ido aumentando la complejidad de las acciones, mayor ha sido la necesidad de personal de salud formado en otras disciplinas; es decir que la salud ha dejado de ser patrimonio exclusivo de la medicina, para pasar a ser multidisciplinaria.

Se describen los principios de la capacitación del personal de salud que son: alcanzar un nivel de excelencia en todos los niveles de formación del equipo de salud, procurar un conocimiento de la realidad sanitaria y social, estar de acuerdo con las necesidades del país, ser multifacética, ser flexible en cuanto a movilidad académica, realizarse en base a trabajo en terreno y a través de procedimientos lleven a la formación y no a la información del estudiante. Se comentan las alternativas que existen, tanto en pregrado, grado y post-grado, para desarrollar un recurso de salud en base a aquellos principios, destacándose aspectos como residencia, mayor información sobre la realidad sanitaria en pregrado, educación continuada, etc.

AU : SONIS, ABRAAM
TI : Educación en ciencias de la salud y atención médica: análisis de su interrelación
PU : Educación Médica y Salud
Vol. 10 No. 3 1976 pp.233-253
RE : La formación de recursos humanos para la salud se realiza en la mayoría de los casos en base a la enseñanza teórica, lejana a la realidad que se ha desarrollado por la transmisión de conocimientos, a través de disciplinas que niegan una visión integral del fenómeno salud-enfermedad.

No hay duda que son necesarios una serie de cambios en el sistema de atención a la salud para hacerlo más igualitario, de buena calidad y de un costo soportable para la comunidad. Pero, ¿por dónde comenzar? ¿Debemos intentar reformar la enseñanza de nuestros profesionales, cuando éstos se forman en los hospitales que adolecen de los vicios que intentamos superar, o debemos intentar cambios en los sistemas de atención, con un personal no preparado para ello? Al parecer, los servicios de salud estarían más directamente expuestos a la presión social, y serían, por lo tanto, donde deberían dirigirse los esfuerzos de mayor intensidad.

Se deben, para ello, elaborar estrategias cuidadosamente preparadas en el área política, conceptual, investigativa, administrativa y experimental, donde se enfoquen todas las áreas simultáneamente, en base a una visualización clara del sistema de atención que queremos alcanzar.

OBRAS CITADAS EN OTRA PARTE DE ESTE TRABAJO:

AU : GARCIA BATES, ALICIA y PERRONE, NESTOR
TI : El problema de la evaluación en las escuelas de salud pública
PU : Educación Médica y Salud
Vol. 8 No. 3 pp.263-278

Ver item 3.1.2.

AU : GUTIERREZ LEYTON, MARIO
TI : Fines sociales de las escuelas de salud pública latinoamericanas
PU : Revista Centroamericana de Ciencias de la Salud
No. 10 Mayo-Agosto 1978 pp.159-167

Ver item 3.1.2.

AU : OPS/OMS
TI : Extensión de cobertura de los servicios de salud con las estrategias de atención primaria y participación de de la comunidad
PU : Boletín de la Oficina Sanitaria Panamericana
Vol. 83 No. 6 Diciembre 1977 pp.477-507

Ver item 2.2.3.

AU : PILLET, JUAN V.
TI : Planificación de recursos humanos para la salud. Consideraciones metodológicas
PU : Educación Médica y Salud
Vol. 5 No. 2 Abril-Mayo-Junio 1971
pp.108-130

Ver item 3.2.2.

2.2.5. FORMULACION DE POLITICAS DE NUTRICION

AU : BENGOA, J.M. y RUEDA-WILLIAMSON, R.
TI : Planificación y organización programas nacionales de nutrición
PU : Boletín de la Oficina Sanitaria Panamericana
Vol. LXXIII No. 5 Noviembre 1972 pp.381-400
RE : La importancia constituye un reto para la elaboración de programas que permitan prevenir la desnutrición y las infecciones en todas las madres y niños del mundo.

La desnutrición y la infección establecen entre sí un círculo vicioso, que tiene como resultado serías repercusiones en el desarrollo físico y mental de los niños que consiguen sobrevivir.

Un importante resultado de esta situación, del punto de vista de la salud pública, es el alto costo de las acciones curativas que ella implica, pero por sobre todo, el desperdicio a nivel nacional que significa la reducida productividad económica del adulto hoy niño desnutrido.

Los factores que condicionan la desnutrición se relacionan con la disponibilidad, el consumo, y la utilización biológica de los alimentos, por lo cual los programas de nutrición deberán estar dirigidos hacia aspectos de la producción agrícola, de la distribución y disponibilidad de alimentos, así como a la reducción de aquellas enfermedades infecciosas y parasitarias que interfieran con la absorción o pérdida de nutrientes.

Siendo los factores implicados en la desnutrición tan variados, se impone una planificación coordinada e intersectorial, formulado por cada país para su propia realidad.

Se recomienda la creación de una Comisión de Política Alimentaria y Nutricional que reciba apoyo de un Comité Técnico de Nutrición, con el fin de hacer efectiva la planificación y ejecución de un programa nacional de nutrición.

Finalmente, se analizan las actividades a ser realizadas en los niveles central, intermedio y local, en los programas de nutrición.

AU : REUNION DEL CONSEJO DIRECTIVO DE LA OPS/OMS
TI : Metodología para la formulación de políticas nacionales de alimentación y nutrición y su ejecución intersectorial
PU : Boletín de la Oficina Sanitaria Panamericana
Vol. LXXX No. 6 Junio 1976 pp.478-487
RE : Los programas nutricionales encuentran una doble justificación en: por un lado, los beneficios que aparecen en un plazo más o menos largo para la productividad de la mano de obra, y por otro, en la medida en que la alimentación debe ser considerada como un derecho fundamental del individuo.

En esta tarea, es indispensable que el sector salud actúe en forma coordinada con todos los demás intereses que, directa o indirectamente, contribuyen a la producción, comercialización, consumo y utilización de los alimentos.

Los planes y programas del sector salud deben otorgar prioridad al fortalecimiento y extensión de las actividades de nutrición en los servicios primarios de salud, a las medidas de control de las enfermedades nutricionales específicas, vigilancia del estado nutricional de la población, organización y administración de servicios de alimentación hospitalaria, y formación y capacitación de personal en nutrición para los servicios de salud.

Es necesario, por otra parte, enfrentar el problema con una concepción amplia, ya que de otro modo, las acciones que eventualmente se pueden adoptar en el sector salud, atacando el problema como si fuese una enfermedad, sin promover mejores niveles de alimentación, difícilmente obtendrán resultados duraderos.

Se presenta así mismo, un esquema acerca de los pasos sucesivas para la fomulaci'on, ejecución, evaluación y reajuste de una política de nutrición y alimentación.

2.2.6. FORMULACION DE POLITICAS DE PARTICIPACION COMUNITARIA EN LOS PROGRAMAS DE SALUD

AU : CONSEJO DIRECTIVO DE LA OPS
TI : Servicios comunitarios de salud y participación de la población
PU : Publicación Científica No. 289 OPS/OMS 1974
RE : Contenido:

1. Participación de la población en la organización y funcionamiento de los programas de salud.
2. Responsabilidad de los Ministerios de Salud en la educación de la comunidad en el desarrollo de los para la participación de la comunidad en el desarrollo de los programas de salud.
3. Funciones de las universidades para promover y orientar la participación de la comunidad en el desarrollo de los programas de salud.
4. Contribución de otras instituciones nacionales.
   - Experiencia en el área del Caribe sobre la función de las universidades para promover y orientar la participación de la comunidad en el desarrollo de servicios de salud.
   - Experiencia en Colombia sobre el papel de las universidades en el fomento y la orientación de la comunidad en el desarrollo de los servicios de salud.
   - Informe final de las discusiones técnicas.
   - Resolución XXII sobre las discusiones técnicas adoptada por la XXII Reunión del Consejo Directivo de la OPS.
   - Resumen de las discusiones técnicas.

AU : HEVIA RIVAS, PATRICIO
TI : Modelos de participación de la comunidad en los programas de salud
PU : Educación Médica y Salud
Vol 11 No. 3 1977 pp.258-276
RE : Dentro de la búsqueda que cada pueblo debe realizar para encontrar la solución a sus problemas de salud, se destaca la importancia de la interrelación entre los servicios y la comunidad, a través de la participación movilizante, conciente y eficaz en los programas de salud.

En el establecimiento de estas interrelaciones, se consideran los siguientes requisitos:

a) Existencia de un sistema local de atención de salud con las características de sectorizado y regionalizado.
b) Presencia de un equipo de salud que incluya a la propia comunidad.
c) Actitud de respeto por la comunidad.
d) Conexión de los servicios de salud con la comunidad organizada y con otras organizaciones oficiales y privadas a nivel local.

En base a diferentes modelos de participación comunitaria, se señalan algunas consideraciones acerca de los voluntarios de salud, los consejos locales, de desarrollo comunal y las brigadas de salud, destacando los aspectos de estructuración y funciones a desempeñar por estos organismos comunales.

Se conlcuye afirmando la importancia de la participación activa de la comunidad organizada en las acciones de salud, que representan la mayor garantía para la obtención de éxitos reales en estos programas, así como la necesidad de que la modalidad de participación elegida se adapte a cada realidad.

AU : OPS/OMS
TI : Guía para la organización de servicios de salud en áreas rurales y la utilización de personal auxiliar
PU : Publicación Científica No. 290 OPS/OMS 1974
RE : Contenido:

I. Introducción
II. Consideraciones metodológicas generales
III. Análisis de las actividades y tareas
Papel de la comunidad
Papel del auxiliar
Papel del médico y la enfermera
IV. Infraestructura del programa
Planificación
Organización
Ejecución, control y supervisión
V. Definiciones o conceptos utilizados dentro del contexto de esta guía

AU : OPS/OMS
TI : Seminario sobre Utilización de Auxiliares y Líderes Comunitarios en Programas de Salud en el Area Rural. Informe final.
PU : Publicación Científica No. 296 OPS/OMS 1975
RE : Contenido:

I. Planificación
II. Planificación y organización de servicios de salud en áreas rurales
III. Adiestramiento del auxiliar y del líder comunitario
IV. Nuevos enfoques prácticos para realizar la supervisión
V. Manual de referencia para el auxiliar
VI. Estrategias para implantar programas de salud en áreas rurales
VII. Definiciones o conceptos utilizados durante el Seminario

OBRAS CITADAS EN OTRA PARTE DE ESTE TRABAJO:?/

AU : DA S. GANDRA, DOMINGO
TI : El concepto de comunidad y su relación con los problemas de salud
PU : Educación Médica y Salud
Vol. 11 No. 3 1977 pp.205-236

Ver item 4.

AU : ISAZA, PABLO
TI : La planificación de salud en América Latina
PU : Revista de la Escuela Nacional de Salud Pública
Vol. 2 No. 2 Juli-Diciembre 1976 pp.99-107

Ver item 2.

AU : OPS/OMS
TI : Extensión de cobertura de los servicios de salud con las estrategias de atención primaria y participación de la comunidad
PU : Boletín de la Oficina Sanitaria Panamericana
Vol. LXXXIII No. 6 Diciembre 1977 pp.477-507

Ver item 2.2.3.

AU : VIDAL, CARLOS
TI : Medicina comunitaria: nuevo enfoque de la medicina
PU : Educación Médica y Salud
Vol. 9 No. 1 1975 pp.11-47

Ver item 2.2.3.

2.2.7. FORMULACION DE POLITICAS DE REGIONALIZACION DE LOS SERVICIOS DE SALUD.

AU : BRAVO, ALFREDO LEONARDO
TI : Regionalización: organización y funcionamiento coordinado de los servicios de salud en zonas rurales y urbanas
PU : Boletín de la Oficina Sanitaria Panamericana
Septiembre 1974 Vol. LXXVII No. 3 pp.231-146
RE : Se presenta en este artículo el concepto de regionalización como instrumento de los servicios de salud, basado en una integridad programática y territorial, en la concentración de los recursos especializados a nivel del hospital regional, y en la descentralización de la asistencia médica, preventiva y curativa básica, hacia los hospitales y centros de salud más periféricos del sistema.

Se analiza la evolución histórica de este concepto y sus aplicaciones más relevantes, desde la organización de los servicios de salud prestados por la Iglesia en el siglo XVI, a los planteamientos latinoamericanos más recientes, destacando la importancia que ha tenido, en el presente siglo, para este concepto, la tendencia médica hacia la tecnificación y especialización.

La implantación de un sistema regionalizado de salud implica la resolución del múltiples problemas, entre los que se destacan el tamaño de la región de trabajo, la integridad territorial, es decir, la necesidad de que cuente con áreas rurales, suburbanas y urbanas, y la necesidad de que la región sea autosuficiente en términos de salud.

Se analizan los principales aspectos de la administración regional y se pone especial énfasis en la definición de los niveles de atención, sus respectivas funciones y relaciones, dada la descentralización técnico-administrativa que la regionalización implica.

OBRAS CITADAS EN OTRA PARTE DE ESTE TRABAJO:

AU : CASTELLANOS, JORGE
TI : Situaciones de cobertura, niveles de atención y atención primaria
PU : Boletín de la Oficina Sanitaria Panamericana
Vol. LXXXII No. 6 Junio 1977 pp.478-493

Ver item 2.2.3.

AU : OPS/OMS
TI : Extensión de cobertura de los servicios de salud con las estrategias de atención primaria y participación de la comunidad
PU : Boletín de la Oficina Sanitaria Panamericana
Vol. LXXXIII No. 6 Diciembre 1977 pp.477-507

Ver item 2.2.3.

AU : PILLET, JUAN V.
TI : El desarrollo de los recursos humanos para la atención materno-infantil
PU : Condiciones de Salud del Niño en las Américas
Publicación Científica No. 381 OPS/OMS 1979 pp.106-112

Ver item 2.2.4.

AU : VIDAL, CARLOS
TI : Medicina comunitaria: nuevo enfoque de la medicina
PU : Educaci'on Médica y Salud
Vol. 9 No. 1 1975 pp.11-47

Ver item 2.2.3.

2.2.8. FORMULACION DE POLITICAS DE VIGILANCIA EPIDEMIOLOGICA

AU : FOSSAERT, HENRI; LLOPIS, ALVARO y TIGRE, CLOVIS H.
TI : Sistemas de vigilancia epidemiológica
PU : Boletín de la Oficina Sanitaria Panamericana
Vol. 76 No. 6 Junio 1974 pp.512-528
RE : La vigilancia epidemiológica es el conjunto de actividades que permite reunir la información indispensable para conocer en todo momento la conducta o historia natural de la enfermedad, detectar o preveer cualquier cambio que pueda ocurrir por alteraciones en los factores condicionantes con el fin de recomendar oportunamente, sobre bases firmes, las medidas indicadas, eficientes, que lleven a la prevención y control de la enfermedad.

El propósito de la vigilancia es estar en condiciones de recomendar, sobre bases objetivas y científicas, las medidas de acción susceptibles de controlar el problema o prevenirlo.

Sus funciones pueden ser agrupadas en cuatro rubros:

1) recolección de la información.
2) procesamiento y análisis.
3) recomendaciones y elaboración de informes.
4) acciones de control.

Los autores presentan un exhaustivo cuadro, elaborado en base a los elementos, fuentes y tipos de datos del proceso de vigilancia epidemiológica, uqe se sugiere como guía en la labor del epidemiólogo.

Se analiza la integración de las distintas actividades de la vigilancia epidemiológica, donde las de información constituyen un subsistema, integrado a su vez con el sistema información-decisión-control.

La vigilancia epidemiológica, desde un punto de vista operacional, podría ser estructurada de muy diferentes formas, dependiendo de la organización de los servicios.

Se presenta un análisis de la evolución del concepto de vigilancia, así como una serie de esquemas acerca del sistema de información--decisión-control, de la ubicación y flujo (comunicación y coordinación) de la vigilancia dentro de un servicio de salud, acerca de las actividades a realizar por niveles, según dos modelos de estructura de servicios, y se finaliza con una lista de indicadores de las actividades a realizar, las que se agrupan en tres categorías: vigilancia epidemiológica propiamente dicha, control del funcionamiento del sistema de vigilancia y evaluación de las actividades de control de las enfermedades.

AU : ROESLSGAARD, E.
TI : Elementos de vigilancia epidemiológica y su instrumentación bajo diferentes condiciones
PU : Boletín de Salud Pública
Año XIII No. 40 Abril 1980 pp.25-29
RE : La vigilancia epidemiológica representa una superación frente al antiguo concepto de notificación estadística, que ha llevado a la epidemiologías desde una práctica rutinaria a una etapa de replanteamiento, tendiente a ampliar el control efectivo de las enfermedades, así como su prevención, significando a sí mismo la mejor utilización posible de los recursos existentes para mantener informados a quienes toman las decisiones sobre la situación epidemiológica. Los elementos que la c componen son:

1. Registro de la mortalidad;
2. Notificación de la morbilidad;
3. Notificación de epidemias;
4. Investigación de laboratorio;
5. Investigación de los casos individuales;
6. Investigación epidémica de campo;
7. Encuestas epidemiológicas;
8. Distribución de vestores y reservorios animales;
9. Consumo de medicamentos y productos biológicos;
10. Información demográfica y ambiental.

Frente a la escasez de recursos con que por lo general es preciso actuar en el área de vigilancia epidemiológica, se impone un sistema de prioridades cuidadosamente preparado en base a dos aspectos: uno, el limitar la vigilancia a unas pocas enfermedades, y otro, el limitar el refinamiento con que puede realizarse la actividad de la vigilancia epidemiológica.

AU : ROMERO, ARTURO y VALVERDE, ELIECER
TI : Establecimiento de un sistema integral de vigilancia epidemiológica
PU : Boletín de la Oficina Sanitaria Panamericana
Vol. 78 No. 6 Junio 1975 pp.501-519
RE : El trabajo plantea el concepto de vigilancia epidemiológica, conjuntamente con un modelo operacional a ser implementado por las autoridades de salud.

Los actuales sistemas de registro, tienen por lo menos las siguientes limitaciones: subregistro marcado, sistemas de certificación inadecuados, y demoras en el procesamiento de los datos.

Por su parte, el sistema de vigilancia epidemiológica se propone: 1) reunir y evaluar informes confiables, que permitan estimar la incidencia y prevalencia de enfermedades; 2) advertir acerca de enfermedades nuevas o emergentes; 3) preveer cambios en la evolución y tendencias futuras; 4) desarrollar aspectos epidemiológicos, que ayuden a prevenir y erradicar enfermedades. Todo lo cual se logrará a través de un plan de trabajo estructurado, donde todo el personal, organizado en un equipo de salud para la acción multidisciplinaria, así como los diferentes niveles de atención, utilicen y generen la información necesaria, el laboratorio sea un elemento simple y que funcione en base a rutinas estandarizadas, y donde el sistema garantice la coordinación entre las diversas instituciones.

OBRAS CITADAS EN OTRA PARTE DE ESTE TRABAJO:

AU : TRIMMER HERNANDEZ, CARLOS
TI : La participación de los servicios de estadística en los programas de los servicios de vigilancia epidemiológica
PU : Salud Pública de México
Vol. XIII No. 4 Julio-Agosto 1971 pp.497-507

Ver item 3.1.3.1.

2.2.9. OTRAS FORMULACIONES POLITICAS

AU : BACKHEUSER, MIRIAM P.; KAMPEL, MARIA M. y PEREIRA da COSTA, ANDRE
TI : Um programa de educaçao comunitária para saúde
PU : Boletín de la Oficina Sanitaria Panamericana
Vol. LXXXIV No. 3 Marzo 1978 pp.255-261
RE : El aspecto orientador de cualquier programa de educación sanitaria, procura introducir en la comunidad cambios a través de la conciencia de lo que es negativo de sus habitos y prácticas en relación a la salud pero es necesario resaltar que sin el deseo y esfuerzo de la comunidad, ninguno de estos cambios será posible.

El P.E.S. (Programa de Educación Comunitaria para la Salud), forma parte de un proyecto de educación permanente, MOBRAL (Movimiento Brasileño de Alfabetización), y procura la captación de la comunidad para la discusión y solución de sus propios problemas de salud, lo que constituye el principio básico del programa.

Se parte de la elección del "monitor", el que no precisa de mayores calificaciones en el área de salud, pero que debe ser un miembro de la comunidad de quien se espera un gran poder movilizador, y el que va a crear su propio grupo de trabajo. Este, a su vez, deberá discutir los principales problemas de salud y elaborar un plan de acción para combatirlos con sus propios recursos y en forma organizada, no importando si la problemática elegida como foco de acción pertenece o no directamente al sector salud.

AU : BRAVO, ALFREDO LEONARDO
SI : Sistemas de salud
PU : OPS/OMS
Publicación Científica No. 234 1972
RE : Se describe el concepto de sistema de salud, destacándose, desde el punto de vista de la teoría de sistemas, su relación con el sistema de desarrollo global de un país.

Los sistemas de salud son múltiples y variados, según el tipo de instituciones que los forman, siendo común entonces que se superpongan y combinen en forma arbitraria y competitiva, situación que podrá corregirse a través de la implementación del sistema nacional de salud.

Se define el concepto de servicio nacional de salud, se ejemplifica con los casos de Cuba, Gran Bretaña y Chile, y se compara con el concepto de seguro nacional de salud.

En cuanto a la fase operativa del sistema de salud, se destaca la importancia que, para la determinación de las políticas, tiene la información estadística y la toma de decisiones en cuanto a: cobertura, prioridades y financiamiento, conceptos que se discuten y sobre los que se hacen recomendaciones.

Finalmente, se consideran algunos aspectos relevantes para la implementación del sistema de salud, como son recursos humanos, procesos administrativos (coordinación, regionalización, evaluación, utilización, etc.), y se sugieren a modo de ejemplo, programas a instrumentar con el futuro sistema de salud.

AU : COMITE DE EXPERTOS ACERCA DE SALUD PUBLICA VETERINARIA
TI : Contribuicao do médico veterinário nas atividades de saúde pública
PU : Revista de la Fundacao SESP
1976 Tomo XXI No. 1 pp.116-145
RE : El médico veterinario ha pasado a desempeñar una función cada vez más importante como sanitarista, especialmente después del reconocimiento del concepto de trabajo en equipo en salud pública.

Las actividades que dentro del equipo están reservadas a este tipo de personal abarcan: control de zoonosis, vigilancia epidemiológica, protección de alimentos, participación en los laboratorios de salud pública, vigilancia de los peligros del medio ambiente, aspectos relacionados con la medicina del trabajo, aspectos de la padronización de materiales biológicos, nutrición humana, entre otras.

Se comenta aquí cada una de estas actividades, resaltando la importancia que para la salud pública tiene la participación en las mismas del médico veterinario.

AU : OPS/OMS
TI : Guía para la coordinación de la atención médica
PU : Sistemas de Salud
Publicación Científica No. 234 1972
RE : Llamaremos integración a la fusión total, técnica, administrativa y financiera, en un servicio único, dependiente del Ministerio de Salud, que sea responsable de formular, organizar y ejecutar una política de salud para toda la comunidad. La coordinación de la atención médica, en cambio, podrá objetivarse a través del concepto hoy conocido como sistema nacional de salud.

La coordinación permitirá:

a) Aumentar la cobertura.
b) Preparar programas locales integrados de salud, que cubran tanto los aspectos preventivos, como curativos.
c) Organizar las infraestructuras de los servicios, en base a un sistema regionalizado.
d) Hacer participar a la Universidad en la preparación de los recursos humanos necesarios para los planes nacionales de salud.

La regionalización entendida como descentralización administrativa, que permita aumentar la cobertura de los servicios, manteniendo una buena calidad de las prestaciones, constituye, según el autor, una de las fases fundamentales de la coordinación de la atención médica.

Para finalizar, se listan una serie de medidas y recomendaciones tendientes a promover la coordinación de los servicios de salud.

AU : JOAO PESSOA DE PAULA CARVALHO
TI : Os laboratórios de saúde pública nos programas de saúde
PU : Revista de Saúde Pública
Sao Paulo Vol. 10 No. 2 Junho 1976 pp.191-207
RE : El laboratorio de salud pública tiene como función primordial contribuir para el estudio y la solución de todos los problemas de salud presentados, al proporcionar una información precisa y fidedigna, para que el personal de asistencia pueda adoptar las medidas adecuadas.

Dentro de las actividades que los laboratorios de salud pública pueden desempeñar, se destacan: establecimiento y manutención de padrones de calidad de agua, leche y alimentos, mediante el examen químico y bateriológico; fabricación y distribución de sueros, vacunas y otros productos biológicos; supervisión de laboratorios particulares; estudio de la etiología de las epidemias; prestación de asistencia tecnológica; entrenamiento de personal; realización de investigaciones; etc.

Es posible identificar dos tipos de laboratorios de salud: el de análisis clínico y el de salud pública, aunque esta división, si bien ha funcionado aceptablemente bien en algunos casos, no parece ser recomendable.

Se aconseja la formación de un Servicio Nacional de Laboratorios, el que permitirá la uniformidad de las técnicas, la posibilidad de obtener datos fidedignos y comparables, mejor aprovechamiento de los recursos y una mayor posibilidad de control de la calidad del trabajo.

Finalmente, se describen los diferentes niveles del Servicio Nacional de Laboratorios, y las funciones de cada nivel, así como se realizan consideraciones sobre personal, planta física y tecnología, describiendo de igual forma algunos procedimientos de evaluación para un laboratorio de salud pública.

AU : VIDAL, CARLOS A.
TI : Aproximaciones a tecnología y salud
PU : Boletín de la Oficina Sanitaria Panamericana
Vol. LXXXIII No. 3 septiembre 1977 pp.197-211

RE : El desarrollo de un pueblo es auténtico cuando es endógeno y nace de su autodeterminación, es decir, cuando ese pueblo define soberanamente el futuro que quiere alcanzar.

América Latina se debate en una lucha por construir su propio destino, ya que, si bien sería más fácil seguir caminos ya recorridos, no será a través de la imitación de otros modelos que podremos alcanzar el desarrollo que la región necesita.

En América Latina, la ciencia y tecnología es producto de un proceso cultural, y no un producto de la propia realidad; los siempre insuficientes recursos dieron lugar a la importación de tecnologías no adecuadas para nuestros problemas. La tecnología apropiada al estilo de desarrollo que queremos alcanzar deberá tender a la satisfacción de necesidades, hacer el mejor uso posible de los recursos, y ser inminentemente participatoria.

Un nuevo enfoque, tendiente a la satisfacción de las necesidades de salud debe, por sobre todo, desarrollar los valores culturales y las relaciones sociales y políticas, mientras que en el plano de la atención a la salud, se deberá reasignar recursos en función de las necesidades, integrar los servicios de salud en el conjunto de los servicios del desarrollo, adaptar los servicios a las circunstancias específicas, instaurar una estrategia de descentralización tendiente a la participación comunitaria y desarrollar investigaciones orientadas a la solución de problemas específicos.

2.3. PROGRAMAS PRIORITARIOS

2.3.1. PROGRAMAS DE ATENCION PRIMARIA EN SALUD

AU : BORROTO, RAFAEL
TI : Concepto de atención médica primaria
PU : Revista Centroamericana de Ciencias de la Salud
No. 10 Mayo-Agosto 1978 pp.135-141
RE : Se describe el concepto de atención primaria, tal como se le entiende en la actualidad en Cuba, haciendo énfasis en que estos procedimientos son consecuencia de todo un proceso de desarrollo a través de años, vinculado al incremento de recursos humanos y materiales, donde siempre ha estado presente la ley fundamental del socialismo, de satisfacer las necesidades crecientes, materiales y espirituales, de toda la población. Desde este punto de vista, el modelo no puede ser interpretado como adecuado a todos los países, sino como un caso específico ilustrativo de una única realidad. Resulta imposible dar a la atención primaria una definición estática acerca de los recursos con que habrá de desempeñar sus funciones, sino que el modelo presentado expresa la etapa actual del desarrollo de la misma, entendida como la máxima capacitación posible, en la medida en que los recursos así lo permiten, en un camino de continua superación.

En este caso, la atención médica primaria descansa sobre cuatro especialidades básicas que son: medicina interna, pediatría, obstetricia-ginecología y estomatología, teniendo como elementos esenciales el ser integral, sectorizada, regionalizada, contínua, dispensarizada, en equipo y con participación activa de la comunidad, definiéndose el significado de cada uno de estos conceptos, en especial el de equipo de salud, en cuanto a tipo, integración, relaciones y funciones de cada uno de sus componentes.

AU : ESCALONA R., MARIO y ILIZASTEGUI, FIDEL D.
TI : La medicina en la comunidad en Cuba
PU : Revista Centroamericana de Ciencias de la Salud
No. 2 Septiembre-Diciembre 1975 pp.127-150
RE : La situación de salud en Cuba ha cambiado de forma sustancial en los años corridos a partir de la Revolución de 1959, según lo revelan los datos presentados, tanto en cuanto a la situación de salud, como a los recursos de que se dispone.

Especial énfasis ha merecido la creación y desarrollo de las unidades de atención primaria, las que se han constituído en la base del Sistema Nacional de Salud, responsables en forma integral de todas las acciones de salud.

La medicina de la comunidad es entendida no como una especialidad, sino como una modalidad de realizar el ejercicio médico-estomatológico en la comunidad, modalidad en la que se producen cambios en la medida en que las condiciones lo permiten. En la actualidad, un Nuevo Modelo de Atención Médica está siendo implementado, del cual se pueden identificar como elementos esenciales el ser:

a) integral, en su doble sentido la unidad preventivo-curativa, biológica-psicológica-social, y el reconocimiento de un ámbito de trabajo en salud que incluya las condiciones del ámbito de trabajo en salud que incluye las condiciones del ambiente físico.
b) Sectorizado, dado por la responsabilidad del equipo de salud por la población que conforma su Area de Salud.
c) Regionalizado.
d) Continuado, a lo largo del tiempo y en todos los lugares del Area de Salud.
e) Dispensarizado, a través de la determinación de grupos de pacientes según sus características de salud.
f) Realizado por un equipo de salud, ya sea vertical, integrado por individuos de la misma profesión o actividad, u horizontal, integrado por personal de distintas profesiones.
g) Basado en la participación activa de la comunidad.

A modo de ejemplo se describe un policlínico docente en cuanto a su personal, capacidad y programación de docencia, además de listar los diferentes programas básicos que se desarrollan en el área de salud.

AU : LARES LEYVA, MA. DOLORES y DAVILA, GRAUBEN FEDERICO
TI : Planeación y organización de un servicio maternoinfantil
PU : Salud Pública de México
Epoca V Vol. XIV No. 1 Enero-Febrero 1972 pp.89-102
RE : La mortalidad materna y la infantil, preescolar y escolar, son de especial importancia en el caso de México, donde alcanzan cifras muy altas, y donde el grupo en riesgo comprende el 56% de la población total del país.

Los servicios deben ser planeados en base a las consideraciones de cada lugar, pero siempre con el objetivo global de lograr una óptima salud de la madre y el niño, siendo la investigación acerca de la morbimortalidad, de las condiciones socio-económicas y culturales, de la disponibilidad de recursos, así como el marco político y normativo, su base fundamental.

Se recomienda la aplicación de un esquema mínimo de actividades, y la adopción de un programa administrativo, donde se destaque la coordinación interna y externa, así como la importancia de la participación comunitaria en las acciones llevadas a cabo por los servicios.

AU : SERRANO, CARLOS V.
TI : Programa regional de desenvolvimiento de saúde maternoinfantil no Brasil
PU : Boletín de la Sanitaria Panamericana
Vol. LXXXII No. 3 Marzo 1977 pp.243-260
RE : En base a las constataciones realizadas en la Investigación Interamericana de Mortalidad Infantil, se desarrollan en la actualidad en el Brasil nueve proyectos coordinados en un programa de servicios maternoinfantil, familiar y de desarrollo de recursos humanos para la salud.

El nuevo programa destaca la mejoría en la resistencia natural de los infantes, mediante la prevención de pesos bajos y deficientes al nacimiento, así como la realización de estudios operacionales para mejorar los servicios maternoinfantiles y la implementación de programas coodinados de entrenamiento para personal de salud, tanto médico como no médico.

Las actividades de los servicios están dirigidas al aumento de la cobertura, en base a la continuidad de la atención y regionalización de los servicios, en énfasis en la atención primaria y en el establecimiento de definiciones para la identificación de los grupos de mayor riesgo, en tanto que se destaca del punto de vista docente el concepto de integración docente-asistencial, en base a la gradual incorporación activa de los estudiantes a los servicios.

Se describen las características de los nuevos proyectos en desarrollo y las etapas seguidas en su implementación, así como se listan las principales líneas de investigación que el programa está instrumentando.

2.3.2. PROGRAMAS DE EXTENSION DE COBERTURA DE LOS SERVICIOS DE SALUD

AU : VILLEGAS, HUGO
TI : Costa Rica: recursos humanos y participación de la comunidad en los servicios de salud en el medio rural
PU : Boletín de la Oficina Sanitaria Panamericana
84(1) 1978 pp.13-23
RE : Costa Rica ha estructurado un Plan Nacional de Salud, con el objeto de alcanzar un 100% de cobertura al final del decenio. El programa forma parte del Plan Nacional de Desarrollo Social y Asignaciones Familiares, siendo su principal apoyo.

Está organizado administrativamente sobre la base de la coordinación de los niveles central, regional y local, teniendo el nivel central funciones administrativas y de entrenamiento del personal. El nivel regional se encarga de la ejecución del Programa, con un importante grado de autonomía, para lo cual ha requerido un proceso de reestructuración aún no culminado. El nivel local, por su parte, es el encargado de la ejecución de las acciones programadas, siendo estructurado para ello en forma radiada, con un hospital periférico que actúa como cabecera del sistema y que tiene a su cargo la programación del área de salud, y múltiples puestos de salud o nivel primario (I) y centros de salud o de atención médica general (II) que, interconectados entre sí, realizan la atención de salud no especializada.

La modalidad de trabajo básica es el equipo de salud, constituído por una auxiliar de enfermería (entrenada centralmente en base a un curso de 48 semanas de estudios teóricos y 3 de práctica), que actúa a nivel de la comunidad sede del puesto de salud, realizando atención directa y acciones de salud maternoinfantil, y un asistente de salud rural, (entrenado en un curso de 21 semanas teóricas y 70 horas prácticas), que ejerce sus funciones en un área más extensa, actuando en el campo de saneamiento y control de enfermedades transmisibles.

Se cuenta además con un colaborador voluntario y un promotor de salud, como miembros de la comunidad que especialmente motivados, colaboran con los servicios.

El Programa dispone de un amplio sistema de supervisión técnica y administrativa, con los fines de apoyo y control.

El Ministerio de Salud coordina las actividades en el campo de la organización de la población, mediante la Dirección Nacional de Desarrollo de la Comunidad, que tiene promotores destacados en el medio rural.

2.3.3. PROGRAMAS DE PARTICIPANTES COMUNITARIA EN SALUD

AU : MOLINA G., GUSTAVO; TURIZO, C.; ALFREDO; ARANGO, ARCANGEL y GOMEZ DE MURILLO, SYLVIA
TI : Teoría y práctica de la participación de la comunidad en Antioquía
PU : Revista de la Escuela Nacional de Salud Pública
Medellín
Vol. 4 No. 1 Enero-Junio 1978 pp.93-103
RE : Al ser la salud pública un esfuerzo de la colectividad organizada, una rama del gobierno, supone la participación activa e informada de la comunidad. En la experiencia de Antioquía, Medellín, Colombia, el concepto de la participación de la comunidad fue definido de forma que "el mayor número posible de habitantes tome parte de las decisiones que le afectan y asuma la mayor responsabilidad posible en los programas y acciones de salud y bienestar, junto a los funcionarios del servicio local".

En el caso que se describe, el primer paso fue realizar contacto con las organizaciones de base existentes, para que fueran éstas las encargadas de nombrar a los responsables de salud, los que posteriormente serán entrenados para un mejor desempeño de sus funciones. Estos responsables de salud, a su vez, constituirán los comités de salud de barrios y revedas, con funciones específicas de coordinación, información y apoyo a los responsables.

Se comentan los principales aciertos, conflictos y recomendaciones que surgen de esta experiencia, en cuanto a cada una de las etapas seguidas, y se adjunta una lista de las funciones de los responsables de salud.

AU : SALED, ABRAHAM
TI : Servicios Comunitarios de Salud y Participación de la Población
La experiencia de Panamá
PU : Revista Internacional de Educación para la Salud
Vol. XVII 1974/1 pp.17-23
RE : Se presenta una experiencia de un programa de salud desarrollado en Panamá, que reconociendo el origen de la problemática en la realidad socio-económica, plantea una acción integral que se base en la organización de la comunidad.

El programa ha creado instrumentos legales que dan a la comunidad personería jurídica que le permite recaudar fondos, contraer compromisos, etc., con la finalidad de desarrollar una conciencia clara de la problemática de salud.

El Comité de Salud es el mecanismo de organización creado, que cuenta con la incorporación de toda la comunidad, sirve como punto de apoyo a la totalidad de los programas básicos de salud, y envía delegados a la Comisión de Coordinación Sectorial.

Otro instrumento creado es el Seminario de Salud Comunitaria, que se celebra en una comunidad, con el fin de que ésta y los trabajadores de salud discutan la problemática y las medidas as tomar.

La desnutrición merece una especial atención del programa, desarrollándose huertos comunitarios y cría de animales, así como enseñanza de nuevos métodos agrícolas, e inviertiéndose el excedente en obras comunitarias.

Otro punto de especial interés es el del agua potable, que se ejecuta mediante la construcción de pozos y acueductos por la propia comunidad.

OBRAS CITADAS EN OTRA PARTE DE ESTE TRABAJO:

AU : Consejo Directivo de la OPS
TI : Servicios comunitarios de salud y participación de la población
PU : Publicación Científica No. 289 OPS/OMS 1974

Ver item 2.2.6.

AU : VILLEGAS, HUGO
TI : Costa Rica: recursos humanos y participación de la comunidad en los servicios de salud en el medio rural.
PU : Boletín de la Oficina Sanitaria Panamericana
Vol. LXXXIV Enero 1978 pp.13-23

Ver item 2.3.2.

2.3.4. PROGRAMAS DE REGIONALIZACION DE LOS SERVICIOS DE SALUD

AU : ARBONA, GUILLERMO y NINE CURT, JOSE
TI : Informe preliminar sobre regionalización de los servicios de atención médica integrada en Puerto Rico
PU : Medicina Administrativa
Vol. IV No. 4 Julio-Agosto 1970 pp.119-123

RE : Se entiende por regionalización la organización de todos los recursos de salud dentro de un área geográfica determinada, para operar un único sistema de atención sanitaria, caracterizado por la centralización de las políticas y la descentralización de las operaciones.

Esta definición está en la base conceptual sobre la que están edificados los servicios de atención médica integrada en Puerto Rico, experiencia que se analiza en su evolución histórica, con el fin de realizar su evaluación.

Se comentan así mismo los principales problemas planteados, entre los que se incluyen: delegación de autoridad, manejo de personal y planteamiento regional.

3. ENFOQUES TECNICOS DE LA PLANIFICACION

3.1. ASPECTOS ADMINISTRATIVOS DE LA PLANIFICACION

3.1.1. ANALISIS DE LA SITUACION

3.1.1.1. DIAGNOSTICO DE SALUD

AU : FARIA ALVIM, ERMENGARDA de
TI : AVALIACAO DO SITEMA DE REGIONALIZACAO DE SERVICIOS DE SAUDE EM AREAS DE ATUACAO DA FUNDACAO SESP - 1979
PU : Revista de la Fundacao SESP
Vol. XXV No. 1 1980 pp.71-90
RE : Se preserva la evaluación de las modificaciones en el nivel de salud observadas en una determinada región del Nordeste brasileño, cinco años después de la implementación de servicios de salud en todos sus municipios.

Los datos levantados permiten conocer el nivel de salud (mortalidad general, infantil, neonatal, postneonatal, de 1 a 4 años, materna y por diarrea en menores de 5 años, así como datos sobre morbilidad), la cobertura alcanzada con los servicios médico-sanitarios (gestantes en control, asistencia parto y consultas médicas por enfermedad), la cobertura de los servicios de saneamiento (conexiones domiciliarias de agua, casas con disponibilidad de retrete y deyecciones expuestas en la superficie) y finalmente, las condiciones económicas de la población.

Concluyéndose que, a pesar de que los objetivos alcanzados solo lograron la extensión de los servicios de salud y no una integración de las diferentes instituciones en base a la regionalización de los mismos como había sido propuesto, de todas formas se alcanzó a influir decisivamente en la mejoría del nivel de salud.

AU : OPS/OMS
TI : Hechos y cifras sobre salud en las Américas: síntesis de las tendencias principales
PU : Boletín de la Oficina Sanitaria Panamericana
Vol. LXXXIV No. 1 Enero 1978
RE : Se ofrece una descripción breve de las condiciones de salud en América en períodos recientes, en base a la presentación de una serie de datos estadísticos que incluyen datos de población, de esperanza de vida, de mortalidad infantil, de morbi-mortalidad por algunas enfermedades transmisibles (poliomielitis, sarampión, tos ferina, tuberculosis, enteritis y otras enfermedades diarreicas), de desnutrición, de disponibilidad de recursos humanos (médicos y de enfermería), así como de servicios de hospital y abastecimiento de agua.

A través de la presentación de estos datos, se intenta dar una imagen de la evolución de las tendencias apuntadas en los últimos veinte años.

AU : RIVERON CORTEGUERA, RAUL; FERRER GARCIA, HELENIO y VALDES LAZO, FRANCISCO
TI : Avances en pediatría y atención infantil en Cuba (1959-1974)
PU : Boletín de la Oficina Sanitaria Panamericana
Vol. LXXX No. 3 Marzo 1976 pp.187-205
RE : Como resultado de los cambios económico-sociales que se han producido en Cuba, la situación de salud ha experimentado notorios progresos.

En base a las decisiones políticas adoptadas a partir de 1959, se estableció un sistema nacional de salud que funciona bajo los principios de responsabilidad del Estado por la salud de la población, servicios de salud con carácter integral al alcance de toda la población, y participación activa de la comunidad, lográndose significativas reducciones en la mortalidad infantil, perinatal, preescolar y escolar.

Se analiza la evolución de los recursos de salud en el área pediátrica, poniendo énfasis en la preparación de recursos humanos, y se describe el Programa de Atención Integral al Niño, que a partir de 1967 realiza la captación precoz de recién nacidos, prematuros y recién nacidos patológicos, en el momento del egreso de la maternidad; estímulo de la lactancia materna; consultas de control de desnutridos; atención del preescolar y del escolar; visitas médicas a domicilio; campamentos de niños asmáticos y diabéticos; atención de campamentos de pioneros; educación para la salud y la prevención de enfermedades transmisibles, donde además se citan los éxitos alcanzados, entre los que se destacan: erradicación de malaria, poliomielitis y difteria, y disminución de tétanos, tuberculosis y enfermedades diarreicas agudas.

3.1.1.2. INVESTIGACION DE LOS SERVICIOS DE SALUD

AU : MARGAIN, JULIO CESAR
TI : Enfoque metodológico en investigación aplicada a servicios de salud
PU : Cuadernos de la Escuela de Salud Pública
Caracas, No. 4 Mayo 1979 pp.81-89
RE : El continuo desarrollo de la medicina impone una evaluación que, por una parte, es el mecanismo dinámico de conocimiento, y por otra, constituye el centro del conflicto creado en la inercia del quehacer organizacional de estructuras administrativas complejas.

Se sugiere, para la evaluación y adecuación a las necesidades de los servicios de salud, un modelo llamado cruz de evaluación, que permite la comparación de la forma de organización de la atención, con sus necesidades de estudio, y las propuestas concretas de investigación, tendientes a analizarla, así como evaluar la estructura informativa actual del sector salud, sus carencias y alternativas de investigación.

AU : MEJIA, ALFONSO
TI : Infraestructura en el desarrollo de investigaciones aplicadas a servicios de salud
PU : Cuadernos de la Escuela de Salud Pública
Caracas No. 40 Mayo 1979 pp.65-81
RE : Los sistemas nacionales de salud, en la actualidad, no se comportan como un sistema teóricamente concebido, es decir, como un conjunto coherente de elementos interdependientes, organizados para un propósito definido, sino que son el resultado histórico de la evolución independiente de cada una de las agencias.

De aquí deriva la importancia de la investigación aplicada a los servicios de salud, vista como un instrumento del proceso administrativo global que, basándose en un análisis crítico y epidemiológico, contribuye al diagnóstico y aporta criterios para la determinación de prioridades.

La investigación aplicada a los servicos de salud se ocupa de las áreas de:

1) Población
   - Necesidades y demandas de servicios.
   - Atributos de los usuarios.
   - Actitud ante los servicios.
2) Ambiente
   - Desarrollo social y económico.
   - Estilo de vida.
   - Relaciones extrasectoriales de los planes de salud.
3) Sistema de salud
   - Organización y funcionamiento.
   - Accesibilidad, distribución, utilización, aceptación, cobertura.
   - Eficacia, eficiencia, efectividad.
4) Sistema educativo
   - Políticas.
   - Procedimientos, proceso, prácticas.

Debe estar orientado a la solución de problemas específicos, entre los que se destaca el cuidado primario a la salud y la extensión de cobertura, a través de un enfoque metodológico que, sin dejar de lado los elementos básicos del método científico, no se agote en la inútil búsqueda de exactitud.

Se recomienda finalmente la creación de "comités o consejos nacionales de desarrollo de la salud", con el fin de organizar a instituciones y programas para el rediseño, operación y control de los sistemas de salud.

AU : PAGANINI, JOSE M.
TI : Investigaciones colaborativas en servicios de atención de la salud
PU : Medicina y Sociedad
Vol. 1 No. 4-5 Sept./Dic. 1978 pp.205-214
RE : Se presenta un esquema organizador de las investigaciones en salud, identificándose cuatro tipos fundamentales:

1) ¿Cómo y por qué se enferma la población?
2) ¿Cómo y por qué se cura o previene la enfermedad en en la población?
3) ¿Cómo y por qué se atiende a la población?
4) ¿Cuánto cuesta la atención de la salud?

Se analizan cuáles son las variables, dependientes e independientes, que definen estos grupos, y se describen tres experiencias en el área de la investigación de los servicios de salud, con el objetivo de destacar la importancia del componente investigación en los servicios, ya que, si bien los resultados de la investigación básica son por lo general pasibles de ser transplantados de un país a otro, no sucede lo mismo con la investigación de los servicios de salud, ya que éstos son realidades locales, que deben conocerse y solucionarse localmente, para lo cual el diseño colaborativo de las investigaciones parece ser una óptima solución práctica.

AU : RODRIGUEZ DOMINGUEZ, JOSE y LOPEZ ACUÑA, DANIEL
TI : La investigación de servicios de salud
PU : Gaceta Médica de México
Vol. 114 No. 3 Marzo 1978 pp.109-116
RE : La imagen dominante de la medicina y de los servicios de salud es esencialmente tecnológica e industrializada, alimentada por los resultados espectaculares de la investigación biomédica, la que se ha constituído en la forma hegemónica de investigación en salud. La investigación de servicios de salud aparece entonces como el proceso científico capaz de generar alternativas de nuevas fórmulas de respuesta a las necesidades de salud.

Podría dividirse en dos grandes capítulos: uno, la investigación de servicios de salud (ISS) propiamente dicha, dirigida al estudio de las políticas y métodos de largo alcance; y otro, el desarrollo de la investigación de servicios de salud (IDSS), dirigido a los cambios prácticos a corto plazo.

La ISS se encuentra definida por los problemas a que está dirigida, dentro de los que se destacan el sistema de salud, el desarrollo de los recursos humanos, las características del proceso salud-enfermedad, factores socio-culturales y etnográficos.

Finalmente, se realizan algunos apuntes históricos relativos a la ISS, así como una breve presentación del tema en el caso México.

AU : ROJAS OCHOA, FRANCISCO
TI : FIJACION DE OBJETIVOS Y UTILIZACION DE INVESTIGACIONES APLICADA A SERVICIOS DE SALUD
PU : Cuadernos de la Escuela de Salud Pública
Caracas No. 40 Mayo 1979 pp.49-65
RE : Las condiciones de salud, el sistema de atención y la investigación misma, están históricamente determinados por el modo de producción de la formación socio-económica correspondiente.

En la sociedad socialista, la investigación se constituye en una actividad estatal y centralizada, que goza de todo el respaldo necesario.

El balance y evaluación que, sobre la política científica nacional se realizó en 1975, en la Tesis sobre la Política Científica Nacional, dejó establecidos los principios que rigen tal política, y que son:

1) Desarrollo planificado de la ciencia y la técnica, en función del progreso social.
2) Combinación de las investigaciones Fundamentales y aplicada, con mayor énfasis en estas últimas.
3) Asimilación de tecnologías y avances científico-técnicos surgidos en otros países.
4) Introducción rápida y con criterio económico de la investigación en la producción y los servicios.
5) Fortalecimiento progresivo del potencial científico-técnico, mediante el desarrollo de los recursos.

La mencionada tesis, también determinó los objetivos generales de la política nacional, así como las directivas principales a tener en cuenta en las investigaciones de salud.

Están definidas, así mismo, por el Comité Nacional de Investigación en Salud integrado por el propio Ministro de Salud Pública, las líneas específicas de investigación donde tiene especial destaque la aplicada a servicios de salud que se orienta a estudiar el perfeccionamiento de la participación popular en la gestión de los servicios, de la organización de la atención médica primaria, de la evaluación cualitativa de los servicios, entre otras.

3.1.2. LA EVALUACION EN PLANIFICACION DE SALUD.

AU : GARCIA BATES, ALICIA y PERRONE, NESTOR
TI : El problema de la evaluación en las escuelas de salud pública
PU : Educación Médica y Salud
Vol. 8 No. 3 1974 pp.263-278
RE : Se analiza el concepto de la evaluación en las escuelas de salud pública en su evolución histórica, reconociendo una primera fase pedagógica, donde el objetivo es conocer "qué" ha aprendido el estudiante. Una segunda fase estaría representada por la evaluación administrativa, donde se pone énfasis en el contexto interno de la organización, centrando los objetivos en la eficiencia; y una fase estadística, donde se intentó medir y cuantificar la eficiencia con que se desempeñaban las funciones. En el momento actual, lo importante es el análisis de fines y objetivos, qué es lo que hay que hacer, y posteriormente, evaluar. La evaluación es vista como una etapa del proceso administrativo, la que permite la toma de decisiones para el cambio; es una apertura a la investigación, de donde pueden surgir replanteos para lo que se está haciendo. Es total, en el sentido que supone la integración del contexto interno y externo, y de éstos con los fines de la organización.

Se propone un mecanismo de evaluación para las escuelas de salud pública, en base a una serie de categorías tentativas, las que se abren en preguntas críticas sobre cada realidad. Estas categorías incluyen: relación de las escuelas con el contexto inmediato y mediato, fines u objetivos, sistema normativo, elementos culturales, organización física, proceso institucional, sistema de comunicación, estructura de poder, sistema de recursos, y sistema tecnológico. Se listan además las interrogantes correspondientes a cada una de las categorías.

Esta propuesta de evaluación que se presenta, y que fue realizada para la Escuela de Salud Pública de Buenos Aires, solo tiene carácter ilustrativo, desde que el esquema de evaluación debe ser elaborado por los integrantes de cada realidad.

AU : GUTIERREZ LEYTON, MARIO
TI : Fines sociales de las escuelas de salud pública No. 10
Mayo-Agosto 1978 pp.159-167

RE : Es cada día más importante en cualquier tipo de organización social, la evaluación permanente de resultados, condición que, en la universidad adquiere especial relevancia. Evaluar representa para ella una instancia indispensable, destinada a enjuiciar la validez de sus propósitos y métodos, a través de un proceso dinámico de permanente adaptación.

La primera tarea de la evaluación consiste en delimitar las áreas específicas del quehacer universitario, y asignarle a cada una de ellas los objetivos y las metas programáticas para establecer a posteriori el saldo alcanzado.

Se identifican como fines universitarios la acumulación, transmisión y aplicación del conocimiento, los que son enriquecidos y jerarquizados por otra función universitaria: la investigación.

Evaluar es entonces identificar tareas y diseñar metas programáticas para las tres funciones tradicionales, pero sobre todo, crear las condiciones necesarias para el desarrollo de la investigación. Se presentan tres esquemas que representan: uno, las funciones de las escuelas de salud pública y sus relaciones intra y extrainstitucionales; otro, la perspectiva sistémica de estas funciones y por último, un enfoque histórico-evolutivo de las mismas.

AU : HORWITZ, ABRAHAM
TI : Por qué no evaluamos y por qué debemos hacerlo?
PU : Salud Pública de México
Vol. XX No. 2 Marzo-Abril 1978 pp.171-176
RE : Es evidente el progreso que se ha operado en el área de salud en los últimos treinta años, pero es justo también reconocer que este progreso no ha sido evaluado sistemáticamente; en el mejor de los casos, se han registrado tasas de mortalidad y morbilidad, y esto en los casos en que se realizó, se hizo enforma tardía, cuando ya la modificación de las acciones no era posible.

La evaluación es una actividad que generalmente es dejada de lado, porque la información básica y la programación, que es su consecuencia, son deficientes, además de lo cual , al no ser siempre precisa la definición de los objetivos de la programación, termina por ser subjetiva.

Por otra parte, no se ha llegado aún a un consenso en cuanto a los principios y métodos que la forman, lo cual obviamente dificulta su desarrollo.

Debe entenderse a la evaluación como una actividad que se sitúa en el centro de la interfase, entre la investigación y la práctica médica, actividad que cada día se hace más necesaria como herramienta que permite mejorar el proceso de la planificación de salud, en especial para el mundo en desarrollo.

AU : MEDINA, JOSE ANTONIO
TI : La evaluación desde el punto de vista administrativo. Diferencias con el control de etapas, propósitos y funciones.
PU : Boletín de Salud Pública Año VII No. 22
Octubre 1973 pp.27-31
RE : La evaluación tiene como finalidad comprobar, verificar e interpretar en qué medida se han logrado los objetivos de un determinado programa, tarea que se realiza en base a datos, tanto tangibles como no tangibles, a partir de los que se produce un proceso de síntesis analítica y se emite un juicio crítico acerca de todos los factores que de una u otra forma participaron durante el proceso de ejecución del programa.

En este sentido, es un proceso sistemático, gradual y continuo, claramente diferenciado del concepto de control, el que se refiere solamente a los aspectos mesurables del proceso de dirección.

Analiza los fundamentos, etapas y funciones de la evaluación, destacando la importancia que la formulación de conclusiones y recomendaciones, etapa final del proceso evaluativo, tiene para la planificación de salud.

AU : MONTOYA AGUIAR, C.
TI : Objetivos de salud y decisión política
PU : Boletín de Salud Pública
(Caracas) Año XII No. 38 Octubre 1974 pp.37-44
RE : Frente a la necesidad de acción en salud, la reformulación y planificación de las futuras actividades aparece como evidente, lo cual nos lleva a la necesidad de un análisis científico de las políticas de salud a adoptar.

Se entienden las políticas de salud como parte de las políticas generales de una nación, pero cabe preguntarse en qué medida los objetivos y estrategias de salud son funcionales en relación a aquellas.

La descripción de una política debe hacerse a través de sus contenidos (objetivos, principios y medios), y de sus modos de expresión.

Se propone, en base a la teoría de sistemas, un esquema de análisis de las políticas del sector salud, intentando identificar cada uno de los elementos y procesos participantes.

AU : RAMOS, REINALDO
TI : O problema da avaliaçao em saúde pública
PU : Revista de Saúde Pública Vol. 8 No. 3 Sept. 1974 pp.305-314
RE : El problema de la evaluación ha sido motivo de constante preocupación de todos aquellos responsables por la elaboración o ejecución de los programas de salud.

Nace en la idea clásica de control administrativo, control directo persona a persona, que procura la supervisión y evoluciona, hasta el concepto de control indirecto o instrumental, donde lo que se pretende son informaciones acerca de los planes y decisiones formulados, y que se considera fenómeno al concepto de evaluación.

La evaluación es un proceso circular, en el sentido de que sus resultados son reincorporados al programa específico de que provienen, por lo que deben formar parte de éste desde su mismo comienzo.

Se indican y comentan los criterios más comunmente usados en la evaluación de salud, destacando algunos de los riesgos que estos criterios implican, fundamentalmente desde que es estado de salud, salvo en casos específicos, no es el exclusivo resultado de las acciones de salud, lo que dificulta, frente a un posible cambio de la situación, la asignación de tal variación a la existencia de una acción de salud determinada, por lo que se llama a utilizar criterios más simples y menos ambiciosos en la evaluación de los programas de salud.

AU : RODRIGUEZ DOMINGUEZ, JOSE
TI : Investigación y evaluación de los servicios de salud
PU : Gaceta Médica de México
Vol. 115 No. 8 Agosto 1979 pp.339-343
En: Simposio "Estrategias para mejorar la atención de salud".
RE : La evaluación puede definirse como un proceso mediante el cual se determinan los resultados alcanzados por alguna actividad programada, con objeto de llegar a una meta valorada. Es un proceso social continuo, que para salvar el riesgo de la subjetividad al analizar las tareas, depende de la investigación evaluativa como un procedimiento científico.

Siendo un proceso, es posible identificar en la evaluación de los servicios de salud las siguientes fases: definición de indicadores como base de comparación; medición de los fenómenos en observación y comparación subsecuente; establecimiento de las medidas correctoras que el proceso anterior haya creado.

3.1.3. APORTES DE OTRAS CIENCIAS A LA PLANIFICACION.

3.1.3.1. APORTES DE LA ESTADISTICA A LA PLANIFICACION DE SALUD.

AU : BEHM ROSAS, HUGO
TI : Crecimiento rápido de la población y satisfacción de las necesidades de salud en los países de América Latina
PU : Revista Centroamericana de Ciencias de la Salud
No. 6 1976 pp.111-122

RE : El crecimiento de las poblaciones en América Latina, comúnmente visto como el responsable por el aumento de las necesidades de atención de salud, no es en realidad el único ni el más importante de los factores. Las adversas condiciones de vida de gran parte de la población, en base a una precaria condición socio-económica, y una oferta de servicios médicos que tiende a concentrarse en los sectores urbanos y de mejorar situación social y económica, generan en realidad una necesidad de servicios de salud que, sin descartar la importancia del crecimiento de la población, la desplazan a un segundo plano.

AU : COMITE REGIONAL ASESOR SOBRE ESTADISTICAS EN SALUD
TI : Comité Regional Asesore Sobre Estadísticas en Salud Séptima Reunión
PU : Publicación Científica No. 314
OPS/OMS 1976
RE : Contenido:

I. Introducción.
II. Situación de las estadísticas de salud en América Latina.
III. Sistemas de información en salud
IV. Organización de sistemas nacionales de información en salud.
Estructura, administración y coordinación.
Prioridades.
Métodos.
Datos pertinentes.
Apoyo de las ciencias de la computación a los sistemas de información en salud.
Personal y capacitación.
Evaluación e investigación.
V. Actividades regionales relacionadas con la Revisión de la Clasificación Internacional de Enfermedades de 1975.
Capacitación.
Investigación.
Publicaciones.
VI. Programa de educación y adiestramiento en estadísticas de salud.
VII. Actividades de investigación.
- Recomendaciones.
- Apéndice I. País A: Datos necesarios para la planificación y evaluación de las actividades de salud.
- Apéndice II. País B: Desarrollo del subsistema de información en salud: Tipos de datos, origen, captación y uso.

AU : AURELIO PERTILE
TI : Sistemas de información en salud y su desarrollo
PU : Revista Medicina y Sociedad
Vol. 1 No. 4-5 Sept./Dic. 1978 pp.215-225

RE : Un sistema de información es un conjunto de componentes que tiene por finalidad producir información, con el fin de cooperar en la racionalización de los procesos decisivos.

Así, el sistema de información presenta responsabilidades en las áreas de recolección, generación de indicadores, transmisión de datos, control de registros y archivos, así como colaborar con las demás estructuras del sistema para facilitar el análisis de sus programas y proyectos.

El sistema de información implica una actividad continua en tiempo y espacio, que va adaptándose a las necesidades cambiantes del sistema de servicios de salud.

El sistema de información debe estar basado en un sistema de informes, que no es más que el arreglo sistemático de procedimientos y documentos que asegure el origen, flujo y recepción de mensajes.

En el diseño de un sistema de información deberá atenderse a las etapas de:

a) conocimiento de la estructura y operación del sistema de servicios de salud.
b) diseño del subsistema de información
c) operación del subsistema
d) control y evaluación de su acción y efectos

Se discuten así mismo los conceptos de campo de información, registro, archivo, control a través de la información, comunicación y toma de decisiones en base a un sistema de información.

AU : PUFFER, RUTH R. y SERRANO, CARLOS V.
TI : Datos básicos esenciales sobre nacimientos y defunciones para la planificación de salud y las estadísticas demográficas
PU : Boletín de la Oficina Sanitaria Panamericana
Vol. LXXVI No. 3 Marzo 1974 pp.187-209
RE : Es evidente la necesidad de modernizar los procedimientos de registro, a fin de seguir el ritmo del progreso, y proporcionar datos que sirvan de guía a los programas orientados hacia la salud de la niñez.

Se analiza la importancia que, a los efectos estadísticos, tiene la aplicación de las definiciones de nacimiento vivo y defunción fetal, concluyéndose la importancia del conocimiento de las definiciones adoptadas por la OMS al respecto.

Otro grave problema detectado es la falta de registro de las defunciones ocurridas, recomendándose una serie de medidas tendientes a su reducción, entre las que se destaca la eventual asignación de responsabilidad de registro a los propios hospitales.

Se incluyen, además de las recomendaciones apuntadas para mejorar el registro de los nacimientos, otras como son: introducción de un nuevo formulario para consignar el resultado de cada gestación, que incluya los datos de peso al nacer, orden de nacimiento, edad de la madre y residencia de la madre; supresión de los procedimientos administrativos actuales de registro, que incluyen al pago de un servicio que, por su importancia, debe ser gratuito.

AU : SILVERA, MARIA HELENA y LAURENTI, RUY
TI : Os eventos vitais: aspectos de seus registros e inter-relaçao da legislaçao vigente com as estatísticas de saúde
PU : Revista de Saúde Pública (U.S.P.)
Vol. 7 Março 1973 No. 1 pp.37-50
RE : A partir de la definición de eventos vitales y de registro civil, se analiza el origen y la evolución histórica de éstos, con especial referencia al caso Brasil, para posteriormente tomar los hechos de nacimiento y muerte, considerados los más relevantes desde el punto de vista de la salud pública, y comentarlos en sus características, posibilidades, defectos habituales y medidas, para superarlos.

AU : TRIMMER HERNANDEZ, CARLOS
TI : La participación de los servicios de estadística en los programas de vigilancia epidemiológica
PU : Salud Pública de México Vol. XII
No. 4 Julio-Agosto 1971 pp.497-507
RE : La vigilancia epidemiológica permite seguir el camino de la infección en el individuo y en la comunidad, posibilitando explorar su origen y orientar la prevención frente a cualquier causa de morbimortalidad, independientemente de que se trate de una enfermedad transmisible o no.

La dinámica de la vigilancia se concreta a recolección y sistematización de los datos, evaluación y análisis de los mismo, notificación oportuna de los resultados de los estudios e investigación constante de la evolución de la enfermedad. La vigilancia epidemiológica condensa una serie de conocimientos apropiados al objeto de estudio que le es propio, dentro de lo que se destaca de forma prioritaria la estadística.

La estadística permite conocer la realidad de una población, aporta los procedimientos para captar los fenómenos de grupo, facilita el análisis de éstos, establece el tamaño de las muestras y proporciona y evalúa medios para medir las variaciones de los fenómenos biológicos.

3.1.3.2. APORTES DE LA EPIDEMIOLOGIA A LA PLANIFICACION DE SALUD.

AU : ACHERSON, ROY M.
TI : La epidemiología en la evaluación y planificación de los servicios de Salud.
PU : Revista de Atención Médica.
Centro Latinoamericano de Administración Médica.
Vol. 2 No. 3/4 Dic. 1973/Mar. 1974 pp.97-125
RE : La epidemiología, en cuanto su aplicación, ha cambiado en los últimos años de forma sustancial, pudiéndose identificar claramente la etapa en que se ocupaba de las enfermedades agudas, más tarde, de las crónicas, y la que comienza, donde al parecer será utilizada como herramienta para la elección de alternativas en la planificación de los servicios de salud, proceso que el incesante aumento de los costos hace cada día más necesario. La elección de indicadores para esta nueva función de la epidemiología deberá balancear en todo momento la practicabilidad con la exactitud y precisión.

Se definen los principales datos epidemiológicos pertinentes a la planificación destacándose su importancia y características principales, así como se realizan recomendaciones tendientes al mejoramiento de los mismos.

Los datos relativos a la necesidad y demanda de servicios presentan características especiales, que hace necesario su estudio por separado, en lugar de la equivalencia con que son considerados habitualmente, en especial en una situación donde los servicios son inadecuados y donde, por esta razón, la demanda espontánea se verá limitada. Es necesario que se desarrollen procedimientos de codificación y tabulación unificados, para que la información que actualmente se recoge a nivel de los servicios especializados sea utilizable en la planificación de los mismos.

AU : CHORNY, ADOLFO H.; LANZA, AQUILES, R.; PAGANINI, JOSE M.; ROSSI, SAUL M.
TI : La epidemiología, la planificación, la necesidad de atención de la salud y los sistemas de información. Seminario de epidemiología aplicada a la organización y evaluación de los servicios de atención de salud
PU : Revista de Atención Médica
Centro Latinoamericano de Administración Médica
Vol. 2 No. 3/4 Dic. 1973/Mar. 1974 pp.125-161
RE : Al considerar el sistema de salud como parte integrante del medio ambiente, la epidemiología en la actualidad, estudia los problemas de salud y las características de los servicios en forma conjunta. Este enfoque metodológico intenta superar la anterior etapa, en la que, si bien se estudiaban ambos sectores, el análisis se realizaba en forma separada, intentándose la relación a través de la comparación final.

El sistema de salud no puede verse como el solo resultado de la ciencia y la tecnología, sino que es, al mismo tiempo, resultado de los cambios político-sociales, sanitarios y económicos que se han producido en cada comunidad; lo cual deberá tenerse en cuenta en cualquier enfoque de planificación del sector, siendo la epidemiología en su concepción global la encargada del aporte de la información necesaria.

En América Latina adquiere importancia fundamental la determinación de las necesidades de servicios de salud, ya que si realizáramos la planificación en base a la demanda, solo lograríamos cristalizar la actual mala organización y distribución de los servicios.

Es claro que es imposible la existencia de una definición única de necesidad de servicios de salud; no obstante, ésta debería estar determinada en una situación concreta por una combinación de información sobre las características del estado de salud, las espectativas de la población, el nivel de conocimiento alcanzado por la ciencia médica y las características de organización y administración de los servicios que se brindan.

Por otra parte, la epidemiología está en condiciones de participar de un proceso continuo de evaluación de eficacia, eficiencia y efectividad de los servicios de salud, a través de la investigación, "monitorea", de los programas en ejecución.

Es necesario entonces diseñar un subsistema de información, que deberá atender a estas diferentes áreas:

Conocimiento de las características socio-demográficas de la población y su estado de salud, de la eficacia de la atención médica y de la eficiencia y efectividad de las acciones de salud.

AU : INFANTE, RODRIGO
TI : DIAGNOSTICO DE LA SITUACION DE SALUD SOBRE LA COMUNIDAD
PU : Cuaderno de la Escuela de Salud Pública
(Caracas, Venezuela) No. 21 Noviembre 1970 pp.33-43
RE : El diagnóstico de la salud-enfermedad en una comunidad comprende la identificación de los problemas de salud y el estudio de las condiciones presentes que son consideradas como condicionantes de la situación actual.

La importancia de la enfermedad dependerá habitualmente de tres criterios que son: magnitud, entendida como la frecuencia de los fenómenos de morbi-mortalidad; la trascendencia, dada por la importancia que la comunidad concede a la vulnerabilidad, que se refiere a la posibilidad de reducir la frecuencia de una enfermedad mediante acciones de salud.

La descripción del comportamiento de determinada enfermedad puede realizarse mediante la elaboración de un modelo, que permitirá la comparación de su conducta en el futuro, modelo que significa el punto de partida para la planificaicón de las actividades de salud pública, y que conduce a la elaboración de hipótesis sobre los factores que condicionan la frecuencia de la enfermedad.

AU : MONTOYA AGUILAR, CARLOS
TI : Aplicación del concepto de riesgo en salud maternoinfantil
PU : Boletín de la Oficina Sanitaria Panamericana Vol. LXXVII No. 2 Agosto 1974 pp.93-102
RE : Se entiende por riesgo en salud la probabilidad de que una población determinada sufra cierta enfermedad o daño, siendo posible entonces a través de la aplicación de este concepto, considerar a una población como compuesta de múltiples subconjuntos, caracterizados por tener distintos niveles de riesgo frente a determinado daño.

Este concepto de riesgo puede ser aplicado en dos niveles de prevención: primaria, donde el objetivo es reducir el factor de riesgo, y secundaria, que consiste en la identificación de la población expuesta a riesgo, para lograr un diagnóstico oportuno y efectuar un tratamiento adecuado. Este segundo tipo de aplicación del concepto de riesgo ha merecido recientemente especial atención, en enfoques que procuran realocar recursos en base a estudios que determinan los riesgos de los diferentes grupos poblacionales. El éxito alcanzado por los diferentes métodos ha sido variable, pero por sobre todo no permiten resolver el problema de la escasez de recursos, siendo probable que lo agraven, al consumir en la etapa de identificación y registro, recursos que deberán ser sustraídos de otros daños u objetivos del sistema de salud, lo cual lleva a la conclusión de que el concepto de riesgo debe usarse dentro de un sistema de atención integral, y que tendrá su máxima aplicación en la investigación y la docencia.

AU : OSUNA, JORGE
TI : El concepto de riesgo en la atención maternoinfantil
PU : Condiciones de Salud del Niño en las Américas
Publicación Científica No. 381 OPS/OMS 1979 pp.89-95
RE : El concepto de riesgo aplicado a la organización de los servicios de salud ofrece una serie de alternativas para la planificación de la atención maternoinfantil, ya que mediante el análisis sistemático de los factores que pueden representar un mayor riesgo de enfermedad o mortalidad en el grupo considerado, es posible organizar los servicios de salud de forma que respondan mejor a las reales necesidades de la comunidad, con un máximo rendimiento en la utilización de los recursos disponibles.

La identificación de tales factores debe necesariamente partir de la previa definición de los daños de salud a los que se intenta corregir, y es conveniente realizar el intento de sistematizarlos a través de la identificación de las familias en riesgo, pues siendo el domicilio familiar el ámbito del primer nivel de atención, resultará de gran utilidad el disponer de los datos así agrupados.

Como elementos importantes del proceso técnico-normativo implicado en la implantación del concepto de riesgo en la atención maternoinfantil, se destacan entre otros; la necesidad de una estructura regionalizada de servicios de salud; la clara definición de la composición tecnológica apropiada a cada nivel, en cuanto a la patología esperada y a las posibilidades económicas de los servicios; y la necesidad de la organización de un sistema de información que permita detectar los factores relacionados, además de la identificación del riesgo de cada familia de la comunidad en el programa, para así realizar el cambio de enfoque desde la tradicional atención de la demanda espontánea, a la búsqueda activa de casos.

Finalmente, se destaca la importancia de una definición política respecto a la satisfacción de las necesidades urgentes de salud a través de la extensión de cobertura, y la necesidad de interpretar el concepto de riesgo como un instrumento de reordenación de las políticas en el campo del bienestar social.

AU : PADILHA, HARLEY P.
TI : Epidemiología e programaçao nos serviços estaduais de saúde
PU : Revista Baiana de Saúde Pública
Vol. 1 No. 2 Abril/Junio 1874 pp.36-40
RE : El método epidemiológico se ha desarrollado en forma importante en las últimas décadas, pero ha carecido de una definición objetiva y sistemática de sus actividades finales, lo cual ha dificultado su aprovechamiento en el sistema de prestación de servicios de salud.

Se hace cada vez más evidente la necesidad de conocer adecuadamente la demanda en términos de morbimortalidad, y de determinar nuevas soluciones para cada problema en cada comunidad, objetivos alcanzables a través de la aplicación del método epidemiológico.

Se listan una serie de programas, capaces de encuadrar las actividades de la epidemiología en la estrategia de la actuación de los servicios de salud, y mejorar las posibilidades de la programación local y regional de salud.

Se destaca así mismo la posibilidad de articular las Universidades con los servicios de salud, para que estos programas sean desarrollados.

3.2. TECNICAS ESPECIFICAS DE PLANIFICACION DE SALUD.

3.2.1. ENFOQUE DE SISTEMAS EN LA PLANIFICACION DE SALUD.

AU : BOBENNIETH, MANUEL A.
TI : Aplicación de la teoría de sistemas a la atención de la salud.
PU : Boletín de Salud Pública Año XI
No. 32 Abril 1978 pp.65-72
RE : Se presentan las principales características y ventajas de enfoque de la teoría de sistemas como método de análisis, y se destaca su importancia y utilidad para la construcción de modelos teóricos, los que al simplificar la realidad, al concentrar su atención en los aspectos relevantes a un problema, sin perder la visión global del mismo, son especialmente útiles en el área de salud.

AU : CANO GAVIRIA, EDUARDO
TI : Notas para una aproximación a la crítica de la "teoría de los sistemas"
PU : Revista de la Escuela Nacional de Salud Pública
Medellín, Colombia, Julio-Diciembre 1975 pp.31-38
RE : La teoría de los sistemas es vista generalmente como una herramienta de conocimiento, una manera de ordenar la realidad, con el fin de hacerla facilmente comprensible.

El autor, en cambio, se basa en la aseveración de Hegel de que la verdad es un producto de la relación dialéctica de la realidad y el conocimiento. Siendo así, el hombre, para conocer, debe transformar la realidad y no solamente exponerse a ella tal como pretende la teoría de sistemas.

Otra idea criticada es el finalismo implícito en la teoría de sistemas, ya que resulta imposible considerar que un sistema social, o aún biológico, tenga una causa final, estática e invariable: no habría un "para" en la evolución, sino reinterpretaciones de nuevas formas.

Al no aceptar que la realidad existe como sistema, como totalidad concreta, la teoría de sistemas aparece como punto de partida, como método de conocimiento, y no como el producto de la investigación de dicha realidad. Así, todos los postulados presentan un carácter apriorístico, especulativo e idealista.

Los sistemas no estarían en la realidad, y por lo tanto, tampoco se nos presentarían como el producto de la investigación de esta realidad; son, por el contrario, lo absoluto, la verdad de la realidad en un movimiento que va de la idea a la realidad.

Es necesario entonces, en el estudio específico de cada nivel, realizar un trabajo científico, que demuestre que el nivel estudiado está organizado sistemáticamente, y no aplicar la teoría de sistemas en forma apriorística.

AU : GALVAN ESCOBEDO, JOSE
TI : La teoría de los sistemas aplicada a la administración de salud
PU : XI Seminario Internacional sobre Administración de Servicios de Salud
Washington, OPS/OMS 1973
RE : La adopción de la concepción de sistema como método de organización para los fenómenos de salud, parece ser una prometedora alternativa frente a los difíciles problemas que hoy se plantean.

La teoría general de los sistemas es una orientación de la actividad administrativa que hace énfasis en las relaciones externas de una organización, que como tal busca la consecución de algún tipo de objetivos.

La teoría descansa en el hecho de que las organizaciones, como caso particular de cualquier tipo de conjunto de elementos que se interrelacionan, se adaptan e influyen en el ambiente.

Se identifican entonces cuatro elementos fundamentales de la teoría de sistemas: insumos, proceso organizacional, productos y retroalimentación; así como se plantean dos posibles enfoques: sistema cerrado y sistema abierto, concluyéndose que la teoría poner énfasis en el segundo aspecto, lo cual la hace especialmente apta en el caso de las organizaciones de salud, al tener estos servicios la necesidad de responder de forma constante a los cambios ocurridos en el ambiente, mediante adaptaciones internas.

Para finalizar, son discutidos los aspectos relativos a la aplicación de la teoría de sistemas a la administración de los servicios de salud en sus diferentes aspectos intrainstitucionales.

AU : ROMERO S., MARIA INES; MAJLUF S., NICOLAS; UBILLA, GUACOLDA; GUERRERO, MARIANO y PALACIOS, GONZALO
TI : Nivel de Salud y Atención Pediátrica Preventiva. Una aplicación de ingeniería de sistemas
PU : CUADERNOS MEDICO SOCIALES.
Santiago de Chile Vol. XVII
1a. parte - No. 2 Junio 1976 pp.7-14
2a. parte - No. 3 Sept. 1976 pp.36-44
3a. parte - No. 4 Dic. 1976 pp.31-37
RE : Se presenta un estudio realizado con el fin de medir la importancia de la atención médica en la determinación de la mortalidad infantil.

La investigación intenta, a través de la aplicación de la ingeniería de sistemas, aislar la responsabilidad que, para la caída de la mortalidad infantil, tenga la atención médica en consultorios periféricos, del resto de factores que la determinan,

en el área norte de la ciudad de SanSantiago de Chile. Se llega, luego de múltiples operaciones, a una expresión numérica de la caída de la mortalidad infantil esperable con un incremento de la atención médica de determinaciones características, así como a algunas interesantes recomendaciones acerca de la organización de estos servicios.

OBRAS CITADAS EN OTRAS PARTE DE ESTE TRABAJO:

AU : BRAVO, ALFREDO LEONARDO
TI : Sistemas de salud
PU : Publicación Científica NO. 234 OPS/OMS 1972 Ver item 2.2.9.

AU : MONTOYA AGUIAR, E.
TI : Objetivos de salud y decisión política
PU : Boletín de Salud Pública Año XII No. 38 Octubre 1974 pp.37-44 Ver item 3.1.2.

AU : PERTILE, AURELIO
TI : Sistemas de información en salud y su desarrollo
PU : Revista Medicina y Sociedad Vol. 1 No. 4-5 Sept./Dic. 1978 pp.215-225 Ver item 3.1.3.1.

3.2.2. LA PLANIFICACION A TRAVES DE MODELOS.

AU : BERNACCHI, MARGARITA; CHORNY, ADOLFO; NOVARO, SARA; TESTA, MARIO
TI : Modelos numéricos: su aplicación para el análisis de una política de financiamiento de la atención médica
PU : Atención Médica
Centro Latinoamericano de Administración Médica
Vol. 1 Nos. 3/4 Diciembre 1972/Marzo 1973
RE : La elección de diferentes alternativas políticas puede realizarse a través de la formulación de un modelo lógico-matemático, sistema especialmente apto para el manejo de problemas con gran número de valores interactuantes.

El modelo que se presenta ha sido diseñado para ensayar o comparar políticas, a través de los resultados de las mismas, para aumentar el conocimiento acerca de determinado sistema, para la identificación de parámetros críticos, o para la prueba hipótesis de trabajo.

En el presente trabajo, se realiza un ensayo de una política de financiamiento al interior del sector salud, y se analizan los resultados arrojados por el modelo.

AU : FUNDACION BARILOCHE
TI : El modelo mundial latinoamericano
PU : Revista Centroamericana de Ciencias de la Salud
No. 2 Sept.-Dic. 1975 pp.5-24
RE : La difusión alcanzada por el modelo lógico matemático WORLD III, también conocido como M.I.T. (Massachussetts Institute of Technology), y en especial las conclusiones catastróficas a que llega, motivaron a un conjunto de veinte especialistas a elaborar la alternativa que se describe, y que reconoce como su finalidad principal el mostrar que es materialmente posible una humanidad liberada del atraso, la opresión y la miseria, ya que las limitaciones físicas, que se afirman como absolutas, son en realidad una resultante del sistema socio-político dominante.

El modelo se basa en una propuesta de sociedad donde el objetivo prioritario sea la satisfacción de las necesidades básicas, que son definidas como: alimentación, vivienda, educación y salud, en una sociedad igualitaria, tanto social como internacionalmente.

Luego de discutir los límites físicos al desarrollo aceptados por el WORLD III como absolutos, además de cada una de las necesidades básicas, se presentan algunos de los resultados arrojados por la operación del modelo, concluyéndose que sería posible alcanzar, en el plazo de una generación , niveles adecuados de satisfacción de las necesidades mínimas, que el crecimiento de la población puede controlarse hasta alcanzar el estado de equilibrio, mediante la elevación de las condiciones de vida y que los obstáculos que actualmente se oponen a un desarrollo armónico de la humanidad, no son físicos o económicos en el sentido estricto, sino esencialmente socio-políticos.

AU : PILLET, JUAN V.
TI : Planificación de recursos humanos para la salud: Consideraciones metodológicas
PU : Educación Médica y Salud Vol. 5 No. 2 Abril-Mayo-Junio/1971 pp.108-130
RE : Luego de discutir algunas consideraciones previas a la planificación de recursos humanos para la salud, como son: plazo en planificación, integración de los planes con diferentes plazos y grado de error tolerable, pasa a analizar ocho diferentes métodos de cálculo acerca del problema.
Se analizan así:
1) "el estudio de la tendencia histórica y su proyección en el futuro", que señala en qué sentido evolucionarían los recursos humanos, si se mantuvieran las condiciones del punto de partida.
2) "La proyección demográfica", que es el estudio de un plan mínimo, basado en índices que relacionan el personal de salud con la población.

3) "La utilización de normas" fijadas en forma empírica, por el método del ensayo y error, que sugiere varias alternativas viables.
4) "La comparación internacional", que puede servir de base para el establecimiento de metas.
5) "Estudios de oferta-demanda", o bien análisis de mercado de los servicios médicos y sus recursos humanos.
6) "La demanda programada", que de acuerdo a los datos epidemiológicos y las funciones que requerirán las acciones de salud tendientes a mejorarlos, analiza la disponibilidad la de recursos humanos.
7) "La planificación geográfica", que analiza los requerimientos de un sistema regionalizado de salud.
8) "La verificación económica", o análisis costo-beneficio.

Según el autor, el uso combinado y crítico de estos procedimientos bastante imperfectos, permitirá formular planes más racionales en el futuro.

AU : TESTA, MARIO
TI : Modelos de salud: las condiciones para su desarrollo
PU : Saúde em Debate, No. 1 Octubre-Noviembre-Diciembre 1976 pp.32-37
RE : El campo donde se desarrollan las actividades de salud es un terreno en el que se entremezclan una serie de factores, provenientes por una lado de la historia natural de las enfermedades, y por otro, de las interferencias que es posible introducir en ella, mediante decisiones de tipo político. Es en este ambiente de complejidad que se presenta al campo de la planificación de salud, que se apoya la necesidad de la utilización de modelos de experimentación numérica.

Esto se justifica especialmente en América Latina, donde en su condición de países subdesarrollados y organizados en una economía de mercado, tendrán un sistema de salud de máxima complejidad e indefinición, además de una multiplicidad de centros de decisión para la apropiación de recursos, en condiciones de oferta conflictiva de los mismo.

Sin restar importancia a la discusión de las decisiones adoptadas para el sector salud, el problema máximo que las políticas encuentran en su implementación gira alrededor de la planificación de recursos humanos, la que, no obstante, debe realizarse en todos los casos como subsidiaria de la planificación general de salud.

Los modelos de experimentación numérica parten de una gran desagregación de los componentes elementales, los que son reagrupados funcionalmente con el objeto de reducir al máximo el número de variables. A su vez, la relación entre dos variables es entendida como una hipótesis de tipo global. Para la

experimentación con el modelo, se deberá eliminar todas las hipótesis dudosas, a través de la asignación de valores a las mismas, lo cual se realiza no sin introducir en el modelo cierta incertidumbre. Debe entenderse a los modelos de experimentación numérica como sistemas específicos en cuanto al tiempo de aplicación y predicción, debiendo sufrir adaptaciones al cambiar las condiciones ambientales y a través de los cuales no se puede hacer predicciones de tipo cuantitativo, sino apenas cualitativo.

A partir de un modelo diseñado en el Centro Panamericano de Planificación de Salud, se discute el posible uso del mismo en el estudio de compatibilización de políticas, a través de los desajustes sucesivos que son evidenciados en una serie de "corridas" del modelo, los que servirán eventualmente como material de análisis de estas políticas.

AU : TESTA, MARIO
TI : Planificación de recursos humanos para la salud en cuanto a tipos, cantidad y adecuación a la función
PU : Educación Médica y Salud
Vol. 4 Nos. 1 y 2 Enero-Junio/1970 pp.48-70
RE : Existen dos grandes líneas metodológicas de planificación de recursos humanos para la salud: el enfoque económico, que se basa en la supuesta constancia en el futuro del comportamiento de la población consumidora y de los propios servicios de salud; y el enfoque político, que se fundamenta en la posibilidad de disponer una clara visión de los cambios sociales que se desean introducir.

Se define el concepto de demanda de servicios de salud, identificando una demanda económica, definida por la capacidad de pago de la población; una demanda directa, dirigida a los servicios públicos gratuitos; y una demanda política, ejercida colectivamente a través de ciertos agentes especializados. La demanda de servicios, cualquiera sea la forma de apreciación, puede variar en función de la estructura de la población, los riesgos a que está expuesta, su situación nutricional y económica, la necesidad sentida de servicios, la accesibilidad de éstos y los cambios tecnológicos, los que, según el autor, deben entenderse como incorporación de conocimientos y técnicas, siguiendo un plan predeterminado.

La oferta de recursos humanos, por su parte, implica analizar la cantidad, las categorías de personal en relación a las funciones que se debe desempeñar y su adecuación a éstas, y la capacidad y planes de adiestramiento de recursos humanos.

Se ilustran ambos tipos de abordaje metodológico; económico y político, con ejemplos concretos de estudios realizados en Formosa, Perú y Colombia.

3.2.3. METODOS DE PLANIFICACION DE SALUD

AU : FARIA ALVIM, ERMENGARDA de
TI : Técnica de programación integrada de salud
PU : Boletín de la Oficina Sanitaria Panamericana
Diciembre 1971 pp.469-480
RE : Se informa acerca de una técnica de planificación semejante a la técnica de programación CENDES/OPS. Posee las ventajas de abarcar todas las enfermedades, las que agrupa por similitud etiológica, lo cual facilitará las actividades de planificación, de medir regularmente la magnitud de los daños y el análisis costo-beneficio.

Para completar la presentación de esta técnica, se la ilustra con un ejemplo, donde se describe la metodología y su aplicación.

AU : FAYAD CAMEL V.
TI : Conceptos sobre evaluación del costo-beneficio en los programas contra las enfermedades crónicas
PU : Boletín de Salud Pública Año IX
No. 28 1975 pp.7-11
RE : Ante la magnitud de los problemas existentes en el campo de la salud pública y la escasez relativa de recursos, se hace cada día más necesario fijar prioridades en la utilización de los recursos de salud, basados en una racional optimización de los mismos. Esta optimización debe basarse en el estudio de dos aspectos: por un lado, el costo de cada actividad, y por otro, el beneficio obtenido a trave/s de su ejecución.

Los beneficios de salud ya sean sanitarios, económicos, sociales o globales, son especialmente difíciles de medir, por lo que por el momento deberán continuar siéndolo en términos de muertes y casos evitados, en tanto que en lo referente al costo de las actividades de salud, la técnica de instrumentación ha demostrado ser de gran utilidad.

Parece evidente que la planificación no puede basarse solamente en las técnicas de costo-beneficio, pero ellas nos indican los daños sobre los cuales debemos concentrar nuestros esfuerzos sin que deban ser utilizadas para determinar cuales otros merecen menos atención.

AU : GIL CORRALES, MIGUEL ANGEL
TI : El método PERT/CPM en la programación de salud
PU : Salud Pública de México
Vol. XIII No. 6 Nov.-Dic. 1971 pp.953-966
RE : Se describe el método PERT/CPM, que se considera de extraordinaria flexibilidad, lo que permite su aplicación en campos muy distintos, inclusive el de salud.

Luego de describir las características y ventajas del método, se explican sus fundamentos y se ejemplifica con la aplicación del mismo a un programa de salud, llegando por esta vía a identificar las posibilidades e implicaciones metodológicas que dicho método presenta para el sector salud.

AU : VON HOEGEN, MIGUEL y LEE, JUAN ENRIQUE
TI : Metodología para determinar prioridades programáticas en el sector salud
PU : Revista Centroamericana de Ciencias de la Salud, No. 9 Enero-Abril 1978 pp.111-121
RE : Se presenta una propuesta metodológica desarrollada para la determinación de prioridades programáticas, con el objetivo de evitar la selección de alternativas sin la debida discussión y la asignación de recursos en áreas programáticas no prioritarias. Se desarrolla un ejemplo ilustrativo, en el área de saneamiento ambiental, de la metodología propuesta.

OBRAS CITADAS EN OTRAS PARTE DE ESTE TRABAJO:

AU : ISAZA, PABLO
TI : La planificación de salud en América Latina
PU : Revista de la Escuela Nacional de Salud Pública Vol. 2 No. 2 Julio-Diciembre 1976 pp.99-107, Ver item 2.

Ver item 2.

4. APORTES SOCIOLOGICOS A LA PLANIFICACION DE SALUD

AU : ALMENDARES B., JUAN
TI : La interdisciplinaridad y el trabajo en equipo
PU : Revista Centroamericana de Ciencias de la Salud No. 2 Sept.-Dic. 1975 pp.165-177
RE : Se analiza la división del trabajo y del conocimiento en el mundo capitalista, desde un punto de vista sociológico, reconociéndolas como resultado histórico, a la vez reproductor de la dinámica del sistema.

La división del conocimiento, a su vez, ha producido la separación de las disciplinas, tanto a nivel de las formas de enseñanza, como de las posibilidades de aplicación.

Así, la especialización de las disciplinas y la división del conocimiento que esto implica, lleva a que aquellas que se ocupan de aspectos cuya articulación se realiza en una forma más directa

con las relaciones de producción dominantes, se vean favorecidas, alcanzando un mayor desarrollo. A nivel de la enseñanza, la disciplinaridad y la división entre ense*anza y trabajo productivo, fomenta la formación de individuos desintegrados de la sociedad.

La interdisciplinaridad no debe entenderse en un sentido formalista, de relación mecánica de disciplinas y ciencias profesionales y técnicas, o diferentes ocupaciones del hombre, sino como un trabajo creativo y productivo en la realidad natural o social, dinámica y compleja. Así también no debe entenderse como un mecanismo de racionalidad económica, sino que debe inscribirse en la lucha por transformar un mundo injusto.

El trabajo interdisciplinario puede, entre otros, vincular la teoría con la práctica, el trabajo manual con el intelectual, puede contribuir al conocimiento integral del hombre, puede orientar la tarea científica hacia el servicio de al sociedad global.

AU : ARANEDA, JOSE MANUEL
TI : Nivel socioeconómico y planificación en salud
PU : Boletín de la Oficina Sanitaria Panamericana, Vol. 51 No. 5 Noviembre 1971 pp.411-422
RE : Se presenta una técnica seguida en una investigación realizada en Valdivia, Chile, que intenta determinar los estratos socio-económico, con el objetivo de proporcionar una orientación metodológica en la planificación de salud.

La técnica consiste básicamente en la aplicación de una encuesta, donde se consideran cuatro indicadores: ocupación, ingreso, escolaridad del jefe de familia y equipamiento del hogar, los que se registrarán en categorías, para posteriormente computar un índice que exprese el estrato socio-económico de cada familia.

AU : BEHM, HUGO
TI : Determinantes económicas y sociales de la mortalidad en América Latina
PU : Revista Cubana de Administración de Salud
Vol. 6 No. 1 Enero-Marzo 1980 pp.1-30
RE : Sin negar la importancia de las causas biológicas en la explicación de la mortalidad infantil, se destaca la participación de los aspectos sociales como determinantes del fenómeno salud-enfermedad a nivel individual y colectivo, tesis que implica la necesidad de analizar este fenómeno en el contexto de una teoría social.

El enfoque propuesto reconoce la base del proceso en la forma en que el hombre se apropia y transforma los recursos naturales y establece relaciones con otros hombres, para producir y para apropiarse del producto generado. Así es posible reconocer en América Latina la formación socio-económica capitalista, con sus particulares relaciones de producción y su especial articulación social, que explica la distribución del fenómeno salud-enfermedad. Este modelo descrito merece de mayor elaboración, al no estar totalmente superadas las dificultades metodológicas por él planteadas, y al tener su hipótesis un mayor valor explicativo en función de las anteriores, que reconocían a la "pobreza" como determinantes de la mortalidad.

Se exponen a continuación los resultados de un conjunto de estudios sobre la mortalidad en menores de dos años de edad en América Latina, intentando reconocer en ellos las diferencias socio-económicas de la mortalidad, y concluyendo que éstas han sido positivas cualquiera sea el indicador adoptado, por lo que la modificación de las estructuras sociales y económicas aparece como un factor decisivo para superar los actuales niveles de mortalidad infantil de América Latina.

AU : CANO GAVIRIA, EDUARDO
TI : La planificación de la salud como ideología
PU : Revista de la Escuela Nacional de Salud Pública
Medellín, Colombia, Enero-Junio 1978 Vol. 4 No. 1 pp.103-112
RE : Las diferentes definiciones y conceptos existentes acerca de la planificación, presentan tres ideas básicas: la noción de técnica, la noción de racionalidad y la concepción funcionalista de la sociedad; las que son discutidas en este trabajo. La planificación no puede ser vista como una técnica, ya que esto la limitaría en sus posibilidades de desarrollo, al negar esta visión de la misma cualquier posibilidad de crítica de las propias bases teóricas en que se asienta. Afirma el autor que es imposible pretender una racionalidad estricta y formal, en una sociedad que encuentra explicación en las determinantes de la estructura económica, sino que, por el contrario, la planificación debería edificarse sobre una concepción histórica, que reconozcan la importancia de estas determinantes.

El enfoque funcionalista de la sociedad presenta las relaciones sociales en forma tan sintética y simplificada, que el esquema de causalidad implícito debería ser, o bien lineal y mecánico, o bien tan complejo e indefinido, que resulte imposible percibir entre las relaciones establecidas, cuáles son las determinantes en última instancia. Postula el autor que dentro de una totalidad histórica que él llama "ecosistema de salud", es precisamente el funcionamiento de todo el sistema el que determina el estado de salud, pudiéndose ver entonces la aparición de un sector específico y dedicado a la producción de salud, así como la extensión de sus atribuciones, como una medida del fracaso de aquel.

AU : CORDEIRO, HESIO y ZAVALETA, HERMAN
TI : Análisis de la práctica médica actual en América Latina: alternativas y tendencias
PU : Revista Centroamericana de Ciencias de la Salud
Mayo-Agosto 1979 No. 13 pp.111-133
RE : A partir de la III Reunión Especial de Ministros de Salud, en 1972, el discurso de salud ha girado alrededor de la extensión de cobertura a los grupos de población "marginalizados", discurso que legítima el derecho a la salud como algo inherente a las necesidades humanas.

Esta declaración presenta dos implicaciones ideológicas importantes: por un lado, al reconocer el derecho a la salud como un concepto abstracto e histórico, se le despoja de todo su contenido en cuanto a las luchas y conquistas sociales; y por otro, al "igualar las desigualdades", asegura una unidad político-social sobre la cual es Estado es el lógico representante de todos los ciudadanos. También se destaca un tercer elemento articulador de los dos anteriores, que es el de participación comunitaria.

El discurso institucional, mientras tanto, gira alrededor de la búsqueda de la racionalidad perfecta, donde para alcanzarla deben ser excluídos todos los conflictos y choques de intereses: la estabilidad social y política asegurada a cualquier precio, aunque para esto se reduzca en forma sustantiva el grado de libertad de la ciudadanía.

Si por un lado los proyectos de extensión de cobertura y racionalización se inscriben en el marco de las políticas sociales, representando en ciertas situaciones avances y conquistas para los grupos subordinados, por otro lado, tienen importancia como proyecto en planes de inclusión e internacionalización de las relaciones capitalistas de producción.

Finalmente, se insiste en la necesidad de determinar el sentido y el significado de las políticas de salud, a través de un pensamiento crítico, capaz de orientar una práctica innovadora.

Para el autor, no hay prescripciones a ser dadas, ni esquemas teóricos generales que den cuenta de cada situación específica: los conceptos y leyes generales son solo herramientas para los análisis concretos.

AU : FASSLER, CLARA
TI : Transformación social y planificación de salud en América Latina
PU : Revista Centro Americano de Ciencias de la Salud
Mayo-Agosto 1979 No. 13 pp.133-159

RE : La autora presenta un análisis histórico de la economía latinoamericana, en el cual se basa para la interpretación de las relaciones sociales en los últimos veinte años. Partiendo de este marco de referencia, se estudian los diferentes modelos de práctica médica, así como el papel del Estado a través de todo el período, en la definición de estos modelos.

Las posiciones desarrollistas de la planificación, con énfasis en los aspectos sociales, emanadas de Punta del Este, han ido dejando paso, a medida que las circunstancias económicas así lo han exigido, a nuevos enfoques de la planificación, donde la importancia de lo social, y lógicamente, el gasto en estos sectores, se ha ido reduciendo.

Se deduce entonces que la llamada crisis de la planificación de salud, no es más que la crisis de la ideología ocula atra/s de ella, y que pretende oscurecer los intereses antagónicos de clase de nuestras sociedades, la que deriva a su vez de la crisis del desarrollo capitalista en su modalidad dependiente.

AU : DA S. GANDRA, DOMINGO
TI : El concepto de comunidad y su relación con los programas de salud
PU : Educación Médica y Salud
Vol. 11 No. 33 1977 pp.205-236
RE : Los conceptos son productos de la creación humana que expresan los contenidos de una forma de percibir y pensar la realidad. Así, el concepto de comunidad ha ido sufriendo cambios y adaptaciones en función de las ideas dominantes en los diferentes períodos. Es importante destacar que a pesar de las transformaciones sufridas por este concepto, una característica ha permanecido como dominante en todos los proyectos planteados hasta la fecha, y ésta es una cierta externalidad de éstos con respecto a la comunidad blanco de las acciones.

Se analizan la evolución, características y limitaciones con que se han desarrollado los trabajos comunitarios, destacándose la expectativa que los diversos proyectos han ido teniendo en cuanto a la participación de la comunidad en sus actividades, expectativa que ha ido aumentando desde una primera etapa donde se entendía a la comunidad como un recursos más, hasta los actuales planteos de la planificación participatoria, cambio que se ilustra con un esquema de comparación entre planificación según el modelo clásico y según la alternativa participatoria.

En la actualidad, una medicina evidentemente curativa y con una reducida cobertura de servicios, busca salidas a lo que se conoce como "crisis de la medicina", a través de proyectos como el de medicina comunitaria que implica, (si bien no siempre es así entendido), un enfoque del problema salud-enfermedad desde una perspectiva global, con una amplia participación comunitaria, y que procure atender más a las causas que a las consecuencias de la enfermedad.

Quedan entonces identificados dos tipos de problemas: uno teórico, que dice de las dificultades de elaborar estructuras conceptuales que nos permitan conocer la realidad sin deformarla a través de nuestra propia idea de la misma, y otro, de naturaleza práctica, que habla del cómo orientar nuestras acciones con la precariedad de nuestros instrumentos teóricos y la imposibilidad de retardarlas.

Es evidente que no existe una solución para los problemas aquí levantados, así como que es preciso asociar los trabajos prácticos a una sistemática investigación y por sobre todo, dar a las poblaciones las condiciones que les permitan elaborar y definir su propia realidad.

AU : GRUPO DE ESTUDIO SOBRE MEDICINA COMUNITARIA
TI : Aspectos teóricos de la medicina comunitaria
PU : Educación Médica y Salud, Vol. 9 No. 1 1975 pp.5-11
RE : Los trabajos dirigidos al desarrollo de la comunidad han estado basados hasta el momento en un enfoque funcionalista, que reconoce una homogeneidad entre lo social, lo político y lo económico. Estas variables son vistas como interdependientes, siendo entonces posible desencadenar el proceso de desarrollo por cualquiera de ellas.

Por otra parte, estos enfoques tradicionales han mostrado la imagen de un interés común de toda la sociedad por la salud, y han planteado agrupar a la comunidad alrededor de aspectos del consumo de servicios; enfoques que enmascaran las contradicciones existentes y enajenan la conciencia de clase, resultando en control ideológico de la comunidad, todo lo cual se ve agravado por la visión monocausal de la enfermedad que oculta sus aspectos socio-económicos y que suele ser la norma en estos enfoques.

Se sugiere que la organización de la comunidad debe pasar a constituir un objetivo primario en las tareas de este tipo, y que debe procurarse adoptar una política de "descentramiento" del saber médico hacia la población, de forma que ésta pueda asumir un papel protagónico en relación a su salud.

AU : MEDINA LOIS, ERNESTO
TI : El uso de encuestas en la medición del nivel de salud
PU : Cuadernos Médico Sociales, Vol. XIX No. 2 Junio 1978 pp.5-10
RE : La medición del nivel de salud de la población constituye un problema aún no resuelto; así suele estimarse a través de los indicadores de la mortalidad, los que presentan la limitación de no ser representativos de los problemas de salud habituales de la población. Un procedimiento más adecuado sería el examen directo de la población, lo cual sin embargo resulta impracticable.

Se plantea entonces un método de medición del nivel de salud a través de la aplicación de una encuesta, en base a un cuestionario autoadministrado, elaborado con siete categorías que son: incapacidad grave, media, presencia de dos enfermedades graves, de una, de síntomas, energía media y alta energía, y se ilustra con un ejemplo de la ciudad de Santiago de Chile.

AU : NERI, ALDO C.
TI : La medicina en el mundo contemporáneo
PU : Educación Médica y Salud, Vol. 13 No. 2 1979 pp.113-131
RE : Es cada día más evidente la necesidad de extender los servicios de salud a las clases populares, pero debemos preguntarnos acerca de qué deberían ser esos servicios médicos, para que cumplan realmente su función social.

La actitud actual frente a los servicios médicos, y en especial las características de la demanda, están fundamentalmente determinadas por los requerimientos y necesidades de un aparato productivo, esencialmente médico, que las modela a su propia conveniencia, por lo que solo parcialmente se adecuarán a las auténticas necesidades de salud de la comunidad.

La creciente accesibilidad de la atención médica y su incesante tecnificación, ha determinado una también cada vez más creciente iatrogenia médica, en tanto que la medicina segura, se basa en conocimientos capaces de ser apropiados por el común de los seres humanos.

En base a estos planteos, el establecimiento hospitalario ha sido sobre valorado y es visto como modelo óptimo de servicio, al tiempo que la atención médica primaria o básica está en crisis.

Se proponen las siguiente estrategias para el replanteo necesario en la atención de salud: "desacralización" de la medicina, desaceleración de la expansión hospitalaria con desarrollo concomitante de la atención primaria, desarrollo de la evaluación de la práctica médica a través de la investigación científica y la transformación profunda del papel del médico frente a la población que sirve.

OBRAS CITADAS EN OTRAS PARTES DE ESTE TRABAJO:

AU : BEHM ROSAS, HUGO
TI : Crecimiento rápido de la población y satisfacción de las necesidades de salud en los países de América Latina
PU : Revista Centroamericana de Ciencias de la Salud
No. 6 1976 pp.111-122

Ver item 3.1.3.1.

AU : CANO GAVIRIA, EDUARDO
TI : Notas para una aproximación a la crítica de la "teoría de los sistemas"
PU : Revista de la Escuela Nacional de Salud Pública
Julio-Diciembre 1975 pp.31-38

Ver item 3.2.1.

AU : FUNDACION BARILOCHE
TI : El modelo mundial latinoameircano
PU : Revista Centroamericana de Ciencias de la Salud
No. 2 Septiembre-Diciembre 1975 pp.5-24

Ver. item 3.2.2.

PUBLICACIONES CONSULTADAS:

Acta Médica Costarricense.
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Acta Médica del Valle.
Acta Médica Venezolana.
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Boletín Epidemiológico Nacional de Bogotá.
Boletín Epidemiológico do Ministerio da Saúde.
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Boletín de la Oficina Sanitaria Panamericana.
Boletín de Salud Pública.
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Gaceta Médica de México.
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Revista Brasileira de Medicina.
Revista Centroamericana de Ciencias de la Salud.
Revista Cubana de Administración de Salud.
Revista da Escola de Enfermagem da U.S.P.
Revista de la Escuela Nacional de Salud Pública.
Revista de la Facultad de Medicina de la UNAM.
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TICITL.
Técnica Hospitalaria.
Traducciones.

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SELECCION BIBLIOGRAFICA DE ARTICULOS EN PUBLICACIONES PERIODICAS NO LATINOAMERICANAS ACERCA DE LA PLANIFICACION EN SALUD

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HEALTH PLANNING BIBLIOGRAPHY & ABSTRACTS: CONSIDERATIONS & PROBLEMS IN THEIR PREPARATION

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I would like to begin with three heresies of my own:

First: The management of health services does not require persons trained in health.

Second: Health professionals have been a main incubus obstructing the growth and of application management sciences in the health field (clearly this heresy is made with great difference to the present distinguished company, which is quite obviously excepted.)

Third: The delivery of health services has grown worse during the period in which large investments have been made in health management education.

These wild and blasphemous remarks are intended partly to generate some heat and partly to raise a huge question mark about our present endeavor. Is our exercise a meaningful one? Such an element of self-criticism is a useful management tool.

Please allow me to run us through a little ritual of considerations before addressing my main task - that of explaining the mechanics and assumptions which determined the bibliographic notes which I brought to this seminar. Both the heresies already mentioned and the issues that I now wish to raise will reveal the prejudices and orientation which shaped the work I attempted.

The task of management is to deal with uncertainty. This uncertainty may manifest itself in unrealible, unavailable or incomplete data; in a lack of knowledge about casual relationships and in the well-established impredictability of human interactions and the responses to intervention in social situations. Different levels of uncertainty characterize the management process. The maintenance engineer in the hospital faces far lower degrees of uncertainty that the hospital administrator who is greeted with industrial conflict or the surgeon who receives word of a mass casualty.

Planning: Is an essential and powerful tool in the process of management. Planning is a device which assists the manager to place informed bets and to hedge against the uncertainty of the future. Planning helps the manager in his search for control; it helps him to approach control of his environment by offering some degree of certainty and predictability.

This search for control is designed to attain results. The idea is to achieve sufficient control to enable one to manipulate certain variables and thereby to attain predictable and desired results. Thus, the purpose of management is entirely results-oriented, and planning must be seen as playing a vital role in giving management that capacity to exent control. The exercise of management is one of implementation. This requires judgement discretion, modulation and so on to ensure that what is done approximates as closely as possible, with which was planned. The idea is to equate plans and intentions with events and results. Planning and management are integrally fused and inter-dependent. In the field of health services administration the pivotal importance of implementation can scarcely be exagerated.

Given this brief sketch of my bias I must be clear that my overriding and abiding quest is for impact. How will our planning-management activities hit upon the social environment which we seek to reform. Will we get the results we want? Health Planning will thrive or flop depending on its performance, that is the result it attains.

Now let me share the assumptions that guided (or misguided) my efforts in compiling the abstracts before you. My first thought was of the probable users - who would read this material. I assume that they would be administrators in the field of health management. My limited experience suggest that

generally these persons are unfortunately burdened and unfavorably enlightened: they are busy folk straining to made through an unending swamp entangled with roots. Second, I do not think they possess a great pool of knowledge about mangement - modern or ancient. By and large they have not been tarnished by exposure to management education. Third, there is little sense of mangement as a creative, problem-solving mechanism. What predominates is the dull, ritual of routine administration. Little mental effort is associated with health administration. This is a bias in the regions national administrative cadets in health are soon plucked out for placement elsewhere in Finance, foreign Affairs, Public utilities and so on. And by extending the dullards from other agencies are often shunted toward Health & Labour or Social Security. Thus, health retains the Weaker administrators precisely because health is not seen as a political agency or commodity, Health does not earn votes.

Fourth: The administrators possess only a rather limited notion of casual relationships. Thus, the notion of managerial intervention designed to change the state of affairs is an underdeveloped one. The bureaucratic agency routinely; it does not manage creatively.

Fifth: There is typically a heavy medical bias where a strong managerial perspective is essential (Remember my second heresy: medical professionals impede the advance of management) For the most part, this medical dominance cultivates an atmosphere which is skeptical if not decisive of management. The organizational climate in health agencies is antieconomic, non-cost and non-quantitative and premathematical. The perspective is medical and what is sought is the best medical treatment not the most suitable or optimal treatment taking all the constraints into consideration - facilities, equipment, manpower, money, etc. Life is its own value and is thereby beyond the scrutiny of the manager. Unfortunatelly, the health budget does not reflect that view.

Sixth: The tradition of planning goes heavily against our current concerns. In the Caribbean plans have been prepared for two audiences - prospective foreign donors and prospective local voters. Thus, the "Plan" has indeed served its purpose as soon as the foreign dollars have been received or

the local votes counted. In this tradition the plan is in fact totally divorced from the practice of management. The plan functions as a documents of illusion - to donor and voter alike. For the former it justifies the loan and to the voters the manifesto is a promise of elevation to a better world without effort on their part. The plan is an illusion, not an instrument which informs and guides managerial action.

The validity of this claim can be tested by a search for a success stoy. ¿Where in the Caribbean is the health plan that has been systematically executed? Where is the health programme that has been prudently revised by field evaluations of resource constraints? Where is the health policy whose priorities are reflected in the apportionment of its budget? But even these questions are difficult to answer because of a stark lack of empirical studies of this type.

Seventh: There are massive gaps between those who plan and those who administer. These are treated as two discrete entitites, as separate and distinct functions, I believe that I said enough about this problem earlier and I shall underline it here simply by suggesting that such an approach is suicidal.

Eighth: And for your patience, the final one of the assumptions that influences my efforts, was the idea of the need to market health planning as a respectable endeavor. Health Planning is virtually unknown in the region. It does not command the respect of more established professions. Mothers speak of my son the arquitect, my son the engineer, my daughter the doctor, lawyer, and son on, but no one shouts of my son the health planner. The discipline lacks status, it is umproven and without distinction. The profession is yet to establish its worth by virtue of demonstrating its economic and social value. Thus, a marketing job remains to be done.

Those eight items and the prejudices wedded to them were some of the considerations which affected my efforts at selection. I had the good fortune to visit two schools of public health, one at the University of Michigan, the

other at the University of North Carolina at Chapel Hill. I remain obligated to colleagues there who exhibited much patience and kindness in pointing a novice toward useful sources.

I found it useful to group the literature I encountered into four categories:

(i) Mathematical: Highly quantitative models of economic optimization. These are very interesting approaches and clearly valuable to persons who posses the tools to use them. Sensitivity tests on some input variable indicate that the data base need not be precise, the models can yield useful information for policy decision within a fairly wide tolerance of information (unreliability). However, I doubt that the policy makers in the region would be receptive to such a highly quantitative approach. This is a personal reservation and I hasten to add that the SPH at Michigan reports that a number of their graduates from developing countries have been using the model in their countries.

(ii) Travelogue: This is unduly simplistic, descriptive information which reads rather like a tourist guide. While this literature is useful introductory material for the uninitiated and while it may give some indication of others and pitfalls, it certainly does not provide a sufficiently general frame of reference to constitute useful training material. I would think that its value is restricted to two spheres; what hast been done and some problems to expect.

(iii) Ideological: Here the literature that radical improvements in the health status requires widespread active involvement of the populace. This, it is proposed, is typically achieved only after a general transformation of the structure of relationships between Government and society. The corollory is clear: until this latter is accomplished there is little to be achieved by engaging in the formal process of health planning.

(iv) Prescriptive: Guidelines which set out the essential stages in developing and evaluating health plans. Understandably, this literature is general and normative. It does not examine the peculiarities of Governmental structure in any particular region nor is it concerned with special constraints of any one state. Little of this material discusses the problems of the planning process and I have encountered no examinations of the difficulties of the "how-to" type. Of course, in spite of the characteristics noted this prescriptive material can be quite useful. I can not pretend that this classification is anything but a preliminary impression. A further reading of the articles may lead to a quite different assessment. Still what it seems to suggest is the limited value of the first three groups.

I tried to opt for the how-to material which provided valuable analytical, informative and question-provoking perspectives. In making this decision I was ever mindful of the prospective users and of the state of the art in the Caribbean. After preparing the abstracts on the 60 articles selected, I then chose the 25 which I thought would put to you for your critical assessment. These I have grouped on six categories:

Group one: First the Consumer contains three articles which are intended to help our planners to retain their focus on the health consumer. This marketing component is often ignored in public administration and all too frequently leads to undue and unnecessary waste.

Second group: General perspectives contains four articles of a rather basic but essential nature. The objective is to place health planning in the context of resource constrainings.

Third group: World politics, to assist the reader in recognizing that a planner interacts with his clients and to provide a checklist of some stages in a planning process. The third group, Approached to Planning, contains six articles which expose the reader to various models, operation research, epidemiological and economic. The administrator is really introduced to the tools and gains some appreciation of how they can be used and to what advantage.

The fourth group: Implementing the Plan contains four articles. It is my view that this is a domain of considerable importance. Planners who cannot engineer change in bureaucratic organizations are simply technocratic eunuchs. A change agent is one who has the political skill to put his technical knowledge into practice. He succeeds in translating his ideas into action. The challenges of innovation, initiating change and the use of power are examined in the selection in this selection.

The fifth group, Evaluation, contains three articles which emphasize evaluation as a techniques of management which informs planning and thereby strengthens management.

The sixth group, some cases contains five articles on countries and provide usefull illustrations of health planning in empirical situations.

The two dominant considerations which affected the selection of articles were first that the papers should be simple and therefore, palatable; and second, that they should assist the planner in having a greater impact on his community through his health plan.

There is a marked paucity of a tradition of Caribbean scholarship of managerial inquiry into either the accomplishments or failures of public policy. There is little concern for rigurous empiricism. There is much political analysis, ideological debate and a fair measure of criticism of policies of whole governments. But there is little cautions, detailed examination of the problems and chores of implementation. Thus, there is little documentation of the pitfalls of progress. Work of this sort is very greatly needed. Without this empirical data we have precious little on which to inform the science of planning. Ideas without empiricism are most restricted in their practical value. It is the creation of such a body of information that can assist us in achieving what we all want, namely, a clearly defined connection between knowledge and results through enlightened planning and management. Empiricism is a basic starting point for transforming intentions into consequences, that is, for making wishes work.

There are a further seven or so articles that I would ask our colleagues to examine with some care.

If this work moves us toward great documentation, it would have made a valuable first step. If in addition the seminar enhances PAHO's ability to assist the region to achieve greater efficiency in the use of its health resources and the countries to achieving greater effectiveness in moving their plans into real activities, it will have been worth all the effort that has gone into it. Failing that, we, who are on the fortunate side of the fence, can simply begin right away to plot (not plan) for our next conference.

H E A L T H P L A N N I N G

I. First the Consumer

1. "Can Health be Planned?" Aaron Wildavsky.
2. "First Question in Health Planning: Does the Public Know What it Wants, or Not? William Richardson and Duncan Henhauser.
3. "Discovering What the Health Consumer Really Wants", William Elexner, Curtis McLaughlin and James Littlefield.

II. General Perspectives

4. "Three Propositions on Planning and Reality", Lynn Muchmore.
5. "Planning in Developing Countries".
6. "Community Decision Behaviour: The Culture of Planning", Richard S. Bolan.
7. "Planning for the Pragmatist", Archie McPherson and Rodney N. Powell.

III. Approaches to Planning

8. "Conclusions: The State of the Art of Health Planning Models".
9. "The Operational Research Approach to Problem Solving", J. Luckman and J. Stringer.
10. "Epidemiology and Health Policy", W. W. Holland and A. H. Wainwright.
11. "Epidemiological Approaches to Planning".
12. "Misuses, Mistakes, and Misunderstandings".
13. "Fashion and Rationality in the Allocation of Health Resources", Kwasi P. Nimo.

IV. Implementing the Plan

14. "Making Plans Happen: Central Management: Central Management Support Systems", Jerry M. Russell.
15. "Initiating Planned Change in Health Care Systems", Irwin Rubin, Mark Plovnick, and Ron Fry.

16. "Selective Primary Health Care: An Intermin Strategy for Disease Control in Developing Countries", Julia Walsh, and Kenneth S. Warren.
17. "Modern Medicine and the Delivery of Health Services: Lessons from the Developing World", Allan G. Rosenfield.

V. Evaluation

18. "Setting up an Economic Appraisal in Health Care".
19. "Evaluation of Programme Effectiveness", O. L. Deniston, I. M. Rosenstock, and V. A. Getting.
20. "Practical Evaluation for Primary Health Care Programmes", Mona R. Bomgaars.
21. "Health Program Evaluation in Relation to Health Programming", Robert M. Thorner.

VI. Some Cases

22. "The Cuban Health Area and Polyclinic: Organizational Focus in an Emerging System", Ross Danielson.
23. "Health Services in Cuba: An Initial Appraisal", Vicente Navarro.
24. "Low-Cost Health Delivery Systems: Lessons from Nicaragua", James R. Heiby.
25. "Starting from Year One: The Politics of Health in Nicaragua", Jose Carlos Escudero.
26. "Reduction of Mortality in Rural Haiti Through a Primary Health Care Program", Warren L. Berggren, Douglas C. Ewbank, and Gretchen G. Berggren.

AU : AARON WILDAYSKY
TI : Can Health be Planned?
PU : Graduate School of Public Policy
University of California (Berkeley)
RE : The Great Equation (Medical Care = Health) is wrong. More medical care does not equal better health. Health is largely determined by behaviour. Health programs displace their goals. No health system can provide as much care as people will use. Medicine faced with uncertainty, is always willing to try one more thing until the economic barrier is reached. Good health programs expand the clientele beyond their capacity, creating larger crowds, longer waiting and greater expenditure. The mixed (public and private) health system has fatal defects.

"Planning is the ability to control the future through present acts; the more future consequences one controls, the more one can be said to have planned effectively."

The problem of spiralling costs with dubious benefits to the intenced consumer is illustrated.

AU : WILLIAM RICHARDSON and DUNCAN NEUHAUSER
TI : First Question in Health Planning:
Does the Public Know What it Wants or Not?
PU : Modern Hospital, (May 1968) Vol. 110, No. 5
RE : Two ideologically opposed perspectives (public ignorance vs. public wisdom) seriously affect health planning. The former ignores data on public behaviour while the latter ignores expert opinion. The public ignorance school would argue that the legislature must set standards to protect the public against (say) unscrupulous manufacturers of substandard hearing aids. The public wisdom school would contend that the public can discriminate and market forces should be left free to operate.

What proportion of the population is wise and informed? (This may be specially pertinent to pluralistic Third World populations.)

"The two theories have different implications. One sees man as ignorant, the other, wise. One values protectionism, while the other advocates the free market. One sees man as potentially altruistic while the other sees man as primarily self-interested. One suggests that the doctor should seek out the patient, and the other says the patient should come to the doctor. Finally, they disagree on many facets of the organization and financing of medical services". One considers the public's health needs, the other speaks of demands.

AU : WILLIAM A. FLEXNER, CURTIS P. McLAUGHIN, and JAMES E. LITTLEFIELD
TI : Discovering What the Health Consumer Really Wants
PU : HCM Review (Fall 1977), Chapel Hill
RE : The appropriateness of maketing techniques are examined in terms of their relevance to the provision of health services. The basic marketing concept: "offering value to someone in exchange for value".

"To be responsive to consumer desires, health care managers need techniques to identify the benefits that guide the choices made by health consumers - techniques that can articulate directly with the planning process of the organization and are relatively simple to implement".

The authors describe the use of informal qualitative group discussions as one technique of learning the consumer's views about health services. The discussions reveal issues of importance to the consumers. These can be ranked according to the intensity of the groups preferences. These findings can become valuable inputs in the planning process.

Differences were found to emerge among different groups - potential consumers, consumers, providers. A simple chart illustrates the profile of concerns of these different groups.

The paper describes how marketing information collected was used to introduce changes in the program studied.

AU : LYNN MUCHMORE
TI : Three Propositions on Planning and Reality
PU : Manuscript (unpublished)
- contact: Prof. Charles Grubb, School of public Health, University of North Carolina
RE : Reality is held to be the dominant criterion for the assessment of planning models. The paper is founded on the author's experience as expressed in three notions:

(i) In reality, planning has no meaningful existence separate and apart from decision making.
(ii) In reality the key actor in any planning scenario is the decision-maker.
(iii) In reality, the individual politician, elected official, appointed administrator who must choose among alternatives - that is make important decisions - will be found among those least knowledgeable about the scope and meaning of those alternatives.

Planning is defined as "the estimation of effects which pending action may have upon future welfare, and the systematic use of those estimates within deliberations that shape that action". Much emphasis is given to the second proposition where the short-range perspective of the

political executive is put in sharp contrast to the long-term view of the planner. The political system allows only short-term considerations.

Planning is making decisions (taking action) in a restrictive environment not the production of an erudite document.

AU : RICHARD S. BOLAN
TI : Community Decison Behaviour: The Culture of Planning
PU : Journal of the American Institute of Planners
Vol 35, No. 5 (September, 1969)
RE : "This paper sets fourth a conceptual framework for better understanding the relationships between the planning process and community decision-making. From an initial assumption concerning the nature of the paper suggests four sets of independent variables that affect decision outcomes:

(i) process rules - including the dimensions of specialization and skill;
(ii) the decision field - including the environment for decision not only in the community but within the deciding body itself;
(iii) planning and action strategies; and
(iv) issue attributes.

Using this framework, a series of hypotheses are poses for future research and the potential implications for urban planning are discussed.

also in: Kramer, Ralph M. Harry Specht (eds)
Readings in Community Organization Practice
(2nd Ed.) Prentice Hall, Englewood Cliffs, New Jersey,
1973, pp. 150-164

AU : O. LUCKMAN and J. STRINGER
TI : The Operational Research Approach to Problem Solving
PU : British Medical Bulletin
Vol. 30, No. 3 (1974) pp. 257-261
RE : Churman's definition of OR ("...the securing of improvement in social systems by means of scientific method") is adopted to stress that change, not the collection of knowledge, is OR's real role. OR is a process which can make a significant contribution to planning, management and administration.

The steps of any rational decision are listed and OR's possible contribution at each stage is illustrated. The sensitivity of a given result to input or environmental changes is explained. Models bring together controllable and uncontrollable variables with a view to determining the extent to which a desired objective can be attained. The model permits an assessment of consequences and alternatives before

intervention into the real-life situation. Different models are briefly mentioned - stochastic, simulation, gaming, linear programming and combinatorial.

The application and limits of mathematical models in the health field are continuously dismissed. In health care there are several decision-makers, social and psychological features significantly affect the system operation, objectives are ill-defined and maybe conflicting, and together these factors make change difficult.

OR is not the inflexible application of mathematical models. The purpose is to use a rigorous process of analysis to reveal a system's structure and problems. In spite of the differences between industrial and health systems there is an increasing number of successful OR applications in the latter.

AU : W. W. HOLLAND and A. H. WAINWRIGHT
TI : Epidemiology and Health Policy
PU : Epidemiologic Reviews
Vol. 1, 1979, pp. 211-232
RE : Epidemiology has made major contributions to the health service. Studies of smoking, blood pressure, serum cholesterol level, nutrition, pollution, etc., have been valuable for preventive and curative health services. Examples from the 16th to early 20th century are cited to support the contribution of epidemiology. Two recent studies are discussed - the Kent Nutrition Study and the National Study of Health and Growth and their impact on government policy is mentioned. Several examples of epidemiological research are cited.

The problem of conducting epidemiological research and making policy decisions is stated. Epidemiology is seldom a direct input to policy making and findings scarcely influence policy behaviour. The authors claim a 5-10 year lag between policy decisions and implementation. More training in epidemiology is encountered as well as a stronger link between epidemiology and policy making.

AU : E. G. KNOX (ed)
TI : Epidemiology in Health Care Planning
PU : Epidemiology in Health Care Planning
Oxford University Press, 1979, Ch 12, pp. 110-135
RE : Epidemiology is described as a problem-oriented discipline. Notwithstanding their knowledge of the contrary, the author (intentionally) assumes that the epidemiologist is fully integrated into all phases of the planning process. This assumption allows for an illustration of the contribution which the epidemilogist can make at each stage of the planning cycle.

Several studies are cited as the author moves from one element of planning to another: situation analysis and the determination of priorities; the formulation of objectives; the formulation of objectives; the formulation of different means to those ends; the prediction of outcomes and the choice between alternatives; the setting of operational plans and monitoring the implementation; pilot studies and experiments; implementing the plan; collecting data for evaluation.

Many cases are used to provide clear illustrations of the impact of epidemiological studies on health policy and service.

AU : E. G. KNOX (ed)
TI : Misuses, Mistakes and Misunderstandings
PU : Epidemiology in Health Care Planning
Oxford University Press 1979, Ch. 15 pp. 136-150
RE : Epidemiology is not common sense, but a science requiring a precise formulation of studies and interpretation of data. The role of logic is emphasized. Several traps and pitfalls are clearly illustrated - in attractive narrative e.g., with respect to the 'cohor effect' of older people being shorter: it is not that they shrunk, but that younger generations grow taller. Errors arising from 'self-selected' populations, the 'dimensionality of data', before-and-after comparisons and regression problems are similarly explained.

Problems of semantics and misuses of the science were discussed. Epidemiological data is sometimes used to support a strong view, e.g., anti-fluoridation.

Epidemiologists need to prize their independence, but must often work in concert with other professionals on complex issues.

AU : KWASI P. NIMO
TI : Fashion and Rationality in the Allocation of Health Resources
PU : Social Science and Medicine
Vol. 15A (1981), pp. 313-315
RE : Health resources are defined according to the inputs to the provision of health services. These may be human, (including physicians, nurses, physiotherapists, etc.) material (buildings, equipment, drugs, vehicle), or financial (budgets for training, remuneration, purchases, maintenance). The distribution of health resources is then examined and then the role of the politicians in their allocation. The curative orientation of a colonial period is exacerbated during independence with the construction of large hospitals as symbols of political activity. More recently there is another polarity as each community without a clinic wants one and those with clinics want them expanded. The role of allocation has to be related to the closely associated responsibilities of users and planners.

AU : IRWIN RUBIN, MARK PLOVNICH & RON FRY
TI : Initiating Planned Change in Health Care Systems
PU : The Journal of Applied Behavioural Science
Vol. 10, No. 1 (1974), pp. 107-124
RE : The authors discuss their experiences, as social scientists, seeking to introduce change in health care. 'Resistance' is regarded as data. Community health centres are examined from four perspectives - task, resources (people), formal structure and the organization - environment interface.

Given the uncertainty of the nature of the task, the high risk in introducing change (life/death) and the fact that the consultants actually (unlike industry meet with the persons who will themselves change all predispose high resistance.

Physicians dominate the team in the health centres. They are risk averters - "first do no harm". They prefer curative to preventive medicine, and medicine to administration reform which in the context of a health centre requires changed behaviour on his part. The health team alienates administrators.

There are several loci of power in the structure - the administrator, the physician, the board . . . There is ambiguity and authoritarianism.

The centres must be responsive to their environment - whose money, what services and what conditions?

The authors propose certain 'scouting and entry' strategies. Consultants are encouraged to examine their own behaviour.

AU : UNKNOWN
TI : Conclusions: The State of the Art of Health Planning Models
PU : Manuscript (unpublished)
Contact: Charles Grubb, School of Public Health, University of North Carolina
RE : In spite of the advances in developing several models for health planning they have seldom proved useful in application. The paper proposes and discusses the following explanations:

1. Very few of the models were developed in part or entirely by health planners.
2. The modesl require large amount of data.
3. Models are often prescriptive and comprehensive.
4. Many models have insufficient documentation.
5. Many models did not reflect reality.
6. While model development was funded by governmental agencies, their application was seldom funded.
7. Health planners may not have been prepared to apply these models.

The poor achievement in the application of health planning models may lie in part in the models themselves and in part in the planners. The use of models in the business environment is well established. Model developers, users and sponsors need to determine the potential for models in the health planning field.

AU : JULIA A. WALSH and KENNETH S. WARREN
TI : Selective Primary Health Care: An Interim Strategy for Disease Control in Developing Countries
PU : The New England Journal of Medicine
Vol. 301, No. 18, pp. 967-974
RE : Priorities among the infectious disease affecting three billion people in the less developed world have been on prevalence, morbidity, mortality, and feasibility of control. With these priorities in mind a program of selective primary health care is compared with other approaches and suggested as the most cost-effective form of medical intervention in the least developed countries. A flexible program delivered by either fixed or mobile units might include measles and diptheris-pertussis-tetanus vaccination, treatment for febrile malaria and oral rehydration for diarrhoea in children, and tetanus toxid and encouragement of breast feeding in mothers. Other interventions might be added on the basis of regional needs and new developments. For major diseases for which control measures are inadequate, research is an expensive approach on the basis of cost per infected person per year. - Abstract

In the absence of comprehensive primary care, cost-effectiveness (measures only in terms of mortality or deaths averted) is one way of establishing priorities for health services intervention.

AU : Allan G. Rosenfield
TI : Modern Medicine and the Delivery of Health Services:
Lessons from the Developing World
PU : Man & Medicine
Vol 2, No. 4 (1977), pp. 279-295 (commentaries pp. 296-312)
RE : Medicine in the developing world is structured largely on the Wester model. The provision of health care is grossly insufficient. The emergence of those systems predicated upon highly trained personnel is discussed.

Generally those countries which take an innovative path in training and using less educated personnel to deliver basic health care succeed in making substantial health gains. USSR, People's Republic of China, North Vietman, Cuba and Tanzania are mentioned.

Substantial gains have been achieved without external aid which often fails to reach the poorest groups in the country and may actually contribute tot greater inequality.

Many of the innovations described followed the emergence of radical political regimes. Could the health reforms have occurred independent of those regimes? Three discussants comment on the paper. Can the lesson in one country effectively learned by another (Bryant)? Do medicine and health care really make a difference to the health states of societies - What is the role of economic and political reforms (Susser)? Using less skilled workers reduces the cost of medical care in addition to providing greater access. In the end the question is ideological (medicine in capitalist or socialist societies) and attitudial (can you really get highly skilled professionals into remote rural areas without coercion?).

AU :
TI : Setting up Economic Appraisal in Health Care
PU : Ch. 3
RE : Different aspects of economic appraisal are explained. The importance of being certain that one is asking the appropriate question is emphasized. Neither costs nor beneftis should be considered/themselves. The question 'is the treatment worthwhile?' requires considerations of the alternate uses of the resources employed: those resources may be applied elsewhere in health or in other sectors. 'What is the most effective treatment of a given condition?' also requires assessments of costs and benefits of different courses of action.

There is a brief note on marginal analysis and its application to decision-making in health. This serves to emphasize the need to examine alternatives of treatment places, scheduling of treatment, different illnesses and different clients.

Policy decisions provide for options and economic appraisal can assist in selecting alternatives.

AU : O. L. DENISTON, I. M. ROSENSTOCK & V. A. GETTING
TI : Evaluation of Program Effectiveness
PU : Public Health Reports
Vol. 83, No. 4 (April 1968), pp. 323-335
RE : All programs in public health are viewed as consisting of combinations of resources, activities of several kinds. Each program has one or more "Objectives" (the desired state resulting from the program's activities) and each objective implies several "sub-objectives" which must be accomplished. "Resources" are consumed in "activities" performed to meeting "sub-objectives". Certain assumptions are generic: (a) the expenditure of resources as planned will result in the performance of planned activity; (b) each activity, if properly performed will result in the attainment of the sub-objective with which it is linked, and (c) if all the sub-objectives are accomplished the program objective will be achieved.

The paper explains its language and describes the evaluation process. The authors offer reasons which reduce program effectiveness: (1) resources are not used as planned, (2) the assumptions linking resources to activities are invalid, (3) activities are not performed as planned, (4) the assumptions linking activities to sub-objectives were invalid, (5) the assumptions linking sub-objectives to the program objectives were invalid.

AU : MONA R. BOMGAARS
TI : Practical Evaluation for Primary Health Care Programs
PU : Ch. 7, pp. 151-175
RE : Evaluation means critical examination of a program. Usually funding is made to the type of evaluation received. Different persons will look for different things. Politicians for proof that people are satisfied with the services provided.

Many people with costs and economists in health as an investment over time.

This article goes on to talk about different experiments using different methods. investigation, surveys, models, etc. It then presents guidelines for evaluation.
(a) Inputs - people and facilities
(b) Processes
(c) Status change

This is followed by a general discussion and example.

AU : ROSS DANIELSON
TI : The Cuban Health Area and Polyclinic: Organizational Focus in an Emergency System
PU : Inquiry - Supplement to Volume XII (June, 1975)
pp. 86-102
RE : The polyclinic is described in detail as a unit of independence but not isolation since it obtains specialists services from regional institutions. The polyclinic is the focus of primary care in Cuba and serves 25,000 to 35,000 in urban areas and as few as 7,500 in rural areas. The services integrate the curative-preventive and clinical-social dimensions. The polyclinic composed of four teams of primary care specialists under the leadership of a physician-director, is regarded as the general practitioner. Much use is made of volunteers and trained folk practitioners.

The polyclinic is linked into a network of community organizations - Committee for the Defence of the Revolution, National Association of Small Farmers. Federation of Cuban Women, Cuban Communist Party, etc.

The emergence of the polyclinic and its place in the national health system is described. There is considerable organizational detail.

AU : VICENTE NAVARRO
TI : Health Services in Cuba: An Initial Appraisal
PU : The New England Journal of Medicine
Vol 287 (Nov. 9, 1972), pp. 954-959
RE : The development of the Cuban health services during the last decade reflects a commitment ot minimize the striking inequalities in the availability and consumption of health resources that previously existed between social classes, between cities and rural areas, and between regions. The process of equalization has been characterized by a centralization of inpatient services, a decentralization of ambulatory services and an increase in the use and production of paramedical and auxiliary personnel within the health services system.

The health services today are structured according to regional models aimed at providing integrated care to the whole population, with integration of preventive with curative services, social with medical services, and environmental with personal health services. The universal coverage of the population has been achieved by redistribution of old and new resources and a heavy investment in the health sector, with great priority given to the rural and poor areas and regions of the country, and to the production of personnel, primarily of physicians. - Abstract

AU : JAMES R. HEIBY
TI : Low-Cost Health Delivery Systems: Lessons from Nicaragua
PU : American Journal of Public Health
(May 1981) Vol. 71, No. 5 pp. 514-519
RE : In 1976 the Ministry of Health of Nicaragua began a low-cost program to deliver simple health services in rural areas through trained traditional birth attendants or "Parteras". After two years the program had prepared 768 parteras in a five-day training course. Parteras were equipped with a kit that included oral rehydration salts, an antihelminthic, multivitamins with iron, aspirins, contraceptives, and obstetrical equipment. The difficulties encountered in implementing this limited set of simple health services illustrate a number of potential obstacles to the achievement of universal, comprehensive primary health care in less developed countries. The most prominent difficulties involved elements of the health service delivery system itself: supervision, the collection and use of management information, training, partera selection, and logistics. The experience also provided examples of issues in the design of delivery systems that require specific applied research. - Abstract

AU : JOSE CARLOS ESCUDERO
TI : Starting from Year One: The Politics of Health in Nicaragua
PU : International Journal of Health Services
Vol. 10, No. 4 (1980) pp. 647-656

RE : The triumphant Sandinista revolution inherited a health situation characterized by high morality, low life expectancy, widespread malnutrition, and a medical system limited in scope. The extent of these problems can only be estimated as a result of the Somocista government's failure to develop an accurate system of vital statistics. While there are many options available for rapidly decreasing the high levels of mortality and morbidity in Nicaragua the revolutionary government has chosen a strategy which fuses public health and politics. A health network based on popular participation and control is being formed which should not only decrease the high rates of malnutrition and infectious diseases in a cost efficient manner, but should increase the strength of the revolution as well. - Abstract

AU : WARREN L. BERGREN, DOUGLAS C. EWBANK & GRETCHEN BERGREN
TI : Reduction of Mortality in Rural Haiti Through a Primary Health-Care Program
PU : The New England Journal of Medicine
Vol. 304, No. 22 (May, 1981), pp. 1324-1330
RE : Deaths and their causes in a rual Haitian population of 8820 were studied through hospital records, death registration, a disease survey, and health surveillance, The results were used in selecting eight diseases for the delivery of health services by village-level health workers. The impact of the service as measured by monitoring annual age-specific and disease-specific mortality rates and by comparing them with officially estimated national mortality rates. Mortality rates fell progressively during five years, to levels only one fourth as high as the national estimates. The fall in mortality was associated principally with services that prevented deaths due to tetanus, malnutrition, diarrhoea, and tuberculosis. The total program of hospital and village health services saved 495 years of potential life per thousand population per year. Most of the saving was attributable to preventive services. The program eventually served more than 115,000 persons, and it has been replicated by other agencies for an additional 135,000 Haitians. - Abstract

AU :
TI : Implementing a National Rural Health System
Management Experiences from Afghanistan
PU : Managing Health Systems in Developing Areas
Ch. 8, pp. 151-158
RE : The case study describes results of six years effort to assist Afghan government in managing rural health system. It highlights problems of replicability and permanence; the difficulties of extending and repeating success of pilot projects are demonstrated. Description of village health workers and their training and development - programme suspended after revolution of 1978 under Russian pressure. Lessons to be learned from projects tested - that villagers can be effective in relieving the pain and suffering of their fellows - but the political will supporting the idea must be present.

Development of appropriate and feasible local financing mechanisms for health care is crucial for those developing countries which have inadequate government resource to pay for all aspects of a national health care system. Article concludes with discussion of weaknesses in system of logistitcs and management training for Ministry staff.

AU : CURTIS P. McLAUGHLIN
TI : Productivity and Human Services
PU : HCM Review, Fall 1976, pp. 47-60
RE : Human service organizations are often a coalition of many elements in a community. Their output is intangible and so difficult to measure and evaluate. The writer looks at the constituencies of the service system - clients, payors, professionals, evaluators. Features - professionals as operating managers, frequently in spite of lack of managerial training and experience; limit amount of productivity improvement. Writer develops behavioural schema for analysing pathologies (of control). The analysis shows such headings as goals, control, performance measures, operating mangement wih subheads of accountability, professionalism, fund sources, efficiency, effectiveness, political rationality. The operating manager is seen as the key to the success of the public program - the article concludes with a discussion of the skills he should display, including those related to marketing, resource acquisition, effectiveness, psychological contracting, use of rewards and incentives, team building and finally, task evaluation and competency training.

AU : CHARLES T. GRUBB
TI : Program Evaluation as a Tool for Management Decision-Making
PU : Charles T. Grubb, doctoral student/lecturer at University of North Carolina, Chapel Hill. (Unpublished)
RE : Increasingly human resources programs must justify their existence. The planning process involves several highly integrated and interdependent steps. Planning and evaluation are not separate entities. Steps include: the "process of defining a problem, assessing the extent to which the problem exists as a need, formulating goals and realistic and feasible objectives to alleviate or ameliorate those identified needs, examining and choosing from among alternative intervention strategies, monitoring the implementation and operation of those programs, and assessing the results of program intervention." These elements are discussed as a background to an examination of evaluation in particular. The potential benefits associated with evaluation are discussed.

AU : RICHARD S. BOLAN
TI : The Social Relations of the Planner
PU : Journal of the American Institute of Planners
Nov. 1971, pp. 386-396

RE : The city planner, in playing his role, engages in a social process which can be analyzed in terms of a planning role, a client role, and a community decision network - all interacting around a public agenda. In the conceptual framework presented here, the planner is viewed as having a primary relationship with his client group, whom he must relate to the larger community network, while they attempt to move. Both sets of relationships are affected by role postures, situation factors, and environmental conditions. This analysis suggests that traditional notions of the planner's role are too narrowly focused on substantive methodologies which imply highly simplistic assumptions about the social setting for planning. - Abstract

AU : T. J. CARTWRIGHT
TI : Problems, Solutions and Strategies: A Contribution of the Theory and Practice of Planning
PU : Journal of the American Institute of Planners
May 1973, pp. 179-187
RE : The purpose of this paper is to suggest that the nature of a problem governs both the range of possible solutions to the problem and the kind of strategies appropriate for achieving those solutions. The argument centers on the definition of four fundamental types of problem, or namely: simple problems, compound problems, complex problems, and metaproblems. Each of these problem-types is held to entail a corresponding kind of strategy. From this, it is concluded that planners face a persistent dilemma in trying to choose between a broad definition of their problem and an exact strategy for solving it. The closer they come to one objective, the further they get the other. - Abstract

AU : GEORGE BRAGER and HARRY SPECHT
TI : Tactics in the Field: A Perspective on Tactics
PU : Planning for Social Welfare
Englewood Cliffs, N.J. Prentice Hall, 1977, Ch. 17, pp. 226-236
RE : Examines different interventions which constitute the spread of tactical choices - collaboration, campaign, contest, violence. The perception of actors is examined in terms of their view/s of the issue - consensus, difference, and dissensus. The actors resources for influence and their relationshpis with each other are associated with particular tactics - problems solving, education, joint action, persuasion, political maneuver, barganing, negotiation, mild coercion, clash of positions within accepted social norms and violation of legal norms. The questions are a major significance. "Who makes the decision regarding the desired change? What is the basis, or sanction, of the current policy?

AU : JEAN-PIERRE HABICHT
TI : Assurance of Quality of the Provision of Primary Medical Care by Non-Professionals
PU : Social Science & Medicine
1979, pp. 67-75
RE : The acceptance of the once radical concept that non-physicians may provide primary medical car is due to the obvious need in many communities for such care in spite of inadequate resources. Primary medical care must involve the family and the community to be successful, it must permit appropriate referrals within a medical system to be effective and the quality of care must be assured by the training and supervision of the primary health care worker. Such a system of training and supervision as applied in some Guatemalan villages is described as well as the quality control methods used. This total system reduced infant mortality by two-thirds and the mortality of children between one and four years of age by three-quarters.

AU : THEODORE H. POISTER
TI : The Systems Approach
PU : Public Program Analysis: Applied Research Methods
Baltimore, University Park Press, 1978, pp. 31-57
RE : The systems approach is described as a way of laying out a public program as an operating system to facilitate performance evaluation and the analysis of alternatives. Systems analysis is a way of conceptualizing problems (and alternative solutions). The bias toward quantitative and efficiency measures as opposed to the behavioural elements is mentioned. The limits of other forms of evaluation (lacking in logic, definition and management) are stated.

Systems are defined as sets of interacting elements. Systems theory focuses on the explanation of the organization and behaviour phenomena in terms of dynamic interactions among interdependent elements withing a contextual environment. An overview of general systems theory is presented - closed and open systems, disturbances, goal seeking, feedback, etc. Systems analysis is explained emphasizing (i) comprehensiveness rather than isolation and (ii) the establishment of specific objectives. The characteristics of systems and constraints are discussed.

The systems approach to program analysis is presented in sections which examine: systems thinking, subsystems interaction, program logic, program measures, impact indications, linking variables, process variables, output and environmental factors.

Program specification and the need to explain program failure are also examined.

AU : HENRICK L. BLUM
TI : Various Planning Models or Outlooks Emphasize Differing Combinations of Purpose, Roles and Functions, and Exclude Others
PU : American Journal of Health Planning, 3 (3): 1978
Does Health Planning Work Anywhere, And If So, Why?
RE : Each planning mode contains its own bias. Some 80 terms to describe 50 distinguishable but overlapping models are listed and grouped into 8 categories intended to reveal their major orientation. For example, the adaptation orientation contains a group of outlooks that emphasize making do, coping with, cooperation, etc. Each term is explained and the reader is provided with a virtual glossary of the biasesórientations in the language of planning.

Kelly, G. Seducing the Elitis: The Politics of Decision-Making and Innovation in Organizational Networks, Academy of Management Review July: 1976

AU : ARCHIE McPHERSON and RODNEY N. POWELL
TI : Planning for the Pragmatist
PU :
RE : The paper addresses the items which must be satisfied in preparing a health programme in a poor country. The context of health in the developing world is described - unclear policies, low health priority health sector imbalances, shortages and maldistribution of manpower, shortages of facilities, equipment and supplies, chronic financial inadequacy, inadequate population coverage, insufficient health education insufficient community participation, insufficient educational materials and inadequate environmental sanitation.

The following plan for planning is proposed:

(i) Preparation for Program Formulation: (1) Assessment of socio-political environment, (2) Assessment of Community Concerns, (3) Establishment of terms of reference, and (4) Identification of program planning team.
(ii) Situation Assessment: (1) Community factors, (2) Organizational factors, and (3) Assessment of health manpower needs.
(iii) Priorities and Objectives.
(iv) Program Design: (1) The Health Team: (a) Manpower configuration, (b) Job descriptions, (c) Health team relationships, (d) Deployment settings, and (e) Stuffing patterns. (2) Primary Health Service System: (a) Manpower configuration and requirement, (b) Administrative support system, (c) Financial Planning and budget analysis, (d) Personnel system, (e) Technical supervision, (f) Supply Management, (g) Physical infrastructure and equipment, (h) Primary health care support systems, (i)Health information systems, and (j) Health services communication (3) Planning for Training Program Development: (a) General background for

training programme development, (b) Development plans for continuing education programs, (4) Development of a broad base of support for the program.
(v) Feasibility Analysis
(vi) Implementation Plan
(vii) Evaluation and Feedback
(viii) Replanning.

TI : Conclusions: The State of the Art of Health Planning Models
RE : In spite of the advances in developing several models for health planning they have seldom proved useful in application. The paper proposes and discusses the following explanations:

1. Very few of the models were developed in part or entirely by health planners.
2. The models require large amount of data.
3. Many are often prescriptive and comprehensive.
4. Many models have insufficient documentation.
5. Many models did not reflect reality.
6. While model development was funded by gobernmental agencies their application was seldom funded.
7. Health planners may not have been prepared to apply these models.

The poor achievement in the application of health planning models may lie in part in the models themselves and in part in the planners. The use of models in the busines environment is well established. Model developers, users and sponsors need to determine the potential for models in the health planning field.

AU : JEARY M. RUSSELL
TI : Making Plans Happen: Central-Management Support Systems
RE : No plan however brilliant can succeed without the provision of the basic elements of administration personnel, materials, by some source, usually the central government. With respect to personnel the author notes that there is in-service training and inadequate supervision. In terms of organization, the structures and procedures are national and there is a lack of job descriptions and manuals. The paper systematically examines the impediments to program implementation and concludes that only two effective paths are evident:

1. "The design and implementation of programs that rely on the private sector and operate using the market and self-interest as the motivating forces.
2. The design and evolution of management support systems in the public sector."

The second path is both important and time consuming.

AU : RAUL CORTEGUERA, HELENO GARCIA & FRANCISCO LAZO
TI : Advances in Pediatrics and Child Care in Cuba 1959-1974
RE : Reduction of infant mortality in Cuba since 1959 - Key health activities described. State responsibility for health available for all, community as basis for health organization. Shift from urban to rural emphasis, curative to preventive. Restructuring of medical training, opening of new schools.

The article describes the major activities carried out since 1959 in the field of pediatrics and child care in Cuba. In particular, it notes the improvements made through establishment of a national health system and through the participation of community organizations (the Federation of Cuban Women, Committees for the Defense of the Revolution, associations of small farmers, and trade unions) and shows how perinatal, infant and childhood mortality have been significantly reduced. As of 1973 perinatal mortality had fallen to 27.9 deaths per 1,000 live births, infant mortality to 27.4 deaths per 1,000 live births, preshcool mortality to 1.2 per 1,000 children, and school-age mortality to 0.4 per 1,000 children.

This report also cites data on available physical and manpower resources, and outlines a large range of activities linked to a Comprehensive Child Care Program undertaken in 1967. This program, in which newborns are enrolled upon leaving the maternity, seeks to encourage breast-feeding, to promote the activities of well-baby clinics, to provide special examinations for malnourished infants, to provide health care for preschool and school-age children, to promote pediatric medical visits to the home, to assist with camps for asthmatic and diabetic children, to provide pediatric services at pioneer and other camps for schoolchildren, to carry out health education activities, and to combat communicable diseases.

In particular, activities to prevent communicable diseases appear responsible for agood part of the progress achieved to date. As a result of these activities malaria and diptheria have been eradicated, poliomyelitis has been overcome, and the incidences of tuberculosis, tuberculous meningitis, tetanus (among newborns and children under 15), and acute diarrhoeal diseases have been substantially reduced.

AU : SARAH CONOVER, STEPHEN DONOVAN & EZRA SUSSER
TI : Reflections of Health Care in Cuba
RE : The other side of the coin to Cuba's much admired successes - reduction of infectious diseases replaced by increase in chronic diseases. Success of programme due to structure created - use of mass organizations - CDR and Federation of Cuban Women - nurses - Comparative lack of success in dealing with chronic diseases - mass organizations not mobilized against them - Reasons rejected by authors.

(1) that change in diet and smoking habit present political problem

(2) the emphasis on success against infectios diseases is political plus. - Authors suggest that doctors believe that only they can deliver good health care, that they make primary contribution to people's health through delivery of good health care Professional status, e.g., specialization - highly prized. Recreated structure of medicine now block to progress.

AU : V. R. BHALERAO
TI : School Children as Health Leaders in the Family
RE : Report on a school health programme in a poor district in Bombay concludes that the best way of arousing interest in health among adults is to convey the message through their children. Starting with a school feeding programme, the participation of the children's mothers was obtained (by subterfuge, at first), the health staff started to use the children system aticually as messengers and "health educators". Lessons of hygiene, civic sense and social responsibility were taught, followed-up by using the children to get family cooperation for immunization and health education programmes.

TI : Contrasting Case Studies of Selected Underdeveloped Countries
RE : Socialists oriented case study of helath care systems in "selected pairs of countries for brief comparison within each major area of the world" - Africa (Tanzania - Ivory Coast), Asia (China - India), Latin America (Cuba - Brazil), Middle East (Syria - Saudi Arabia). Postulates that Socialist oriented countries (named first in each pair) tends to more decentralize - concerted type of authority structure - Mao's Democratic Centralism - and should, therefore, be more supportive of more equitable distribution and control of resources and life chances in general, as well as fully regionalized health service. Findings are in general agreement with the postulates, with the further thesis that "since in several of the contrasted pairs, the negative cases (i.e., the last named in each pair) are wealthier, it is clear that resources alone will not bring health to the people", but rather the way in which the resources are distributed and organized is the vital element.

AU : SUSAN H. COCHRANE
TI : Socio-Economic Determinants of Mortality: The Cross National Evidence
RE : The rate of reduction of mortality in developing countries seems to have slowed. Determinants of mortality studies. Multiple regression and correlation analyses used to explain relative importance of economic resources and medical technology in determining mortality levels and changes at the aggregate level. Examination of factors like per capita income, and its variation over time, shifts in incidence of types of fatal diseases. Income distribution and its relation to life

expectancy, nutrition or food intake and percentage of adult literacy, health expenditures by the state, degree of urbanization and ratio of doctors population showed significant positive correlation between life expectancy and per capita income, literacy and income distribution, although the reasons for these correlations were not quite clear from the data used.

AU : KRISTINA VARENOIS
TI : Needs Assessment: An Exploratory Critique
RE : Paper examines the use of "needs assessment", the methdologies employed and questions the value of the activity. No standard definition exists, but "needs assessment" is a process which results in useful information. Different strategies in data collection and analytical tools are used.

Needs assessment seen as a logical phase of a large process - that of providing information for decision makers engaged in policy setting. Data collection is expensive and there is a need to determine what information is required and pertinent for a particular decision. The user - consideration may lead to an arbitrary setting of boundries . . . so that the data collection is influenced by the values of those who prescribe the method and extent of the needs assessment.

AU : J. C. TUNNICLIFFE-WILSON
TI : A Review of Population Health Care Problems Tackled by Computer Simulation
RE : The use of simulation in health care has grown substantially in the last ten years so there are now a considerable number of published papers scattered through a variety of journals. This paper summarizes the material available in all these publications on the health care of a population and provides references so the use in any particular area can be studied in more detail.

Simulation has helped in the planning of new facilities and new methods of organization as well as improving services. One of the greatest contributions has been in seeking the most effective way to use scarce resources or spend a limited budget. Another important use is in the prevention and control of both infections and non-infectious diseases. many of the simulations not only show the way to move forward from a particular situation, but also have an educational value in helping those involved understand how their decisions affect the performance of the service.

Some of the results of these studies may be applicable directly while others will need further work to fit them to new situations. The studies are arranged according to the problem tackled with an appendix at the end of the paper providing references to the different sections of health care mentioned.

AU : ROY PENCHANSKY and WILLIAM THOMAS
TI : The Concept of Access
Definition and Relationship to Consumer Satisfaction
RE : Access is an important concept in health policy and health services research, yet it is one which has not been defined or employed precisely. To some authors "Access" refers to entry into use of the health care system, while to others it characterizes factors influencing entry or use. The purpose of this article is to propose a taxonomic definition of "access". Access is presented here as a general concept that summarizes a set of more specific dimensions describing the fit between the patient and the health care system. The specific dimensions are availability, accommodation, affordability and acceptability. Using interview data on patient satisfaction, the discriminant validity of these dimensions is investigated. Results provide strong support for the view that differentiation does exist among the five areas and that the measures do relate to the phenomena with which they are identified. - Abstract

AU : HILLEL SHUVAL, ROBERT TILDEN, BARBARA PERRY & ROBERT GROSSE
TI : Effect of Investments in Water Supply and Sanitation on Health Status: A Threshold-Sanitation Theory
RE : A general theory on the relationship between water supply and sanitation investments and health, the threshold-saturation theory, is proposed. The theory takes into consideration three variables: health status, socio-economic status, and sanitation level, and attempts to encompass, for the first time in one general theoretical framework, numerous conflicting empirical findings. The two-tiered S-shaped logistic form of relationship that is proposed assumes that at the lower end of the socioeconomic spectrum there is a threshold below which investments in community water supplies andór excreta disposal facilities alone result in little detectable improvement in health status. Similarly, at the higher end of the socio-economic scale, it is suggested that a point of saturation is reached beyond which further significant health benefit cannot be obtained by investments in conventional community sanitation facilities.

A preliminary attempt to validate this model using published data on sanitation level (defined as access to water supply), life expectancy, and adult literacy rates, for 65 developing countries appears to provide preliminary support for the threshold saturation theory, but further empirical validation is required before a quantitative predictive model can be developed. - Abstract

AU : ROBERT N. GROSSE
TI : Interrelation Between Health and Population:
Observations Derived from Field Experiences
RE : This paper presents information and concepts concerning the health of population in less developed countries as background for decisions of more focused and detailed papers on these and related subjects.

It begins with a review of health status and trends in developing countries since 1950, followed by a section identyfing the major problems and their causes.

The third part includes analyses of associations between health resources, water and sanitation facilities, food availability, and economic and social indicators taken as independent variables.

The final section discusses health policies and their implementation and offers an analysis of their source requirements and health effects of different methods of organizing and combining health programs in a few developed countries. The objective is to illustrate a method of determining preferred activities at any given level of investment and the probable health effects of varying increases in the level of health expenditures. - Abstract

AU : ALFONSO MEJIA
TI : International Migration of Professional Health Manpower
RE : The migration of physicians and nurses from certain developing countries to developed countries is a matter of international concern. The number of those migrating appears to be increasing, though the migration is poorly documented and the data available are incomplete and frequently inaccurate. The pattern of migration and its characteristics, causes, and consequences vary from country to country, but some common features exist.

Excessive migration reflects important differences in levels of social and economic development. In both donor and recipient countries the capacity of the health system to retain its manpower is determined primarily by identifiable elements of the system within the broader context of the country's political, social and economic framework. When health professionals fail to obtain what they expect of their job, in economics or other terms, a proportion of them will seek employment abroad, in the health or in other fields. Excessive migration generates problems within the health system of the countries involved; imbalances its non-use or misuse. A country may produce more manpower than it can readily employ, but it may still have a deficit in relation to the actual need for it.

Education and training programmes that are irrelevant to local health problems predispose graduates either to going abroad in search of employment in the health field or to seeking employment outside the health field. The motivation to migrate is complex and highly personal, it varies from one category of manpower to another as well as between countries, and it can only partially be expressed in quantitative terms.

The effect of migration in both donor and recipient countries is very difficult to assess, partly because the data are not available, but also because much of it is intangible; nor is there any tested methodology for measuring it. However, the monetary loss and gain are great, and for several donor countries the loss largely exceeds their national health budget. For example, it would take eight selected donor countries at least five years each to replace the number of their physicians abroad in 1970-71. Conversely, it would take major recipient countries at least seven years to replace the immigrant physicians with their own nationals.

WHO is currently studying migration patterns and is proposing to establish a system for monitoring and data collecting that should provide a more reliable data base for action in individual countries to curb migration and to facilitate bilateral and multilateral agreements among the countries involved. - Abstract

AU : FRANK YOUNG, FERNANDO BERTOLI and SANDRA BERTOLI
TI : Design for a Microcomputer-Based Rural Development Information System
RE : A new type of rural development information system is described. It is based on two recently introduced low-cost technologies; microcomputers and the informant survey. When the informant data from the universe of subdistricts in a region are analyzed with modern multivariate techniques, it is possible to derive comprehensive measures of institutional structure as well as five measures of rural progress. The latter are: a level of living scale based on housing characteristics, a measure of inequality derived from the difference between the housing of irrigated and dryland farmers, an estimate of agricultural productivity, a score of ecological problems, and a measure of status group restrictions, specifically restrictions of females. These and similar measures of social structure constitute the 'macrosocial accounting' file. In addition this information system includes project monitoring and administrative accounting files. The uses of this system are familiar - comparative description, monitoring and evaluation - but in this integrated and upgraded form, the potential problem solving capacity of rural development agencies should be significantly enchance. / Abstract

AU : LEONA BAUMGARTNES
TI : Principles of Health Service Planning
RE : This paper presents a behavioural approach to the problem of improving health services in lesser developed countries. The writer contends that much of the failure of sophisticated and modern health practices to gain acceptance can be traced to the inability of the donors to take into consideration the cultures into which they try to transplant new ideas and practices. The deep-lying factors of religious beliefs, family and kinship relationships, status of women, etc. are more

important than drugs, vaccines and surgical equipment. New health programmes must be built on the cultures on which they arise and must be guided by the priorities set up by the recipients, not donors. Services should be designed to make maximum use of existing facilities and personnel, providing for their continual upgrading and training.

AU : MICHAEL B. HARRINGTON
TI : Forecasting Areawide Demand for Health Care Systems:
A Critical Review of Major Techniques and Their Application
RE : Paper posits a zone of "feasible forecasting" between perfect forecasts and none at all and explores that zone by examining (i) the objectives of forecasting in areawide health planning; (ii) specific factors contributing to the demand for health services that enter into any serious forecasting efforts; (iii) major services of change and continuity in the areawide health care system that are identified in conjuntion with demand forecasts; (iv) six generic kinds of forecasting techniques in the health planning context, including an evaluation of the strengths and weaknesses of each; (v) a simple framework through which each forecasting methods might be brought to bear most effectively; and (vi) some apparent dimensions of the "zone of feasible forecasting" given the current state of the art.

TI : Criteria for the Evaluation of Health Planning Models
RE : The paper suggests two criteria for evaluating quantitative models for use in health planning agency.

A. Criteria for user evaluation - in terms of utility to health planning agency. Under headings inter alia

(a) practicality and appropriateness - including relevance and information needs, involvement of user, acceptability.
(b) Clarity - simplicity of operation, interpretation of output documentation.
(c) Validity - assumptions, demonstrations previous results, who, what, where.
(d) Use of resources - type of date requirements - parameter estimation processes - accessibility of data, hand or computer application, new staff and computer requirements, time requirements.
(e) Cost-feasibility study cost, consulting, modification, manpower, equipment, etc.

B. Criteria for technical evaluation
(i) Model validity - purpose, realism, real world applicability
(ii) Technical errors - correctness of equations, programming, calculations
(iii) Appropriateness and availability of data
(iv) Implementation and operational consideration
(v) Transferability and extendability
(vi) Cost

TI : Developing and Implementing a Community or Regional Plan
RE : This paper considers four essentials:

(1) Sound projections of needs for hospitals and relevant health facilities - long- and short-term; give time to allow for planning process, marshalling of financial resources, legislation, etc., manageable time periods.
Hospital bed needs - factors which influence - hospitalization practices of (local) physicians, financing patterns, age and economic status of population, location of specialists.

(2) Orderly distribution of facilities, by type and geographical location - other health care facilities - minimum size, distribution, comprehensiveness of treatment programs. Home services, rehabilitation.

(3) Projection of anticipated financial resources to meet needs.

(4) Scheduling of resources and construction work.

This paper concentrated on the first two.

AU : ROBERT W. DAY
TI : Systems Analysis and Applications
For Public Health Programming
RE : Discussion of the implications of trends towards the wider application of some of the newer planning and management techniques used in government and industry to tackling problems in the delivery, cost and availability of medical care. He presents his article in three parts - first, a summary of certain social, economic and technological trends that reinforce the incorporation of newer techniques into health programs, second, a review of the techniques and selected applications and third, a discussion of the impact of systems approaches in public health. The techniques examined are systems analysis, defined in two ways, operations research, including linear and dynamic programming, CPM and PERT, program budgeting and cost benefit and cost effectiveness techniques applied to objectives such as population control.

AU : A. L. COHRANE and W. W. HOLLAND
TI : Validation of Screening Procedures
RE : Discussion of the validation of screening procedures in clinical practice, the conditions for which the test are considered acceptable, the conditions for which there is insufficient evidence to justify routine tests and those for which some benefits may be derived from the use of such tests. The paper then looks at the ethical, scientific and financial considerations, gives a few representative considerations and reviews the findings for each of the categories of conditions mentioned above. Criteria are established to assess the screening procedures

(e.g., simplicity, precision). In conclusion, the authors argue that the validation of screening procedures should be approached from two points of view - (1) whether the test is justified, scientifically and financially, by resulting benefit to the society and, (2) how efficient is the proposed test of measurement.

AU : RICHARD M. STEERS
TI : Problems in the Measurement of Organizatioal Effectiveness
RE : This paper reviews 17 multivariate models of organizational effectiveness in terms of their primary evaluation criteria, their normative or descriptive nature, their generalizability and their derivation. Little consistency was found in the evaluation criteria of the models. Eight problems of such models are discussed which appear to reduce their utility for the study of organizational effectiveness. Suggestions are advanced for further work to focus on operative goals and goal optimization to further our understanding of the effectiveness construct in ongoing organizations. - Abstract

AU : ROBERT N. GROSSE and BARBARA H. PERRY
TI : Correlates of Life Expectancy in Less Developed Countries
RE : Analyses were performed to investigate several hypothesis concerning the multiple determinants of levels of life expectancy on developing countries in recent decades and some possible explanation for the observed variations in amount of gain in life expectancy from the 1950's to the 1970's. The findings were significant. For level of life expectancy the results of this present work conform by and large to results of other scholars in this area, although the present work is unique in that only developing countries were included. From the 1960's to the 1970's there has been a shift in the relative importance of economic indicators and general social indicators in favour of the social indicators. In the period 1970-65 some 70% of the variation in levels of life expectancy was associated with per capita income and literacy rates in a ratio of about 3 to 2 in favor of the economic variable. By 1970-75 the ratio has been 6 to 1 favor in literacy. In addition, the multivariate model showed that the sanitation variables began to appear as significant correlates of levels of life expectancy in the more recent time period, playing a larger role than level of income per capita. Work pursued as part of a separate but concurrent project explored explicitly this three-way interaction between literacy, life expectancy and sanitation

For change in life expectancy from 1950 through 1970, associations were quite different. Per capita income was not associated with the absolute change in life expectancy, and the associations with literacy were much smaller than earlier observed with level of life expectancy at a point in time. In the multivariate model the primary correlates with change were the sanitation variables and health personnel as represented by population per midwife. Tests for such associations

with variations in amount of gain in life expectancy have not been found in other literature and comparison with other findings can therefore not be made directly. The present work suggests that it may be lower skill level of health manpower and activities in sanitation that are the main correlates in a multivariate model of absolute change in life expectancy. - Abstract

AU : ANNE MOONEY and NORFLEET W. RIVES, Jr.
TI : Measures of Community Health Status for Health Planning
RE : The National Health Planning and Resources Development Act of 1974 requires health systems agencies (HSAs) to assess the health status of their area population but limits their data-collection activity. Numerous measures of health status have been devised, but many of these require data that are not yet available or are available only on the national level. Proposed measures are reviewed, and the problems of applying them to the measurement of health status in small areas, under current technical and practical constraints, are discussed. Several measures have promise for giving reasonable results, but only with further developments of data sources, estimation techniques, and social indicator models; under present constraints, HSAs will have to work with less precise and less useful methods. - Abstract

AU : SIR GEOFFREY VICKERS
TI : What Sets the Goals of Public Health?
RE : The social and bureaucratic systems are continuous. Institutions operate, men have concerns, budget headings remain. "History sets the goals of public health". Human needs, technology, acceptable levels of taxation and ideology all influence the setting of public health goals.

Does public health have goals or does it avoid threats? Or is health a norm rather than a goal? The goal setting process is one of adaptation. Choice is often highly restricted.

In Western Societies public health has largely conquered deficiency diseases: the challenge now is disorders - metabolic, mental ... the hazards of excess, the evils of industrialization. National figures on disease significantly different incidences in various income groups. He hopes for public health goals to be set by a range of specialists working together - public health practitioner, epidemiologists, social scientists - and with more data.

Public health must (i) evaluate the criteria used to measure health (ii) criticize these criteria and help to refine them, and (iii) explore the process of decisions by which public health policy is defined and implemented. Arguments are advanced to justify these perspectives.

TI : Summary of Health Economics Seminar
RE : Brief resume of many topics covered, but summed up mostly under two heads, namely, how do you collect money to pay for the health services, and to whom are you trying to redistribute? The writer continues with the urban-rural, rich-poor division of most developing societies, the pros and cons of medical insurance, social security schemes, and the remuneration of doctors under the salary or fee-services schemes. The problems and cost of travel to health facilities (hospitals, clinics) and the cost of providing these services are also critically examined, along with the options available for different levels of sophistication of facilities. The cost per treatment, rather than the cost of a drug, should be the primer consideration. The problems of local manufacturers, quality control and sources of supply, along with the problem of lowering the cost of medical training while maintaining the quality, and matters such as hospital planning and incentives round out the discussion.

AU : HENDRICK L. BLUM
TI : Models or Methdologies of Planning
RE : There are innumerable ways to affect the four determinants of change - impetus, mobilization, structural controls and societally promoted self-regulation. Planning to promote social change offers hopes for a reasonable and peaceful means of introducing change, but affecting all or one of those four determinants. Eight planning options discussed and a development model is proposed. The eight models examined are laissez faire, disjointed incrementalism, allocative mode, articulated and guided incrementalism, exploitive mode, explorative mode, normative mode, and total planning.

The author describes his "developmental" mode which is a combination of the normative with the articulated and guided incrementalism. Society is embarrassed with values which provide the normative framework. But long-range normative goals seldom attract none than lip-service. The need is to establish long-range goals and then systematically determine the short-range ones which can incrementally lead to the desired end result.

The merits and limitations of each approach are described.

AU : GERALD ZALTMAN and ROBERT DUNCAN
TI : Defining Problems: Two Approaches
RE : Social problems are generally defined by intuition. The authors propose a "metatheory perspective" which stresses a thinking process and identifies various steps or stages involved in thinking about problems. There is strong emphasis on problem definition since informed intervention is largely in ed to a precise appreciation of casual relationships affecting the situation. The paper makes use of several illustrations and applications of their approach. The value of

casual images or models is stressed. There is much importance in understanding how one factor affects another. The change agent must determine what factors can be altered and which one impel him to adapt to them. In diagnosis, the history of the situation is important to an appreciation of sentiment and structure. Several techniques of data gathering can be employed. A given problem may have several facets and each must be understood and documented by the change agent. Post remedical efforts should also be carefully scrutinized.

ECONOMIA DA SAUDE

PARTE III

REFERENCIAS BIBLIOGRAFICAS

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INTRODUCAO

Dois fatores, entre outros, podem ser responsabilizados pela crescente preocupação que tem se verificado em relação ao Setor Saúde. Primeiro, a conscientização de fornecedores e consumidores dos serviços do Setor de que há necessidade por melhores serviços. Como consequência, aumentam os custos, principalmente porque não se usam racionalmente os recursos disponíveis e, frequentemente, se dá preferência à sofisticação desnecessária. A grosso modo, este aumento de custos é universal e se verifica em todos os níveis do setor. A grande maioria dos países registra, a cada ano que passa, porcentagens maiores do seu PNB destinados ao Setor Saúde. Para conter esta escalada é necessário planejamento racional do uso dos recursos. A formação de recursos humanos é ponto básico em qualquer estratégia de planejamento; a edição desta bibliografia está relacionada com este ponto.

Os primeiros intentos de planejamento na América Latina se iniciaram por volta de 1950 no setor de produção de bens de consumo. Os serviços, entre eles os de saúde, só mais tarde começaram a utilizá-lo. A partir da Reunião de Ministros da Saúde do Continente em Punta del Este (1961) os governos latinoamericanos passaram a dar maior destaque ao planejamento do Setor Saúde em seus planos de desenvolvimento social. A descontinuidade do processo político-administrativo, contudo, tem prejudicado o andamento destes planos. Em consequência prejudicam o desenvolvimento do substrato acadêmico-científico paralelo ao processo de planejamento. Desta forma a Economia da Saúde se desenvolve marginalmente ao estudo da Economia e do planejamento em si e não como uma entidade com identidade própria, o que, talvez, ocorrerá futuramente quando saúde não for considerada como elemento accessório da capacitação de mão de-obra.

O objetivo deste trabalho é a coleta de material concernente as areas de Economia, Planejamento e Finanças, visando conhecer o que existe em termos de publicações, nestas áreas, referentes ao Setor Saúde. A

finalidade de se selecionar este material é o ensino de Economia em programas de Administração da Saúde. Finanças e Planejamento são tópicos indissociáveis, para esta finalidade, da Economia.

Algumas dúvidas surgem diante deste objetivo e suas finalidades. O que é o ensino da Economia da Saúde? Existe um campo das ciências econômicas que pode ser denominado "Economia da Saúde"? u estudo das ciências da saúde carregam consigo implicações econômicas?

Como toda novidade Economia da Saúde ainda tem vários nomes e a denominação é usada para expressar conceitos diferentes. Por vezes sua existência como área do pensamento científico, autônoma, é até mesmo negada.

Dificuldades semânticas e conceituais à parte, se considera Economia da Saúde como a aplicação de conceitos econômicos ao campo da administração da saúde. Tal definição é tão ampla e óbvia que pouca resistência pode gerar.

Klarman sugere que a denominação "economia da saúde" é mais ampla e abrangente do que "economia médica". Aquela engloba a indústria de cuidados médicos, como esta, mas se extende também à: análise dos custos econômicos da doença; os benefícios dos programas de controle; o retorno de investimentos feitos em educação e treinamento para a área etc. O mesmo autor diz que "economia da saúde" se refere aos problemas da saúde relacionados com a determinação da quantidade e preços de recursos escassos e com a melhor combinação no uso destes recursos tentando solucionar aqueles problemas.

Cooper e Culyer dizem que Economia da Saúde busca respostas para perguntas tais como: quanto um país deve gastar com saúde? como devem ser financiados os gastos com saúde? gastos com saúde são investimentos ou consumo? qual é a combinação mais eficiente de médicos, enfermeiras, hospitais, etc. para produzir os melhores resultados? qual é a demanda por serviços de saúde e qual é a necessidade real? que fatores determinam a demanda? etc.

As multiplas interfaces da Economia com outras Ciências Sociais confundem as suas fronteiras. Logo não se pode restringir o estudo da Economia ao enfocar a Economia da Saúde. As interrelações com as outras Ciências Sociais e até mesmo com a própria medicina fazem com que seu estudo possa se tornar extremamente vasto e de difícil limitação. Os critérios para seleção dos artigos desta bibliografia, portanto, tiveram que ser subjetivos, procurando a maior abrangência evitando-se, contudo, disperções do tema. Os artigos da área de finanças foram de mais fácil caracterização.

O material referente à América Latina compreende, principalmente, artigos publicados em protuguês e espanhol. As referências ao resto do mundo, principalmente Estados Unidos e Inglaterra, são os artigos que aparecem em inglês. Livros contendo os conceitos básicos da área são todos em inglés, uma vêz que tais conceitos são geralmente desenvolvidos fora da América Latina; os livros em português ou espanhol são, geralmente, traduções ou adaptações daqueles e, portanto, não foram incluídos.

O levantamento bibliográfico relacionado à América Latina foi feito através de pesquisa de todos os periódicos que possivelmente tivessem artigos de interêsse (aproximadamente 200) cobrindo os últimos dez anos. O levantamento de material em lingua inglesa cobriu principalmente os últimos três anos e o critério básico foi o possível interêsse para o leitor latinoamericano, além dos títulos que veiculam conceitos gerais. O levantamento foi feito em bibliotecas médicas e administrativas. De especial importância foi a colaboração prestada pela Biblioteca Regional de Medicina da OPS (BIREME) com sede em São Paulo, Brasil.

Foram feitas várias tentativas para classificar o material. Por fim optou-se pela mais simples com apenas duas grandes divisões uma vez que os assuntos apresentados poderiam sempre ser incluídos em duas ou mais divisões devido às suas abrangências.

Por fim uma palavra sobre a qualidade do material apresentado. Muitos artigos de boa qualidade e igualmente importantes não foram incluídos pela simples razão que esta bibliografia não pretendia cobrir todo o material existente mas apenas fornecer orientação para os não iniciados ou para aqueles com conhecimento limitado od assunto. Assim se pretendeu dar uma visão, a mais ampla possível, das potencialidades da Economia da Saúde. Desde logo, outras razões, que não as expostas acima, não tiveram qualquer importância na seleção do material aqui apresentado. Uma preocupação dos organizadores da bibliografia foi a possibilidade de acesso dos artigos relacionados e como nem todas as publicações e periódicos norte-americanos e europeus fazem parte do acervo de algumas bibliotecas na América Latina, se procuraram aqueles mais comumente encontrados.

ASPECTOS CONTABEIS E FINANCEIROS

AU : AMORIM, AUGUSTO ALVES DE
TI : 1. As possibilidades financeiras dos hospitais em escala Nacional; 2. Outros planos de Assitência à população estranhas ao INPS - sua viabilidade; 3. Seguro. Saúde.
PU : Vida Hospitalar (São Paulo), 33: 3-18, 1971.
RE : O autor apresenta o planejamento como uma realidade no Brasil atual. A seguir, faz uma análise das possibilidades financeiras dos hospitais em escala nacional, através de uma apresentação da situação atual. Coloca também planos de assistência à população não filiada ao INPS: mostra alguns sistemas de saúde do mundo e o brasileiro. Retorna então ao planejamento no setor saúde e aborda o problema do planejamento hospitalar propriamente dito. Finalmente, apresenta uma análise econômica-financiera de viabilidades dos hospitais brasileiros e do seguro saúde.

AU : ANDRIOLI, L. M.
TI : Financiamento da Assistencia Hospitalar no Brasil.
PU : Revista Paulista de Hospitais (São Paulo), XVIII (5): 16-22, 1970.
RE : O autor faz um breve histórico da evolução da assistência médica e médico hospitalar no Brasil, até os dias de hoje.

Posteriormente descreve em linhas gerais os vários sistemas existentes para o financiamento da assistência hospitalar desde a iniciativa privada específica até o financiamento estatal total passando por vários pontos intermediários.

AU : BRITO, GILDO DA ROCHA
TI : Controle de evasão de receita.
PU : Vida Hospitalar (São Paulo, VIII (2): 82-85, 1974.
RE : O autor após um breve aporte sobre conceitos do que é receita expõem as fontes de receita e como estas são apuradas ho Hospital "Ana Costa".

Cita, a seguir, os tipos possíveis de evasões de receitas e como se pode controlar essa evasão. Finaliza discorrendo sobre o grande auxílio de computador nessa área e os resultados que se tem conseguido com este instrumento no referido hospital.

AU :
TI : Conselho Inter Ministerial de Preços.
PU : Vida Hospitalar (São Paulo) 34: 17-31, 1971.
RE : É apresentado um roteiro com instruções para a uniformização da sistemática de apuração de custos no campo hospitalar.

Assim, são apresentados os Centros de Custo de Base os Centros de Custo Intermediários, os Centros de Custo Especiais e os Centros de Custo de Produção. A seguir, discutem-se bases de distribuição de rateio. São também apresentadas ressalvas quanto às despesas não operacionais.

Finalmente, são apresentados Mapas do CIP, propriamente ditos, onde se pode colocar os dados obtidos e tentar uma apropriação de custos realista.

AU : CORRALES, M. A. G.
TI : El presupuesto en los servicios médicos del ISSSTE.
PU : Salud Pública de México (México), XVI (1): 89-98, 1974.
RE : O autor apresenta o regime financeiro que norteia o Instituto de Previdência e Serviços Sociais dos trabalhadores do Estado no México. Analisa a seguir o orçamento desta entidade, apresentando algumas variáveis de análise, como recurso disponível, o desequilíbrio entre capacidade instalada e demanda dea atenção médica, distribuição da população filiada, multiplicação de serviços por deficiência de registro, heterogeneidade no funcionamento das unidades e falta de um sistema logístico para alocação de recursos. Complementa esta análise com propostas para racionalização do orçamento e termina sugerindo a reooganização do orçamento visando programas e por atividades.

AU : CASADO, ALCIDES
TI : Aspectos Financeiros de um Emprendimento Hospitalar
PU : (Vida Hospitalar (São Paulo), VIII (2): 78-80, 1974.
RE : O autor explica de forma bastante superficial o significado de um orçamento exemplificando em termos hospitalares.

Tenta explicitar o significado de receita e custos e como se deve chegar a um equilíbrio para que um empreendimento hospitalar seja viável economicamente.

AU : FERNANDES, ALOISIO
TI : A situação econômica e financeira dos hospitais privados no Brasil.
PU : Vida Hospitalar (São Paulo), XI (6): 257-267, 1977.
RE : O autor aborda temas relevantes para a situação economico-financeira hospitalar num período de 10 anos. Estuda o custo de um hospital, através da evolução dos custos operacionais e a atuação do INPS, principalmente sua situação e sua política de reajuste dos preços dos serviços médicos e hospitalares. Finalmente mostra a situação financeira dos hospitais. Conclui que não existe uma política de financiamento para hospitais e que os custos operacionais vem ocorrendo assim; apresenta algumas sugestões consideradas "fundamentais" para incentivar a rede hospitalar privada a invertir na criação de novos leitos.

AU : FERNANDES, ALOISIO
TI : Viabilidade Econômico-Financeira dos Hospitais.
PU : Vida Hospitalar (São Paulo), 31: 37-43, 1970.
RE : O autor faz uma análise do que deve ser um hospital como empresa. Ressalta a importância da viabilidade econômica financeira de uma instituição assim constituída.

Faz uma breve análise sobre rentabilidade, receitas, centros de receitas, suas fontes, relação de capacidade de receita e número de leitos e das despesas e sua distribuição.

A seguir, exemplificando, descreve sobre a produtividade hospitalar e uma proposta orçamentária.

Conclui que para haver viabilidade é necessário haver lucro, e que esta lucratividade poderá colocá-lo livre de interesses pessoais e de grupo, podendo proporcionar melhores possibilidades técnicas para o profissional e melhor padrão de atendimento ao paciente.

AU : GANME, JOAO
TI : Receita Operacional X Custo Operacional.
PU : Vida Hospitalar (São Paulo), XIII (2): 83-87, 1979.
RE : O autor coloca duas fontes de recursos para investimentos ou o lucro das empresas privadas, ou a estatização, ou como outra opção teríamos uma economia estagnada onde não haveria necessidade de se investir ou de crescer.

A seguir o autor define o que é receita operacional e suas implicações - como podem ser aumentadas e como se esvaem. Entra em considerações a respeito de custo operacional e suas formas de controle.

Mostra alguns quadros exemplificando o de despesas em um hospital e sua evolução de 1973 a 1977.

Finalisa ressaltando que do mesmo modo que nas providências para aumentar as receitas, as medidas para reduzir custos operacionais não devem contribuir para diminuir a qualidade de atendimento aos pacientes.

AU : GATO, M.
TI : Orçamento como Instrumento Administrativo.
PU : Revista Paulista de Hospitais (São Paulo), XXII (8): 378-380, 1974.
RE : O autor enfatiza a importância da elaboração de orçamento programa dentro do hospital-empresa.

Em linhas bastante gerais expõe o que é o orçamento programa e faz um esquema de como este pode ser elaborado em seus pontos mais importantes.

AU : GERSDORFF, RALPH C. J.
TI : A Contabilidade Hospitalar de Custos no Brasil: situação, problemas, sugestões.
PU : Vida Hospitalar (São Paulo), 13 (4): 157-165, 1979 (cont.) - 13 (5): 2204-211, 1979.
RE : O autor aborda os sistemas de contabilidade de custos em geral e sua utilização em hospi tais. Cita a seguir a experiência brasileira de apuração de custos hospitalares: o Conselho Interministerial de Preços, o sistema de custos dos serviços hospitalares próprios do INAMPS, o sistema dos hospitais contratados e algumas outras experiências.

São em seguida, apresentadas a contabilidade de custos e a política de contratação de serviços médico-hospitalares. São, inclusive, mencionadas algumas experiências internacionais.

Finalmente, são apresentados cuadros com a Composição dos Custos de Hospitais Gerais, de Hospitais de tisiologia e de hospitais psiquiátricos. E também apresentado um quadro mostrando o custeio direto, com a divisão entre custos fixos e variáveis.

AU : GERSDORFF, RALPH C. J.
TI : Contabilidade de Custos Hospitalares no Brasil: Qual seria um sistema prático, simples e eficaz?
PU : Vida Hospitalar, 14 (3): 116-123, 1980.
RE : O autor sugere um esquema de implantação de contabilidade de custos numa empresa hospitalar. Da um guadro diferencial entre um hospital e uma fábrica e analisa o "transporte" da tecnologia de contabilidade de fábrica para o hospital. A partir daí explica como deve ser mostrado um sistema contábil hospitalar, frente a atual política de saúde e as contingências setoriais, analisando cada um dos vários itens do que seria um sistema prático, simples e eficaz de contabilidade de custos.

AU : KORBES, GENESIO A.
TI : O controle de custos como instrumento da eficácia financeira.
PU : Vida Hospitalar XIII (6): 270-273, 1978; XVI (1): 8-15, 1980.
RE : O autor aponta o problema financeiro como relevante no meio hospitalar brasileiro, tentando mostrar algumas orientações alternativas através de técnicas racionais. São apresentados alguns conceitos necessários para a melhor compreensão do tema, mecanismos de acompanhamento e controle com vistas à tomada de decisão. Finalmente, antes dos anexos (quadros que mostram a situação dos hospitais brasileiros) discute a qualidade em função dos custos e a importância da divulgação dos custos entre os participantes da atividade médico-hospitalar.

AU : LANDMANN, JAYME,; MARIANI LUIZ C.; QUADRA, ANTONIO A.
TI : Convênio MEC/INPS.
PU : RBM: Revista Brasileira de Medicina (São Paulo), vol. 34 (4): 183-195, 1977.
RE : O autor apresenta o desenvolvimento das escolas médicas no Brasil como independente da Previdência Social e com poucos pontos de contato. Expõe então algumas medidas estatísticas do HC-UERJ, a saber número de consultas ambulatorias e de internações por fonte financiadora, taxa de ocupação, número de leitos dia e tempo médio de permanência.

Em seguida, analisa as repercussões financeiras do convênio MEC/ INPS no HC-UERJ, através da composição da receita, do subsídio médio diário do INPS e da receita ambulatorial do INPS. Apresenta finalmente propostas para aprimorar o convênio: definição de serviços especiais, estabelecimento de critérios para determinação dos subsídios, uniformização dos mesmos para todos os hospitais de ensino, atualização de subsídios e outras.

AU : ODA, T.; NACIMENTO, G. M.
TI : Custos em nutrição dietética.
PU : Revista Paulista de Hospitais (São Paulo), 27 (2): 76-77. 1979.
RE : Os autores fazem um breve comentário a respeito da significação dos custos em hospitais. Abordam então a importância da avaliação dos programas desenvolvidos e a forma adequada para se considerar uma avaliação. A seguir descrevem de maneira sucinta a forma como pode ser feito um levantamento de custo em nutrição, salientando ser este um dos processos de avaliação. Enumera finalmente quais os benefícios que uma avaliação de custos em nutrição pode trazer.

AU : RIGOLON, N.
TI : Custo do Paciente Internado no Hospital. Causas de sua elevação.
PU : Revista Paulista de Hospitais (São Paulo), XXVI (8): 373-379, 1978.
RE : O autor apresenta a Contabilidade de Custo Hospitalar como técnica para melhor utilização de recursos. A seguir descreve alguns conceitos, como custo de paciente-dia e centro de custo, desenvolvendo este último aspecto. Coloca então alguns relatórios contábeis necessários para a administração. Finalmente, aborda causas de elevação do custo do paciente dia e conclui reiterando a necessidade de implantação de Centros de Custo para o bom funcionamento da dinâmica hospitalar.

ASPECTOS ECONOMICOS E DE PLANEJAMENTO

AU : ACUÑA, H. R.
TI : Financiamento y administración presupuestaria de los programas de Salud Pública.
PU : Boletin de la Oficina Sanitaria Panamericana (USA), 72 (1): 36-43, 1972.
RE : Frente a necessidade da modernização dos sistemas administrativos do setor saúde, o autor discorre sobre um novo sistema orçamentário anual, como plano de trabalho, principalmente governamental. O plano consistiria em 5 fases básicas e teria um mecanismo de controle e gestão pelos diferentes poderes, determinado a quem cabe a formulação, apuração, administração e controle. Ressalta o autor o mecanismo de controle fornecido pela contabilidade - que finalizaria e proporcionaria informações para avaliação de resultados.

AU : ALVINE, E. F.
TI : Técnica de Programación integrada de salud.
PU : Boletin de la Oficina Sanitaria Panamericana (USA), 71 (6): 469-480, 1971.
RE : O autor analisa uma técnica de programação denominada "Programação integrada de saúde", e descreve a metodologia e sua aplicação em uma localidade do "Polígono das Secas" - Pirapora Brasil, cuja situação de saúde foi determinada mediante tal pesquisa. Faz uma breve análise sobre a apropriação de custos para este programa.

AU : ARANEDA, J. M.
TI : Nível socioeconômico y planificación en salud.
PU : Boletin de la Oficina Sanitaria Panamericana (USA), 71 (5): 411-422, 1971.
RE : Um levantamento social realizado no campo da Sociologia da Medicina no Chile (Valdena) permitiu determinar o nível socio econômico das famílias. E apresentada a técnica utilizada, com a finalidade de proporcionar aos "planificadores" em saúde uma orientação que possibilite uma consideração adequada dos diferentes estratos da população que permita orientar as suas ações tomando como marco de referência a realidade socio econômica cultural.

AU : ARAUJO, J. D.
TI : O custo da Doença: revisão de literatura.
PU : Revista de Saúde Pública (São Paulo), 9 (2): 229-238, 1975.
RE : Foi feito um levantamento da literatura brasileira e internacional, relativa ao custo da doença e suas repercussões econômicas na população.

AU : ARBONA, G.
TI : La Salud en el año 2.000.
PU : Boletin de la Oficina Sanitaria Panamericana (USA), 445-451, mayo/1972.
RE : Através da análise do relatório da OMS sobre a situação sanitária no mundo no período de 1965-1968 pode-se prever mudanças importantes nesta situação até o ano 2.000. O autor ressalta a interdependência do desenvolvimento social dos povos, a melhora das condições sanitárias e dos níveis de educação em relação ao bem estar econômico.

Prevê-se a evolução das medidas de prevenção na luta contra as moléstias transmissíveis, desnutrição e saneamento ambiental. Estas medidas, apesar de necessitarem grandes investimentos, pessoal preparado e participação comunitária, são menos caras e mais eficazes que as curativas.

Também se pode prever progressos no âmbito da organização e da administração dos serviços de saúde e da sua expansão efetiva visando atender maior parcela da população. As mudanças serão favorecidas pela alteração nos conceitos da formação profissional e das atribuições delegadas a profissionais auxiliares de saúde. Pretende-se combater e prevenir as doenças a vírus, através de vacinas e da quimioterapia.

Diversas outras medidas serão tentadas. Entre elas, espera-se que as pesquisas sobre as relações entre a saúde, o ambiente e o bem estar cheguem a novos conhecimentos e métodos que permitam abordar de forma mais específica os fatores ecológicos que influem na saúde.

AU :
TI : Anterprojeto. Novo Sistema de controle e pagamento da Assistência Médico-Hospitalar da Previdência Social.
PU : Vida Hospitalar (São Paulo), 14 (4): 158-165, 1980.
RE : E apresentada uma proposta para um novo sistema de controle de pagamento à Assistência Médico Hospitalar da Previdência Social, apontando as diretrizes e exemplificando a nova sistemática. Além disso faz alguns comentários com referência a vantagens e desvantagens do sistema proposto.

AU : BADIA, ROBERTO DE J.
TI : Desarrollo Economico Social y Salud: interrelaciones.
PU : Revista Salvadoreña de Hospitales (San Salvador), vol. VII (3): 164-193, 1976.
RE : Neste artigo é inicialmente fornecido um marco de referência relacionado saúde e condição social. Em seguida, são analisados desenvolvimento e sub-desenvolvimento, através de obstáculos para o desenvolvimento, característica de nível e ritmo de desenvolvimento e características do subdesenvolvimento.

São apresentadas a seguir as relações entre saúde e desenvolvimento e a situação de desenvolvimento de El Salvador. E também mostrada uma tipologia do desenvolvimento, com 6 grupos de países (foram considerados 24 países latinoamericanos, exceto Brasil e Haiti) e uma tipologia de saúde com 4 grupos.

São apresentados alguns indicadores econômicos para medir o grande desenvolvimento: bem-estar social, PIB, renda por habitante, taxa de crescimento econômico e crescimento real per capite.

Finalmente, é apresentado o sistema de Saúde de El Salvador, relacionados aos gastos com saúde no país.

AU : BANDEK, E. M. V.
TI : El Costo de la Salud en El Salvador.
PU : Revista Centroamericana de Ciencias de la Salud (San Jose), 4: 154-160, 1976.
RE : O autor faz uma análise da destinação do orçamento do país para a área da saúde. Ressalta que o que se pode verificar são os gastos na área da saúde e não o custo da saúde propriamente dita.

Compara os dados obtidos com a população e com o Produto Nacional Bruto, (PNB) salientando que o que se encontra em termos de investimento em relação ao PNB é inferior ao encontrado em outros trabalhos tido como o mínimo para países subdesenvolvidos. Faz ainda um breve apanhado de como estão sendo aplicados esses recursos dentro da estrutura de saúde do país.

AU : BARBOSA, RENATO F.
TI : Saúde e Desenvolvimento Econômico (Planejamento Integrado).
PU : Vida Hospitalar (São Paulo), 30: 25-32, 1970.
RE : O autor descreve a evolução global dos setores sociais e posição atual da Medicina de Grupo no Brasil. A seguir entre em uma abordagem do Setor Saúde como fator prioritário para o Desenvolvimento Econômico. Propõe finalmente uma solução para o rápido aprimoramento e adequação do Setor Saúde na "Nova Etapa Social" contemporanea. Os aspectos são focalizados com apresentação de gráficos demonstrativos que fazem parte do Planejamento Integrado Brasileiro de Saúde.

AU : BARBOSA, RENATO F.
TI : Seguro Saúde, Seguro Social e Mutualidade.
PU : Vida Hospitalar (São Paulo), IX (5): 214-215, 1975.
RE : O autor procura situar a correta significação, conceituação e extensão de termos tais como Seguro-Saúde, mutualidade e Seguro Social, dentro da atual contingência brasileira.

AU : BASTOS, MURILLO V.
TI : Planejamento de Saúde no Brasil (Considerações sobre a Assistência Médica).
PU : RBM: Revista Brasileira de Medicina (São Paulo), 30 (10): 636-639, 1973.
RE : A importância da assistência médica é aqui examinada em confronto com outras atividades que contribuem para a elevação dos níveis sanitários da população e melhoria do bem estar social. O trabalho focaliza o planejamento da saúde no Brasil com seu atual estado sanitário e nível de renda per capita.

AU : BASTOS, M. V. e MELLO, C. G. de
TI : Conceitos Econômicos Fundamentais.
PU : Revista Paulista de Hospitais (São Paulo), XXII (9): 404-410, 1974.
RE : Os autores tentam mostrar a importância e a vinculação intrinsica da saúde com a economia e o crescimento econômico.

Diante de tal fato expõem em linhas gerais, para que os profissionais da área da saúde tomem conhecimento, os princípios básicos fundamentais da economia. Expõem ainda conceitos de desenvolvimento econômico e alguns indicadores que possam apontar tendencias a esse desenvolvimento.

AU : BERNACCHI, M.; CHORNY, A.; NOVARO, S. y TESTA, M.
TI : Modelos numericos: Su aplicación para el análisis de una política de financiamento de la atención médica.
PU : Atención Médica (Buenos Aires), 1 (3 e 4): 70-136, 1972 1973.
RE : E apresentado neste artigo uma breve caracterização do Sistema de Saúde, onde se ressalta sua falta de definição e sua complexidade. Propõe-se também um método de experimentação numérica para abordar os problemas de análise de política, levando em conta o papel do administrador e do planificador de saúde.

Descreve-se em seguida os modos de emprego do modelo, visando ao mesmo tempo o administrador, o planificador, o político e a investigação. Busca-se também especificar as relações entre os componentes do modelo e também o tipo de resultado passível de ser obtido através dele.

Existe, finalmente, um exemplo prático de aplicação do modelo.

AU : BRUCE-CHWATT, L. J.
TI : El costo de la malaria y su control en relación con la realidad socioeconomica.
PU : Boletin de la Oficina Sanitaria Panamericana (USA), 85 (5): 392-406, 1978.
RE : E citada a dificuldade que vem sendo encontrada para a erradicação total da malária nos países onde ela existe. Dentro os diversos fatores e frente a uma análise chegou a conclusão de que haveria necessidade de um enfoque onde se encaram:

1. Investigação de novas técnicas de controle

2. Melhorar os serviços básicos de saúde

3. Considerar os fatores econômicos frente a custos de uma das principais endemias e preço do seu controle.

E ressaltado ainda pelo autor os profundos efeitos sócio-econômicos causados pela malária; além disso, a influência de fatores de diversas áreas sobre os efeitos previstos para qualquer programa, influencias estas que podem diminuir ou anular estes efeitos.

AU : CAMPINO, ANTONIO CARLOS C.
TI : Nutrição e Desenvolvimento Econômico.
PU : Revista ABIA/SAPRO, 30: 9-16, maio/1977.
RE : Este trabalho apresenta um paralelo entre Nutrição e Economia. - Assim, a nutrição é estudada como um possível investimento de curto, médio ou longo prazo. Mostra-se também a tentativa de introduzir a relação desempenho escolar - produtividade; o PRONAM é outro dos aspectos considerados.

Finalmente, o autor torna a abordar conceitos económicos, como capital humano. Nutrição são limitados, as necessidades' são ilimitadas. Assim, a análise económica deve ser usada como instrumento para auxiliar a tomada de decisão na alocação de recursos.

AU : CONLY, N.C.
TI : Impacto de la malaria sobre el desarrollo economico; em estudio de casos.
PU : Boletin Oficina Sanitaria Panamericana (U.S.A.? 81(1):93-105, 1977
RE: O autor realizou um trabalho em zonas rurais do Paraguai onde' a malária existe endemicamente. Através de levantamentos e pesquisas feitas pode demonstrar a redução da capacidade de trabalho e de produtividade das famílias envolvidas na pesquisa. Finalmente depreendeu do estudo que a malária endemica ou holo endemica perjudica todo e qualquer programa de desenvolvimento econômico.

AU :
TI : Discusiones tecnicas de la XIX reunion del consejo directivo de la OPS. Financiamiento del sector salud.
PU : Boletin de la Oficina Sanitararia Panamericana (USA), 68(1): 1-38, 1970.
RE: Os aspectos do financiamento são importantes para o conteúdo diagnóstico e para as proporções programáticas no processo de planejamento do setor saúde. Em grande parte dos países, apesar da existência de técnicas metodológicas, não se tem conhecimento exato do financiamento do setor saúde.

Os problemas básicos de financiamento do setor geralmente são devidos à escassez relativa dos recursos e à muliplicação de fontes e de instituições que utilizam os recursos sem

coordenação. Além disso, existem poucas bases objetivas para tomada de decisão em relação à alocação dos recursos. Reforçando esta afirmação, não se pode medir com eficiência as atividades do setor, por falta de indicador adecuado.

Em seguida, foram discutidos aspectos de financiamento interno e de financiamento externo.

Finalmente, pode-se dizer que os recursos financeiros não são suficientes e não são usados de forma racional, visando atender prioridades reais.

AU :
TI : Discusiones Tecnicas de la XXV reunion del consejo directivo de la OPS. Coordinacion entre los sistemas de seguridad social y salud Publica.
PU : Boletin de la Oficina Sanitaria Panamericana (USA), 86(6): 471-475, 1979.
RE: Para tingir no menos prazo possível, uma cobertura de saúde expectativa para toda a população é indispensável racionalizar ao máximo a utilização dos recursos de saúde disponíveis nos países. Este objetivo foi amplamente aceito pelos governos dos paises da região das Américas. Concluiu-se que a coordenação entre os serviços de saúde dos Ministérios e das Secretarias de Saúde junto com as ações dos sistemas de Previdência Social é um instrumento fundamental para a utilização mais eficaz dos recursos. Através desta se poderia facilitar a extensão das prestações de saúde aos grupos populacionais atendidos ou não atendidos nos países das Américas.

AU : FERNANDES, ALOISIO
TI : Investimento Hospitalar.
PU : Vida Hospitalar (São Paulo), VII(4) 157-164, 1973.
RE : O autor discorre sobre a importância dos investimentos em saúde, prioritários hoje talvez sobre investimentos no desenvolvimento e educação. Cita as características do investimento hospitalar, seus custos, seu projeto, suas implicações. Coloca a situação vigente' e as necessidades futuras de investimento nessa área expondo alguns critérios para essa forma de investimento, apontando ainda' as difficultades e facilidades possíveis.

Conclui dizendo da necessidade de um melhor conhecimento da situação real em termos de investimento hospitalar para melhor se poder programar além de se poder controlar o padrão oferecido. Acredita ainda na substituição da iniciativa governamental pela iniciativa privada em termos de investimento nessa área.

AU : FERNANDES, ALOISIO
TI : Situação e perspectiva da rede hospitalar' privada.
PU : Vida Hospitalar (São Paulo), 12(6): 308-315, 1978.
RE : O autor inicia ressaltando os esforços desenvolvidos pelo governo na area da Saúde nos últimos anos. Cita que apesar desses esforços os hospitais são mal pagos e não tem financiamento adequado. Tenta com o trabalho explicar as razões das quixas de médicos e hospitais contra o atual sistema.

Como explicação analisa hospitais e número de leitos no Brasil, apontando as disparidades existente entre hospitais governamentais e particulares. A seguir analisa a situação da evolução do número de profissionais médicos no Brasil dando ênfase ao crescimento irracional do número de escolas médicas nos últimos anos. Relaciona o número de médicos com a população e analisa comparativamente com países desenvolvidos; além disso aponta uma relação entre número de alunos e leitos disponíveis.

A seguir entra no aspecto do investimento hospitalar, seus custos, sua depreciação e o custo dos financiamentos hoje dispiníveis. Analisa ainda os custos de equipamentos e operação de um hospital e a correlação destes custos com os pagamentos feitos pelo INSP.

Aponta a seguir uma série de medidas erroneas tomadas pela área' federal no tangente a política de Saúde e concluir que a persistir tal situação - Previdencia e hospitais C hospitais e médicos teremos como consequencia a "destruição da atual rede hospitalar". Sugere medidas urgentes quanto ao sistema de pagamento, sistemas' de financiamento e gerencia eficaz e adequada por parte da Previdencia Social.

AU : FIGUEROA S., M.
TI : Costo de la salud en Honduras.
PU : Revista Centroamericano de Ciencias de la Salud (San José), 4, 161-170, 1976.
RE : O autor descreve a organização do setor de saude em Honduras fazendo dosi agrupamentos principais - o setor público e o privado. Dentro do setor privado, onde é atendida cerca de 15% da populaçao poyco se sabe. Em relação ao setor público o autor mostra como tem crescido as inversões no setor saúde, e para que programas esta inversão tem sido destinada.

Descreve sucintamente os principais fatores que levan ao atual estado de saúde do país. Compara o projeto do plano decenal de saúde para Honduras para o período de 1970-1980 e tenta mostrar' a dificultade com que os objetivos serão atingidos frente a realidade socio-econômica atual.

AU : FUENTE, M. DE LA; GONZALES, J.; MUÑOZ, H.; MUÑOZ, F.; YENTZEN, G.
TI : Nivel de Vida y Salud. Analisis por Regiones y Concepto de Pobrreza Extrema.
PU : Cuadernos Medicos Sociales (Santiago), XVII (4): 13-20, 1976.
RE : E feita uma análise do indicador Pobreza Extema em relação com' Mortalidade Infantil, tradicionalmente usado como indicadores de nível de vida. Verifica-se que a mortalidade infantil se correlaciona com um maior número de indicadores de nível de vida e saúde, e com valores mais altos de tais coeficientes de correlação.

Sugere que a Mortalidade Infantil seja um melhor indicador do nosso meio do que o índice de Pobreza Extrema.

AU : GARDEAZABAL U., JULIAN
TI : Diagnóstico de la situacion de Salud.
PU : Medicina de Caldas (Buenos Aires), 1(3): 71-76, 1979.
RE : O autor faz uma apresentação sucinta dos condicionantes que influencia para definir uma política de saúde que permitiria reorientar' os programas saúde dentro do marco de desenvolvimento integral do país.

Apresenta a estratégia usada pelo Setor Saúde para desenvolver os programas de saúde necessários para aumentar as coberturas de atenção à saúde e as condições da população marginal à estes serviços.

AU : GERSDORFF, RALPH C.J.
TI : Tipos de Organização da Assistência Médico Hospitalar Providenciária e seu custeio: quais são os mais eficazes e econômicos?
PU : Vida Hospitalar (São Paulo) XIV (1): 16-23, 1980; XIV (2): 89-98, 1980.
RE : O autor apresenta e analisa os tipos básicos de assistência (direta o indireta). Mostra, a seguir, os diferentes tipos de assistência direta e indireta e o seu controle de custo, no Brasil e no exterior. Coloca então algumas alternativas de organização e finalmente apresenta como conclusão ideal ou expansão' da rede dos hospitais próprios do INAMPS.

Como anexos são apresentadas tabelas, com os pagamentos per capita-segurada do INAMPS, a evolução do número de convênios e da população previdenciária abrangida no período 1973/77, a evolução de internações hospitares de 1971 a 1977, a evolução do volume de serviços no mesmo período e os sistemas de remuneração médica no Brasil e nos E.U.A.

AU : GERDORFF, RALPH, C.J.
TI : Fontes Potenciais de Financiamento do INAMPS.
PU : Vida Hospitalar (São Paulo), XIII (5): 226-233, 1979, (cont.) XIII (6): 246-257, 1979.
RE : O autor apresenta a previdência social e seu financiamento em geral, apresentando as contribuições reais ao SINPAS e possíveis receitas alternativas para o aumento do financiamento da assistência médico-hospitalar previdenciária.

Analisando, por outro lado, as despesar, o autor mostra alguns tipos de economia possível. Finalmente, analisa fontes exteriores' de financiamento, como doações e/ou empréstimos. Termina ressaltando a necessidade de se identificar sistemáticamente as fontes de recursos adicionais para o INAMPS e de se optar por aquellas com maior viabilidade política, social e econômica.

AU : GOMEZ, H.A.
TI : Reflexiones sobre los cambios necesarios para la atención medica a toda la población del país.
PU : Revista de la Escuela Nacional de Salud Publica (Medellin), 2(2): 107-108, 1976.
RE : O autor discute uma forma de cobrir toda a população com um programa de melhor atenção médica. Isto se daria através de uma mudança socio-política radical na estructura do país. Criar-se-ia um Serviço Nacional Unico de Atenção Médica, financiado por um imposto geral de 12% sobre o valor de todos os salários.

Ressalta ainda a importância da medicina preventiva e da participação popular neste processo.

AU : GRINGO, JOSE S.
TI : O Hospital como empresa. Incentivos e Financiamentos.
PU : Vida Hospitalar (São Paulo), 12(6): 316-322.
RE : O autor inicia seu trabalho expondo a falta de planejamento existente na área de alocação de recursos para o setor saúde, criticando os orgãos oficiais por estes procedimentos e questionando' o hospital como empresa, dentro deste contexto.

A seguir discorre sobre a falta de coordenação entre os organismos responsáveis pela prestaçãode assistência à população em ambito governamental e que controlam de certa forma a distribuição e contratação de leitos hospitalares e os orgãos financiadores, apontando a atual situação da distribuição de recursos e qual a tendencia evolutiva para os próximos anos.

Isto posto sugere a criação de um orgão coordenador e facilitados de incentivos financeiros na área hospitalar, além de medidas de carater creditício e de carater fiscal para responder as necessidades ora existentes.

AU : HORGEN, M.V. & ZSCHOCK, D.
TI : Modelo economico para evaluar el sistema de Salud Rural.
PU : Revista Centroamericana de Ciencias de la Salud (San Jose), 6: 69-77, 1977.
RE : Este artigo se propõe a avaliar o primeiro nível de um sistema regionalizado. Deve ser levado em contra que os governos tem recursos limitados para expandir quaisquer serviços e que para melhor utilizar os recursos existentes deve-se detectar deficiências. Também esta avaliação poderia auxiliar planejamentos futuros.

Assim, sugere-se 4 grandes áreas de estudo: o efeito dos gastos nos serviços preventivos, curativos, informativos investigativos' e outra sobre o nível da saúde; o efeito dos níveis de saúde sobre a produtividade e a produção; o procedimentos que podem melhorar as atividades não sanitárias, através de um nível de saúde mais elevado e a formar de utilizar com major eficiencia os recursos setoriais. Basicamente, o estudo foi desenvolvido a partir da determinação da importância destinada à entrega de serviços em área rural, da determinação da estructura de custos da unidade de atenção de saúde rural, da análise da eficiência econômica da equipe de saúde rural, da análise do custo/efetividade das ações da equipe de saúde rural e da determinação do gasto efetuado pelas famílias através do setor privado.

AU :
TI : Informe final del III seminario del Programa Centro Americano de Ciencias de la Salud. El Costo de la Salud en Centroamerica.
PU : Revista Centroamericana Ciencias Salud (San Jose), 4:73-89. 1976
RE : Este trabalho resume o III Seminário do Programa Centroamericano de Ciências da Saúde, no qual foram abordados 4 (quatro) temas básicos: a situação da saúde na América Central, o custo da Saúde na América Central, o gasto com medicamentos e a responsabilidade da equipe de saúde e da comunidade na solução dos problemas dos gastos com saúde.

Quando se abordou o tema da situação da saúde na América Central, foi dado especial ênfase ao manejo adequado das informações estatísticas em saúde e à influência das condições sociais.

O custo da Saúde na América Central enfatizou as delegacões de funções (médicos descalços, etc), a integração e regionalização dos serviços e a participação da comunidade.

Com relaçao aos gastos com medicamentos foram abordadas as consequências negativas do desenvolvimento tecnológico; a irracionalidade na prescrição dos medicamentos e a competição entre as indústrias multinacionais da indústria farmacêutica.

Em termos da responsabilidade da equipe de saúde e da comunidade, foi apresentada a preocupação de se vincular a equipe de saúde com as organizações representativas da comunidade.

AU : JURICIC, B.
TI : Algunas consideraciones sobre gastos en salud en Chile y su financiamiento.
PU : Cuadernos Medico Socialies (Santiago) XIII (3): 17-22, 1972.
RE : Neste artigo se analisam os problemas atuais da atenção à saúde no Chile e a atenção médica que recebe a população, e os gastos' que os envolve tanto no setor público quanto no privado. Se destacam as deficiencias dos sistemas atuais; se formulam algumas possíveis soluções e se discutem aspectos de financiamento. Esta abordagem é feita tendo em vista o estabelecimento de um Serviço Nacional de Saúde unificado.

AU : JURICIO, B.
TI : La Salud Publica en el año 2.000.
PU : Boletin de la Oficina Sanitaria Panamericana (USA), 419-427, mayo/1972.
RE : Através da análise dos conhecimentos atuais e de seus progressos nas últimas décadas, da utilização dos novos conbecimentos em benefício da saúde da comunidade, do desenvolvimento econômico dos países e do progresso tecnológico pode-se tentar prever a situação futura.

Assim, estudando as diferentes doenças observa-se a multicausalidade: agentes genéticos, físicos, químicos, carenciais, infecciosos e microbiológico-interagem frequentemente.

Espera-se que até no ano 2.000 os homens trabalharão em busca do seu-bem-estar, e que a desnutrição e que algumas enfermidades transmissíveis diminuam ou desapareçam até o final do século.

Analisa-se também neste artigo os problemas da super-população munidal. Deveriam ser empreendidos esforços conjuntos e simultâneos de melhoramento econômico-sociais e de educação em aspectos familiares.

AU : LOIS, E. M.
TI : Economia y Salud
PU : Cuadernos Medicos Sociales (Santiago), XIX(3): 5-9, 1978.

RE : O autor faz um exame das interrelações existentes entre economia e saúde e os efeitos recíprocos entre ambas, além de interação de diferentes componentes de nível de vida entre os quais destaca a saúde e a frequência de doença.

Diz que tal estado não só depende de um ingresso econômico maior, como também de outros fatores tais como nutrição, instrução, condições de moradia, recreação comunicações e seguro social.

Os efeitos da saúde sobre a economia apontam diversas considerações que devem ser feitas sobre as repercuções da doença sobre a capacidade produtiva do indivíduo.

Faz ainda algumas considerações sobre a organização e situação do sistema de saúde no Chile.

AU : LOPEZ, D.H., SAMPERIO, C.G.
TI : Valoración del funcionamiento de una' unidad de cuidados intensivos.
PU : Boletin Medico Instituto Mexicano de Seguro Social (Mexico), 17(8): 339-348, 1975.
RE : O autor, após um relato dos grandes benefícios que uma unidade de terapia intensiva pode trazer, ressalta, de forma breve, o alto custo destas unidades, enfatizando a necessidade de uma maior atenção face a eleição dos doentes, com critérios bem fundamentados e com possibilidades de oferecer benefícios reais, para ingresso nes sas unidades.

AU : MACHADO, P. de A.
TI : O Médico e a Macroeconomia da Doença
PU : Revista Paulista de Hospitais (São Paulo), XXV (4): 172-175, 1977.
RE : O autor analisa o deempenho histórico do médico frente ao desenvolvimento da economia - referindo-se a macroeconomia em especial. Tenta explicar as multiplas alterações sofridas pelo exercicio deste profissional relacionando com a descoberta da "lucrativa industria da doença".

AU : MAHLER, HALFDAN
TI : Las necesidades humanas fundamentales como objetivo Mundial de Salud.
PU : Boletin de la Oficina Sanitaria Panamericana (U.S.A.), 83(3): 187-196, 1977.
RE : Apenas uma pequena parcela da população mundial se beneficiou dos avanços das ciências e da tecnologia da saúde. Atingir um estado "saúde" não é uma aspiração individual, mas sim um entre muitos objetivos sociais e economicos. Assim, até o ano 2000 deve-se chegar a uma distribuição mais justa dos recursos de saúde.

Caberia à OMS uma função de coordenação para a aplicação de cooperação técnica, aos esforços de desenvolvimento economico-social em geral.

No entanto, esta programação de saúde nacional não é apenas para os países menos desenvolvidos. Também, só poderá funcionar se todos' os estados membros da OMS colaborarem.

A atenção básica da saúde necessita de uma tecnologia básica que possa ser aplicada por pessoal não especializado. Também a descriminação de métodos, equipamentos e medicamentos necessários ou de resultados duvidosos cabe à OMS.

A OMS deve, finalmente dar um apolio político de palavras e de ações reafirmando sesus objetivos sociais e dando prioridades a programas' que reflitam seus principios.

AU : MANZANEDO, H.G.
TI : Los Programas de Salud, la conducta Humana y la Seguridad Economica.
PU : Salud Publica de Mexico (Mexico), XII(6): 741-744, 1970.
RE : O autor coloca a atual necessidade sentida de se melhorar os níveis de saúde da população. Traça um breve histórico desde tipo de preocupação e coloca, nos dias de hoje, a incorporação dos conceitos financeiros ao oferecimento de melhores condições de saúde. Discute então a visão integrada de saúde, diferenciada do conceito estritamente econômico de determinação de prioridades na área e menciona a necessidade de se trabalhar a comunidade, no sentido de cooperação e no sentido de tratamento no ambiente. Conclui dizendo que os programas de saúde devem ser paralelos à modificações na economia, na estrutura social e na educação da população.

AU : MARANO, VICENTE P. e QUEIROS, VILMA MACHADO
TI : Influência do tempo de permanência de empregados no Ambulatório Médico de Empresa' sobre as horas não trabalhadas e respectivos custos.
PU : Revista Brasileira de Saúde Ocupacional (São Paulo), 20(5): 8-22, 1977.
RE : Este estudo foi realizado numa empresa do ramo metalúrgico, dotada de um ambulatório médico. Observou-se que diversos fatores influem no tempo de permanência de empregados neste ambulatório: realização de consultas não agendadas; atividades burocráticas não estritamente necessárias no fluxograma, apuração de acidentes do trabalho em áreas distantes do ambulatório e outros. Concluiu- se também que o aumento de horas não trabalhadas é diretamente proporcional ao aumento da mediana de permanência do ambulatório médico.

Sugere-se, entre outras medidas, a aplicação do mesmo modelo a outras empresas, para tentar obter dados mais generalizáveis e elementos para planejamento.

AU : MATOS, AFONSO JOSE
TI : Análisis do comportamento dos preços do INPS diante dos princípais índices econômicos.
PU : Vida Hospitalar (São Paulo), 12(6) 278-289, 1978.
RE : O autor objetiva apresentar uma análise do comportamento dos preços do INAMPS (através de diárias, taxas e U.S.) em relação aos principais índices econômicos (ORTN, índices geral de preços, índice do cuto de vida e índice de dissídios coletivos). O período compreendido vai de março de 1965 e maio de 1978. Entre as conclusões, o autor coloca a existência de uma defasagem entre as variáveis e suas consequências para a rede hospitalar existente.

AU : MEJIA, M. I.
TI : Gasto médico familiar em Honduras.
PU : Revista Centro americano de Ciencias de la Salud (San Jose), 4: 171-186, 1976.
RE : Foi observado em Honduras que o gasto familiar com Saúde é maior nas zonas urbanas e rurais que nas duas regiões fr msiot impotyància econoômica do país. A maior parte dos gastos como asaúde se destinou à compra de medicamentos; a proporcão de maior gasto com medicamentos foi mais sentida na populaçaão de maior nível de renda. Não se conseguiu, no entanto, até o momento, descobrir para que tipo de enfermidade se gasta mais. Pode-se supor, no entanto, que, acompanhando a maior prevalência e incidência em Honduras, a maior parte dos recursos seja usada com moléstias infecciosas.

AU : MELLO, CARLOS G.
TI : Aspectos Econômicos de Saúde.
PU : RBM: Revista Brasileira de Medicina (São Paulo), 32(8): 570-576, 1975 e Revista Brasileira de Hospitais (São Paulo), XXIII (7): 281-292, 1975.
RE : O autor cita inicialmente as relações entre saúde e econmia, abordando aspectos descordantes entre diversos autories no que se refere a saúde gerando desenvolvimento econômico ou vice-versa.

Tenta enfatizar a importância da íntima interdependência desses' dois fatores apontando alguns planos malogrados em que ambos os aspectos não foram trabalhados em conjunto.

Mostra ainda as disparidades entre diversas regi¨es do Brasil, enfatizando o aspecto de desenvolvimento econômico e melhores níveis de saúde através de comparações entre essas regiões.

AU : MELLO, CARLOS G.
TI : População, Saúde e Desenvolvimento.
PU : Vida Hospitalar (São Paulo), VI (3): 117-129, 1972.
RE : O autor coloca a importância das questões de natureza econômica e os fatores de ordem demográfica para equacionamento racional dos problemas de saúde.

Cita a seguir conceitos sobre demografia e macroeconomia. Define' desenvolvimento econômico e faz uma análise de uma série de indicadores de desenvolvimento referendando a forma com que estes refletem a situação de saúde e que importância relativa podem ter, além das ressalvas e cuidados para com sua manipulação.

AU : MELLO, C. G. de
TI : População, Saúde e Desenvolvimento.
PU : Revista Pau lista de Hospitais (São Paulo), XX((11): 7-12, 1972.
RE : O autor ressalta a importancia da correlação entre problemas de saúde questões de natureza econmica e fatores de ordem demográfica. Cita a importancia de um planejamento conjunto nessas diversas áreas, salientando a ineficiência de programas isolados em cada uma das áreas, sem os correlatos implicados em outras áreas.

Faz breves considerações sobre demografia, saúde e estado sanitário e conceito macro-economicos, entrando a seguir em consideraç"es e análise de indicadores do desenvolvimento. Analisa acerca de 12 desses indicadores e como se tem comportado em algumas regÕés do Brasil.

Conclui dizendo que o estudo de populaçaÕ saúde e desenvolvimento assume significado"tao somente quando o objetivo final é representado pelo bem-estar do hmem, que se deve postular mediante implantação de medidas visando a elevação do nível de vida".

AU : MELLO, C. G.
TI : Os empresários do Setor Saúde.
PU : Revist Paulista de Hospitais, (São Paulo), XXVI (1): 21-25, 1978.
RE : O autor apresenta os convênios com empresas feitos pela Previdencia Social, explicando seu aparecimento (como o absenteísmo da mão-de-obra), e analisa a seletividade dos convênios e dos previdenciários. Aborda a opção "Medicina de Grupo", discute alguns indicadores técnicos, como taxa de mortalidade e finalmente conclui apresentando a assistência prestada através dos convênios com empresas como mal distribuída geográficamente e principalmente como elitista.

AU : MERA, JORGE A.
TI : Oferta y utilizacion de Servicios en Areas Urbanas.
PU : Medicina y Sociedad (Buenos Aires), 1(2): 81-85, 1978.
RE : O autor faz uma correlação entre a oferta de serviços de saúde e sua utilização, desenvolvendo um estudo comparativo entre 4 áreas distintas da Argentina. Com este trabalho ele conclui que onúmero de internaç¨es, mas não encontra uma correlação entre o número de consultas ambulatoriais e o número de médicos por habitante diferentemente de outros estudos realizados em outros países. Todavia não aponta as possíveis raz¨es dessa não correlação.

AU : NILO, L. F.
TI : Funcionamiento del presupuesto por programas en los servicios de salud.
PU : Boletin de la Oficina Sanitaria Panamericana (USA), 72(3): 198-214, 1972.
RE : O artigo em pauta mostra a importância do orçamento como instrumento de direção e de administração dos serviços de saúde. Ressalta o fato de que os países latino-americanos se interessam pelamodernização dos sistemas de administração orçamentária e pelacolocação do orçamento programa para resolver o problema da programação e da racionalização no emprego dos recursos financeiros.

Para o autor, a colaboração com os diferentes países devem apresentar algumas características: integração nos programas sanitários, desenvolvimento integral das categorias do programa, emajoração dos custos unitários das ações de saúde, etc. Também São assinalados alguns requisitos essenciais para seu funcionamento eficaz: formação de possoal, modernização de servicos administrativos, fluxo de informações, financiamento, etc.

E ressaltada a importância dos serviços de saúde tomarem a inicialtiva da implantação do orçamento programa, de acordo com alguma estratégia, sem esperar que todas as condições sejam favoráveis. A final, a aplicação deste instrumento permitirá seu aperfeiçoamentos, a capacitação do seu pessoal, a racionalidade, administrativa' e a planificação na saúde. A medida em que os responsáveis pela' saúde tomarem consciência dos resultados e aprenderem a utilizar' as informações, a real importância do orçamento programa será apreciada, possibilitando uma administração mais racional dos recursos disponíveis.

AU : PAIM, Jairnilson Silva
TI : Indicadores de Saúde no Brasil: Relações com variáveis econômicas e sociais.
PU : Revista Baiana de Saúde Pública (Salvador), 2(2): 39-82, abr/jun/1975.
RE : Foram, para este trabalho investigados dos indicadores desponíveis e as dificuldades que impediram o estabelecimento de uns, a qualidade de outros. Estudoi-se também a utilização dos indicadores no planejamento e sua utilização.

Na análise dos indicadores disponíveis frente a algumas variáveis socio-economicas, encontrou-se que aqueles apresntavam correlação com salários, educação, renda mensal, PIB per capita e assisência médica social. Não foi demonstrado, relação entre níveis de saúde e índices de saneamento e de assistência médica.

Assim, através destes resultados se justifica a necessidade de serem introduzidas modificações na estrutura da economia para assegurar melhor distribuição da riqueza nacional e para elevar o nível de saúde de população.

AU :
TI : Programas de Atencion Medica. Ministério de Sanidad y Assistencia Social Instituto Venezuelano de los Seguros Sociales.
PU : Revista Venezolana de Sanidad y Assistencia Social (Caracas), XXXVI, No. 1: 93-163, 1972.
RE : Este trabalho mostra uma descrição e uma valoração dos problemas relacionados com a saúde e das atividades que visam orientar ações a serem executadas.

Analisa-se elementos de desenvolvimento economico-social e aponta' algumas características de programas de atenção Médica da Venezuela. Descreve-se a seguir a organização e a estrutura dos serviços' de atenção médica. E também tratada a setorização destes serviços, através da descrição das regiões da saúde. Estuda-se o papel de médico nos programas, com ênfase na medicina geral. Assim, menciona. se inclusive a formação médica. Analisa-se em seguida o financiamento da atenção médica e as características dos gastos no setor público de saúde. Consequentement, aborda-se também a possibilidade' de adotar um seguro de assistência médica para toda a população ativa do país.

Finalmente, são descritas a dinâmica de ação sanitária pregressa as dificuldades e a situação da época, delineado algumas medidas a serem implementadas até 1979.

AU : RAMIREZ, A. A.
TI : El Mercado de los Servicios Medicos.
PU : Boletin - Asociación Medica de Purto Rico (Puerto Rico), 68(7): 167-170, 1976.
RE : A crise no setor saúde é geralmente definida como um aumento da diferença entre a oferta de serviços e a demanda do público consumidor. Um aumento no número de médicos geralmente é sugerido' como solução para o problema. O artigo analisa a validade e as limitações deste tipo de estratégia. A primeira parte descreve' as particularidades da atenção Médica, ressaltando as várias diferenças entre o mercado de saúde e o de outros bens de consumo ou serviços. A segunda parte examina e refuta a crenca de que o aumento do número de médicos reduziriacustos, traria uma distribuição mais equitativa de atenção, e reduziria a demanda de serviços.

AU :
TI : Relatório da Previdência e Assistência Social no Brasil - 74/78.
PU : Vida Hospitalar, XIII (2): 92-96, 1979 e XIII(3): 142-144, 1979.
RE : Estes dois artigos mostram aspectos financeiros da Previdência e Assistência Social no Brasil, através de alguns indicadores. No. lo. artigo é mostrada uma evolução histórica da Previdência social, de 1923 a 1977. Além disto, são estudados segurados e dependenes da previdência, divididas entre urbanos e rurais; também se mostra as atividades de bem-estar urbano, as agências da previdência social, a assistência médica prestada e outros tipos de atendimento vinculado ás agências prestadoras de serviço. Finalmente, são mostrados os números de municípios atendidos e outros programas. Todos estes dados são apresentados de forma comparativa, tomando o perído de 1974 a 1978.

No segundo artigo são apresentadas as realizações de duas agências da previdências (FUNABEM e DATAPREV) nos anos considerados. No final aparece um quadro-resumo com as principais realizações do Ministério de Previdência e Assitência Social no mesmo período.

AU : ROBLES GARNICAR, R.: GONZALES., E.; BARBOSA K., A.: RUIZ SANDRY, C.; TURRENT F., E.
TI : Efectos Economicos y de Salud en la Seguridad Social de los Programas de Medicina Preventiva.
PU : Boletín Médico Instituto Mexicano de Seguro Social (Mexico), 16(8): 292-305, 1974.
RE : Os autores abordam aspectos da precariedade da informação na álrea da saúde, salientando a dificuldade que isto traz no aspecto de planejamento global em saúde. Aborda ainda alguns aspectos de medicina preventiva e aponta os benefícios que esta práctica está trazendo, no sentido de liberar recursos humanos, materiaís e financeiros que poderiam ser reorientados na sentido' de uma melhor utilização.

Finalmente salienta o efeito econômico e sobre a saúde da população da medicina preventiva e os esforços que se tem efetuado para quantifica-los.

AU : RODRIGUES, B.A.; HUERTA, R.
TI : consideraciones sobre el costo del los programas de vacinacion.
PU : Boletín de la Oficina Sanitaria Panamericana (USA), 76(2): 125-135, 1974.
RE : E ressaltada a importancia dos programas de vacinação e as dificuldades de sua execução principalmente no que tange a custos. E então mostrada a necessidade de uma programação consciente e bem administrada para que se atinja os objetivos propostos ao menor custo possível.

A elaboração antecipada dos planos e programas. A preparação de pessoal, a aquisição de vacinas, a conscientização da necessidade de vacinação dos diversos setores da área da saúde podem levar - ao êxito dos programas de vacinação bem como à diminuição de seus custos.

AU : SADY NETTO, JOSE
TI : Princípios que devem nortear o pagamento pela Assistência Médica.
PU : Vida Hospitarlar (São Paulo), 12(5): 268-270, 1978; -12(6): 335-338, 1978.
RE : O autor faz críticas ao atual sistema de pagamentos que norteiam a política de compra de serviços pelo INAMPS e fundamenta suas críticas em um estudo feito nos E.U.A. com representantes da "Blue Corss", dos hospitais e de outras autoridades visando delinear padrões de adequação para pagamento de serviços por terceiros prestados a seus beneficiários.

Enumera 36 princípios e faz comentários a respeito de cada um deles tentando provar que modelos alternativos à atual política do INAMPS seriam mais justos e possibilitariam melhores resultados tanto para as entidades contratadas quanto para a população.

AU : SANTOS, ROBERTO
TI : A Saúde no contexto do desenvolvimento social e Econômico.
PU : Mundo da Saúde (São Paulo), 4(14): 67-74, 1980.
RE : O autor inicia o texto evidenciando o problema de saúde no Brasil. Faz uma observação importante no sentido de que o desenvolvimento economico alcançado não tem sido acompanhado pela melhoria do nível de saúde da população.

cita que pouca Foid a atenção dada à área social quando relacionada com o setor economico e ressalta ainda que a herança culturalé ftor importante para se conseguir modificações no setor social.

Diz ainda que os índices economicos se alteram a prazos relativamente curos, mesmo com recursos humanos com suas potencialidades limitadas, mas que este pode ser um dos fatores da concentração de renda. Já no campo social e particularmente na área de saúde, devido a inúmero faores, mudam com maior lentidão. Além dissose a política neste setor atinge uma população mais favorecida, pouca alteração se percebe nos indicadores de nível de saúde. Resalta a importância de se enfocar população na classe mais baixa, tanto a nível de melhoria de enda famiiar, quanto a nível de oferta de serviços sociais e principalmente de atenção à saúde, salientando que o desenvolvimento economico por si só não leva ao desenvolvimento d nível de vida. Faz uma série de críticas ao atual sistema apontando ao que este tipo de tratar do problema tem levado. Aponta algumas medidas tomadas pelo governo que amenizam' de certa forma as condições existentes.

AU : SOUTO, DAPHNIS F
TI : Perspectivas da Assistência Médica no Brasil
PU : Revista Brasileira de Saúde Ocupacional (São Paulo), vol 4(13): 56.69, 1976.
RE : O autor faz uma análise retrospectiva da prestação de assistência a saúde nos últimos años no Brasil, chegando até à situacão atual.

A seguir aborda aspectos conjunturais do problema dando ênfase particular à escassez de recursos tanto financeiros como técnicos.

Descreve a seguir as medidas de planejamento e política que o governo tentaria adotar mostrando aspectos da realidade existente.

Finalmente menciona aspectos fundamentais para o desenvolvimento do setor saúde frene aos êxitos econômicos que vem sendo obtidos apontando problemas que devem ser encarados com maior prioridade.

AU : SUARES, LUIS; MENDES, C. R. L.
TI : Retribución del trabajo medico por las obras sociales.
PU : Medicina y Sociedad (Buenos Aires), 3(1): 5-7, 1980.
RE : O autor analisa o comportamento dos honorários médicos através de média aritmética, discriminada por especialidades e analisa, dentro da Pediatria, as diferenças dos honorários entre médicos homens e mulheres e entre os pediatras gerais e neonatólogos. Apósdeduzir a procentagem referente a gastos (material, etc), conclui que a especialidade que mais honorários dá ao profissional è a Anatomia Patológica (+ 3.000.000 pesos). A que mais gastos apresenta è a radiologia (79%). Em relaçao aos pediatras, existe uma relação de honorários entre homen e mulher de 1:3, quanto aos nenonotologistas e pediatras é de 2:1. 60% das especialidades representam honorários entre 600 e 1200 US$.

AU : TAYLOR, CARL E. y HALL, MARIE FRANCOISE.
TI : Salud, Poblacón y Desarrollo Economico.
PU : Cuadernos Medico-Sociales (México), XI(2): 22-31, 1970.
RE : As relações recíprocas entre saúde, desenvolvimento econômico e crescimento da população è pouco compreendida pelas autoridades institucionais, a populção referida e as comunidades de mais baixos níveis socio-econômicos e culturais.

Os autores referem-se a acontecimentos recentes que demonstram esta interrelação. Ao mesmo tempo combatem falsas afirmações de muitos setores profissionais.

AU : WITT, A. SPINOLA, M. R. de P.
TI : Economia no Setor Saúde: Considerações Básicas.
PU : Revista Paulista de Hospitais (São Paulo) XXVII (8): 251-255, 1979.

RE : O auto r enfatiza o aumento da importância do setor saúde no plano econômico global. Cita que o desenvolvimento da economia aplicada à Saúde está intimamente relacionado com o próprio desenvolvimento de administração da saúde.

A seguir procura fornecer noções básicas a respeito de conceitos de que è economia, oferta, procura e como funciona o mercado sempre sobre o enforque do aspecto saúde.

Finaliza recomendando um maior conhecimento da economia do setor "imprescindível para que possam orientar eficientemente a alocação de recursos e o dimensionamento das plantas produtoras dos serviços" - por parte dos administradores de saúde.

AU : WITT, A. y SPINOLA, M.R.P.
TI : O Hospital como Agente Econômico dos Recursos Humanos.
PU : Revista Paulista Hospitais (São Paulo), XXVII(5): 147-149, 1979.
RE : O autor discorre sobre a importância que indivíduo, como força de trabalho, tem sobre a economia.

Cita que "das alternativas viáveis para maximizar o retorno do investimento realizado no capital humano, que o mais eficiente, economicamente, seja a conservação da saúde, e consequentemente da vida".

Ressalta então o papel que o hospital desempenha na conservação da saúde desse "capital" sendo agente potencializador de sua contribuição em termos sociais. Vê assim o hospital como um valor econômico colaborando no desenvolvimento do país.

AU : BERKI, S.
TI : Hospital Economics
PU : Lexington Books
(Massachusetts), 1971
RE : It is an analytical work of hospital economics covering the objetives of the hospital; the concept of efficiency and production of hospital services; productivity and costs with emphasis on the issues of economics of scale and efficiency; levels of utilization and demand for the service; pricing and reimbursement policies; and special problems of municipal bureaucratized hospitals. The hospital is considered to be an specialized yet integral component in the production of medical care services. These services and their cost depend of 5 factors: 1. the relative stocks of service capabilities and their relative price; 2. the preference functions of potential patients; 3. the preference function of the medical decision maker; 4. the reward system facing the medical decision maker; and 5. the budget constraint faced by the patient.

AU : CLEVERLEY, W.O.
TI : Profitability Analysis in the Hospital Industry
PU : Health Services Research
13(1): 16-27, 1978
RE : Measures of marginal profit are derived for the two payment classes-cost payers and charge payers - that the hospital industry must consider in profitability analysis, i.e., prediction of the excess of revenue over expenses. Two indexes of profitability, useful when payments mix is constant and when it is nonconstant, respectively, are derived from the two marginal profit measures, and one of them is shown to be a modification of the contribution margin, the conventional measure of profitability in general industry. All three measures - the contribution margin and the two new indexes of profitability - are used to estimate changes in net income resulting from changes in patient volume with and without accompanying changes in payment mix. The conventional measure yields large overestimates of expected excess revenue.

AU : FELDSTEIN, M.S.
TI : Economic Analysis for Health Service Efficiency
PU : North-Holland and Publishing Company
Amsterdan, 1967
RE : An econometric study of the British National Health Service (NHS) with particular attention to the hospital system. The objective of the study is stated on the first page: it is concerned with "identifying and estimating relevant decision-making information and with applying optimizing methods to improve efficiency of the British NHS". The book is divided into two parts: the first is concerned with the hospital as a producing unit; the second deals

with planning the supply and use of health-care resources. The first part of the book contains extensive analysis of cost and productivity of general non-teaching hospitals. The second part examines approaches to planning bed supply, improving maternity services and an aggregate planning model of the health care sector.

AU : FRANK, W.G.
TI : A Managerial Accounting Analysis of Hospital Costs
PU : Health Services Research
11(11): 34-33, Spring, 1976
RE : Variance analysis technique, is applied to an eight-component model of hospital costs to determine the contribution each component makes to cost increases. The method is illustrated by application to data on total costs from 1950 to 1973 for all United States nongovernmental non-profit short-term general hospitals. The costs of a single hospital are analyzed and compared to the group costs. The potential uses and limitations of the method as a planning and research tool are discussed.

AU : PROGRAMA DE INVESTIGACION Y DESARROLLO EN SISTEMAS DE SALUD
TI : Evaluación de la Gestión Financiera y Beneficio Social de los Hospitales de Referencia en Colombia 1975-1980
PU : Ministerio de Salud de Colombia
(Spanish), 1980
RE : The financial aspects of eight teaching hospitals in Colombia are studied. It is a comprehensive financial assessment of these institutions in order to find a solucion for their ciclical economical and financial crisis. Each hospital is analyzed and long- and short-term strategies are suggested to solve common problems. The short-term strategies are designed in order to keep the hospitals working and try to avoid deficits. The long-term ones suggest a change in the basic in the basic orientation of these instituciones so they can properly play their social roles. From the discussion of these problems it is expected that coherent policies will be proposed to ameliorate the financial conditions of these hospitals. It is supposed that the experience can be used in other teaching hospitals in Latin America.

AU : VRACIU, R.A.
TI : Decision Models for Capital Investment and Financing Decisions in Hospital
PU : Health Services Research
RE : 15(1): 35-52, 1980
RE : The literature on capital investment and financing decisions for hospitals has suggested several approaches to analysing sets of options. In this paper, it is presented a taxonomy of the different approaches; analyzed and compared the different elements

of the taxonomy; and illustrated and discussed the information that can be gained by using each approach. It is viewed in these different analytical methods of providing information to decision makers, and argue that the complex nature of hospital demands the use of more than one approach. Failure to do this may lead to biased evaluation and poor decision making.

AU : VRACIU, R.A.
TI : Programming, Budgeting, and Control in Health Care Organizations: The State of the Art
PU : Health Services Research
14(2): 126-149, 1979
RE : The planning, budgeting and controlling processes (PBCP) largely subsume all of the planning and controlling activities of an organization. This paper discusses these activities within the context of a single management control system focusing on three topics: first a brief historical perspective. Second, normative models of the processes are presented. The discussion focuses on the elements and relationships of these processes, and numerous references to the literature are provided. Third, several issues related to the gap between the state of the art in PBCP for hospital and the current state of practice are discussed. The author suggests that the future fiscal environment in the United States will provide hospital managers with stronger incentives to develop cost-effective PBCP.

ASPECTOS ECONOMICOS E DE PLANEJAMIENTO

AU : ABEL-SMITH, B.
TI : Value for Money in Health Services - A Comparative Study
PU : Heinemann
London, 1976
RE : The author explains how health services came to be organized and financed in different countries and draws upon theory and experience to discuss health planning for both developing countries and more developed countries. The book draws upon economics, sociology, epidemiology public administration and politics. In the first part there is a description of the historical evolution of the organization and financing of health services in different countries. Then some fundamental questions of health economics are dealt with. The underlying criteria for health planning both in developing and developed countries is discussed. Finally, education and training aspects are presented. The problem of organizing and financing health services is not considered to be possibly solved by any value-free theory. Increasingly access to health services has come to be regarded as a right: the modern state is seen to have a duty to ensure that all can use them, whether they can afford to purchase them or not.

AU : ACTON, Jan P.
TI : Nonmonetary Factors in the Demand for Medical Services: Some Empirical Evidence
PU : Journal of Political Economy Economy 83(3): 595-614, 1975
RE : Nonmonetary factors are expected to assume an increasingly important role in determining the demand for medical care as the out-of-pocket money price falls (due to spreading health insurance coverage or the enactment of the federal health insurance legislation). A utility maximization model is used to develop predictions for the demand for "free" and nonfree care. A simultaneous-equation is estimated on a survey of users of New York City's "free" outpatient departments and municipal hospitals. The empirical results support the major predictions that nonmonetary factors such as travel distance will function as prices in discouraging demand and that earned and non-earned income have different impacts. A number of implications for public policy are suggested, including the possibility of substituting income maintenance for the direct provision or insurance of medical care.

AU : ARMSTRONG, R.A.
TI : Canadian Lessons about Health Care Costs
PU : Bull. N.Y. Acad. Medicine 54(1): 84-101, 1978
RE : The costs of health care, public or private, fall basically into three groups. First is the primary cost of providing services or benefits and this is not simply dollar cost but includes a social costs, which is often ignored in examining health care costs. However, it is an extremely important cost that is very difficult to measure. The second cost factor relates to the secondary cost of providing the service, the overhead, and associated costs. This factor takes into account such things as the cost of malpractice insurance because, after all, that cost has to be built into the fees or rates paid for service. Finally, one must also consider the cost of an administration which covers not only the payment of claims but also includes the cost of collecting premiums or tapping other sources of revenue and paying comissions or salaries to those who collect them. The more different policies and the more people involved the higher the cost. The author briefly describes and diseases various aspects of the Canadian National Insurance Program.

AU : ARROW, K.J.
TI : Uncertainty and the Welfare Economics of Medical Care
PU : The American Economic Review 53(5): 941-973, 1963

RE : The subject of this paper is the medical-care industry, and not health. It contends that the special economic problems of medical care can be explained as adaptations to the existance of uncertainty in the incidence of disease and in the efficacy of treatment. The discussion is centered on the way the operation of the medical-care industry and the efficacy with which it satisfies the needs of society differ from the "norm" that the economist uses for the purposes of such comparisons, i.e. the competitive market. The failure of the market to insure against uncertainties has created many social institutions in which the usual assumptions of the market are to some extent contradicted. The economic importance of personal and family relationships is by no means trivial; it is based on nonmarket relations that create guarantees of behavior which would otherwise be afflicted with excessive uncertainty. The logic and limitations of ideal competitive behavior under certainty force us to recognize the incomplete description of reality supplied by the impersonal price system. Two propositions about the nature of optimal insurance policies are presented. The author suggests "that the government should undertake insurance where the market, for whatever reason, has failied to emerge".

AU : BARLOW, R.
TI : Applications of a Health Planning Model in Morocco
PU : Intl. J. Health Services
6(1): 103-122, 1976

RE : Public health planning should be guided by the principle of output maximization. The objetives of the health sector should be specified, and measurable forms of output should be derived from these statements of purpose. There is a discussion of the objetives or forms of output in a public health system both humanitarian and economic. A verbal model of such a system for an underdeveloped country is constructed which identifies the relationship which must be known if spending decisions are to succeed in maximizing output. An attempt is then made, in the context of the Moroccan public health system, to show that the model is not merely a theoretical exercise, but is potentially useful as a planning instrument. On the whole, the prevention activities are found to be a much cheaper way of saving lives than are curative activities.

AU : BLENDON, R.J.
TI : Can China's Care Be Transplanted Without China's Economic Policies?
PU : New England J., Med.
300:1453-1458, 1979

RE : China's economic policies of the past 25 years have shaped its present health-care system. China's leadership decided to have neither a national health-insurance sistem nor a national health

service. Instead, it decided that its health system would mirror the workings of its industrial and agricultural system. Decisions to minimize imports, ban private economic activity, assign university graduates on a compulsory basis, control wages, maintain a large domestic standing army, and prevent profession or universities from acquiring independent status led directly to the present system of medical care. Consequently, transplation of China's strinking achievements in health-care delivery to the United States or other country is unlikely to occur in the absence of transfer of the underlying economic policies.

AU : CHRISTIE, D.
TI : Screening for Breast Cancer: The Role of Mammography
PU : Med. J. Australia
2(12): 398-400, 1977
RE : The early diagnosis of breast cancer by screening is a relatively new development in medical practice and its enthusiastic acceptance needs to be tempered by appraisal of the costs, the risks, and the potential benefits. No case can be made at present for screening well women under the age of 50 years when such screening includes mammography. With the exception of women who have already had cancer in one breast, it is likely that those women under 50 with the associated risk factors are better managed by careful attention to breast self examination and more frequent physical examinations. Provided that the radiation dose is less than one rad per examination the benefits to women over 50 outweight the risks of radiation-induced breast cancer. Against this must be placed the very large cost to the community of screening programmes and the relatively low additional benefits gained by incorporation of mammography into the screening process.

AU : COOPER, M.H.
TI : Rationing Health Care
PU : John Wiley and Sons
(N.York), 1975
RE : Economics in this book, is concerned with the need for rationing and the methods by which it takes places. Although the prime focus is on the British National Health Service, most, if not all, of the problems discussed are common to all health care delivery systems in the developed world. The book deals with supply and demand (need); the need to ration and rationing in practice. There is another chapter on planning and management and some considerations about the future. The conclusion is that despite all its problems and difficulties the British NHS has a positive balance.

AU : COOPER, M.H. and CULYER, A.J. (eds.)
TI : Health Economics
PU : Penguin Book Ltd.
(Middlesex), 1973
RE : This selection of articles shows how economists have approached health service problems and have begun to carve out for themselves certain areas which at least partly, if not largely, demand the use of econometric tools. The selection reflects the current trend toward empiricism, applying theory to solve real world problems rather than engaging in abstract speculation. It contains some of the major theoretical contributions in the field and a variety of different applications of economic analysis. It tries to answer questions that demand economics analysis like: How much should a country spend on health services? How should it be financed? Is health expenditure an investment or is it consumption? What is the output of health care institutions?, etc. Part one refers to economic efficiency; Part two refers to ways of improving decisions; Part three is dedicated to the hospitals, and part four to the value of human lives.

AU : CORREIA DE CAMPOS, A. and NOGUEIRA DA ROCHA, J.
TI : Les effects d'echelle dans les services hospitaliers
PU : Techniques Hospitaliers (FRENCH)
409: 88-95, 1979
RE : The article is a bibliographic review on the matter of economies of scale in the general hospital industry in the United States and France.

The authors suggest that studies on the subject should give more relevance to psycho-sociological variables such as: "human dimension" of the institucion, travelling time, and other social costs of the hospital, even if there is not much agreement as far as the existance of the scale effect on hospital they concluded that the optimum general hospital size must be between 300 and 600 beds. These figures do not apply to countries which import technology. These countries should avoid big hospital units and shared ancillary services are recommended.

AU : COX, K. R.
TI : Who Owns Problem of Health Care Costs?
PU : Med. J. Australia
2(22): 727-730
RE : It is unacceptable that less than 0,01% of the health care bill spent on research and development into the health care process, and only such a heavily subsidized industry could have survived this long. The Federal Government's responsability for funding such studies is obvious. Perhaps the tasks are daunting; but doctos must now appreciate that if they are not tackled by those

immersed in the problems, then isolated decisions will be made (separately within government, insurance, industry, professional associations and political parties) based on unclarified values and negligible data, and without consideration of the impact on the other pieces of the system. Who owns the problem of health care costs? We all do, whether we like it or not. The issue is whether we can create satisfactory procedures so that all the concerned parties may participate in the decisions on how to handle those problems, or whether separate decisions will be made by those parties with power to make them.

AU : CULYER, A.J.; WISEMAN, J. and WALKER, A.
TI : An Annotade Bibliography of Health Economics
PU : St. Martin's Press
(N.York), 1977
RE : The bibliography has 1491 entries on the subject of health economics covering books and articles published in English. Entries are classified by topics in sections, and within sections are listed in date order. The sections are: general works; demand need for health; supply of health services; finance and organization of health services; planning whole systems; utilizacion studies; bibliographies. Unpublished documents, dissertations and discussion papers have been excluded from the bibliography.

The entries cover from 1920 onwards. Each section has an introduction where the authors give their reasons for the entries and draw the limits within which they are included.

AU : CULYER, A.J. and WRIGHT, K.G. (eds)
TI : Economic Aspects of Health Services
PU : Martin Robertson
(London), 1978
RE : The contributors to this collection are members of the Institute of Social and Economic Research at York, England, The collection deals with economic aspects of medical care in Great Britain mainly the ones related to the reorganization of the British National Health Service.

Two main approaches were used by the contributors: the first exploring both the theoretical and empirical consequences of choices and actions; and the second exploring the logical nature of the choices that have been made. The papers were divided in four groups: quality of care; evaluation of services; financing; and manpower. Special attention is drawn upon Carns and Snell paper "Prices and Demand for Care." They suggest a possible rationale for absence of charges in the National Health Service, namely, that an individuals health is of concern to other people

as well as himself. They accept that universal zero-pricing is not necessarily the only or the best way of a non-charges policy. The policy depends on the extent to which charges deter consumption who is detered and the value that society places on ensuing that these people do receive treatment.

AU : CVJETANOVIC, B. and GRAB, B.
TI : Rough determination of the cost benefit balance point of sanitation programmes
PU : Bull. Wld. Hlth. Org.
54(2): 207-215, 1976
RE : Resources for sanitation programmes in developing count countries are limited, and therefore, must be used judiciously to obtain the best possible effect. Cost benefit analysis is a tool that permits the better utilization of available resources. A simple method for rought determination of the cost benefit balance point has been devised which requires little computation. To reduce the computations to a minimum, nomograms have been constructed which require little or no mathematical skill for their use. While the method falls short of perfection, its simplicity makes it useful for a rough evaluation of the benefits from sanitation programmes aimed at disease control in countries whose resources are not available for more sophisticated analysis.

AU : DAKERKOW, S.G.
TI : Location and Cost of Ambulances Serving a Rural Area
PU : Health Services Research
2(3): 299-311
RE : A location model is used to determine the most efficient (i.e. least cost) number and location of ambulance facilities in a rural area. The model incorporates response time and service time and service time standards into the analysis and indicates the trade-off between costs and various time standards. The financial feasibility of individual facility locations is then analysed. The results indicate why many rural areas depend on volunteer or part-time purveyors of emergency medical transportation.

AU : DOHERTY, N. and alli
TI : Real Costs of Dental Care in Private and Public Practices
PU : Medical Care
18(1): 96-109, 1980
RE : This paper was based on the Chatanooga Children's Incremental Dental Program from 1960 through 1975. This project was a publicly funded program providing dental care to indigent children by private practice and public fixed and mobile clinics. Previous studies of the project had shown that the cost of providing dental care in public was lower than in private and that this difference

was not attributable either to the social characteristics of the children nor to the type of care provided. This article analyses potential economic causes of the cost differences arising from the input-output relationship in each mode. The results were that with services and productivity held constant the differences between private and public costs increased. The implications are that resources in the private practices were earning higher returns than those in the public practices can offer viable economic alternatives to private practives in the provision of dental care.

AU : DOHERTY, N. and HICKS, B.
TI : Cost-Effectiveness Analysis and Alternative Health Care Programs for the Elderly
PU : Health Services Research
12(2): 190-203
RE : A generalized cost-effectiveness technique for comparing alternative health care programs is described, and an example is given of its use in evaluating programs for care of the elderly. The analytical method requires setting criteria and standards for each outcome and cost dimension and assessing the relationship between these standards and patient status. The relative effectiveness and costs of each setting are examined in a simple tabular display that allows comparisons of each program's attainments on each criterion so that alternatives may be ranked according to the extent to which they meet standards and incur costs.

AU : DOUGLAS, R.M.
TI : Prepaid Health Plans and Control of Health Care Costs
PU : Med. J. Australia
2(9): 478-480, 1979
RE : It is the author's point of view that prepaid health plans offer an alternative strategy that warrants trial in Australia as a private sector initiative to constrain health costs. They are not considered as a panacea and quite as susceptible to abuse as any other system. In a mixed economy they offer a serious alternative to what otherwise appears to be inevitable future government and political control of the entire health care system. So the prepaid health plans are seen as an alternative direction diversifying the private sector with the development of organizational methods which could produce real market changes in the system of health care delivery and therefore offer the possibility of constraining costs from within.

AU : ENTERLINE, P.E. and alli
TI : The Distribution of Medical Services Before and After 'Free' Medical Care - The Quebec Experience
PU : New England Journal of Medicine
289(22): 1174-1178, 1973
RE : Households interviews were conducted before and after the introduction, in Quebec, of a government-sponsored compulsory insurance program covering physician services. Physician visits per person per year remained constant from persons in higher to lower income groups. The percentage of selected medical symptoms for which a doctor was consulted increased from 62% to 73% with all the increase in lower income groups. Average waiting lists for a doctor's appointment increased from 6 to 11 days with the largest increases in the higher income groups. Waiting time in the doctor's office also increased. Eight percent of the population considered the quality of medical care improved, while 30% thought it worse. Ninety percent of those who saw a doctor were satisfied with the services received - the same proportion as before Medicare.

AU : FELDSTEIN, M.S. et alli
TI : Resource Allocation Model for Public Health Planning - A Case Study of Tuberculosis Control
PU : Bulletin of the WHO
4(SUPPL.), 1973
RE : The concepts underlying cost/benefit analysis in the health sector are highly complex. This study is an attempt to surmount some of the methodological involved, using a case study of tuberculosis control for purposes of illustration. It demostrates the important progress made towards the successful theoretical application of linear programming techniques for the determination of publich health strategies, with quantifiable social and epidemiological obejtives. The model brought up by the authors considers demographic, epidemiological, technical and economical parameters. It considers that the outputs of a health plan are the health and economic benefits accruing from the health activities. Seven types of health care benefit are considered: reduction of temporary disability during the acute phase of tuberculosis; reduction of permanent impairment; reduction of the risk of dying in four different age groups; and the resulting effects on income. Solutions for the optimum allocation of one year's resources for tuberculosis control have proved relatively insensitive to moderate changes in assumptions.

The results suggest that the traditional allocation of resources in tuberculosis control may be appropriate.

AU : GERSON, L.W. and HUGHES, P.
TI : A Comparative Study of the Economics of Home Care
PU : Intl. J. Health Services
6(4): 543-555, 1976
RE : The costs of home care and treatment solely in hospital for patients in a variety of shor-term diagnostic categories are compared. Five hundred and eighty-three patients included in an experimental home care program were randomly assigned either to a group which received home care as part of their treatment, or to a control group that remained in the hospital the traditional length of time. It is argued that the only costs relevant in an economic comparison of the two modes of treatment are those attributable to the direct care of the patient. A techniques is presented where by changes in the daily amount of nursing services show that, when similar diagnoses are compared for an episode of illness, there is vasically no difference in cost between home care and treatment in hospital.

AU : GREAT BRITAIN DEPT. OF HEALTH AND SOCIAL SECURITY
TI : Sharing Resources for Health in England - A Report of the Resource Allocation Working Party
PU : HMSO (LONDON), 1976
RE : This report presents the conclusions of a Working Party set up to review the arrangements for distributing capital and revenue of the British National Health Service among the different regions, areas, and districts. The Working Party was to establish method of securing a pattern of distribution responsive objectivelly, equitably and efficiently to relative need and to make recommendations. The reports is based upon a year's study of the many and complex issues associated with resource allocation in a way that is responsive to the relative needs of the populations. The recommendations are in terms of which indicators should be used for allocation purposes and how they can be combined to form a single index of the needs of the population.

AU : GRIFFITH, D.H.S. and alli
TI : Contribution of Health to Development
PU : Intl. J. Health Services
1(3): 253-270, 1971
RE : Health planners in developing countries face - amongst others - the following problems: defining the role of health in economic growth; obtaining recognition of the effects of illl/health upon economic development; and quantifying health benefits. Three examples of these problems stated in simple economic and health terms are developed in this paper: production function, health expenditures and investment in Ceylon from 1947-1948 to 1958; effects of ill/health benefits and cost-benefit ratio achieved by malaria prophylaxis in small mining concern in Thailand in 1969 1970. It is suggested that further studies in the fields exemplified will aid health planners in finding ways and means for better justification of programs.

AU : GROSSMAN, Michael
TI : On the Concept of Health Capital and the Demand for Health
PU : Journal of Political Economy
80(2): 223-255, 1972
RE : The aim of this study is to construct a model of the demand for the commodity "good health". The central proposition of the model is that health can be viewed as a durable capital stock that produces an output of healthy time. It is assumed that individuals inherit an initial stock of health that depreciates with age and can be increased by investment. In this framework, the "shadow price" of health depends on many other variables besides the price of medical care. It is shown that the shadow price rises with age if the rate of depreciation on the stock of health rises over the life cycle and falls with education if more efficient producers of health. Of particular importance is the conclusion that, under certain conditions, an increase in the shadow price may simultaneously reduce the quantity of health demanded and increase the quantity of medical care demanded.

AU : KEHRER, B.H. and KEHRER, K.C.
TI : Toward a New Health Economics: Health Economics and Welfare Policy
PU : Asian Med Journal
21(4): 29-47, 1978
RE : In Section 1 of their paper, the authors present illustrations in support of the notion of dynamic interrelationships is that sometimes achievement of health and achievement of other aspects of social welfare may be incompatible with one another. In Section 2 they argue that some activities may promote health as well as other aspects of social welfare. However, still other activities may be beneficial to one welfare objective while harming another. Recognition of the potential tension, or competition, among various social welfare objectives suggests that an integrated approach is required to address the issue of how to improve general social welfare. The authors call for such an integrated approach in Section 3. Finally, in Section 4, they suggest some ways in which medical care practitioners, health policy makers, and health economists and the other social scientists can contribute to the development of unified social welfare policy.

AU : KING, K.W.
TI : Preventive and Therapeutic Benefits in Relation to Cost: Performance over 10 years of Mothercraft Centers in Haiti
PU : Am. J. Clin. Nutrit.
31(4): 679-690, 1978
RE : Evaluation of the effectiveness of Mothercraft Centers operating in Haiti over the period 1964 to 1975 as a public health measure in private and public health services is reporter. For the most

part, the data are derived from centers operating routinely in the health services rather than from pilot demonstrations. Then impact both in therapy and prevention of severe malnutrition in preschool children is considered, and it is found that numerically the greater benefit is in prevention. As a total anual cost of US$4034 a typical center accomplishes successful therapy and prevents relapse in 105 children. In addition, it provides protection against severe malnutrition to their 306 younger siblings. It is thus estimated that, considering only these 411 children demonstrably benefited from a year's operation the cost of providing essentially life time protection from severe malnutrition is approximately US$10 per child.

AU : IKLARMAN, H.E. (ed.)
TI : Empirical Studies in Health Economics - Proceedings of the Second Conference on the Economics of Health
PU : The Johns Hopkins Press
Baltimore, 1970
RE : The papers presented to this conference were classified into five groups: population, health, and program planning; demand analysis; structure of the health industry; productivity and cost; factors of production. They cover research completed between 1967 and 1968, and reflect a widespread reliance on econometrics. By design, the papers are empirically oriented. Some of the suggestive and interesting findings and hypothesis brought up to the conference are: changes in the death rate did lead at one time to adjustments in the birth rate (the New England diphteria epidemic of 1734-1740); age and poverty interact in such a way that the poor tend to age at a faster rate; when physicians combine in larger units and are paid fee for service they produce more ancillary services per physician, but not more physician visits; economies of scale obtain in small hospitals, but not in larger ones; income is to be viewed as four separate variables (ability to pay; index of life style; index of socioeconomic and cultural status; value of time.

AU : KNOX, E.G.
TI : Principles of Allocation of Health Care Resources
PU : Journal of Epidemiology and Community Health
32(1): 3-9, 1978
RE : The methods and principles of allocating centrally provided health care resources to regions and areas are reviewed using the report of the Resource Allocation Working Party (RAWP) and a consultative document as a basis. A range of practical problems arising from these papers is described and traced to the terms of reference. It is concluded that the RAWP misinterpreted aspects of social and administrative reality, and it failed to recognize clearly that the several principles on which it had to work conflicted with

each other and demanded decisions of priority. The consequential errors led to: 1. an injudicious imposition of 'objectivity' to all levels of allocation; 2. an insistence that the same method should be used at each administrative level; 3. the exclusion of G.P.'s services from their consideration; 4. a failure to delineate those decisions which are in fact political decisions.

AU : LALL, S. and BIBILE, S.
TI : The Political Economy of Controlling Transnationals: The Pharmaceutical Industry in Sri Lanka, 1972-1976
PU : Int. J. Health Serv.
8(2): 299-328, 1978
RE : This paper describes the experience of Sri Lanka in performing the structure of production, importation and distribution of pharmaceuticals in the period 1972-1976. It highlights the actions and reactions of transnational pharmaceutical corporations to these reforms and traces the achievements and problems of the State Pharmaceutical Corporation which was set up to implement the reforms. The roles of political leadership in regulating the power of drug transnationals, and of the medical professional in resisting reform, seem to be of crucial significance. Developing countries wishing to lower the present high cost of drug delivery of quality control, bioequivalence, medical acceptance and consumer reeducation are involved.

AU : LAVE, J.R. and LAVE, L.B.
TI : Cost-Benefit Concepts in Health: Examinations of Some Prevention Efforts
PU : Preventive Medicine
7(3): 414-423, 1978
RE : As expenditures on health continue to increase it becomes important to determine the effectiveness of health care programs. This paper outlines an approach to evaluating health care programs with particular emphasis on preventive measure programs. It is argued that the most difficult step in the process is assessing the differential impact a measure has on health status. Some specific programs including environmental control, the search for healthful lifestyles, and screening programs are briefly considered. The cost-benefit or cost effectiveness analysis cannot be used as the sole criterion for decision-making in health programs since these tools are difficult to apply in practice and issues such as income distribution effects are not usually encompassed.

AU : MAYNARD, A.
TI : Avariace, Inefficiency, and Inequality: an International Health Care Tale
PU : Int. J. Hlth Serv.
7(2): 179-190, 1977
RE : The paper is concerned with impact of a medical profession physicians, on the delivery of health care. The basic economic motivation of self-interest and avarice has led this profession to produce health care outcomes which are inequitable and inefficient. In the first section of the paper the regional geographical distribution of physicians in four disparate health systems - England, Ireland, France and West-Germany - is analysed and found to be highly unequal. The next section is concerned with the efficacy of therapies and the cost-effectiveness of health care delivery systems in a variety of countries. The final section discusses how health care can be more equitably and more efficiently delivered. It is argued that both market and bureaucracies are likely to be inadequate unless carefully monitores. In particular, there is a great need to investigate the cost-effectiveness of therapies and then persuade physicians, via pecuniary and nonpecuniary incentives to behave in a manner which leads to more equitable and efficient health care outcomes.

AU : MAYNARD, A.
TI : Pricing, Demand, and the Supply of Health Care
PU : Intl. J. Health Services
9(1): 121-133, 1979
RE : This paper is divided into three sections. In the first, the conventional neoclassical paradigma is augmented by consideration of the agency relationship in which the physician is considered not only as the agent who controls the supply of health care, but also as the decision maker who articulates the demand. The next section is concerned with the effects of pricing on consumer demand and draws on the available empirical date to present estimates of price elasticity and other characteristics of the choice process. If the policy objectives are containment and greater efficiency in resource utilization the price mechanism should be used to affect the bahavior of the primary demander and supplier: the physician. In the final section the implications of this analysis are discussed.

AU : MINERS, L.A. et alli
TI : Demand for Medical Care in a Rural Setting: Racial Comparisons
PU : Health Services Research
3(3): 261-275, 1978
RE : Household data from a Southern rural community in the United States are used to examine racial differences in the utilization of medical care services, and both monetary and nonmonetary

determinants of demand are considered. Regression analysis results indicate that office waiting time (for black households) and travel time to the provider (for both black and white households) have a greater impact on demand than price. Racial differences exist in the effects of health insurance coverage and household income on household medical visit expenditures, and both need and household size are found to be consequential determinants of demand.

AU : MOONEY, G.H. and alli
TI : Choices for Health Care
PU : The MacMillan Press Ltd.
London, 1980
RE : The basic tenet of this book is that some rational, explicit health care planning is a good thing. It has, basically, four parts: in the first it explains certain approaches and techiques of economics which can assist in making choices for health; in the second part various case studies exemplify the use of these approaches and techniques; then, British National Health Service Organization is studied as well as some of the reasons why certain organizational changes could assist planning and give health economics more fertile soil in which to operate; finally, the last part deals with some of the choices that must be faced. It emphasizes the need for more use of both the philosophy and techniques of economics in approaching the many problems currently faced by the health service.

AU : MOONEY, G.H.
TI : Economic Approaches to Alternative Patterns of Health Care
PU : Epidemiology and Community Health
33(1): 48-58, 1979
RE : This paper considers the choice between doing and not doing something; it interprets the question of choice as simply whether a policy is worth pursuing or not. Three techniques are reviewed: cost-effectiveness analysis of alternatives; cost-benefit analysis; and marginal analysis of alternative patterns of health care. Marginal analysis provides a useful evaluative framework for examining questions of alternative patterns of care. It avoids the question of measuring total need. It concentrates initially on the fact that limited resources are available both to the health service as a whole and to the individual programs of health care. It does not solve the question of benefit measurement, but by providing cost data on care, and offering descriptions of the effects of relatively small changes in the supply of services it brings out the questions of trade-off which are essential in any planning of alternative patterns of care. The use of this approach leaves a great deal to the judgments of the decision-makers since there is no objective, scientific way of measuring benefit.

AU : MUSHKIN, S.J. et all
TI : Cost of Disease and Illness in the United States in the Year 2000
PU : Public Health Reports, Special Suppl.
93(5): 495-588, 1978
RE : The report is a product of a larger study of the costs of illness over the twentieth century. The purpose of the larger study is to examine the changes over the century in total cost of illness and in the composition of that total in terms of disease that afflict the population. The purpose of the report is to project the cost of illnesss to the year 2000, a reasonable and identifiable benchmark for long range planning. It is attempted to estimate economic growth and resources for health care in the United States 25 years hence and to compare them with estimates of the cost of disease in 1900, 1930, 1963 and 1975. History and projections were used in assessing the past payoff to biomedical research and to prospects for such payoff in the future.

AU : NAVARRO, V.
TI : The Underdevelopment of Health or the Health of Underdevelopment: An Analysis of the Distribution of Human Health Resources in Latin America
PU : Int. J. Hlth. Serv.
4(1): 5-27, 1974
RE : In this presentation it is postulated that the present maldistribution of human health resources in Latin America is brought about by the same determinants that cause the underdevelopment of most of the continent. It is indicated that contrary to the theories of development prevalent in the corridors of power and academic circles of development countries (as well as in the leading circles of developing countries and international agencies) underdevelopment, and the uneven distribution of resources inside and outside the health sector, is not due to the absence of cultural and technologic diffusion from developed to developing countries, the scarcity of capital in poor nations, or the presence of dual economies in underdeveloped countries, i.e. the urban and entrepreneurial economy and the rural primitive economy. To the contrary, underdevelopment and the concomitant maldistribution of resources is caused precisely because of the existance of the assumed "conditions" of development i.e. the cultural, technologic and economic dependency of developing countries, and economic dependency of developing countries, and economic and political control of resources by specific interests and social groups, the national lumpen burgeoisie and its foreign counterparts. Moreover, these two factors bring about the so-called dual economies in those countries. The uneven distribution, by type of health care, by region, by social class, and by subsectors (private, public and social security) of human health resources, described in this articles, is shown to be explained by the same determinants that cause underdevelopment in Latin America.

AU : PATRICK, D.L.
TI : Constructing Social Metrics for Health Status Indexes
PU : Intl. J. Health Services
6(3): 443-453, 1976
RE : Health status indexes used to make collective decisions satisfying the principles of equality and social minimum must incorporate a social metric for health. Any index or indicator applied to populations for determining health status or to health programs for evaluating outcomes must confront the question of: who prefers which states of health under which circunstances? Utility models, psychometric scaling, and empirical social decision valuation have been used to measure preferences for states of health. Efforts should be directed toward constructing social metrics for health that are prospective, context independent, relevant, community-wide, ratio scaled, sensitive, empirically validated, and applicable to program evaluation. These efforts represent the application of normative social theory to research an important advance in uncovering the mysteries of social action and its consequences.

AU : PAULY, M.V.
TI : The Economics of Moral Hazard: Comment and Further Comment.
PU : The American Economic Review
58(1): 531-539, 1968
RE : This paper comments on Kenneth Arrow's article "Uncertainty and the Welfare Economics of Medical Care" (also in this bibliography). It shows that even if all individuals are risk-averters, insurance against some types of uncertain events may be nonoptimal. Hence, the fact that certain kinds of insurance have failed to emerge in the private market may be no indication of nonoptimality and compulsory government insurance against same uncertain events may lead to inefficiency. It also intends to show that the problem of "moral hazard" in insurance has little to do with morality. But can be analyzed with orthodox economic tools. It concludes that even if all individuals are risk-avertes some uncertain medical expenses will not and should not be insured in an optimal situacion. No single insurance policy is "best or most efficient" for a whole population of diverse tastes. Which expenses are insurable is not an objective fact, but depends on the tastes, and behavior of the persons involved. Arrow's further comments on Pauly's paper concludes that the price system is intrinsically limited in scope by the inability to make factual distinctions needed for optimal pricing under uncertainty. Nonmarket controls whether internalized is moreal principles or externally imposed, are to some extent essential for efficiency.

AU : REINHARDT, U.E.
TI : Health Costs and Expenditures in the Federal Republic of Germany
PU : Abstr. Hospital Management Studies
14(3), 1978
RE : An overview is presented of the health system in the West Germany, with emphasis on similarities and contrasts between health care in that country and the United States. The discussion is presented in 3 parts: a sketch of the health care delivery system; a description of the health insurance program; and a review of the costs and expenditure records of the health system. The West Germany system appears to be amply endowed with medical manpower and inpatient facilities, although it employs fewer allied health personnel than the U.S. The W. German insurance system is said to be remarkable in terms of the proportion of the population it covers and the generosity of the benefits it provides. Although W. Germans use approximately 50% more hospital days than the Americans and consume substantially more ambulatory physician visits, the proportion of the gross national product devoted to health care appears to be roughly the same in both countries. Differences in the resource intensity of a "hospital day" and a "physician visit" appear to account for this parados. Economic incentives in the W. German system that make the system more expenditure prone than it needs to be on the basis of the medical need are pointed out. A list of references and supporting tabular data are included.

AU : REYES ALARCON, D. and alli
TI : Surgery Wound Infection Related to Contamination Probability: Degrees and Costs
PU : Rev. Cubana Cir.
15(5): 529-537, 1976
(SPANISH) with summanry in English and French)
RE : Infections in 500 surgical patients at Dr. Luiz Dias Soto central military hospital are studied according to contamination probability, and it is corroborated that these increased gradually as contamination risks were higher; different infection levels determined in 75 operated patients are exposed. The prolongation of the staying after surgery is pointed out and it is compared to that of patients of the same group who did not present infection. The approximate cost of this complication is given.

AU : RIDINGS, K.W. and ISDALE, I.C.
TI : The Day Hospital: Efficacy and Cost Effectiveness
PU : New Zealand Med Journal
87(606): 129-133, 1978
RE : Analysis of the operation of the Roberts Day Hospital has demonstrated that this is economically a sound alternative to other methods of care of the disabled with not only good

maintenance of independence of the patients going through the centre but also an increased social involvement in the community. Lessons with regard to the operation of a day hospital team are discussed with particular attention being drawn to the controversial area of team leadership.

AU : ROSSER, R.M. and WATTS, V.C.
TI : The Measurement of Hospital Output
PU : Intl. J. Epidemiology
1(4): 361-368, 1972
RE : This paper describes a case study in which one aspects of the output of a hospital in a London teaching group was measured for one month. The study was related to a theoretical model, which is outlined, and which could be extended as the basis of a health index. For the evaluation of in-patient care, the morbidity state of each patient was assessed on entry to the hospital and at his first out-patient visit after discharge. The difference between these two, summed over all the patients in a particular period, is called the sanative out-put of the hospital. The sanative output and sanative potencial are not very meaningful in isolation. It is the possibility of seeing how they change over time and comparing with other hospitals which make them potentially valuable.

AU : SCHFFLER, R.M. and PARINGER, L.
TI : A Review of the Economic Evidence on Prevention
PU : Medical Care
18(5): 473-484, 1980
RE : This study examines the economic evidence on preventive health care. A discussion of benefit-cost analysis, their applications to preventive strategies, and the problem inherent in implementing these strategies precedes a review of the empirical evidence. Prevention strategies are grouped into 4 categories: lifestyle changes; public health measures and screening programs. Lifestyle changes include altering behavior patterns as they relate to alcohol and drug abuse, smoking and automobile safety regulations. Public health measure are immunizations, water fluoridation and food inspection. Screening includes detection of PKU, spina bifida cystica and hypertension. The conclusions are that many of the preventive health measures examined represent an efficient use of resources. Because only quantifiable changes in health status or costs are included in the benefit-cost, and cost-effectiveness analysis, the actual value of prevention strategies may be understated since reductions in pain and suffering are usually omitted.

AU : SCHULTZE, C.L.
TI : The Public Use of Private Interest
PU : The Brooking Institution
Washington, 1977
RE : This book explains why public regulation of the private sector is inherently difficult and how government intervention can be improved. The main thesis is that regulatory laws and agencies have attempted directly to force people and businesses to do certain things rather than to encourage them through indirect methods to achieve the same objectives. The author suggests, as an alternative the use of market-like incentives - such as tax and transfer arrangements - that would convert public goals into private interests. Such incentives would remove some of the decisions from a central bureaucracy and rely on decentralized private markets to achieve the desired results.

AU : SIMON, J.M. et allis
TI : Health Costs and the Hospital: an Attempt at Comparative Evaluation
PU : Rev. Hosp. Fr. (FRENCH)
42/307(II): 7.46, 1978
RE : This is a report on a working group session of a number of French hospital experts. First the report discusses, in detail, the health care costs in rich countries, especially the fact that health care costs rise quicker than the national income, and that hospital cost by itself form an increasingly large part of health care cost. Then the situation in France is looked at, and the role of its government in the health care delivery system is reviewed. Finally some suggestions for the future of the health care delivery system are presented.

AU : STEVENS, C.M.
TI : Health and Economic Development: Longer Run View
PU : Soc. Sci. Med.
11(17-18): 809-817, 1977
RE : Increasing recognition has been given to the fact that in developing countries improved health may make an important contribution to economic development. In analysing this relationship it is important to distinguish between the immmediate, stable situation with organizational modes and technology held constant and longer term issues in which organizational and technical changes induced by improved health standards must be taken into account. Development policy can be more effectively planned if both levels of analysis are considered.

AU : TAUSSIG, M.
TI : Nutrition, Development, and Foregin Aid: A Case Study of US-Directed Health Care in a Colombian Plantation Zone
PU : Int. J. Health Serv.
8(1): 101-121, 1978
RE : Based on a case study of some aspects of Rockfeller and USAID intervention in the Cauca Valley, Colombia, this article is aimed at drawing attention to the political characteristics and inadequacies of US-sponsored health care planning and research in the Third World, particularly as regards nutrition in rural regions of intensive economic development. By contrasting an historical analysis of the politicoeconomic development of agriculture and nutrition in the Southern Cauca Valley with the assumptions guiding US intervention in the health field there, a more complete picture of the causes of malnutrition is obtained, among which should be coutend the internavention of the US itself. Inter alia, other approaches to the malnutrition problem are suggested.

AU : WAITZKIN, H. and MODELL, H.
TI : Medicine, Socialism and Totalitarianism: Lessons from Chile
PU : New England Journal of Medicine
291(4): 171-177, 1974
RE : Under Salvador Allende (himself a physician), Chile's socialist government achieved health reforms that emphasized nutrition, maternal and infant care, environmental health, increased services for the poor, and improved distribution of care. The government also encouraged worker and consumer control over health policy in neighborhood health centers and hospitals. The Chilean Medical profession opposed democratization in the health system, participated in periodic strikes and work stoppages and criticized the government for shortage of medical supply and consumer goods that resulted from an international boycott of new loans and credits to Chile. The present totalitarian regime has dismantled the health system; political repression has severely affected physicians and other health workers. The implications for health care and social changes in the Third World emerge from the Chilean experience: that health care is inextricably linked to a nation's political and economic systems; that conflict within the system minor the inherent conflicts of stratified society; and that incremental reforms in the health system have little meaning without basic changes in the social order.

AU : WILLIAMS, A.
TI : The Cost Benefit Approach
PU : Brit. Med. Bull
30(3): 252-256, 1974

RE : There are not, and probably never will be, enough resources to satisfy the community's desires for things that improve the quality of life. This poses the necessity for choice, and hence, the consideration of priorities. In the medical field two distinct kinds of choice arise: one at the clinical level and the other in the planning process. At the point of contact with a particular patient within the confines of existing knowledge and facilities. In the planning process, on the other hand, the concern is with large groups of potential patients at some future date, and with decisions that will, to some extent, determine what the confines of existing knowledge and facilities will be at that date.

AU : ZSCHOCK, D.K.
TI : Economic Aspects of Health Needs in Colombia
PU : The Milbank Memorial Fund Quaterly
46(2): 21-231, 1968

RE : This paper analyses the applicability of three principles in general economic terms and, specifically, as they relate to the identificacion of health needs in Colombia. These principles are: 1. Health Services in a country should be examined at two levels: the priority of the sector within the overall context of social and economic development; and priorities within the health sector; 2. Besides, national health goals should be part of a comprehensive set of natural goals, and health programs should have maximum interaction with other economic and social development efforts; 3. Health improvements are a means of accelerating social and economic development as well as a goal of development. The paper outlines the relationship between social and economic problems and health status and then suggests how to quantity health needs and shortages in the provision of public health services.

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SELECTED BIBLIOGRAPHY: HEALTH ECONOMICS

Introduction

I have assumed in making this selection that the purpose of the collection is to provide managers and planners of health services with a background in health economics which will:

a) enable them to appreciate the range, scope and limitations of economics;
b) to familiarize them with concepts and techniques which might be useful in analysing problems in health services;
c) provide examples of applications of concepts and techniques to the problem of health planning.

It is difficult to choose twenty-five articles which go some way towards meeting these objectives. Many excellent articles have been rejected. Those which have been chosen have been selected because they are:

i) classics in the fields, involving some conceptual development which provided the impetus for further progress in the subject; or
ii) survey large, unwieldy areas of the subject matter; or
iii) explain clearly some concept or technique; or
iv) provide good examples of application of the theory or technique

Health Economics/Teaching

An overall review of health economics is provided by Alan Williams in his research portfolio which was set out to encourage young economists to work in health economics.

Economics of the health care industry/finance

The scene is set for much of the subsequent analysis of health care systems and the finance of health care by the classic article of Arrow. This article provides an admirable introduction for anyone new to the conceptual

framework of health economics. It also provides a structure for much of the subsequent debate about financing of health care systems. Recently the shift of emphasis in many western countries towards market mechanisms and the minimization of the government role in the economy has given the health care debate an added momentum. Since the early debates more is known about the behavior of providers and users of health care systems and this behavioral information is incorporated in recent contributions in this area. The article by Maynard is fairly representative of the current/debate (Rashi Fein's Heath Clark lectures, to be published by Milbank shortly, should be included in this section).

Evaluation - Cost Benefit Analysis/Cost Effectiveness Studies

Because health care has certain characteristics it can only be evaluated imperfectly by normal market mechanisms. This has led to the development of a large body of literature relating to the evaluation of health care.

A scholarly introduction to the evaluative literature is provided by Fein in his article - "On Measuring the Economic Benefits of Health Programmes." This article provides a historical approach to evaluation and indicates how studies have been used to develop health policy over the past four centuries. The evaluative approach which takes up the theme that health is an investment in human cpaital is described in Muskin's article. An example of a similar approach is shown in Hemminki's article which estimates the costs of diseases in Finland. Stevens takes up this aspect in relation to less developed countries and offers a challenging portfolio of research which might be undertaken on productivity of health care programmes.

Paglin is uneasy with this investment centred approach and his paper attempts to construct a "model" in which the "consumption" aspects of health care are given the approapriate weight. Williams also offers a framework in which the consumers' values can be incorporated into an evaluation of health care programmes. He stresses the usefulness of health status indicators in

this context. Mooney enters this debate by tackling the question of whose values are or should be incorporated into health care policy and he describes some of the methods which might be used to measure values when embarking upon an evaluative study. Culyer stresses the need for an outcome indicator for health planning and policy and he, like Williams, is interested in health status indicators. This article provides a very useful, concise discussion of the characteristics of an index and the various methods which might be used to form an index. Chen, Bush and Patrick have done a considerable amount of work in this fields and the article chosen discusses the development of an index which might be used to assess the health of a community. Much of the evaluative literature which has emerged relating to health care has been concerned not so much with the value of health care per se but with the relative effectiveness of different forms of care. An example of this approach is provided in the article by Williams et al which examines the effectiveness of vaccination against pneumonia and also shows the counter-productive effect of some financial arrangements. The article by Walker and Gish, estimating the effectiveness of a rural mobile health service in Botswana, is another interesting example of a cost-effectiveness study.

Health Care - Cost/Efficiency

Discussions of cost effectiveness studies leads us on to deeper consideration of the production side of health care. Hurst's paper includes a description of the economic concepts underlying the production process and these include concepts of marginal relationships and economic efficiency. Estimations which have been undertaken are reviewed and a simple example of a production function of a heating plant is described. Berry's article provides a further example of work to establish characteristics relating to costs of hospital services.

Distribution of Health Care

Distributional issues have been the focus of much concern in the delivery of health care and many of the arguments relating to the finance of care concentrates upon this issue. Le Grand's article is one of the few which

concerns itself with the social class gradient in the distribution of resources in a publicly provided health care service. The recent survey by Frericko et al in Bolivia is also concerned with distributional issues relating to use of health services by a rural population in a very different health care system for the British N.H.S.

Many of the technological advances which have been made in health care have distributional effects in so far as they concentrate upon relatively few conditions and are ususally located in already well-endowed urban areas. Little is known about the proliferation of these new technologies but David Piachaud's enterprising study includes some interesting results relating to the adoption of advanced technology by very poor countries.

Muller is concerned with sex biases in the distribution and patter of delivery of health care. She points out the distortions which exists in health systems as a result of the assumptions made about women's role in society.

Health Care Planning

Planning of health systems is closely related to attitudes towards financing of health care and the interpretation of the behavioral relationships of consumers and providers of health care. This is clearly indicated by the approach taken by Klarman and Mc Nerney in their papers concerned with developments in the U.S.A. system.

Those who accept some form of national health system are not likely to be concerned with issues of measurement, evaluation and production which are discussed above. Pole surveys the rather slow progress in the British N.H.S. from an administered to a more planned service with the introduction of better financial information and the programmed budget system.

On the manpower planning side more has been done though not always to much effect. Maynard and Walker describe British attempts to plan medical manpower over the years and offer a framework for future planners. This includes a discussion of the use of substitute labour, the likely participation of female doctors and the effects of migration.

Industry and Health

Our interest has been focused on the effect of an efficient use of health service resources and has neglected the impact of the effect of other sectors on health or the way in which we might control the deleterious effect on health. Marin's paper goes some way towards removinq this deficiency.

Conclusion

In each of the areas of health economics discussed, with the exception of teaching, there are a plethora of articles and books which can be used to deepen and extend the range of those new to the subject. Many articles are referred to in the bbliographical material associated with the articles choosen, in addition a useful reference work is that of Culyer A.J., Wiseman J. and Walker A. An Annotated Bibliography of Health Economics, Martin Robinson 1977.

J.A. Roberts
December 1980

HEALTH ECONOMICS/TEACHING

AU : WILLIAMS, ALAN
TI : "What can Economists do to help Health Service Planning?"
PU : Studies in Modern Economic Analysis. 1977.
pp. 301-335. in Artis, N.J. and Norbay, A.K. et al.
RE : There are few good articles relating to the teaching of health economics. The article by Alan Williams was thought worthy of inclusion though it possibly needs some editing as it is designed for economists. If it was included in the collection it would be probably more suitable as a postcript than as an introduction. The article was written as an attempt by Williams to lure good economists into the field of health economics. In doing this he provides a clear delineation of the subject matter of health economics and indicates the potential contribution which economists might make in this field. In doing so he surveys work which has already been done as well as pointing to areas where work is needed.

He begins by discussing the enormous and growing proportion of nations' resources being spent by the health sector and bemoans the neglect of this sector by many economists. He then attempts to define health and its value taking the human capital theory of Becker and Grossman as a starting point. This lead him on to a survey of the work which has been undertaken to estimate the value of life and of health status. The demand side of health care and the special problems involved in deriving and interpreting demand schedules for health services are discussed. The impact of different financial arrangements are discussed and studies relating to the responsiveness of demand are reviewed. The work relating to the supply of services - estimates of production functions and cost functions and the appropriate mix of resources is examined. Cost effectiveness and cost-benefit studies are described and the wider areas of planning and control mechanisms are reviewed. At all points the author is anxious to point out areas which remain unexplored and which merit further examination. This framework should provide a good rule for noneconomists who need to identify problems wihch might be usefully tackled by an economists.

ECONOMICS OF THE HEALTH CARE INDUSTRY/FINANCE

AU : ARROW, KENNETH J.
TI : The Welfare Economics of Medical Care.
PU : American Economic Review
Vol. 53, 1963. pp. 941-973
RE : In this classic article Arrow considers how the market may be inadequate to deal with certain aspects of the provision of health care in a way which would ensure efficient and equitable allocation and

distribution of resources. He provides a conceptual framework in which the relevance and applicability of the market to the health care industry can be considered and around which much of the debate relating to the provision of services has been developed.

On both the demand and supply side the health care industry is seen to have characteristics which affect marketability of its product. On the demand side consumers are uncertain about the timing of their potential need for health care of about the quality of the information they receive about the treatment they may requiere. In addition consumers may benefit from the provision of health expenditure undertaken collectively, e.g. a public health measures, and they will not be able to express their preferences for this expenditure via the market place. They will also not be able via the market to express their concern for others' welfare. The providers of health care are in a very powerful position which they have consolidated by controlling entry into the medical profession.

One way of coming to terms with uncertainty is to participate in some form of insurance. Arrow analyses the theory of an ideal insurance systems and also explores the problems associated with insurance systems.

This article provides the framework from which much policy analysis in health care can be developed. It has provided the starting point for many debates on the financing of medical care.

AU : ALAN, MAYNARD
TI : Pricing, Demanders and the Supply of Health Care.
PU : International Journal of Health Service
Vol 9, No. 1, 1979.
RE : This paper begins with a discussion of the nature of the relationship between the patient and the providers of health care in the context of a neo-classical market model the assumptions of which are modified to take into account insurance and externalities. The effect of the use of price in the health care market are discussed and a considerable range of articles estimating the effect of pricing policies on use of health care are reviewed. He concludes that the use of prices to deter the patient may deter those in "need" but many have no effect on resource allocation because of the physician-patient agency relationship.

In the final section of the use of the "need" paradigm is compared to the approach of the "Libertarian" school which stresses the importance of consumer sovereignty in the allocation of resources. This old debate is re-emerging in the literature and in the policy making departments of many countries. Although many of the issues are the same as those which formed the centre of the earlier debates the experience of and problems of administering different health systems have expanded our understanding of the industry and add different nuances to the debate.

EVALUATION - COST - BENEFIT ANALYSIS/COST EFFECTIVENESS STUDIES

AU : FEIN, RASHI
TI : On Measuring Economic Benefits of Health Programmes in Medical History and Medical Care.
Nuffield Provincial Hospital Trust. Ed. McKeown. Oxford.
RE : Fein traces the historical background of exercises in the economic evaluation of health care programmes. This shscholarly review will disarm most critics opposed to evaluate efforts in health care and add a note of caution to those who would practice this art.

Beginning with Petty, political economist and surgeon in seventeenth century England, he proceeds to trace the evaluative efforts of reformers in the public health sectors in Europe and the United States in the nineteenth century. The developments in measurement in more recent years are closely scrutinized and the limitations to the various methods are discussed. The first problem which tackled is of measurement of outcomes. Difficulties in measuring the outcome of many programmes may lead to two biases in the development of policy: one bias arises from the use of "inputs" as a measure of, or criteria for the achievement of policy goals; the other bias arises when programmes with easily identifiable outcomes are favoured. Fein is not too pessimistic about the development of some measures of outcome though he warns against their mis-use. He is anxious about the use of "proxies" for outcome measures which may supplant the true goal of the programme and earnings-based measures which may distort priorities.

This thoughtful paper should go some way towards preventing the mechanical application of crude evaluative measures being used in the design of health care systems.

AU : MUSKIN, SELMA J.
TI : "Health as an Investment."
PU : Journal of Political Economy, supplement.
Oct. 1962, No. 5, Part 2, Vol. LXX, p. 129-157
RE : This article begins by referring to the relative neglect of human capital by economic development theorists. The problem of disentangling health from other factores such as education is discussed and the fact that the promotion of health involves move than health services is recognized.

Returns to health accrue partly to individuals and partly to the community. Health contributes both to the number and quality of the work force, but it is difficult to measure its impact especially as "strength" is not always necessary in new processes of production.

In attempting to set up a system for evaluating health care contribution it is suggested that costs of environmental and curative services should be aggregated. The next problem is to assess the yields. She poses two questions: If there were no sickness how much would those persons who are now sick have produced? How much has been added to national income by health care? The effects of sickness are considered to be (a) deaths (b) disability (c) debility. Then assuming full employment and making adjustments for policies relating to retirement and adjusting for activity rates, i.e. the proportion of the population employed, methods of assigning values to each labour unit lost are explored.

She then proceeds to examine the effect in terms of loss of production which would have occurred had death rates not declined since 1900. This amounts to a 25% increase in the labour force and under certain assumptions amount to $60 b. loss in GNP.

The article concludes with an excellent summary of other attempts at estimating potential loss output resulting from health care.

AU : HEMMINKI, KARI
TI : The Costs of Diseases and Violence in Finland in 1972.
PU : In: Social Science and Medicine
Vol. 11, 1977.
RE : This article addresses itself to assessing the indirect costs of diseases and violence. Using the good statistical and information base available in Findland, Hemminki pursues the approach previously used by Rice (1966) who assessed the costs of illness in the U.S.A., and found that indirect cost were three times larger than direct costs. Hemminki reviews the results of earlier work conducted in Finland and proceeds to calculate the total costs of ill-health in Finland in 1972.

The number of deaths in the 20-64 age group was calculated, and the adjustment was made for the "computing risks" of deaths - Hakulinen and Teppo (1976). The number of work output lost was calculated by estimating the work lost involved in all periods of sickness of longer than seven days. Housewives were included. Data were also collected about the disease groups to which these sickness absences were attributable. The losses in work output were converted into economic losses by multiplying the number of working years lost by the average income for Finland for 1972 - differential rates for men and women were used. Hospital costs were obtained from hospital statistics and allocated to disease groups. Total costs were then computed.

The work output lost because of deaths and "invalidities" corresponded to 29% of the working years of the population; losses in work output explained 82% of the costs - sickness or "invalidities" benefits and hospital costs accounting respectively for 9% of the costs.

This article and that of Stevens should be read in conjunction with Muskin's paper which explores some of the economic concepts and methodological difficulties more fully.

AU : STEVENS, CARL M.
TI : "Health and Economic Development: Longer-run View
PU : Social Sci. Med.
1977, Vol. 11, No. 17/18, p. 809-817
RE : This paper discusses the contribution of improved health to economic development in the context of LDCs. In doing this the author distinguishes the short-term improvements which take place in the context of existing organizational and technical framework and the longer term improvements which may contribute to changing the context. Health planners are advised to consider the share to the health sector of development funds and in doing so, they will need to consider the impact of improved health status on economic development.

It is usually assumed that improvements in health status will increase both participation rates and the productivity of individual workers. These precepts are generally assumed to be valid on physiological grounds but these factors alone do not determine economic behavior. There is scope for empirical studies into the impact of changes in health status or output. Studies by Conly demonstrated that malaria did in fact reduce productivity and Fenwick and Figenschou found that Schistosoma mansoni patients' productivity increased after treatment. Malnutrition and iron deficiencies are also factors which have been implicated as a cause of work loss.

In the LDCs, however, it is generally assumed that becuase of unemployment or underemployment in the agricultura sector, the marginal product of labour is zero and so little impact is to be expected from health programmes. There may be shortages of labour during peak periods in the agricultural sector and shortages of skilled labour in other sectors which improvements in morbidity would counteract.

Attempts to assess long-term implications of health improvements need to be made in the context of a fairly detailed specification of the whole economy. This was done by Barlow in the study of malaria eradication. One of the major points at issue is whether the programme causes undesirable growth in the population. Evidence on this count is still unclear.

In the context of a village agricultural sector where apparent short-term effects from improved health care may be small, it is argued that the poor health of farmers is a major bar to the adoption and propagation of improved techniques. Even in non-agricultural sectors, it is suggested that poor health of the work force can reduce the pace of the whole productive process. In addition, the loss of time because of ill-health may slow down the acquisition of skills in the

organization and cause problems in the internal labour market networks within the firm, distorting the promotion opportunities of workers and making it necessary to recruit more untrained workers from outside the firm to take over jobs which could be better filled by those with more experience of the industry.

Bearing in mind the measurement and conceptual problems, the author recommends that research is feasible and baseline studies should be set up on a number of sites and observations conducted to compare ex-ante and ex-post conditions.

This study should stimulate research interest in the design of protocols to measure the impact of health on development but whether or not studies are undertaken, the author highlights relationships which are potentially important to the progress of development.

AU : PAGLIN MORTON
TI : Public Health and Development: A New Analytical Framework
PU : Económica, 1974
RE : Paglin extends the traditional evaluation of public health as an investment in human capital to incorporate the consumer good dimension of public health which he considers has considerable advantage especially for health programmes in underdeveloped countries.

He asks what is the nature of health as a consumer good and explains it as an expenditure to relieve pain and suffering and to reduce the risk of dying. Better health is a "want" and health services the "good" which satisfies this want and thereby generates a utility. This framework is seen as being of the same general approach as that taken by Mishan in his article on the evaluation of human life. Both health goods and other goods are seen as contributing to improving life expectancy and can be combined in various ways to achieve an equal life expectancy. He constructs "iso-life" expectancy curves and production possibility functions which show the maximum of health and other goods which can be produced from a society's resources. The tangencies of these two sets of curves define the maximum life expectancy which could be achieved if resources were allocated with the sole objective of minimizing risk of death. He then accepts that society is rarely so single-minded as to want merely to maximize life expectancy and that indeed they often prefer other things. He then draws up some more curves to illustrate the rate at which society are willing to substitute health goods for other goods. The difference between the locus of these tangency points and those derived from the line indicating the minimum life lost might be viewed as the difference between society preferences and those of public health enthusiasts or those who believe like Ruskin that there is "no wealth but life." It also represents the limit of social policy in achieving health improvements at any level of resources per capita. If there are externalities not taken into account by market then the true equilibrium will be rather higher than that derived merely by considering individual values.

Paglin considers that health services in general are mainly of consumer goods and public health programmes may be viewed to a large extent as collective consumption goods in so far as although they cannot be individually packaged they do provide benefits to individuals. He also shows that productivity itself will be effected in health care and other goods are not consumed up to a certain level and that improvements which affect the length of life have the same effect as a real increase in resources.

This apparently technical article provides a rich conceptual framework which would simplify many issues which worry planners and policy makers would simplify many issues which worry planners and policy makers by constructing an analytical framework which untangles many of the issues which presently appear to be imponderables. The challenge is to acquire the data to make this framework operational.

AU : WILLIAMS, ALAN
TI : "Measuring the Effectiveness of Health Care Systems"
PU : In: The Economics of Health and Medical Care. MacMillan, 1974.
RE : Alan Williams is concerned with methods of evaluation of health care systems which ensure that health resources are allocated amongst the different programmes as efficiently as possible. He hypothesizes a health care system "whose sole function is to ensure that the community it serves derives the maximum net benefit from its existence." He concentrates upon developing "output resources" which can be used to compare the returns to resources in different health care programmes. In doing this he places "economic benefits" in his evaluative framework as negative costs and proceeds to consider the "humanitarian" benefits concentrating on the client or patient's state of health. An attempt is made hypothetically to build up an index of health, measuring the intensity and duration of an event. He uses the concept of "pain" and restricted activity as the basis for evaluating the health state, considering how they might be traded-off one against the other to construct an index of intensity. This index can then be used in a time dimension to compare the effects of treatment of different conditions or of different treatments of the same condition. Having carried out these evaluations, the index is used in conjunction with the estimates of economic costs and benefits to improve the effectiveness of health services and provide a tool to be used in the allocation of resources.

This study provides a context in which to consider the rapid development in the field of health status indicators over the past twenty years.

AU : MOONEY, GAVIN
TI : "Values in Health Care"
PU : In: Economics and Health Planning. Ed. Kenneth Lee. Croom Helm, London, 1974.

RE : Mooney's article is concerned with the determination of values. It begins with a brief outline of some of the ways in which outputs of health care could be measured and then takes on the task of discovering whether there is or might be a coherent underlying value system in the British N.H.S. He finds a "continuum of value systems" stretching from consumer sovereignty to an imposed system. He then turns his attention to the derivation of values and outlines the various approaches which might be used. A consumer sovereignty oriented system is described in which the consumer knows what is in his best interests and expresses his preferences. It is difficult to discover preferences and many authors found it easier to formulate the question in terms of individuals' behaviour when faced with alternatives which reduce the risk of death.

Mooney discusses some studies using the approach, such as that by Melinek who studied the behaviour of persons faced with crossing roads by surface or underpass. An alternative way of considering risk avoidance is that used by Jones-Lee who set up a study of risk taking in a hypothetical situation using a questionnaire based on the potential use of airlines with different risk factors and fares. The human capital approach is also discussed. This approach, based on man/s productive potential was used in the seventeenth century by Petty, but is currently popular with the "human capital" theorists. This approach assumes that the objective is to increase productivity and poses problems, especially in the valuation of health care to persons unable to work. The next approach considered is the one which measure the implied values - the values implied by decisions relating to the use of resources. This approach has the advantage of being easy to implement but it does not answer questions about what the balance health care programmes should be. It merely reflects the existing decision process and the values of the status quo.

AU : CULYER, A. J.
TI : "Need, Values and Health Status Measurement."
PU : In: Economic Aspects of Health Services
ed. Culyer, A.G. and Wright, K. G. Martin Robertson, 1978.
RE : This article begins with a consideration of the need for health care. He considers need for health care arises if it is possible to improve or prevent a deterioration in health status. To apply such a concept in the allocation of health care resources it is necessary to measure health status. In the remainder of the article Culyer considers the place of values in health status measurement, paying particular attention to three kinds of value judgements: those concerned with the choice of dimension in which to measure health status; those concerned with the weighting of the various dimensions; and those concerned with aggregating the various components to form an index.

The importance of the selection of dimensions and who should make judgements or whose values should be incorporated in designing the framework of dimensions to be used in the construction of the index are considered. The consequences for health care programmes of different groups making these decisons is discussed. The possibility of developing scales of the Guttman type which represent a continuum of sickness or disability is considered and it would appear that certain categorizations of dependence can be formulated in this way. The use of indices to measure inequality and the social impact of disease are reviewed particularly the work of Miller (1970) and Chen (1973), looking at the differential illness between Indians and the rest of the population of the USA.

Methods of aggregation and scaling are explored in some detail and the category, magnitude, equivalence, standard gamble and time trade-off methods of scaling are explained.

Culyer believes that sufficient conceptual and practical experience has been gained to justify the adoption of this approach at all levels of health service planning.

AU : CHEN, MILTON M., BUSH, J. W., PATRICK, DONALD
TI : "Social Indicators for Health Planning and Policy Analysis"
PU : In: Policy Sciences
March 1975. 6. 1. p. 71-89.
RE : In this paper the authors propose two indicators which can be used to describe different aspects of community-wide health status. They begin by considering criteria relating to indices.

The indicators should have a welfare orientation and since it is meant to aid policy making the index should be adaptable for social optimization and sufficiently sensitive to detect changes in health status. If an indicator is to have community-wide application it should be made up of clearly defined components and should be derived from observable and easily reproduced data.

An operational definition of health which includes a measure of "well-being" and "prognosis" is discussed. Functional status index is then described for the population and prognosis is incorporated into the index by using the Markov chain process.

The article concludes with a discussion of the index for policy analysis. Scales are definitions used in the analysis are given in an appendix.

AU : WILLIAMS, SANDERS, RIDDIOUGH and BELL
TI : "Cost-effectiveness of vaccination against pneumococcal pneumonia"
PU : New England Journal of Medicine
Sept. 1980.

RE : This study analyses the cost effectiveness of vaccination against pneumococcal pneumonia. It is seen as a study of primary prevention technology. Costs of medical care and the effects on health associated with a preventive programme are discussed from the perspective of society and of a third party provider such as medicare. As a result of the findings it is suggested that if the provision was directed towards certain high risk groups there would be considerable advantages for health programmes.

Pneumonia is the fifth largest cause of death in the U.S.A. Estimates of the proportion caused by pneumococcal bacteria vary from 10-35%. At 10% it has been estimated that treatment costs $135. at 1978 prices. Although vaccines have been available since early in the century, antibiotics are the major tool against the disease but 17% of patients die. A vaccine which is effective in 75% of all pneumonococal pneumonia is licensed by the Food and Drug Administration for high risk groups, those with chronic heart, lung and kidney disease, metabolic diseas and the elderly.

The study calculated that the expected changes in health effects and medical care costs produced by vaccination against pneumococcal pneumonia compared with the continuation of present treatment paths. Effectiveness was measured by assigning values to changes in morbidity and mortality to derive a quantifiable measure of added years of healthy life. The cost effectiveness measure was expressed as net medical cost per year of life saved. Only medical care expenses were included. In the first instance costs were included irrespective of whether they were met by patients or third party insurers. In the second instance only third party expenses were considered. The ratios were based on a hypothetical vaccination programme in June 1978 using a simulation model to estimate the effects for 1978 - 2050 for a vaccinated and unvaccinated population. Costs and effects were discounted at 5% and 10%. A sensitivity analysis was conducted on all variables.

Net benefits were found for all age groups but most remarkable were those for the over 65 age group. The Social Security Act specifically forbids Medicare payment for preventive immunization, physical examinations, hearing aids and glasses. Economists and physicians have noted the low level of financial support given to preventive services in comparison with other medical technologies despite the apparently high pay off in benefits relative to costs for successful prevention. This article illustrates the counter-productive aspects of some forms of financing on the efficient use of resources in health care.

AU : WALKER, GODFREY and GISH, OSCAR
TI : "Mobile Health Services. A Study in Cost-effectiveness"
PU : Medical Care
April 1977, Vol. XV, No. 4

RE : The mobility of scarce health workers is a matter of great importance in many areas of the world. This paper describes a cost-effectiveness study comparing land and air transport systems in delivering health care in Botswana. Botswana is a poor country in which most of the population are engaged in subsistence agriculture. The per capita income was estimated at £92 per head in (1973-74), but this was skewed in favour of the urban population; per capita income of the rural population was £28. The mining development led to a 12% annual growth rate rate of the economy in the seventies. Some of this growth is being used to develop rural areas. Access to largely hospital-based curative health services was shown to be dependent on proximity.

The study attempted to measure the cost-effectiveness (output defined by the number of patient contacts) in four rural clinics. Two mobile services, a lorry and a light-weight aircraft serving similar populations were evaluated and compared with the effectiveness of static clinic sites. It was found that the mobile services, particularly the air service, were more costly thatn the fixed site clinics. The effectiveness of treatment was also greater at fixed clinics. They considered, however, that mobile services had a supportive role to play in visiting skilled health workers in rural areas and for this purpose lorries were cheapest except for the most inaccessible localities.

This article provides a useful adjunct for planners of services in rural areas.

HEALTH CARE - COSTS/EFFICIENCY

AU : HURST, JEREMY
TI : "Planning and Hospital Costs"
PU : In: Economics and Health Planning
Ed. Kenneth Lee. Croom Helm, 1974.

RE : This paper is useful in so far as it explains very simply some basic economic concepts relating to costing. The points made are illustrated with reference to applied research and the context is set in the field of planning national health services. Although this study is set in the context of the British National Health Service the message is applicable to other countries and other planning systems.

The author sets out to answer three planning questions: What ought costs to be? What are costs? What are costs likely to be in the future? His analysis begins with a discussion of economic theory and hospital costs. The concept of a production function: a mathematical description of the inputs required to produce a given output, is introduced. With clear diagramatic representations the optimal combination of inputs which might be required to produce a given output is identified. Average and marginal cost curves are shown and the author proceeds to explain how choices might be made between services.

The costing information available is described and its appropriateness to answer questions posed by the above analysis is considered. The article then proceeds to discuss research on hospital costing. This includes the estimation by the author of a cost functions for heating plants in 88 acute hospitals. This indicates that the average costs fall steeply as the output increases and they appear to be relatively constant. This leads to a review of other work which has been undertaken in the British system relating to the estimation of the minimum average costs of hospitals based on bed size. Methods of collecting basic costing data are discussed and the article concludes with an appeal for better costing information.

AU : BERRY, RALPH E.
TI : "Cost and Efficiency in the Production of Hospital Services"
PU : Milbank Memorial Quarterly.
RE : This study reports on the analysis of the factors affecting hospital costs. Data on approximately 6,000 short-term general hospitals is included. The cost function was defined as being dependent upon the level of output, the quality and scope of services provided, factor prices and relative efficiency.

A rather shallow "U" shaped average cost curve was found providing evidence of costs initially decreasing but ultimately increasing. Comparisons are made between the average and the optimal output levels and the authors concluded that a sevenfold difference in level of output would be necessary if output was to be at minimum average cost, but that the minimum average cost in most cases was not much below the prevailing average costs. The quality aspect which is difficult to measure was included by using accreditation statistics and some facilities which were thought to increase the quality of services rather than merely extend the range. It was found that accredited hospitals had higher average costs, and several relationships between average cost and quality enhancing services and facilities were also positive. The product mix was also found to affect costs especially the provision of some facilities such as radiotherapy, ECG, and community medical services. The analysis of factor prices showed wage rates to be the most significant variable in explaining average costs. Dummy variables were included to take into account government or voluntary control and it was found that government control very slightly lowered average costs. They also identified the now well known relationship that average costs rise as average length of stay is reduced because the early days of hospitalization are more expensive. It was also clear that the propriety hospitatals utilized their facilities more intensively per patient day and consequently incurred a higher cost per patient day.

The characteristics of high and low cost hospitals are considered by an analysis of residuals, comparing the predicted and actual cost on the basis of output, quality and factor prices. The fifty highest and

fifty lowest cost hospitals were more likely to have administrators with medical qualifications. There were also found to be considerable differences in factor intensity with higher and low cost units. The ratio of personnel to total cost was higher in low cost hospitals than in high cost hospitals. Hospitals were relatively high occupancy were found to have lower costs and also to group around the middle of the bed size range.

DISTRIBUTION OF HEALTH CARE

AU : LE GRAND, JULIAN
TI : "The Distribution of Public Expenditure. The Case of Health Care"
PU : Económica, Vol 45, 1978. No. 178, p. 125.
RE : Le Grand begins by mentioninig the gap in the work done on distribution of public expenditure as opposed to work done on the distribution of income and wealth and sees his contribution in the context of an attempt to explore one aspect of the social wage which results from the distribution of public expenditure on the NHS.

The paper relates public expenditure on health services to the incidence of illness by socio-economic group, in order to see whether the position in society: the social class of an individual affects the amount of medical treatment he receives when ill. National morbidity data collected from interviews conducted as part of the General Household Survey were used. A significant class gradient was found in the percentage of the population who were suffering from a long-standing illness. The total cost to HNS of treatment of persons within each socio-economic group was calculated and divided by the number sick in each socio-economic group. It was found that inspite of the greater prevalence of illness amongst lower socio-economic groups, groups one and two received 40% more resources than the lower social groups.

This evidence should be considered along with other documentation of inequalities reported in the document. "Inequalities in the Health Service" DHSS, 1980, in relation to the distributional problems which remain even in systems in which health care is provided free at the service point, as in the British National Health Service.

AU : FRERICKO, RALPH R., BECHT, JAMES N. and FOXMAN, BETSY
TI : Prevalence and Cost of Illness Episodes in Rural Bolivia
PU : IN: International Journal of Epidemiology, 1980.
RE : This article describes research conducted as part of a demonstration project to improve the delivery of health services in rural Bolivia. In most areas of Bolivia the mortality statistics and the birth registration data are deficient because of under-reporting and there is

no information on the use of health services. This article describes a house-based survey which was designed to discover patterns of medical care utilization and health expenditure attributable to self-reported illness in a rural lowlands population.

The survey was conducted in autumn of 1977; over three thousand persons were covered and there was a 98% participation rate. The households were selected on a two stage random sample. An especially trained team of Quechua and Spanish speaking auxiliary nurses conducted the interviews. Information was requested on symptomatic illness during the previous two weeks for all members of the household. Information was also gathered about who provided the care and how much it cost for the various componentes of the treatment. This information was subsequently coded by one code.

The population was young: over 50% were under fifteen years of age. Of the men 75% were self-employed agricultural workers and 94% of the women were household workers. Health problems had been experienced by 42% of the population. The prevalence was highest among the young and old. Although there were proportionately more illness episodes in females over five years of age the rate of illness for which a health worker was consulted was nearly identical up to forty for men and women, and then it was highest for women.

Medical assistance was obtained for 21% of the illness episodes. Over half of these consultations were at a hospital. A further 30% were either at a sanitary of medical post and only 8% were provided at the patient's home. The average expenditure for each reported illness was $2.13 per person and $4.42 per illness episode. Over 76% of the money was spent on medication; 15% was spent on fees for medical providers and 5% for transportation. Of the illnesses for which a physician was consulted the cost was $9.00 or more compared to $1.80 for illnesses for which a nurse was consulted and $.95 for visits to health promoters or midwives.

Of the male illnesses 23% were disabling, causing the man to be unable to work. The rate of disability was highest for gastro-intestinal problems, followed by respiratory problems. Only half of these with a disability sought help from a health worker.

The results are compared with those found in surveys in Ghana and Colombia. The Colombia study showed a 39% reported illness in a two week study compared with the 42% found in the Montero Region, and 21% in Ghana. The same male-female differences were found in all studies, including those in Australia and in the United States. This comparison could be extended to other areas where morbidity surveys are conducted.

The authors conclude with an appeal for efforts to provide health care for rural populations.

AU : PIACHAUD, DAVID
TI : The Diffusion of Medical Techniques to Less Developed Countries
PU : International Journal of Health Services
Vol. 9, No. 4, 1979.
RE : This paper discusses the proliferation of modern technology in less developed countries. The medical techniques included in the study had to satisfy certain criteria: they had to have substantial resource implications, be of relatively recent introduction, be clearly definable and inambiguously understood in different countries in different languages and easily identifiable by someone with a high degree of knowledge of the health services of the country. Eight techniques were chosen, half were diagnostic, half were therapeutic. The questionnaire was sent to either Deans of Medical Schools or to the Chief Medical Officer in the Ministry of Health. A response rate of 47% was obtained.

The proportion of African countries having a given technique was lower than that of either Asia or America. The most commonly introduced technique was cobalt isotope for radio therapy which was introduced in 69% of the countries. The majority of techniques had been first introduced in teaching hospitals and had been financed by governments. Comparisons were made amongst countries where each technique had been introduced on the average income levels for those countries. Countries introducing the techniques tended to have higher than average incomes for their region but on a continental basis African countries having the techniques were poorer than the average of all Asian countries. Positive relationships were established between introduction of techniques and population size, GNP and per capita GNP.

AU : MULLER, CHARLOTTE F.
TI : Methodological Issues in Health Economics Research to Women.
PU : In: Social Science and Medicine
Vol. II, p. 819-825.
RE : Health care planners may well find it increasingly necessary to rethink some of their assumptions relating to the role of women which underlie some of the present planning decisions.

The use of health indicators as tools in health care planning in increasing and the author suggest that this measure can be distorted by the social position of women. The social position and role of women is seen as distorting the measure not only in so far as it affects the measurement of the health of women, but also the measurement of the health status of children and adult males. The assumed or actual availability of a female caring companion will affect the selection of care for the child or man.

Evidence showing the greater length of stay for non-married people or people living alone is quoted. The measurement of severity of illness in adult females is affected by the characteristics of usual or expected activities. Hospital use data which excludes obstetrical data is severely criticized.

Attempts to cost patient time are also criticized for undervaluing female time by using data which is itself affected by labour force distortions which result from discrimination against women in the labour force. Women's work potential is again stressed in relation to the observation that the ages of optimal reproduction potential are also the ages when advanced education or career experience would normally be expected.

The points made in this article should be considered by all those involved in planning health services especially those in countries undergoing rapid change in the role of women.

HEALTH CARE - PLANNING

AU : KALRMAN, HERBERT E.
TI : Health Planning, Progress, Prospects and Issues in Milbank Memorial Fund Quaterly
PU : Health and Society
Vol. 56, No. 1, 1978
RE : The article begins by reviewing the development in health care planning in the USA and then proceeds to raise several fundamental issues in health planning and reviews much of the earlier thinking in this field. This latter section is of particular interest, it begins by raising the question, "Why embark on health planning?" The appeal is thought to reside in the rationality and the apparent simplicity of the concept of need. Much of the delight in planning he feels stems from the concept of need which, "As a measure of requirements of health care, the criteria of need has been more talking about and cited than made operational through empirical studies." The growing importance of the physicial as an agent (explored in the earlier work of Roemer) is examined and in that context the effect of a physician-induced demand on the supply of facilities. With the growth of wider insurance cover he sees the provider and patient as joint conspirations in the use of more and more health resources yet differences in geographical utilization rates have been no appreciable effect on health status of the relevant population.

Bearing in mind what Klarman sees as the deficiencies in "Need" as an operational tool for planning, he stresses control of supply. The ability to control supply depends upon authority and power. This is seen to be most likely to be achieved by a more participative approach amongst planners, providers and consumers of health care. He then tackles the question of allocation of budgets amongst many competing providers and the difficulties of planning for small areas.

It is a good example of the range of much of the Klarman work, his detailed knowledge of health services and the practical problems of planning services.

AU : McNERNEY, WALTER J.
TI : Control of Health Care Costs: the 1980's
PU : The New England Journal of Medicine 1980
No. 19, Vol. 303, Nov. 6, pp. 1088-1095
RE : This paper is of interest because it takes up the many strands of the argument about the form of delivery and financing of health services. The debate relating to these issues has ranged widely from the advocacy of a national health service through to the new emphasis on competition which is the central philosophy amongst economists of "libertarian" persuasion. McNerney provides an optimistic view of the future management of health care services ensured by the joint action of competition amongst of health care services ensured by the joint action of competition amongst purveyors of insurance and providers of care, tempered by guidance from government relating to goals and standards and the commitment of those locally involved in the delivery of health care who in the form of "voluntarism" which is "increasingly seen not as an outdated value of a vanishing era but as a lasting and necessary component sustaining the social quality that prevents health services from becoming just another business." These forces together he considers will have the driving force to provide the innovation necessary if the health sector is to rise to the challenge posed by providing increasingly costly care to a population which is ageing and will require greater health care provision.

He is aware and lays great emphasis on the fact that only a small portion of morbidity and mortality can be reduced by health care facilities per se. Given the growing evidence of the importance of life styles and habits, socio-economic and occupational factors, he appears to see the lack of a national service as an opportunity to re-thinkg the directions in health care provision. These new directions would include health promotion and prevention and more emphasis on ambulatory and domiciliary care. This is interesting to place in the context of similar approaches being taken in dissimilar organizational structures in Europe, e.g. Britain, Finland and France.

AU : POLE, J.D.
TI : "Programmes, Priorities and Budgets"
PU : British Journal of Social and Preventive Medicine
1974
RE : This paper is written at a turning point for planners in the British national health service. It stresses the need for a better systeam for allocating resources within the administered service. Proposals for planning procedures which were eventually adopted in the reorganized health service are described.

The development and inadequacies of a financial information system in the British N.H.S. is described and the merits of marginal costing rather than average costing information is discussed. Rather than describe an ideal information systeam Pole asks how much is needed at the various administration levels and for the various purposes of planning and management of the service.

He describes programme budgeting and the difficulties which arise in the selection of the programme structure and the setting and monitoring of objetives. The benefit side of the budget he considers the most difficult as not only is there no index of medical output, even if there was one there is no information relating to the contribution of medical treatment to changes in outcome. Until this dilemma is resolved he sees progress being made by use of cost benefit and cost effectiveness techniques.

AU : MAYNARD, ALAN and WALKER, ARTHUR
TI : "Medical Manpower Planning in Britain: A critical appraisal"
PU : In: Economic Aspects of Health Services
ed. Culyer and Wright.
RE : This paper sets out to appraise critically the attempts that have been made to plan the supply of medical manpower in the United Kingdom in the period 1957-76. In doing so the authors consider the rationale and problems underlying manpower planning and why it might be necessary for governments to intervene to achieve a better balance of manpower and so avoid periodic surpluses and shortages developing. The imbalance which arise in the market for physicians are seen in the context of the eoconomics of the labour market. The special problems of adjustment which arise in connection with physicians relating to the strong professional influences which are reflected in long training requirements and entry limitations associated with the maintenance of "professional standards." They also consider the problems associated with the situation which exists in Britain, and other countries with a national health system, of their being effectively only one buyer of medical manpower.

After describing and explaining the reason for the lack of success of the early British attempts to forecast manpower the authors proceed to suggest some improvements which might be made in forecasting models. They set up a "stock-flow" model and analyse the supply and demand factors underlying changes in the stock of doctors.

The necessity to study carefully the elasticity of supply of female physicians, older physicians and migrants; the need to use a wide range of policy instruments in manpower planning; the need for investigation of substitutes; and the importance of regular forecasts showing costs of planning.

This article provides a framework worth considering by any planner about to embark on manpower planning or attempting to adjust the stock of physicians.

INDUSTRY AND HEALTH

AU : MARIN, A.
TI : "Pollution Control: Economists' Views"
PU : The Three Banks Review
March 1979, No. 121.
RE : Marin takes on the task of considering the methods which might be used in control pollution. Focus is on the policies which seek to limit pollution by charging a "price" or by setting legal limits. Using imports initially for illustrative purposes he demonstrates the issues which might affect the choice of policy. These issues are speed, predictability and equity, and the cost and effectiveness of administering the policy.

It is commonly assumed that economists would favour a "price" approach to the pollution problem but Marin demonstrates that economic analysis provides no general rule which can be used for policy guidance. If the aim is to achieve an "optimal" level of pollution it is necessary to obtain knowledge about the cost conditions of each firm producing the pollutant in order to select the appropriate tax level; thus, a legal limit might be simpler to apply and more effective, "Prices" may encourgae innovation to remove the cause of pollution whilst standards may well become minimum. Charges may also be inappropriate when "satisficing" rather than "profit maximizing behaviour" is the norm or when distributional issues are paramount. The issues raised in the paper should be borne in mind in the design of any pollution control policy.

ANEXO I

SHORT BIBLIOGRAPHY: HEALTH ECONOMICS*

R. L. AKEHURST**

Introduction

In making this selection I have tried to choose references which will help fulfill at least one of the following aims:

a) To delimit and define the range and nature of problems with which health economics is concerned.

b) To adequately cover most of the concepts and techniques which are used by economists in analysing the delivery of health services.

c) To provide examples of applications of concepts and techniques.

Many excellent articles have been omitted and inevitably such a small selection is an arbitrary one. Some areas touched by health economists have been omitted altogether, for example industrial hygiene, environmental economics and problems of regulating supply industries especially pharmaceuticals. Nevertheless, the references given provide an adequate starting point for an understanding of health economics and they all themselves contain many more references for the interested reader to pursue.

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* Jennifer Roberts, whom I replaced, prepared some bibliographal material for this meeting and kindly passed it to me. I have used some of it in my summaries of papers.

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Organization

The bibligraphy is divided into eight sections, each section containing from one to five references. I have not annotated the text book references because a half page or so on each would not do them justice. They all provide a good coverage of aspects of health economics. Cullis and West and Newhouse are more on what they see as crucial aspects of the analysis of health care.

The remaining seven sections include:

i) coverage of major theoretical issues including the welfare of insurance, the extent to which health economics is part of human capital theory, the market versus state debate and the importance of the physician agency relationship;

ii) a section of values in health care and measurement of outcome including discussion of possible measures and difficulties of measurement and the way personal values enter into the system;

iii) a section on health care planning which discusses problems with planning, information needs and how to meet them, and the special problems of manpower planning;

iv) a section on methods of defining global need for health care containing two examples of how priorities in the allocation of health care resources might be decided;

v) a two-paper section on health care and economic development, stating clearly many of the theoretical and practical problems involved;

vi) a section which gives a few examples of cost-benefit/cost-effectiveness type studies plus a reference to a short book intended as a guide to non-economists who wish to include economic consideration in any evaluation they are undertaking;

vii) a single paper which set out one man's view of the role of economists in planning health care.

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General Texts on Health Economics

Fuchs, Victor R. Who Shall Live? Basic Books, New York, 1974.

Newhouse, J.P. The Economics of Medical Care Addison-Wesley, 1978.

Cullis, John G. The Economics of Health Martin Robertson, Oxford, 1979, and West, Peter A.

Cooper, Michael H. Rationing Health Care Croom Helm, London, 1975.

Defining the Nature of Major Aspects of Problems of Allocating Health Care Resources

AU : Arrow, Kenneth J.
TI : Uncertainty and The Welfare Economics of Medical Care
PU : American Economic Review
Vol 53, 1963, pp.941-973
RE : In this article Arrow considers how the market may be inadequate to deal with certain aspects of the provision of health care in a way which would ensure efficient and equitable allocation and distribution of resources. He provides a conceptual framework in which the relevance and applicability of the market to the health care industry can be considered and around which much of the debate relating to the provision of services has been developed.

On both the demand and supply side the health care industry is seen to have characteristics which affect the marketability of its product. On the demand side consumers are uncertain about the timing of their potential need for health care of about the quality of the information they receive about the treatment they may require. In addition consumers may benefit from the provision of health expenditure undertaken collectively, e.g. a public health measure, and they will not be able to express their preferences for this expenditure via the market place. They will not be able via the market to express their concern for others' welfare. The providers of health care are in a very powerful position which they have consolidated by controlling entry into the medical profession.

One way of coming to terms with uncertainty is to participate in some form of insurance. Arrow analyses the theory of an ideal insurance system and also explores the problems associated with insurance systems.

This article provides the framework from which much policy analysis in health care can be developed. It has provided the starting point for many debates on the financing of medical care.

AU : Mushkin, Selma J.
TI : 'Health as an Investment'
PU : Journal of Political Economy, supplement
Oct. 1962, No. 5, Part 2, Vol LXX, P. 129-157
RE This article begins by referring to the relative neglect of human capital by economic development theorists. The problem of disentangling health from other factors such as education is discussed and the fact that the promotion of health involves more than health services is recognized.

Returns to health accrue partly to individuals and partly to the community. Health contributes both to the number and quality of the work force, but it is difficult to measure its impact especially as 'strength' is not always necessary in new processes of production.

In attempting to set up a system for evaluating health care contribution it is suggested that costs of environmental and curative services should be aggregated. The next problem is to assess the yields. She poses two questions: If there were no sickness how much would those persons who are now sick have produced? How much has been added to national income by health care? The effects of sickness are considered to be (a) deaths (b) disability (c) debility. Then assuming full employment and making adjustments for policies relating to retirement and adjusting for activity rates, i.e. the proportion of the population employed, methods of assigning values to each labour unit lost are explored.

She then proceeds to examine the effect in terms of loss of production which would have occurred had death rates not declined since 1900. This amounts to a 25% increase in the labour force.

The article concludes with an excellent summary of other attempts at estimating potential output resulting from health care.

AU : Culyer, A.J.
TI : The Nature of the Commodity "Health Care" and its Efficient Allocation
PU : Oxford Economic Papers
Vol 23, 1971, p. 189-211
RE : This articles brings together the main issues in the debate on whether health care is best provided by a market mechanism or directly by the state. It begins by listing the main characteristics of health care as an economic good, and then examines the implications that these characteristics have for allocation. Culyer argues that neither pro-state nor pro-market writers and demonstrated an a priori case for their favoured method of provision and criticises them for adopting a 'Nirvana approach'. That is they compare hypothetical perfect markets with real-world state allocation with real-world markets. What is appropriate is comparison between the two imperfect real-world entities. Which of these is superior, he demonstrates, cannot be determined a priori, but turns on empirical questions, and he indicates what some of these questions are.

AU : Maynard, Alan
TI : Pricing, Demanders and the supply of Health Care
PU : International Journal of Health Service
Vol. 9, No. 1, 1979
RE : This paper begins with a discussion of the nature of the relationship between the patient and the providers of health care in the context of a neo-classical market model the assumptions of which are modified to take into account insurance and externalities. The effects of the use of price in the health care market are discussed and a considerable range of articles estimating the effect of pricing policies on use of health care are reviewed. He concludes that the use of prices to deter

the patient may deter those in 'need' but many have no effect on resource allocation because of the physician-patient agency relationship.

In the final section the use of the 'need' paradigm is compared to the approach of the 'Libertarian' school which stresses the importance of consumer sovereignty in the allocation of resources. This old debate is re-emerging in the literature and in the policy making departments of many countries. Although many of the issues are the same as those which formed the centre of the earlier debates the experience of and problems of administering different of the industry and add different nuances to the debate.

On Values in Health Care and Measurement of Outcome

AU : FEIN, RASHI
TI : On Measuring Economic Benefits of Health Programmes in Medical History and Medical Care.
Nuffield Provincial Hospital Trust. Ed. McKeown. Oxford.
RE : Fein traces the historical background of exercises in the economic evaluation of health care programmes. This shscholarly review will disarm most critics opposed to evaluate efforts in health care and add a note of caution to those who would practice this art.

Beginning with Petty, political economist and surgeon in seventeenth century England, he proceeds to trace the evaluative efforts of reformers in the public health sectors in Europe and the United States in the nineteenth century. The developments in measurement in more recent years are closely scrutinized and the limitations to the various methods are discussed. The first problem which tackled is of measurement of outcomes. Difficulties in measuring the outcome of many programmes may lead to two biases in the development of policy: one bias arises from the use of "inputs" as a measure of, or criteria for the achievement of policy goals; the other bias arises when programmes with easily identifiable outcomes are favoured. Fein is not too pessimistic about the development of some measures of outcome though he warns against their mis-use. He is anxious about the use of "proxies" for outcome measures which may supplant the true goal of the programme and earnings-based measures which may distort priorities.

This thoughtful paper should go some way towards preventing the mechanical application of crude evaluative measures being used in the design of health care systems.

AU : MOONEY, GAVIN
TI : "Values in Health Care"
PU : In: Economics and Health Planning. Ed. Kenneth Lee. Croom Helm, London, 1974.
RE : Mooney's article is concerned with the determination of values. It begins with a brief outline of some of the ways in which outputs of health care could be measured and then takes on the task of discovering whether there is or might be a coherent underlying value system in the British N.H.S. He finds a "continuum of value systems" stretching from consumer sovereignty to an imposed system. He then turns his attention to the derivation of values and outlines the various approaches which might be used. A consumer sovereignty oriented system is described in which the consumer knows what is in his best interests and expresses his preferences. It is difficult to discover preferences and many authors found it easier to formulate the question in terms of individuals' behaviour when faced with alternatives which reduce the risk of death.

Mooney discusses some studies using the approach, such as that by Melinek who studied the behaviour of persons faced with crossing roads by surface or underpass. An alternative way of considering risk avoidance is that used by Jones-Lee who set up a study of risk taking in a hypothetical situation using a questionnaire based on the potential use of airlines with different risk factors and fares. The human capital approach is also discussed. This approach, based on man/s productive potential was used in the seventeenth century by Petty, but is currently popular with the "human capital" theorists. This approach assumes that the objective is to increase productivity and poses problems, especially in the valuation of health care to persons unable to work. The next approach considered is the one which measure the implied values - the values implied by decisions relating to the use of resources. This approach has the advantage of being easy to implement but it does not answer questions about what the balance health care programmes should be. It merely reflects the existing decision process and the values of the status quo.

AU : CULYER, A. J.
TI : "Need, Values and Health Status Measurement."
PU : In: Economic Aspects of Health Services
ed. Culyer, A.G. and Wright, K. G. Martin Robertson, 1978.
RE : This article begins with a consideration of the need for health care. He considers need for health care arises if it is possible to improve or prevent a deterioration in health status. To apply such a concept in the allocation of health care resources it is necessary to measure health status. In the remainder of the article Culyer considers the place of values in health status measurement, paying particular attention to three kinds of value judgements: those concerned with the choice of dimension in which to measure health status; those concerned with the weighting of the various dimensions; and those concerned with aggregating the various components to form an index.

The importance of the selection of dimensions and who should make judgements or whose values should be incorporated in designing the framework of dimensions to be used in the construction of the index are considered. The consequences for health care programmes of different groups making these decisons is discussed. The possibility of developing scales of the Guttman type which represent a continuum of sickness or disability is considered and it would appear that certain categorizations of dependence can be formulated in this way. The use of indices to measure inequality and the social impact of disease are reviewed particularly the work of Miller (1970) and Chen (1973), looking at the differential illness between Indians and the rest of the population of the USA.

Methods of aggregation and scaling are explored in some detail and the category, magnitude, equivalence, standard gamble and time trade-off methods of scaling are explained.

Culyer believes that sufficient conceptual and practical experience has been gained to justify the adoption of this approach at all levels of health service planning.

AU : ROSSER, R. M. and WATTS, V.C.
TI : The Development of a Classification of the Symptoms of Sickness and its Use to Measure the Output of a Hospital.
PU : Lees, Dennis and Shaw, Stella
Impairment Disability and Handicap
Heinemann Educational Books
London, 1974
RE : This paper describes the adoption of a measurement method which has as its aim the monitoring of the health status of patients in terms of both distress and disability. The authors take the view that medical treatment involves moving patients between health states and they are looking for methods of measuring and valuing those states. They conclude that values placed on different states tend to be consistent within professional groups and have high test/retest stability but differ between groups. The paper ends with a demonstration of how the measure could be used to measure the 'output' of a hospital. The article is interesting both becuase it goes some way to tackling important measurement problems and because of the further questionsíssues it raises.

AU : WILLIAMS, ALAN
TI : "What can Economists do to help Health Service Planning?"
PU : Studies in Modern Economic Analysis. 1977.
pp. 301-335. in Artis, N.J. and Norbay, A.K. et al.
RE : There are few good articles relating to the teaching of health economics. The article by Alan Williams was thought worthy of inclusion though it possibly needs some editing as it is designed for economists. If it was included in the collection it would be probably more suitable as a postcript than as an introduction. The article was written as an attempt by Williams to lure good economists into the field of health economics. In doing this he provides a clear delineation of the subject matter of health economics and indicates the potential contribution which economists might make in this field. In doing so he surveys work which has already been done as well as pointing to areas where work is needed.

He begins by discussing the enormous and growing proportion of nations' resources being spent by the health sector and bemoans the neglect of this sector by many economists. He then attempts to define health and its value taking the human capital theory of Becker and Grossman as a starting point. This lead him on to a survey of the work which has been undertaken to estimate the value of life and of health status. The demand side of health care and the special problems involved in deriving and interpreting demand schedules for health services are

discussed. The impact of different financial arrangements are discussed and studies relating to the responsiveness of demand are reviewed. The work relating to the supply of services - estimates of production functions and cost functions and the appropriate mix of resources is examined. Cost effectiveness and cost-benefit studies are described and the wider areas of planning and control mechanisms are reviewed. At all points the author is anxious to point out areas which remain unexplored and which merit further examination. This framework should provide a good rule for noneconomists who need to identify problems wihch might be usefully tackled by an economists.

On Planning Health Care

AU : KLARMAN, HERBERT E.

TI : Health Planning, Progress, Prospects and Issues in Milbank Memorial Fund Quaterly

PU : Health and Society
Vol. 56, No. 1, 1978

RE : The article begins by reviewing the development in health care planning in the USA and then proceeds to raise several fundamental issues in health planning and reviews much of the earlier thinking in this field. This latter section is of particular interest, it begins by raising the question, "Why embark on health planning?" The appeal is thought to reside in the rationality and the apparent simplicity of the concept of need. Much of the delight in planning he feels stems from the concept of need which, "As a measure of requirements of health care, the criteria of need has been more talking about and cited than made operational through empirical studies." The growing importance of the physicial as an agent (explored in the earlier work of Roemer) is examined and in that context the effect of a physician-induced demand on the supply of facilities. With the growth of wider insurance cover he sees the provider and patient as joint conspirations in the use of more and more health resources yet differences in geographical utilization rates have been no appreciable effect on health status of the relevant population.

Bearing in mind what Klarman sees as the deficiencies in "Need" as an operational tool for planning, he stresses control of supply. The ability to control supply depends upon authority and power. This is seen to be most likely to be achieved by a more participative approach amongst planners, providers and consumers of health care. He then tackles the question of allocation of budgets amongst many competing providers and the difficulties of planning for small areas.

It is a good example of the range of much of the Klarman work, his detailed knowledge of health services and the practical problems of planning services.

AU : MAYNARD, ALAN and WALKER, ARTHUR
TI : "Medical Manpower Planning in Britain: A critical appraisal"
PU : In: Economic Aspects of Health Services
ed. Culyer and Wright.
RE : This paper sets out to appraise critically the attempts that have been made to plan the supply of medical manpower in the United Kingdom in the period 1957-76. In doing so the authors consider the rationale and problems underlying manpower planning and why it might be necessary for governments to intervene to achieve a better balance of manpower and so avoid periodic surpluses and shortages developing. The imbalance which arise in the market for physicians are seen in the context of the eoconomics of the labour market. The special problems of adjustment which arise in connection with physicians relating to the strong professional influences which are reflected in long training requirements and entry limitations associated with the maintenance of "professional standards." They also consider the problems associated with the situation which exists in Britain, and other countries with a national health system, of their being effectively only one buyer of medical manpower.

After describing and explaining the reason for the lack of success of the early British attempts to forecast manpower the authors proceed to suggest some improvements which might be made in forecasting models. They set up a "stock-flow" model and analyse the supply and demand factors underlying changes in the stock of doctors.

The necessity to study carefully the elasticity of supply of female physicians, older physicians and migrants; the need to use a wide range of policy instruments in manpower planning; the need for investigation of substitutes; and the importance of regular forecasts showing costs of planning.

This article provides a framework worth considering by any planner about to embark on manpower planning or attempting to adjust the stock of physicians.

AU : HURST, JEREMY
TI : "Planning and Hospital Costs"
PU : In: Economics and Health Planning
Ed. Kenneth Lee. Croom Helm, 1974.
RE : This paper is useful in so far as it explains very simply some basic economic concepts relating to costing. The points made are illustrated with reference to applied research and the context is set in the field of planning national health services. Although this study is set in the context of the British National Health Service the message is applicable to other countries and other planning systems.

The author sets out to answer three planning questions: What ought costs to be? What are costs? What are costs likely to be in the future? His analysis begins with a discussion of economic theory and

hospital costs. The concept of a production function: a mathematical description of the inputs required to produce a given output, is introduced. With clear diagramatic representations the optimal combination of inputs which might be required to produce a given output is identified. Average and marginal cost curves are shown and the author proceeds to explain how choices might be made between services.

AU : POLE, J.D.
TI : "Programmes, Priorities and Budgets"
PU : British Journal of Social and Preventive Medicine
1974
RE : This paper is written at a turning point for planners in the British national health service. It stresses the need for a better systeam for allocating resources within the administered service. Proposals for planning procedures which were eventually adopted in the reorganized health service are described.

The development and inadequacies of a financial information system in the British N.H.S. is described and the merits of marginal costing rather than average costing information is discussed. Rather than describe an ideal information systeam Pole asks how much is needed at the various administration levels and for the various purposes of planning and management of the service.

He describes programme budgeting and the difficulties which arise in the selection of the programme structure and the setting and monitoring of objetives. The benefit side of the budget he considers the most difficult as not only is there no index of medical output, even if there was one there is no information relating to the contribution of medical treatment to changes in outcome. Until this dilemma is resolved he sees progress being made by use of cost benefit and cost effectiveness techniques.

On Defining Nation-wide Need for Health Care

AU : FRERICKO, RALPH R., BECHT, JAMES N. and FOXMAN, BETSY
TI : Prevalence and Cost of Illness Episodes in Rural Bolivia
PU : IN: International Journal of Epidemiology, 1980.
RE : This article describes research conducted as part of a demonstration project to improve the delivery of health services in rural Bolivia. In most areas of Bolivia the mortality statistics and the birth registration data are deficient because of under-reporting and there is no information on the use of health services. This article describes a house-based survey which was designed to discover patterns of medical care utilization and health expenditure attributable to self-reported illness in a rural lowlands population.

The survey was conducted in autumn of 1977; over three thousand persons were covered and there was a 98% participation rate. The households were selected on a two stage random sample. An especially trained team of Quechua and Spanish speaking auxiliary nurses conducted the interviews. Information was requested on symptomatic illness during the previous two weeks for all members of the household. Information was also gathered about who provided the care and how much it cost for the various componentes of the treatment. This information was subsequently coded by one code.

The population was young: over 50% were under fifteen years of age. Of the men 75% were self-employed agricultural workers and 94% of the women were household workers. Health problems had been experienced by 42% of the population. The prevalence was highest among the young and old. Although there were proportionately more illness episodes in females over five years of age the rate of illness for which a health worker was consulted was nearly identical up to forty for men and women, and then it was highest for women.

Medical assistance was obtained for 21% of the illness episodes. Over half of these consultations were at a hospital. A further 30% were either at a sanitary of medical post and only 8% were provided at the patient's home. The average expenditure for each reported illness was $2.13 per person and $4.42 per illness episode. Over 76% of the money was spent on medication; 15% was spent on fees for medical providers and 5% for transportation. Of the illnesses for which a physician was consulted the cost was $9.00 or more compared to $1.80 for illnesses for which a nurse was consulted and $.95 for visits to health promoters or midwives.

Of the male illnesses 23% were disabling, causing the man to be unable to work. The rate of disability was highest for gastro-intestinal problems, followed by respiratory problems. Only half of these with a disability sought help from a health worker.

The results are compared with those found in surveys in Ghana and Colombia. The Colombia study showed a 39% reported illness in a two week study compared with the 42% found in the Montero Region, and 21% in Ghana. The same male-female differences were found in all studies, including those in Australia and in the United States. This comparison could be extended to other areas where morbidity surveys are conducted.

The authors conclude with an appeal for efforts to provide health care for rural populations.

AU : BLACK, D.A.K. and POLE, J.D.
TI : Priorities in Biomedical Research
PU : British Journal of Preventive and Social Medicine
Vol. 29, 1975, P. 222-227

RE : The aim of the paper is, for purposes of determining research priorities, to try to estimate the importance of different diseases in terms of burden on the population in the U.K. The approach, however, could also be applicable to determining priorities for routine health service expenditure. The paper sets out for each of 54 categories of disease five indices of the burden on services, based respectively on inpatient days, outpatient referrals, consultations in family practice, sickness benefit, and loss of expectation of life. It finds that there is considerable variation in the rank-order of categories of disease, in their contribution to the five burdens; but for each burden the number of categories accounting for 50% of the total burden is not large, ranging from 3 to 9 out of the possible 54.

Health Care and Economic Development

AU : STEVENS, CARL M.
TI : "Health and Economic Development: Longer-run View
PU : Social Sci. Med.
1977, Vol. 11, No. 17/18, p. 809-817

RE : This paper discusses the contribution of improved health to economic development in the context of LDCs. In doing this the author distinguishes the short-term improvements which take place in the context of existing organizational and technical framework and the longer term improvements which may contribute to changing the context. Health planners are advised to consider the share to the health sector of development funds and in doing so, they will need to consider the impact of improved health status on economic development.

It is usually assumed that improvements in health status will increase both participation rates and the productivity of individual workers. These precepts are generally assumed to be valid on physiological grounds but these factors alone do not determine economic behavior. There is scope for empirical studies into the impact of changes in health status or output. Studies by Conly demonstrated that malaria did in fact reduce productivity and Fenwick and Figenschou found that Schistosoma mansoni patients' productivity increased after treatment. Malnutrition and iron deficiencies are also factors which have been implicated as a cause of work loss.

In the LDCs, however, it is generally assumed that becuase of unemployment or underemployment in the agricultura sector, the marginal product of labour is zero and so little impact is to be expected from health programmes. There may be shortages of labour during peak periods in the agricultural sector and shortages of skilled labour in other sectors which improvements in morbidity would counteract.

Attempts to assess long-term implications of health improvements need to be made in the context of a fairly detailed specification of the whole economy. This was done by Barlow in the study of malaria eradication. One of the major points at issue is whether the programme causes undesirable growth in the population. Evidence on this count is still unclear.

In the context of a village agricultural sector where apparent short-term effects from improved health care may be small, it is argued that the poor health of farmers is a major bar to the adoption and propagation of improved techniques. Even in non-agricultural sectors, it is suggested that poor health of the work force can reduce the pace of the whole productive process. In addition, the loss of time because of ill-health may slow down the acquisition of skills in the organization and cause problems in the internal labour market networks within the firm, distorting the promotion opportunities of workers and making it necessary to recruit more untrained workers from outside the firm to take over jobs which could be better filled by those with more experience of the industry.

Bearing in mind the measurement and conceptual problems, the author recommends that research is feasible and baseline studies should be set up on a number of sites and observations conducted to compare ex-ante and ex-post conditions.

This study should stimulate research interest in the design of protocols to measure the impact of health on development but whether or not studies are undertaken, the author highlights relationships which are potentially important to the progress of development.

AU : PAGLIN MORTON
TI : Public Health and Development: A New Analytical Framework
PU : Económica, 1974
RE : Paglin extends the traditional evaluation of public health as an investment in human capital to incorporate the consumer good dimension of public health which he considers has considerable advantage especially for health programmes in underdeveloped countries.

He asks what is the nature of health as a consumer good and explains it as an expenditure to relieve pain and suffering and to reduce the risk of dying. Better health is a "want" and health services the "good" which satisfies this want and thereby generates a utility. This framework is seen as being of the same general approach as that taken by Mishan in his article on the evaluation of human life. Both health goods and other goods are seen as contributing to improving life expectancy and can be combined in various ways to achieve an equal life expectancy. He constructs "iso-life" expectancy curves and production possibility functions which show the maximum of health and other goods which can be produced from a society's resources. The tangencies of

these two sets of curves define the maximum life expectancy which could be achieved if resources were allocated with the sole objective of minimizing risk of death. He then accepts that society is rarely so single-minded as to want merely to maximize life expectancy and that indeed they often prefer other things. He then draws up some more curves to illustrate the rate at which society are willing to substitute health goods for other goods. The difference between the locus of these tangency points and those derived from the line indicating the minimum life lost might be viewed as the difference between society preferences and those of public health enthusiasts or those who believe like Ruskin that there is "no wealth but life." It also represents the limit of social policy in achieving health improvements at any level of resources per capita. If there are externalities not taken into account by market then the true equilibrium will be rather higher than that derived merely by considering individual values.

Paglin considers that health services in general are mainly of consumer goods and public health programmes may be viewed to a large extent as collective consumption goods in so far as although they cannot be individually packaged they do provide benefits to individuals. He also shows that productivity itself will be effected in health care and other goods are not consumed up to a certain level and that improvements which affect the length of life have the same effect as a real increase in resources.

This apparently technical article provides a rich conceptual framework which would simplify many issues which worry planners and policy makers would simplify many issues which worry planners and policy makers by constructing an analytical framework which untangles many of the issues which presently appear to be imponderables. The challenge is to acquire the data to make this framework operational.

Cost Benefit/Cost Effectiveness Studies

AU : WILLIAMS, SANDERS, RIDDIOUGH and BELL
TI : "Cost-effectiveness of vaccination against pneumococcal pneumonia"
PU : New England Journal of Medicine
Sept. 1980.
RE : This study analyses the cost effectiveness of vaccination against pneumococcal pneumonia. It is seen as a study of primary prevention technology. Costs of medical care and the effects on health associated with a preventive programme are discussed from the perspective of society and of a third party provider such as medicare. As a result of the findings it is suggested that if the provision was directed towards certain high risk groups there would be considerable advantages for health programmes.

Pneumonia is the fifth largest cause of death in the U.S.A. Estimates of the proportion caused by pneumococcal bacteria vary from 10-35%. At 10% it has been estimated that treatment costs $135. at 1978 prices. Although vaccines have been available since early in the century, antibiotics are the major tool against the disease but 17% of patients die. A vaccine which is effective in 75% of all pneumonococal pneumonia is licensed by the Food and Drug Administration for high risk groups, those with chronic heart, lung and kidney disease, metabolic diseas and the elderly.

The study calculated that the expected changes in health effects and medical care costs produced by vaccination against pneumococcal pneumonia compared with the continuation of present treatment paths. Effectiveness was measured by assigning values to changes in morbidity and mortality to derive a quantifiable measure of added years of healthy life. The cost effectiveness measure was expressed as net medical cost per year of life saved. Only medical care expenses were included. In the first instance costs were included irrespective of whether they were met by patients or third party insurers. In the second instance only third party expenses were considered. The ratios were based on a hypothetical vaccination programme in June 1978 using a simulation model to estimate the effects for 1978 - 2050 for a vaccinated and unvaccinated population. Costs and effects were discounted at 5% and 10%. A sensitivity analysis was conducted on all variables.

Net benefits were found for all age groups but most remarkable were those for the over 65 age group. The Social Security Act specifically forbids Medicare payment for preventive immunization, physical examinations, hearing aids and glasses. Economists and physicians have noted the low level of financial support given to preventive services in comparison with other medical technologies despite the apparently high pay off in benefits relative to costs for successful prevention. This article illustrates the counter-productive aspects of some forms of financing on the efficient use of resources in health care.

AU : WALKER, GODFREY and GISH, OSCAR
TI : "Mobile Health Services. A Study in Cost-effectiveness"
PU : Medical Care
April 1977, Vol. XV, No. 4
RE : The mobility of scarce health workers is a matter of great importance in many areas of the world. This paper describes a cost-effectiveness study comparing land and air transport systems in delivering health care in Botswana. Botswana is a poor country in which most of the population are engaged in subsistence agriculture. The per capita income was estimated at £92 per head in (1973-74), but this was skewed in favour of the urban population; per capita income of the rural population was £28. The mining development led to a 12% annual growth rate rate of the economy in the seventies. Some of this growth is being used to develop rural areas. Access to largely hospital-based curative health services was shown to be dependent on proximity.

The study attempted to measure the cost-effectiveness (output defined by the number of patient contacts) in four rural clinics. Two mobile services, a lorry and a light-weight aircraft serving similar populations were evaluated and compared with the effectiveness of static clinic sites. It was found that the mobile services, particularly the air service, were more costly thatn the fixed site clinics. The effectiveness of treatment was also greater at fixed clinics. They considered, however, that mobile services had a supportive role to play in visiting skilled health workers in rural areas and for this purpose lorries were cheapest except for the most inaccessible localities.

This article provides a useful adjunct for planners of services in rural areas.

AU : GLASS, NORMAN
TI : Evaluation of Health Services Development
PU : In Kenneth Lee (Ed), Economics and Health Planning
Croom Helm, London, 1979
RE : In this paper Glass looks at a number of examples of work he has undertaken of a costéffectiveness type. The presentation does not attempt to set out details of the studies reported. Rather it tries to indicate some particular lessons which can be drawn for each one.

For example, the first study, of the location of peripheral outpatient clinics, points up the difficulty of defining need as 'medical fact'. The study finds a marked effect of distance on patient referral rates indicating that doctors take distance into account in their assessment of need. The third and fourth studies, which involve the screening of pregnant women for genetic defects in the foetus, strongly suggest that once an evaluation is embarked upon it may lead necessarily to many other evaluations and that artificial constraints may be incorporated into studies unless care is taken to consider them. The fifth study stresses that costs and benefits do not generally fall to the same people and notes how results should be presented to make this plan.

The value of the paper lies not in its academic elegance but in the practical guidance it contains from a seasoned cost/benefit campaigner in the health field.

AU : DRUMMOND, M.F.
PU : Principles of Economic Appraisal in Health Care
Oxford University Press, Oxford, 1980
RE : This book is intended as a guide for non economists with an interest in economic appraisal in the field of health care. It sets out the steps which have to be taken during the course of an evaluation and illustrates the steps, and difficulties which may be encountered, by examples. A companion volume is to be published very soon which contains a review and classification of many existing evalutive studies.

Role of Economists in Health Care

AU : WILLIAMS, ALAN
TI : "What can Economists do to help Health Service Planning?"
PU : Studies in Modern Economic Analysis. 1977.
pp. 301-335. in Artis, N.J. and Norbay, A.K. et al.
RE : There are few good articles relating to the teaching of health economics. The article by Alan Williams was thought worthy of inclusion though it possibly needs some editing as it is designed for economists. If it was included in the collection it would be probably more suitable as a postcript than as an introduction. The article was written as an attempt by Williams to lure good economists into the field of health economics. In doing this he provides a clear delineation of the subject matter of health economics and indicates the potential contribution which economists might make in this field. In doing so he surveys work which has already been done as well as pointing to areas where work is needed.

He begins by discussing the enormous and growing proportion of nations' resources being spent by the health sector and bemoans the neglect of this sector by many economists. He then attempts to define health and its value taking the human capital theory of Becker and Grossman as a starting point. This lead him on to a survey of the work which has been undertaken to estimate the value of life and of health status. The demand side of health care and the special problems involved in deriving and interpreting demand schedules for health services are discussed. The impact of different financial arrangements are discussed and studies relating to the responsiveness of demand are reviewed. The work relating to the supply of services - estimates of production functions and cost functions and the appropriate mix of resources is examined. Cost effectiveness and cost-benefit studies are described and the wider areas of planning and control mechanisms are reviewed. At all points the author is anxious to point out areas which remain unexplored and which merit further examination. This framework should provide a good rule for noneconomists who need to identify problems wihch might be usefully tackled by an economists.

ANEXO II

SHORT BIBLIOGRAPHY: HEALTH ECONOMICS

David W. Dunlop, Ph.D.*

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9,2 (1975) 133-139

AU : POPKIN, BARRY, et. al.
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PU : Social Science & Medicine
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PU : Health: What is it worth?
S. Mushkin and D.W. Dunlop eds
pp. 61-68, New York: Pergamon Press, 1979

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PU : Law and Contemporary Problems
40, 4 (Autumn 1976) 46-71

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PU : Social Science and Medicine
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In Selwa Muschking, ed.
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PU : University of Michigan, Center for Research on Economic Development
Discussion Paper 62 Ann Arbor, Michigan, Oct. 1976, 52pp mimeo

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PU : Social Science & Medicine
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AU : FIEDLER, JOHN, et.al.
TI : The Dynamics of Human Capital Formation in Developing Countries: A Review of the Relationship Between Health, Nutrition, Education and Population Change
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November, 1977, Revised draft, Fall 1978, pp 54

ANEXO III

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PU : Revista Centro Americana de Ciencias de la Salud
Año 3, No. 6, 1977

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PU : Rev. Mexicana de Ciencias Políticas y Sociales
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PU : Mimeo, FLACSO, México, 1980

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PU : Ed. Periferia

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TI : Extensión de cobertura con atención médica primaria.
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PU : A ser publicado en un libro por CESDP.

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Nota del Editor

Por motivo de fuerza mayor algunas referencias bibliográficas salieron de esta edición incompletas y con fallas de impresión. En la segunda edición de este documento tales errores serán corregidos.

Anexo IV

SHORT BIBLIOGRAPHY: HEALTH ECONOMICS

David Engler*, Ph.D.

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TI : Uncertainty and the Welfare Economics of Medical Care
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Anexo V

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* Recomendada en el Taller de Educación en Economía, Finanzas y Control de Costos Para Servicios de Salud, OPS. Brasilia, 1981.

ORGANIZACION PANAMERICANA DE LA SALUD
Oficina Sanitaria Panamericana, Oficina Regional de la
ORGANIZACION MUNDIAL DE LA SALUD

525 TWENTY-THIRD STREET, N.W., WASHINGTON, D.C. 20037, E.U.A. CABLEGRAMAS: OFSANPAN

SELECCION BIBLIOGRAFICA DE ARTICULOS EN PUBLICACIONES LATINOAMERICANAS ACERCA DE INVESTIGACION DE OPERACIONES Y ANALISIS DE SISTEMAS EN EL CAMPO DE LA SALUD

P O R

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Independientemente de nuestras actividades e intereses profesionales, todos tomamos decisiones. La mayoría de esas son rutinarias y bastante sencillas, pero muchas resultan ser complejas y hasta críticas para nuestra organización. Sin duda, el proceso de la toma de decisiones es más fácil, menos traumático y menos riesgoso, cuando nuestro nivel de información sobre el comportamiento del problema tratado es mayor, y es de tal magnitud y característica, que permite simplificar el problema a sus componentes más simples.

Cuando el ambiente en el cual nos encontramos es dinámico, ocurren muchos cambios y se desarrollan rápidamente, la toma de decisiones se dificulta substancialmente. Más aún, la instrumentación de la decisión se complica por la necesidad de reconsiderar el comportamiento de los parámetros que más representan los cambios en el entorno. Un ejemplo típico de un área con este dinamismo es el de la salud.

Para poder controlar y desenvolverse mejor en situaciones de esta índole, es necesario que los profesionales de la salud, especialmente los administradores de servicios médico-asistenciales, desarrollen destrezas en técnicas que les permitan manejar más fácilmente y más organizadamente grandes cantidades de información. Entre esas técnicas resaltan las de Investigación de Operaciones y Análisis de Sistemas, (IOAS).

No es fácil de definir las técnicas de IOAS. Rusell C. Koza, en su libro Mathematical and Operations Research Techniques in Health Administration (Colorado Associated University Press, 1973), nos dice que la IOAS es la aplicación de los métodos científicos, técnicas y herramientas al análisis y solución de problemas asociados con la operación y manejo de sistemas. El valor de la información generada mediante la aplicación de dichas técnicas está en su uso en el proceso de toma de decisiones.

Al aceptar esta definición, es importante notar que las técnicas y la metodología de la IOAS como tal, son recientes, aproximadamente 40 años; sus aplicaciones en el campo de la salud son más recientes aún.

El objetivo declarado de este trabajo es de presentar un resumen de aproximadamente 50 publicaciones en castellano y portugués, (artículos, libros, casos, etc.) sobre el tema de interés. Para tal efecto se han visitado numerosas bibliotecas profesionales y de instituciones académicas en Venezuela, en la Escuela de Salud Pública de la Universidad de Harvard, y la biblioteca de la Association of University Programs in Health Administration, AUPHA, en Washington D.C. Aún refiriéndose a la definición amplia de la IOAS, el autor logró identificar solamente 43 publicaciones.

En Harvard se preparó un "computer search" de banco de datos bibliográficos en los cuales en base a la utilización de palabras claves se han identificado 60 publicaciones, cuyos títulos indican que posiblemente serían de interés para los participantes de este Taller.

Cabe mencionar que entre los criterios de selección figuran los siguientes:

(i) Identificar artículos, libros, capítulos de libros, casos resúmenes de conferencias y comunicaciones privadas que incluyan ejemplos, metodología, técnicas o aplicaciones de la IOAS en el área de salud;

(ii) Elegir ejemplos y aplicaciones en diversas áreas funcionales o sobre el análisis de información médica o gerencial;

(iii) Demostrar que las técnicas de la IOAS tienen un campo amplio de aplicaciones, y requieren la colaboración de grupos de trabajo interdisciplinarios; y

(iv) Presentar alguna información general sobre lo que es la IOAS.

El documento está organizado en dos partes principales, la primera incluye los resúmenes de los documentos identificados en orden alfa-

bético en base al apellido del primer autor. La segunda parte presenta la lista de los títulos que podrían ser de interés. Aún cuando los títulos aparecen en inglés, los originales están en castellano o portugués.

Quiero agradecerles a Odorico Riveiro por su valiosa colaboración en la búsqueda de las publicaciones y a Zandra Cuña por su dedicación en mecanografiar este documento.

Pu: Administración de Empresas

Mayo 1974, Vol. 5 (50), pág. 125-135.

Au: Russel L. Ackoff

Ti: Posibilidades Actuales de la Investigación Operativa

Re: Trabajo de divulgación cuyo objetivo consiste en hacer conocer en términos generales, y sin entrar en tecnicismos matemáticos, las siete distintas clases de problemas que pueden hoy solucionar mediante técnicas de investigación operativa, y de las variadas situaciones que pueden cubrir estos problemas en la realidad. Está pues destinado a los dirigentes de empresa y profesionales no especializados en matemáticas, con el objeto de que puedan así formarse una idea general de las posibilidades que ofrece en la actualidad la investigación operativa como herramienta de administración.

Los temas discutidos como marcos conceptuales son:

(i) Problemas de Inventario;

(ii) Problemas de Colas de Espera;

(iii) Problemas de Asignación de Recursos;

(iv) Problemas de Recorrido;

(v) Problemas de Reemplazo y Mantenimiento;

(vi) Problemas de Búsqueda; y

(vii) Problemas de Competencia

Este documento no está en el campo de salud específicamente, pero presenta una buena discusión del método de pensar asociado con las técnicas de Investigación de Operaciones y Análisis de Sistemas.

Pu: Boletín de la Oficina Sanitaria Panamerciana, 84 (6): 471-80, 1978

Au: Francisco de Assis Machado

Ti: Participación del personal en la dirección de un servicio de Salud Pública (pág. 471-480)

Re: En este artículo se describe el proceso de cambios ocurridos en la estructura organizativa de un servicio de salud pública de tipo tradicional, de funcionamiento monolítico y de jerarquía vertical, a una estructura más dinámica y de participación en todos los niveles.

La experiencia aquí descrita, válida en términos de productividad institucional y de relaciones interpersonales, se puso en práctica en un Centro Regional de Salud del Estado de Minas Gerais, Brasil y fue repetida con mejores resultados en otro Centro del mismo Estado.

El marco de referencia para los trabajos lo lleva a partir de la estructura tradicional para definir una reforma administrativa. Luego se discute una evaluación de la experiencia de introducir cambios.

Entre las conclusiones más importantes se señala la necesidad de trabajar en grupos interdisciplinarios y lograr cooparticipación para la toma de decisiones. La experiencia demuestra que esta característica participativa se refleja en una mayor eficiencia del servicio.

Nota: El artículo no presenta expresamente una técnica de Investigación de Operaciones ni de análisis de sistemas. Pero, por la escasez de material publicado en español sobre temas asociados con el manejo de personal, el autor decidió incluir este artículo como un ejemplo, ya que aplicaciones de Investigación de operaciones requieren trabajo en grupos interdisciplinarios y deben tener una estructura organizativa como apoyo.

Pu: Medicina Sanitaria y Administración de Salud. Tomo II, Atención de la Salud, parte 3, 1978

Au: Juan José Barrenechea

Ti: La selección de Prioridades como Integrante del Proceso de Decisión, (pág. 206-214)

Re: El capítulo presenta reflexiones del autor sobre el comportamiento del proceso de decisión, con el subproceso de determinación de prioridades, en el sector salud. Se discuten apoyándose por flujogramas, técnicas para la sistematización de los criterios a ser considerador para el establecimiento de prioridades.

La identificación y selección de los problemas que deben ser solucionados para conseguir un propósito global, constituye la esencia misma de la definición de la política y, por lo tanto, la etapa de un proceso que desencadena la secuencia de decisiones necesarias para alcanzar el objetivo deseado. Esta consecuencia comprende la toma de decisiones en cuanto a seleccionar las mejores soluciones para los problemas, la programación de las actividades y de las inversiones que esas soluciones implican y su implementación.

El autor distingue el momento entre el análisis cuatitativo y cualitativo, situando [illegible] situación actual como parte del proceso de selección de problemas, soluciones viables y alternativas tecnológicas. En cuanto a los métodos de aumento del nivel de información para la toma de decisiones, se presentan el método del phi, y algunos modelos de experimentación.

Pu: Facultad de Ciencias Económicas y Administrativas, Universidad de Chile, 1976.

Au: Carmen Bastidas M. y Patricia Pearcy P.

Ti: Diseño de un Sistema de Determinación de Costos para Establecimientos Hospitalarios

Re: La presente investigación está dirigida hacia el problema integral de la comprensión y significado de la información contable en los establecimientos hospitalarios y no sólo a la rutina mecánica de los procedimientos que se pueden seguir en la acumulación de costos. Pretende hacer un aporte de tipo técnico-contable que sirva de ayuda a los niveles jerárquicos de la unidad hospitalaria, que le permitan obtener una visión más clara y completa del objeto administrado.

Evaluando el hospital como una unidad económica, se hace énfasis en los procesos de recopilación e interpretación racional y sistemática de la información contable y financiera procesada en la unidad, sin perder de vista la finalidad esencial de la misma como proporcionadora de atención médica.

El libro contiene cuatro capítulos:

(i) Elementos teóricos de costos; describe los conceptos de la teoría de sistemas de costos.

(ii) Consideraciones previas a la implantación de un sistema de costos para establecimientos hospitalarios; evalúa los aspectos técnicos a ser considerados previa instrumentación de un sistema de costos.

(iii) Definición de un sistema de determinación de costos hospitalarios; propone una metodología de recopilación de costos y

un procedimiento general para su cálculo;

(iv) Costos del sistema de determinación de costos al Hospital San Juan de Dios; mediante el ejemplo, explica integralmente los diferentes componentes y sus procedimientos.

Los formularios diseñados para el sistema, así como el flujograma del sistema de cálculo de costos se incluyen al final.

Pu: Revista de Administración Pública # 4, Vol. 13, oct/dic. 1974 (pág. 137).

Au: Paulo Ricardo da Silva Maia e Valéria de Souza

Ti: O processo orcamentario da Secretaria de Saúde e Promocao Social de Niteroi: um estudo de caso

Re: El proceso presupuestario a nivel municipal presenta características bastante peculiares. La elaboración del programa trae consigo pocas similutudes entre los varios municipios. Debido a estos factores, entre otros, se torna muy difícil la recolección de datos. Este estudio del Municipio de Niteroi, en su Secretaría de Salud, tiene como objeto disminuir estos obstáculos. De acuerdo a su conformación dicho Municipio sirve como parámetro para un estudio metodológico de una determinada categoría de municipios. La facilidad de acceso a las informaciones en esta región contribuyó a que conclusiones fueran más fácilmente formuladas, conclusiones estas que servían a un universo de municipios cuyas características serán similares.

Este trabajo presenta cuadros y flujogramas que ayudan a comparar dicho municipio de Niteroi con muchos otros no solamente en Brasil sino en toda América Latina. Asimismo, se discutía la estructura organizacional del sistema de servicios de salud en el municipio y se evalúa el flujograma del proceso presupuestario correspondiente.

Pu: Administración de Empresas
1970, N°1, pág. 359-367

Pu: Ministerio de Obras Públicas de Venezuela, Dirección General de Desarrollo Urbanístico, Secretaría Técnica, Unidad de Investigación, 1976

Au: W.A. de Dunia, C. Garmendia, M.T. Tello, L. Martínez y G. Torres (miembros de departmaento de estudios avanzados)

Ti: Servicio de Emergencia. Consideraciones Conceptuales sobre su Funcionamiento y Organización Especial. (Centros Ambulatorios de Salud y Hospital General de 200 camas); Nota técnica 76-NTe-13

Re: Este papel de trabajo comprende el análisis e interpretación de tres factores básicos:

i) la programación vigente en el país (Venezuela) para varios tipos de Centros Asistenciales;

ii) Los criterios de organización espacial empleados en varios proyectos realizados por el Minsiterio de Obras Públicas; y

iii) la observación directa del funcionamiento del servicio de emergencia en varios Centros Asistenciales.

La última parte del trabajo presenta una visión dinámica de un Servicio de Emergencia en forma de diagramas de flujo, las cuales pueden ser la base para la simulación del recorrido de distintas mezclas de pacientes, y el uso consiguiente de las instalaciones. Los resultados presentados son útiles desde el punto de vista de la programación y control de actividades, y para planificación de espacio y capacidad. Los conceptos y la metodología presentadas son generales y aplicables en otras áreas del servicio médico-asistencial.

Pu: Técnica Hospitalaria, Vol. XXVII, Nov. 1-2, Mar-Jun., 1980

Au: Jorge Brull, M.S., Víctor R. Marrero, y Jorge Iván Reyes.

Ti: El Aumento en Costos en la Industria Hospitalaria (pág. 31-33)

Re: La contención y control de los costos en la industria hospitalaria, es una tarea ardua y sumamente compleja. La misma requiere el envolvimiento y participación de todos los factores que interactúan en dicha industria.

Se presenta una discusión de los cinco factores considerados como los más influyentes sobre los costos del hospital:

(i) Tamaño del hospital;

(ii) Amplitud de los servicios ofrecidos;

(iii) Actividades de investigación y enseñanza;

(iv) Factores de producción; y

(v) Eficiencia organizacional.

También se ofrecen recomendaciones específicas sobre la programación de RR.HH., utilizándose instalciones hsopitalarias, manejo de personal y su desarrollo y procesamiento de información.

Pu: Ministerio de Obras Públicas de Venezuela, Dirección General de Desarrollo Urbanístico, Secretaría Técnica, Unidad de Investigación, 1976

Au: W.A. de Dunia, C. Garmendia, M.T. Tello, L. Martínez y G. Torres (miembros de departmaento de estudios avanzados)

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Pu: Medicina Sanitaria y Administración de Salud, Tomo II, Atención de la Salud, parte 3, 1978.

Au: Adolfo H. Chorny

Ti: Los Modelos Matemáticos: su aplicación al Campo de la Salud, (pág. 231-243)

Re: En este trabajo se presentan algunos elementos que le permitirán al "profesional de salud ir adentrándose en un campo que hasta ahora le ha resultado de muy difícil acceso: el mundo de los modelos matemáticos. Este intento de apertura no se hace por un mero interés académico sino que tiende a llenar un vacío - el que existe entre el sector salud y los modelos matemáticos - con el propósito de que quienes se desempeñan en el área de salud tengan acceso a un instrumento que ha demostrado ser de gran utilidad para planificar, proyectar, decidir e investigar de manera correcta en varios de los diversos aspectos que configuran lso complejos problemas del sector".

Reconociendo la distancia entre el desarrollo de la metodología de modelación matemática y sus aplicaciones en el área salud, el autor discute algunas nociones acerca de los modelos matemáticos, modelos analíticos algebraicos, modelos acumulativos, modelos de simulación, y finalmente la experimentación numérica. Un punto importante en este capítulo es la discusión sobre los pasos a seguir para la construcción de un modelo matemático, y la importancia de su validación. También se presentan algunos ejemplos de aplicaciones al sector salud de los modelos de experimentación nemérica.

Pu: Boletín de Salud Pública, Año V, # 3, Julio 1971, Caracas

Au: Colaboración de la División de Dermatología Sanitaria

Ti: Investigación Operacional - Rendimiento (pág. 10-12)

Re: La investigación operacional es una etapa básica en al preparación de actividades, pues lleva a un conocimiento real del rendimiento de los recursos en unidades del tiempo, además que permite obtener una ordenación justa de las acciones en beneficio de su rápida ejecución y por tanto de una mayor eficiencia.

El artículo presenta algunos promedios de rendimiento obtenidos en 26 servicios en Venezuela, para las actividades básicas a desarrollar en un servicio de campo.

Pu: Trabajo presentado en el Congreso Internacional de Sistemas, Hotel Macuto Sheraton, Julio 1981, Venezuela

Au: Napoleón Ortiz Coli, María Collado y Edgar Rodríguez

Ti: Un Modelo del Proceso de Micción

Re: El objetivo del trabajo es hallar un modelo matemático del proceso de micción, tomando como referencia el comportamiento fisiológico de la vejiga humana y el tracto uretral.

El modelo seleccionado consisten en una esfera de radio constante, la cual descarga por un orificio de sección variable. La descarga se hace por gravedad a través de una abertura que permanece abierta durante un período inicial y luego se cierra en forma aproximadamente lineal.

Se tomó como patrón de comparación una curva considerada como representativa de una micción normal, obtenida de una prueba realizada en un paciente seleccionado en forma conveniente. A objeto de comparar el modelo propuesto con los resultados experimentales, se elaboró un programa de simulación digital, cuyos resultados demostraron una muy buena aproximación entre el modelo escogido y las curvas experimentales.

Se presenta la formulación matemática completa y una serie de gráficos evaluando el proceso. Estos gráficos comparativos fueron desarrollados en base de un modelo de simulación.

Pu: Organización Panamericana de la Salud, Escuela de Ingeniería Industrial, Facultad de Ingeniería, Universidad de Costa Rica, 1974

Au: Miembros de la Facultad de Ingeniería

Ti: Estudio de Ingeniería Industrial en el Subsistema "Procesar y Distribuir Alimentos", del Hospital Nacional de Niños.

Re: El estudio presentado evoluciona en el concepto de Sistemas y su relación a la Ingeniería Industrial. Los autores eligieron este enfoque para poder considerar el hospital como "un todo orgánico y no como la mera suma de sus partes".

La metodología y los pasos seguidos en el estudio son los siguientes:

i) Definición del sistema y recopilación de datos;

ii) Formulación de objetivos;

iii) Análisis del sistema mediante el uso de modelos que representan la realidad de modo simplificado. Los sistemas más complejos se simplifican al separarlos en subsistemas según criterios que se relacionan a los objetivos formulados;

iv) Diganóstico crítico de la situación actual;

v) Elaboración de alternativas mediante modelos que permitan la evaluación de ventajas y desventajas y comparación de alternativas; por ejemplo modelos de simulación;

vi) Elegir y diseñar una solución;

vii) Instrumentación del sistema elegido;

viii) Control, retroalimentación y evaluación; y

ix) Reformulación del problema

Pu: Universidad Central de Venezuela - Facultad de Medicina - Escuela de Salud Pública - Departamento de Administración de Empresas.

Au: Felipe García Vidaurre

Ti: Programa de Administración de Suministros

Re: Este documento es un material de apoyo para una materia de un programa de educación contínua.

El objetivo de la materia es de transmitir a los participantes el conocimiento de las más modernas técnicas especializadas en la Administración de Suministros, en la medida necesaria para tomar decisiones y formular políticas.

El documento trata los siguientes temas:

(i) Definir de lo qué se entiende por Administración de Suministros

(ii) Control de Existencia

(iii) Métodos de Compra

(iv) Presupuesto de operacón en la Administración de Suministros.

El material está escrito muy claramente y se apoya en muchos ejemplos. Su nivel técnico es muy elemental y sencillo.

Pu: Revista de la Sociedad Venezolana de Salud Pública, # 53, julio 1974.

Au: J.A. González Fernández

Ti: Costos de Construcción de Hospitales en Venezuela (pág. 188-191)

Re: Cuando se analizan los costos de construcción de hospitales con una conciencia, se observa qeu los factores determinantes son factibles de ser corregidos, para que la inversión que el Estado efectúa como un imperativo por el constante aumento demográfico, sea adecuada.

El artículo presenta un análisis preliminar de costos de la construcción hospitalaria en Venezuela para 1974; identifica algunos factores, tales como especialización y número de camas, necesidades reales de la población, tiempo de espera entre construcción y y puesta en marcha, como los más influyentes sobre el comportamiento de costos; y compara superficialmente - los costos de edificaciones hospitalarias en Venezuela con las de los EE.UU.

El tema es de mucha importancia aún que este artículo lo trata con bastante simplicicidad.

Pu: Cuadernos de Salud Pública, # 51

Organización Mundial de la Salud, 1974

Au: F. Grundy y W.A. Reinke

Ti: Investigaciones de Práctica Sanitaria y métodos matemáticos de gestión (Cap. I, II, IV y VIII)

Re: Cualquier sistema debidamente organizado de asistencia sanitaria comprende dispositivos para la evaluación de su eficiencia en el cumplimiento de los fines propuestos. En rigor, la evaluación es una actividad distinta de la investigación, aunque a veces sea difícil trazar la frontera entre una y otra.

Los datos para fines administrativos, por ejemplo, son muchas veces útiles para la investigación y lo mismo ocurre con los análisis comparativos de los resultados de estudios prácticos- Por otra parte, si se exceptúan ciertas técnicas de análisis muy complicadas, los métodos usados en la planificación y en la gestión son idénticos a los empleados en la investigación, circunstancias de particular interés para el presente estudio, que trata sobre todo de métodos y técnicas.

Este libro, contiene ocho capítulos de los cuales el primero: Alcance y Naturaleza de las Investigaciones de Práctica Sanitaria, abre una discusión sobre la noción de sistema y el análisis de sistema, y una evaluación de los modelos y el método científico y de la investigación operativa.

El segundo capítulo: Los Métodos de Investigación Operativa y su Aplicación en la Práctica Sanitaria, además de la presentación de técnicas sencillas incluye una discusión sobre el uso y diseño de

de modelos.

El cuarto capítulo presenta la tuilización y la planificación de servicios con aplicación de programación lineal. El último capítulo persenta y evalúa planes de estudio para la formación de personal para administración sanitaria y para investigaciones de prácticas sanitarias.

Pu: Boletín de Salud Pública, Año IV, # 7, Enero 1970

Au: G. Edwin Howe

Ti: La descentralización como Ayuda a la Coordinación de Atención Médica, (pág. 9-14)

Re: La administración descentralizada de la atención médica, ha probado hasta ahora ser un sistema eficaz y dinámico en los Hospiles Universitarios del Estado de Ohio. La orientación del cuidado médico, más que un servicio es el pilar de la nueva organización.

El enfoque de análisis de sistemas se aplica a la definición del paciente como el centro de actividades. Se discuten nuevas funciones dirigidas a la unidad de cuidado intensivo y otras con monitores o equipo de alto desarrollo tecnológico.

El énfasis está en la administración y coordinación de los servicios de asistencia médica.

Pu: Medicina Sanitaria y Administraicón de Salud, Tomo II, Atención de la Salud, parte 2, 1978

Au: Manuel Kulfas

Ti: Administración Presupuestaria (pág. 97-117)

Re: El presupuesto representa la savia vital que garantiza la subsistencia y continuación en el tiempo de los organismos. Los insumos materiales y humanos son asegurados, precisamente, mediante la adecuada asignación de créditos. Pero el presupuesto representa, además de la autorización para efectuar determinados gastos, el poder o prestigio que se asigna a ciertos funcionarios en un momento dado, por ejemplo, cuando la ley correpondiente otorga créditos específicamente destinados a organismos o programas que gozan del favor, la simpatía o las preferencias del poder ejecutivo o legislativo. Toda referencia a la administración del presupuesto debe tener en cuenta un problema que se plantea con mucha asiduidad, representado por la falta de fondos para hacer frente oportunamente a las obligaciones que emergen de los compromisos contraídos durante la ejecución del presupuesto, es decir, de la gestión específica del organismo.

El artículo presenta los conceptos y principios básicos del proceso presupuestario, el sistema de planeamiento relacionando actividades de programación con el presupuesto. También se discute la dinámica del proceso de planificación, y se presentan distintos criterios de medición. Las últimas secciones del artículo son las que lo convierten en importante para usuarios de técnicas de investigación

de operaciones. Esta presenta brevemente un análisis de costo-beneficio y costo-efectividad, el sistema de informaciones, y una serie de aspectos relevantes para el proceso de instrumentación de un sistema presupuestario con orientación programática.

Pu: Editora de la Fundación Getulio Vargas

Au: Uriel de Magalhaes

Ti: Demanda de Salud en el Brasil: Dos Estudios de Casos

Re: La presente investigación, sin duda alguna limitada por dificultades de orden metodológico y empírico, tiene como objeto el significado de ciertas variables que puedan ser usadas como facilitadoras de decisiones de asignación de recursos para el sector salud.

La presentación del modelo teórico obedece a una visión macroeconómica de la demanda individual de salud. Dicho modelo resalta la diferencia entre el capital-salud y las otras formas de capital humano, por ejemplo, los individuos nacen con un stock inicial de salud que se deprecia con el tiempo, el cual puede ser aumentado a través de la inversión en la salud. Los consumidores demandan salud por dos motivos: como bien de consumo y/o como bien de inversión.

El estudio empírico se concentra en los casos específicos de dos muestras, una en Río de Janeiro (1973) y otra en Sao Paulo (1971/72), los cuales, principalmente el primero, presenta limitaciones en los datos disponibles que implicarán resultados empíricos relativamente pobres.

Sin embargo, el modelo básico teórico también presenta diversas limitaciones como la hipótesis de mercado de capital perfecto, la forma como aumenta el costo marginal de producción, etc.

Se señala al final los aspectos relevantes para una política nacional de salud.

Pu: Medicina Sanitaria y Administración de Salud, Tomo II, Atención de la Salud, parte 3, 1978

Au: Isidoro Marín

Ti: Investigación Operativa, (pág. 244-260)

Re: La tendencia más destacable hoy en la técnica gerencial es aquella que pone especial énfasis en la adopción racional de decisiones mediante el auxilio de métodos cuantitativos de análisis, si bien debe recordarse que su empleo no sustituye, en absoluto, al criterio y a la evaluación analítica propios de la dirección.

Este capítulo está destinado a esclarecer el papel y la modalidad con que debe enfocarse este análisis, utilizando técnicas de investigación de Operaciones. Luego de explicar distintas definiciones de investigación de operaciones, el autor dicute en detalle la necesidad e importancia del uso del método científico para resolver problemas gerenciales, mediante la solución de un problema de asignación.

Junto con un llamado a los directivos para determinar su papel ante nuevas técnicas y métodos, el autor lista una agrupación, en determinadas teorías generales de las distintas teorías y técnicas de modelación:

(i) Programación lineal y modelos especiales de distribución;

(ii) Programación no lineal;

(iii) Teoría de juegos;

(iv) Programación dinámica;

(v) Teoría de colas;

(vi) Control de Inventarios;

(vii) Teorpia de reemplazos;

(viii) Teoría de decisión;

(ix) Teoría de Información;

(x) Modelos de simulación;

(xi) Procesos estocásticos; y

(xii) Teoría de redes.

También se presenta una evolución de las aplicaciones de la investigación de operaciones a los problemas de salud, y se resuelve un ejemplo de cálculo elemental de una dieta óptima de costo mínimo.

Al final, en las conclusiones, el autor da cinco apreciaciones sobre las perspectivas de aplicaciones de la investigación de operaciones en el campo de la salud.

Pu: Universidad Central de Venezuela, Facultad de Medicina, Escuela de Salud Pública (1979)

Au: José Germán Medina

Ti: Organización del Departamento de Cirugía del Hospital Central de las Fuerzas Armadas "Dr. Carlos Arvelo".

Re: Una buena Departamentalización hospitalaria conducida por un Médico conocedor de los aspectos administrativos que se deben manejar a nivel de una Dirección de Hospital, aseguraría el éxito de toda la programación en salud que se le pueda planificar a una Institución prestadora de servicios de salud.

Aún cuando el trabajo no se base directamente en la metodología de Investigación de Operaciones o de Análisis de Sistemas, su enfoque de evaluación partiendo de la definición de objetivos, descripción y medición de actividades y siguiendo mediante la localización de servicios y la medición de su uso con el objetivo de la organización funcional de los mismos, permite aceptarlo como un ejemplo de aplicación para la planificación departamentalizada de un hospital.

Pu: Organización Panamericana de la Salud, 1969

Au: R. Llewelyn-Davies y H.M. C. Macaulay

Ti: Planificación y Administración de Hospitales, Publicación Científica Nº 191, (pág. 7-64).

Re: Esta monografía tiene por objeto exponer algunos de los resultados prácticos sobre la planificación y administración de hospitales a fin de prestar ayuda a las autoridades de todas partes del mundo encargadas de esa labor.

Dicha monografía no pretende ser un libro de texto, ni abarcar los múltiples detalles de la planificación y administración de hospitales; resultaría imposible hacerlo en un sólo volumen.

Ahora bien, trata de señalar algunos de los obstáculos con que han de tropezar las autoridades de la planificación de hospitales, llaman la atención sobre los errores cometidos en diversos partes del mundo e indican los principios generales que deben regir esas actividades y la clase de asesorameinto técnico que debe obtenerse antes de planificar un hospital.

Se eligió recomendar la primera parte del libro, capítulos 1-4, y el capítulo cinco de la segunda parte. El primer capítulo se concentra en la definición del rol del hospital en el servicio regional de salud, presentado en sistemas regionalizados de hospitales. El capítulo 2, sobre costos y su relación al nivel de utilización del hospital, también enfatiza el uso de índices para la evaluación de tasas de costo-utilización. El capítulo próximo, compara hospitales públicos y privados desde el punto de vista de administración y organización del hospital. El cuarto capítulo presenta algunas funciones especiales del hospital: docencia, laboratorios, salud

mental, consumo y otros.

El quinto capítulo discute en detalle los procedimientos y mecanismos de cálculo en la planificación hospitalaria. En este último capítulo se comparan programas de planificación con la evaluación de necesidades.

Pu: Instituto Médico La Floresta, Fundación Julián Karam, Caracas, 1972

Au: Rolando Moreno Calvo

Ti: Apertura de un Hospital Privado

Re: Este trabajo fue hecho con el firme propósito de poder transmitir su vivencia a todas las personas interesadas en el tema, y con la esperanza de que el mismo sea útil no sólo a proyectos futuros sino a los Administradores de Instituciones Hospitalarias de todos los sectores. Una de las soluciones factibles de aplicar a nuestros servicios de atención médica con el propósito de lograr su superación, sería el de tener una política administrativa basada en algunos de los criterios y procedimientos empleados por la iniciativa privada.

El común denominador de todas las fases de análisis es el concepto (llamado por el autor, administrativo) de sistemas. Así, para cada proceso de decisión se evalúan: (a) Entrada (quién? dónde? por qué?); (b) Mezcla o procedimiento (cómo?); y (c) Salida (qué?) El trabajo en su primera parte presenta un estudio de demanda, comparados los resultados con las observaciones de los cuatro primeros meses de operación del hospital. En la segunda parte, se discute la creación del departamento de contabilidad.

El documento también incluye distintos ejemplares de formularios y flujos de acumulación de información dentro del hospital.

Pu: Atención Médica, V. 2, N 1/2, junio/septiembre 1973

Au: Sara Novaro

Ti: Asignación de camas en servicios de hospitalización: una técnica posible (pág. 101-135)

Re: La técnica que se presenta en este trabajo es de utilidad, bajo ciertas condiciones que se describen, para dar soluciones al problema de asignar un número adecuado de camas en servicios de hospitalización de modo que se puede satisfacer un volumen de requerimientos esperados.

Las soluciones están resumidas en una tabla de asignaciones alternativas de camas en función de uso diario promedio. Para ilustrar el método utilizado se presenta un breve ejemplo. También se anexa el detalle de la formulación matemática mediante la cual se obtienen las soluciones, así como el programa de computación utilizado.

El esquema metodológico desarrollado es de teoría de colas basándose en cuatro supuestos:

(i) La llegada de pacientes es Poisson;

(ii) No existe lista de espera ni demanda atrasada

(iii) El tiempo de estadía es independiente de la tasa de ocupación.; y

(iv) La recuperación de camas es instantánea.

Pu: Organización Panamericana de la Salud (1974)

Au: Organización Panamericana de la Salud (I/4-026)

Ti: Sistemas: Algunos concetos de la Teoría

Re: Cada vez con mayor frecuencia se escuchan referencias a "sistemas de salud", "sistemas sociales", "sistemas políticos", etc., sin que en muchos casos se definan con exactitud cuáles son los alcances de dichas expresiones. Generalmente ellas se ofrecen para satisfacer las condiciones del contexto dentro del que se las utiliza; sin embargo, en los últimos años ha ido creciendo el interés por llegar a contar con una "teoría general de sistemas" que compatibilice los diferentes usos que se hacen del concepto de sistema en todas las ciencias y que permite disponer de un marco teórico general de uso común, con un lenguaje único para favorecer la transferencia interdisciplinaria de conocimiento.

Este breve documento ofrece distintas definiciones de un sistema. Trata de caracterizar los principales factores que determinan su dinámica interna e interrelacionan con el contorno así como las distintas maneras de definir la jerarquización de un sistema operativo con esté abierto o cerrado. También se presenta una muy breve discusión sobre efectividad, eficiencia, eficacia y la definición de estado de un sistema.

Pu: Organización Panamericana de la Salud (1981)

Au: Jorge Ortiz Castro

Ti: Método del Camino Crítico en la Administración de Proyectos de Salud (RD/11/2)

Re: Este manual introduce al lector con la técnica del camino crítico - método de investigación operativa, especialmente diseñado para la administración de proyectos.

El administrador de hoy en día se encuentra enfrentado a una serie de problemas complejos de la práctica sanitaria, cuya solución, en términos de alternativas existentes y métodos de comparación entre las alternativas, escapan a la simple intuición y métodos de trabajo.

La racionalización del proceso de adopción de decisiones por medio de métodos analíticos de gestión, tiene como propósito el incrementar al máximo la objetividad del administrador.

La investigación operativa, mediante el enfoque de sistemas, presenta un marco conceptual y técnicas específicas de trabajo que proveen al ejecutivo en el sector salud con criterios cuatitativos que le facilitan racionalizar sus decisiones.

El manual presente en las tres primeras secciones, los principios, conceptos e instrumentos requeridos en al aplicación del método, mientras que en la cuarta sección se presentan aplicaciones prácticas del método a proyectos de salud.

La primera sección está dedicada a planificación, haciendo referencia especial al proceso de desarrollo de un modelo gráfico como mecanismo de diagnóstico de un proyecto de salud como un sistema.

La sección segunda, programación, corresponde a la formulación y optimización del modelo analítico que representa el proyecto. La tercera sección, la de control, es muy corta y bastante resumida, compara la programación teórica con el desarrollo real de las actividades.

El manual ha sido elaborado como una guía complementaria a la enseñanza del método de ruta crítica en cursos y seminarios (administración hospitalaria, planificación de salud animal, administración de salud, programación, etc.) que la Oficina Sanitaria Panamericana ha venido organizando para contribuir a la formación de administradores de sistemas de salud.

Pu: Organización Panamericana de la Salud (1972)

Au: Jorge J. Ortiz*

Ti: Aplicación de líneas de Espera al Estudio de una Unidad de Mensajeros en un Hospital, (RD/11/8)

Re: Este documento pretende desarrollar, por medio del enfoque de análisis de sistemas, elementos de juicio que le sean útiles de administración del hospital en la selección del número adecuado de mensajeros en la unidad.

La función de la Unidad de Mensajeros es la de trasportar pacientes, reportes, especímenes, etc., en solicitud a la demanda al azar de cualquier sección del hospital. El servicio es de tipo FIFO, formándose una cola de solicitudes de servicios, cuando todas los mensajeros están ocupados.

El tiempo de ejecución también tiene carácter aleatorio. Así el cálculo del número de horas-hombre requeridos en la unidad se complica, y por lo tanto, el enfoque de analísis era más bien de análisis de sistemas y no de desarrllo teórico-analítico, aun cuando se presenta un modelo analítico bastante asociado con las siguientes hipótesis sobre el comportamiento del sistema.

(i) Distribución de solicitudes de servicio es exponencial;

(ii) Distribución de tiempos de servicio es poisson; y

(iii) La orden de servicio es de tipo FIFO.

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* Preparado por el Ing. Jorge J. Ortiz, Jefe de la Unidad de Investigación Operativa, Departamento de Promoción y Coordinación de Investigaciones, Organización Panamericana de la Salud, Washington, D.C., basado en el estudio "Hospital Manpower Planning by Use of Queueing Theory," por Ishwar Gupta, Juan Zoreda y Nathan Kramer, publicado en la revista Health Services Research, Vol 6, No. 1, pp 76-82, 1971.

Pu: Organización Panamerciana de la Salud, Vigésima Reunión del Comité Asesor sobre Investigaciones Médicas, 1980

Au: J. Ortiz

Ti: Informe al Comité Asesor en Investigaciones Médicas sobre el Seminario Regional de Investigación Operacional en Salud.

Re: Aun que este documento no constituye una publicación oficial de la OPS, las opiniones y observaciones del autor reflejan el estado de la naturaleza de las aplicaciones de la investigación de operaciones de la salud.

El autor parte con la mención de algunos antecedentes históricos en el desarrollo de la investigación de operaciones en salud en latinoamérica. También se proporciona una lista de proyectos de aplicación que se ha llevado a cabo en Ministerios de salud, hospitales privados y estatales en el período 1973-1979.

Se presentan las recomendaciones de los grupos de trabajo sobre el marco conceptual de la investigación de operaciones en el campo de la salud, sugerencias para el desarrollo de aspectos metodológicos, formación y adiestramiento de RR.HH., mecanismos de difusión y promoción de la investigación en el campo, y la manera de crear comunicación inter-institucional.

Pu: Organización Panamericana de la Salud, 1976

Au: J. Peña, J. Ortiz y E. Goldstuker

Ti: Sistema de Información Dinámica de Evaluación del Apoyo a Unidades de Pacientes - SIDEA, (RD/13/16).

Re: El estudio ofrece un esquema metodológico de diagnóstico de evaluación para el uso de los directores de instituciones médico-asistenciales, con el objeto de mejorar el funcionamiento de los procesos de atención médica indirecta. Los autores parten de la definición del hospital como "un sistema de salud que integra la demanda de prestaciones con la oferta de recursos a través de una compleja red de interrelaciones de apoyo". Se presentan modelos de hospital como un sistema de salud, un diseño de los componentes del sistema de control funcionales y locales, se discuten esquemas estadísticos de una serie de índices dirarios promedios para determinar si el procesos se encuentra en

Se presentan también resultados numéricos y gráficos para distintos subsistemas funcionaels en pensionado, cirugía y medicina.

Pu: Organización Panamericana de la Salud, División de Recursos Humanos e Investigación, 1980.

Au: Víctor L. Pérez

Ti: Sistemas de Información y Decisión en la Investigación Administrativa de los Servicios de Salud, (HRC/1/80).

Re: El documento presenta "conceptos fundamentales de sistemas de información en forma accesible al personal del sector salud". La concentración en el desarrollo de un sistema de información administrativa con ejemplo en los servicios de salud.

El documento parte del estudio de necesidades, y sigue con la clasificación de distintos enfoques de los sistemas de información. También se presentan detalles sobre los pasos a seguir para el desarrollo de dicho sistema, y una discusión sobre le ciclo de vida del sistema.

Se ofrecen esquemas y diagramas de flujo del diseño lógico del sistema, y de su diseño físico, su operación, mantenimiento y evaluación. También hay una sección sobre la relación entre los sistemas de información administrativa y los procesos de toma de decisiones en la organización.

El documento es general y servirá de base educacional en el área de análisis de sistemas para la generación de sistemas de información gerencial. La aplicación de la metodología al área salud es inmediata.

Pu:

Au: A Reisman, E. Green, H. Emmons, S. Mehta, S. Morito, K. Dadachanji y R. Occhionero.

Ti: Consideraciones Económicas y Administrativas en el Ejercicio de la odontología en equipo, (pág. 795-807).

Re: El artículo resume el trabajo y los resultados logrados, por un equipo de investigadores de la escuela de odontología y el departamento de investigación de operaciones en la Universidad Case Western Reserve en Ohio, sobre los problemas de organización surgidos en la programación de pacientes, estudiantes dentales y auxiliares dentales de responsabilidades mayores en la clínica.

Al principio se ofrece una breve discusión sobre la aplicación de técnicas de investigación de operaciones a la odontología. Específicamente, en la programación de pacientes y del personal, en el análisis de costos, para predicciones y para control administrativo. Se presentan ejemplos de programación para distintas configuraciones de práctica, así como un desglose general de los costos operativos del año.

Como conclusión los autores mencionan que las técnicas de investigación de operaciones fueron adecuadas para el análisis por haber una cooperación entre los dentistas y los científicos en administración.

Pu: Boletín de la Oficina Sanitaria Panamericana, 84 (6)y 493-504, 1978.

Ti: Estado Actual del Sistema de Control de Pacientes del Hospital de Clínicas,(pág. 493-504)

Au: Roberto J. Rodríguez, Luis Carlos Arcón, y Luis A. Almeida Pimentel

Re: Analistas de sistemas, médicos y administradores cooperan en el establecimiento de un sistema de información y comunicación basado en la computadora, destinado a centralizar la información clínica sobre los pacientes, mejorar la comunicación entre los distintos sectores del complejo de asistencia médica, y establecer un control eficaz sobre la inforamción clínica y administrativa de los pacientes.

Este sistema se está aplicando en el Hospital de Clínicas, Facultad de Medicina de la Universidad de San Pablo.

Este artículo presenta una planificación del sistema de información médica del hospital. Este, está diseñado en forma modular y mexcla el sistema de control contable con la de datos clínicos y los de control de pacientes.

Se presentan las generalidades sobre la estructura del hospital y cómo este influye en la planificación y el desarrollo del sistema de información. Se discuten las ventajas básicas del sistema en cuanto sea totalmente operativo.

Pu: Boletín de la Oficina Sanitaria Panamericana, Vol. LXX, N°2, Abril 1971.

Au: Rafael Sandoval L.

Ti: Métodos Modernos de Programación para elegir entre Alternativas en Proyectos de Atención Médica (pág. 139-147)

Re: La presentación de alternativas en el diseño de un proyecto de atención médica puede ser muy útil para que las entidades responsables de la elección analicen, en conjunto y con detalle, las diversas posibilidades, con lo que disminuyen los riesgos de error.

El método usado, de ruta crítica o CPM, es particularmente útil como herramienta administrativa para control ejecutivo de proyectos. El artículo ilustra cómo se aplicó el método para decidir entre tres alternativas para la instalación de equipo de telecobaltoterapia en el Hospital San Juan de Dios, de San José, Costa Rica.

En el trabajo se introdujeron algunas variantes al CPM común. El método ilustra como técnicas de programación modernas pueden completar los planes de acción en distintos proyectos.

Pu: Documento Privado (1974)

Au: Ludwig Schmidt

Ti: (1) El Sistema de Emergencia Médica en el Area Metropolitana de Caracas: Consideraciones Sociales y Técnicas (Estudio Preliminar)

(2) Consideraciones Básicas en la Implementación de un Sistema de Comunicaciones en el Programa de Emergencia Médica en el Area Metropolitana de Caracas

Re: Los dos documentos se tratan conjuntamente porque por partes son complementarios y por partes son repetitivos. En ambos trabajos el enfoque de discusión y evaluación es en base de análisis de sistemas.

En el primer trabajo se identifica los lineamientos de la política sanitaria de Venezuela dentro del marco del Sistema Nacional de Salud, con énfasis a la necesidad de la puesta en marcha de un programa de emergencia médica.

El análisis se basa en el diseño de un sistema piloto prototipo a ser generalizado a todo el país. Luego de una breve discusión sobrela definición y los tipos más frecuentes de servicios de emergencia, se evalúa la circulación, comunicación e información de la emergencia médica.

Partiendo de un resumen de la situación actual se discuten brevemente los sitemas de atención, transporte y comunicaciones, los cuales se organizan en los siguientes subsistemas: orientación, rescate, coordinación institucional, asesor y logístico, direc-

triz, organización y ejecución.

En el segundo documento, se repiten algunos lineamientos presentados anteriormente, añadiendo consideraciones básicas en cuanto a la instrumentación de un sistema de comunicaciones del sistema de emergencia médica para el área metropolitana de Caracas.

El sistema de comunicación servirá entre los sistemas de rescate y de organización y ejecución, y está diseñado de tal forma que pueda acumular información al mismo tiempo. El trabajo evalúa todos los componentes y aspectos relevantes al sistema, y sugiere mecanismos de resolver problemas previstos.

Pu: Tabajo presentado en el Congreso Internacional de Sistemas, Hotel Macuto Sheraton, Julio 1981, Venezuela

Au: Ludwig Schmidt

Ti: Criterios de Reducción de Información en Sistemas de Diagnosis Clínica: Modelo Diagnóstico

Re: La contínua expansión, redundancia y volúmenes de datos requeridos para el manejo de la información en las bases de datos y sistemas de ayuda para la diagnosis clínica, hacen necesaria la aplición de las actuales negentrópicas en el diseño de nuevos sistemas de diagnóstico. Los criterios de exactitud lógica y validez de la información son función de la naturaleza, interpendiente y mecanismos de optimización empleados en el procesamiento de datos. Los riesgos y las alternativas diagnósticas son una función de decisión analizadas probabilísticamente, de acuerdo a ponderaciones específicas obtenidas por cada afección en comunidades particulares. Los datos clínicos no son independientes estocásticamente entre sí, y cada uno posee su valor relativo. La aplicabilidad de ciertos criterios de reducción de información incrementan la operabilidad, versatilidad, relacionalidad y análisis de datos de Sistemas de diagnosis clínica.

Pu: Ministerio de Sanidad y Asistencia Social, Dirección de Planificación, Presupuesto e Informática, Comité de Informática, 1980.

Au: Ludwig Schmidt

Ti: Consecuencias Técnicas de Investigación del Sistema de Información para la Salud, Venezuela (SIS-V/80)

Re: El autor enseña por qué la implementación de SIS-V/80 será una poderosa herramienta para resolver los problemas y necesidades asistenciales del sector salud. No considero, empero, que dicha implementación sea la panacea de aquél sector, que todos sus problemas serán resueltos. Esto dependerá del uso que se le atribuya. Sin embargo, la concientización de la necesidad e importancia de la información como un aspecto vital de subsistencia, evolución y entendimiento, de su carácter lúdico, específico y racional hará de todos los usuarios de su potencialidad logística.

Como primer paso establece el significado de la palabra sistema, sus componentes y sus propiedades o atributos, sus entidades y relaciones que existen entre ellas.

A partir de las definiciones de sistema y ambiente como un conjunto de componentes interactuantes, es necesario dividir los sistemas para facilitar su estudio, dividirlos en subsistemas, si es factible, de manera de estudiar sus conductas microscópicas y posteriormente estudiar sus comportamientos macroscópicos, al ver el sistema como un todo.

De ahí que llegamos a lo que representa un sistema de información, sus conceptos claves, lo que puede realizar y por una relación

se traslada al concepto del sistema de información de salud en líneas generales. Como el objetivo básico de un sistema de información de salud es la de mejorar la prestación del servicio de salud, son muchos de estos mejoramientos que el SIS/V80 permitirá.

Pu: Trabajo presentado en el Congreso Internacional de Sistemas, Hotel Macuto Sheraton, Julio 1981, Venezuela.

Au: Ludwig Schmidt, Edgar Zorrilla y Miguel Quintero

Ti: Sistema Automático de Monitoreo de Señales EKG para una Unidad de Cuidados Coronarios

Re: La contínua supervisión de cardiópatas en las unidades de cuidados coronarios es muy complicada y con los avances tecnológicos se complica más aún. Los autores sugieren un análisis de los métodos de procesamiento automático de datos más frecuentes. Los criterios de escogencia del método eran: rapidez de procesamiento, capacidad de almacenamiento de datos, flexibilidad para cambios de configuración, eficiencia y costo.

El trabajo describe un sistema automatizado de monitoreo, contemplando en forma detallada cada uno de los procesos que deben seguirse, y se propone la organización del software requerido para la instrumentación del sistema en tiempo real.

Pu: Medicina Sanitaria y Administración de Salud

Tomo II, Atención de la Salud, parte 3, (pág. 118)

Au: Abraam Sonis

Ti: El enfoque sistemático en la administración de salud

Re: A partir de algunas teorizaciones y aspectos generales del enfoque sistemático se plantean algunos problemas que se le presentan al administrador de salud en su tentativa de utilizar estas modernas tecnologías, a fin de introducir racionalidad en el sector, planteo que requiere como encuadre algunas consideraciones generales previas.

Entre las modernas tecnologías se discuten los aspectos conceptuales de la teoría general de sistemas; se presenta una evaluación del enfoque sitemático y aplicación en el campo de la salud en general y a la administración de salud en particular. También se evalúan las limitaciones para la aplicación del enfoque de análisis de sistemas en la administración de salud.

Entre las limitaciones más importantes se señalan: la necesidad de investigación más exploratoria que verificatoria; los tipos de información requeridos para el análisis de un sistema concreto de vida social (salud), son muy variados, "referidos a diversos tipos de materia, energía e información, su procesamiento, sus atributos y sus relaciones"; y dificultades de comunicación por la necesidad de trabajar en grupos interdisciplinarios.

Pu: Atención Médica, V.1, N°3/4, diciembre 1972/marzo 1973

Au: A. Sonis, C.A. Gianantonio, J.M. Paganini, B. Sovilla, y M. Lapacó de Trípoli

Ti: La asignación y utilización de recursos para la atención médica en función de su calidad y eficiencia. Primer informe (pág.1-29).

Re: Se presentan en este informe los lineamientos generales de un proyecto de investigación de largo alcance, orientado a procurar la obtención de una metodología que permita contribuir a una más racional asignación y utilización de los recursos de atención médica. Se describen en él la hipótesis y los objetivos planteados para la primera etapa del mismo, en la que se intentará medir el resultado final alcanzado con la aplicación de dos distintos niveles de recursos. Finalmente, se resume la experiencia acumulada durante la implementación de la tarea de campo, algunos resultados obtenidos de una prueba preliminar y se bosquejan posibles líneas de acción a desarrollar en el futuro.

El marco conceptual del trabajo se basa en que la atención médica puede ser evaluada tomando en consideración cuatro parámetros:

(i) calidad del servicio;

(ii) eficiencia del servicio;

(iii) accesibilidad física, económica, cultural y legal; y

(iv) efecto del servicio

La hipótesis a demostrar es que el incremento de los recursos y el resultado obtenido, están sujetos a la ley de los rendimientos decrecientes.

Así el objetivo es determinar el umbral de recursos con el cual se podrían obtener los mejores resultados.

Pu: VI Congreso Venezolano de Salud Pública

Au: Ramón Tinedo Meléndez con la participación y contribuciones de Ludwig Schmidt, César Camejo y Elías Anzola Pérez.

Ti: Sistemas de Información y Estadísticas para la Salud

Re: La obtención de inforamción la más completa y analizable plantea problemas de calidad y cantidad de datos. Para que el administrador tome decisiones acertadas, él deberá disponer de un sistema de información compatible.

En Venezuela, que carece de un sistema de información nacional sobre salud, excepto en el caso de la mortalidad, se hace imprescindible atender este problema.

El presente estudio trata primeramente de hacer una somera descripción de los sistemas, un tema sobre el cual existen numerosos libros y artículos, buscando familiarizar con el tema a quienes por un motivo u otro no han estado en contacto con este tipo de conceptos. En segundo lugar adentra en el caso específico de un sistema de información, describiendo toda su antomía, todas las condiciones, su funcionamiento, los procesos de recolección, almacenamiento, análisis y evaluación de la información.

Por último llega un caso del Sistema de Inforamción para la Salud que es todo arreglo de hombres, equipos, facilidades y procedimientos que aseguren la recolección, procesamiento y comunicación de datos, que generan la información necesaria para los usuarios que planifican, programan, administran o evalúan los sitema de salud. Para el caso de Venezuela se llega a conclusiones en cuanto a las carencias del sistema de Información para la Salud presentando las

las recomendaciones plausibles.

El documento presenta una serie de modelos de mucha importancia tales como los del sistema de atención a la salud, modelo funcional de un sistema de salud, y modelo dimensional de los servicios de salud y previsión.

Pu: Trabajo presentado en el Congreso Internacional de Sistemas, Hotel Macuto Sheraton, Julio 1981, Venezuela

Au: Rafael Añez Torrealba, Jorge Castro García y José Troconis Elcrga

Re: El volumen geométricamente creciente de la población que requiere de los servicios de cirugía y la falta de disponibilidad hospitalaria, así como también, el aumento de los costos de operación de cirugía y hospitalización, hacen imperativo el buscar medidas que incrementen la eficiencia de las actividades involucradas en el proceso de diagnosis y terapéutica quirúrgica. La metodología utilizada fué básicamente la técnica de toma de decisiones colectivas y el esquema general de la teoría de sistemas. La implementación de este programa reduciría apreciablemente los costos de operación (tanto para el paciente como para el hospital), e incrementaría la capacidad de la prestación del servicio terapéutico-quirúrgico.

Pu: Técnica Hospitalaria, Vol. XXVI, #4, Dic. 1970
Au: Guillermo Torres C.
Ti: Desarrollo de Hospitales y Selección de Tecnología Apropiada en la Prestación de Servicios de Salud, (pág. 9-17)

Re: La selección de tecnología aplicada como problemática asociada al desarrollo de Hospitales en los países en desarrollo. Sus aspectos limitantes, la tecnología apropiada según niveles de acción, consideraciones socio-económicas, restricciones y contribución de la tecnología en el campo de salud, son algunos de los temas tratados. También, se ofrecen conclusiones específicas de cómo ajustar el desarrollo hospitalario a la tecnología de los componentes físicos.

El artículo está estructurado por fases usando una metodología de análisis de componentes y factores influyentes.

Pu: Organización Panamericana de la Salud (1976)
Departamento de Ingeniería Industrial del Instituto Tecnológico y de Estudios Superiores de Monterrey, Nuevo León, México, (HRR/13/2-8)

AU: ---

Ti: Análisis de Sistemas de Lavandería de un Hospital General

Re: El objetivo del estudio es aumentar la eficiencia en distintas áreas, para que el hospital de un mayor y mejor servicio a los derchos-habientes. Esto se logra encontrando las posibles causas que producen fallas en los sistemas que operan actualmente, y mejorando los métodos que están en operación.

El reporte corresponde al desarrollo de una metodología para la estimación de la capacidad ideal y actual de la lavandería para fines de programación de futuras necesidades. La metodología de análisis es sencilla y clara, y por lo tanto, fácilmente adaptable a otros sistemas de un servicio de salud.

Los pasos principales del estudio incluyen:

(i) definición de variables que afectan la capacidad de la lavandería;

(ii) recopilación de datos sobre la capacidad de cada estación, así como el tiempo ocasionado con cada operación;

(iii) cálculos de ciclos para cada estación;

(iv) obtención de la capacidad diaria del sistema; y

(v) recomendaciones para instrumentar mejoras.

1. Au: De Assis Machado F.
   Ti: Particiátion of the Emplyees in the Management of a Public Health Service
   So: Bol of Sanit Panam, 84, 6, P471-80, Jun. 78
   Lg. SP.

2. Au: Domínguez Carmona D.M.
   Ti: Health Planning and Politcs.
   So: An R Acad Nacl Med. (Madr) 95. 2. 135-53,1978
   Lg: SP.

3. Au: Foucaul M.
   Ti: Incorporation of the Hospital into Modern Technology
   So: Educ. Med. Salud. 12, 1. P20-35, 1978.
   Lg: SP.

4. Au: Kisil M.
   Ti: Progressive Patient care: An Administration Experiment in a Complex Medical Center
   So: Bol. of Sanit. Panam. 84, 3, P223-9, Mar.78
   Lg: SP.

5. Au: Jouclas, V.M.
   Ti: Manuals in the Organization of Nursing Sevices
   So: Rev. Enferm. Nov. Dimens. 4.1. P47-52, Jan-Feb. 78
   Lg: PT

6. Au: Sanjad, A.M., Batista M.C., Hanai N., Klein L., Sonoda F., Abujade M., Coradazzi M.L., Nogueira S.R., Timoner Z.
Ti: Control of the use of Materials
So: Rev. Enferm. Nov. Dimens. 3. 6. P317-22, Nov.-Dec. 77
Lg: PT

7. Au: Secaf V.
Ti: Role of Nursing in the adqyisition of Technical Material
So: Rev. Bras. Enferm. 28. 1. P69-79, Jan-Mar 76
Lg: PT

8. Au: Romera Páez A.
Ti: Health Planning (A Conceptual Process).
So: Perspectives 1.1. P 30-47, Concl. 1976
Lg: SP

9. Au: De Oliveira Franco L.H.
Ti: Teaching of Administration in PUblic Health Nursing Services in Order ti be Qualified for Public Health Nursing
So: Rev. Enferm. Nov. Dimens. 3. 1. P 12-4, Jan-Feb. 77
Lg: PT

10. Au: Benavídez Vázquez L.
Ti: Basci Minimun Requirements in the Organization of Hospitals
So: Gac. Med. Mex. 112. 5. P 361-74, Nov. 76.
Lg: SP

11. Au: Kurcgant P.

Ti: Evaluation System of Students Practicing in the Field of Administration applied to Nursing.

So: Rev. Esc. Enferm. UsP. 10. 1. P 101-37, Apr. 76

Lg: PT

12. Au: Tinoco A Da F.

Ti: The Most Commonly Commonly Use Technics in Health Planning

So: Rev. Saude Publica, 14. 4. P 597-605, 1980 Dec.

LG: PT

13. Au: del Moral A., Cormenzana Arraran C.

Ti: Apllied Research in Nursing and Public Health Technics of Data Collection and Statistical Evaluation or Results in the field of Care.

So: Nueva Enferm. 19. P 12-5. 1981. Mar.

Lg: SP

14. Au: Jiménez Larrea C.

Ti: Administration of Public Health Nursing Services

So: Nueva Enferm. 18. P 11-5. 1981 Feb.

Lg: SP

15. Au: Valente F.P

Ti: Use of a Small Programmable Calculator as an Aid in Radiotherapy Planning

So: Acta Med. Port. 2. 3. P 245-52. 1980 May-Jun.

Lg: PT

16. Au: Manzano J.L, Church A., Bolanos J., Blazquez M., Villalobos M.
Ti: Computers in Intensive Care Units
So: Rev. Esp. Anestesio Reanim 27. 4. P. 301-10. 1980 Jul.
Lg: SP

17. Au: Barbera A., Guerra L., Castro M., Mahn R. Mahan D., Bartolotti E., Videla C., García R.
Ti: A Computerized Drug Surveillance System: Its applications in Health Care, Information and Teaching
So: Bol. of Sanit Panam. 89. 2. P 124-9. 1980 Aug.
Lg: SP

18. Au: Novelli M.D., de Araujo N.S.
Ti: Introduction of a Patient Records and Data Analysis System with Help of Computers in the Area of Oral Pathology
So: Rev. Fac. Odontol. Sao Paulo. 16. 1. P 7-17. 1978 Jan-Jun
Lg: PT

19. Au: Campedelli M.C.
Ti: Systems Theory applied to Health
So: Rev. Esc. Enferm. Usp. 12. 2. P 109-15. Aug. 78
Lg: PT

20. Au: Arias Galicia F.
Ti: Systems Theory
So: Enfermeras. 21. 2. P 5-11, Han-Mar 75.
Lg: SP

21. Au: Cianciarullo T.I.

Ti: A Systemic Approach to the Binomial Realtionship, Central Supply and Surgical Center

So: Rev. Enferm. Nov. Dimens. 1. 3. P 107-12. Jul-Ag.75

Lg: PT

22. Au: De Almeida Pimentel L.A., Ferrarini C., Valerio Maschio U.

Ti: Data Processing in the Hospital Das Clinicas

So: Rev. Hosp. Clin. Fac. Med. Sao Paulo. 30 Suppl. Psuppl. 17-22.1975

Lg: PT

23. Au: Sastre Olamendi de Yaxte F.

Ti: The Microcumputer in the Mechanization of the Administration and Assistance Processes of a General Hospital (Author's Transl)

So: Folia Clin. Int. (Barc.) 24. 7. P 579-90 Jul-Aug. 74

Lg: SP

24. Au: Romero Paez A.

Ti: Health Planning (A Conceptual Process) III

So: Perspectivas. 1-2, P 12-26 1975

Lg: SP

25. Au: Kurogant P.

Ti: Nursing Care Plan - An ADminitrative Necessity

So: Rev. Enferm. Nov. Dimens. 2. 3. P 139-41. Jul-Aug. 76

Lg: PT

26. Au: Adams C.J.

Ti: Use of Health Statistics in the Surveillance and Evaluation of Maternal Health Programs PP. 28-32

So: In: Seminario sobre Aspectos de Enfermería-obstricia en Salud Maternoinfantil y Planificación de la Familia, Washington, D.C. Organización Panamericana de la Salud. 1974, Wl PA 443 N°291, 1974

Lg: SP

27. Au: Carbonell Masia C. del Carme Martínez y Martínez M.

Ti: Administration of the Psychiatric Department of the San Carlos Hospital at the Complutense University of Madrid

So: Actas Luso Esp. Neutrol Psiquiatr. 3. 1. P 59-70, Jan-Feb. 75

Lg: SP

28. Au: Royd L.C.

Ti: Health and Health Administration

So: Rev. Sanid. Hig. Publica (Madrd.) 47. 12. P 181-91 Dec.73

Lg: SP

29. Au: David Banta H.

Ti: Information for the Evaluation of Technology

So: Educ. Med. Salud. 14. 2. P 157-73, 1980

Lg: SP

30. Au: Pumarola A. Busquets F.

Ti: Suggestions for a Possible Change of the Territorial Health Structure Parallel to the Forseeable Administrative Modifications

So: Rev. Sanid. Hig. Publica (Madr.) 52. 1-2. P 229-31, Jan-Feb. 78

Lg: SP

31. Au: Najera R., Casal J.

Ti: Importance of Health Laboratories, Ideas on the Organization of a Network of Laboratories of Mediacal Microbiology

So: Rev. Sanid. Hig. Publica (Madr.). 52. 1-2 P. 201-6. Jan-Feb. 78

Lg: SP

32. Au: Arevalo Alonso J.M.

Ti: Basis for the Organization of Public Health Laboratories

So: Rev. Sanid. Hig. Publica (Madr). 52. 1-2 P 117-86 Jan-Feb. 78

Lg: SP

33. Au: Romero-Alvarez H

Ti: Planning in Programs of Environment Health

So: Gac. Med. Mex. 114. 10. P 470. 10. P 470-2. Oct.78

Lg: SP

34. Au: Domínguez Trejo C.

Ti: Policy Naking: An Administration Viewpoint

So: Rev. Col Nac. Enferm. 24-25 101. P 11-3. Sep-Feb. 78

Lg: SP

35. Au: Fajardo-Ortiz G.

Ti: Health Technology in Developing Countries

So: Gac. Med. Mex. 117. 1. P 18-22. 1981 Jan.

Lg: SP

36. Au: Rojas Ochoa F.

Ti: Determining Objectives and Utilization of Research Applied to the Health Services

So: Educ. Med. Salud. 15. 1. P 48-59. 1981

Lg: SP

37. Au: Neri A.

Ti: Infraestrucutre for the development of Research applied to the Health Services

So: Educ. Med. Salud. 15. 1. P.30-39. 1981

Lg: SP

38. Au: Conde Rodelgo V.

Ti: Functions of the Administration (Hemotherapy)

So: Sangre (Barc.) 25. 5C. P958-61. 1980

Lg: SP

39. Au: Tin:Oco A. Da F.

Ti: Problems Hampering the Implementation of Health Planning

So: Rev. Saude Publica. 14. 2. P 246-52. 1980 Jun.

Lg: PT

40. Au: Presser E.

Ti: Health Administration

So: Nueva Enferm. 17. P 12-3 1981 Jan.

Lg: SP

41. Au: Andre V.

Ti: Administration's Role in a Conflict

So: Nueva Enferm. 12. P 12 1980 Jun.

Lg: SP

42. Au: López Acuña D., Ponce de León R., Ruiz de Chávez S., Zapata Cossio V.

Ti: Adminitrative Decentralization of Medical Care Services in the Secretaria de Salubridad y Asistencia II Financing the Services

So: SPM 22. 1. P 25-37. 1980 Jan-Feb.

Lg: SP

43. Au: Gómez E.S.

Ti: Evaluation of Attention

So: Salud Bucal. 7. 37. P 16-9. 1980. Jun.-Jul.

Lg: SP

44. Ti: Education in Health Administration

So: Educ. Med. Salud. 14. 4. P 385-98. 1980

Lg: SP

45 Au: Lares Leyua D., Federico Davila G.

Ti: Planning and Organization of a Material-Infant Service

So: Salud Pública Mex. 14. 1. P 89-97. Jan-Feb. 72

Lg: SP

46 Au: Díaz López N.

Ti: Administration Nursing Prescription: Conditions for its implementation as one of the Nurse's Routine Activities

So: Rev. Esc. Enferm. Usp. 7. 2. P 177-86. Sep. 73

Lg: SP

47 Au: Acu;a Monteverde H.

Ti: Data Processing in Public Health

So: Salud Pública Mex. 14.5. P 707-8. Sep-Oct. 72

Lg: SP

48 Au: Acuña Monteverde H.R.

Ti: Financing and Budgetary Administration in Public Health Programs

So: Salud Publica Mex. 13. 4. P 539-44. Jul-Aug. 71

Lg: SP

49 Au: Gil Corrales M.A.

Ti: The Pert-CPM Method in Health Programming

So: Salud Pública Mex. 13. 6. P953-66. Nov.Dec.71

Lg: SP

50. Au: Fajardo Ortiz G.

Ti: Administration of Medical Care, ADministrative Development of Medical Organizations

So: Salud Pública Mex. 15. 6. P 909-15. Nov.-Dec. 73

Lg: SP

51. Au: Lobo L.C.

Ti: Use of New Educational Technology in the Development of Human Resources

So: Educ. Med. Salud. 8. 2. P 140-9 Apr. 74

Lg: PT

52. Au: Andrade J.

Ti: Problems and Prospects of Manpower Planning for Public Health in Latin America

So: Educ. Med. Salud. 7. 3. P 253-64. 1973

Lg: SP

53. Au: Benchetrit M.

Ti: Costs and Efficiency in an Orthodontic Hospital Service

So: Ortodoncia 36. 72. P 175-85 Nov. 72

Lg: SP

54. Au: Acu;a H.R.

Ti: Financing adn Budget Administration of Public Health Programs

So: Bol. of Sanit. Panam. 72. 1. P 36-43 Jan-Jun. 72

Lg: SP

55. Au: Escalona M.

Ti: Integration of Administration, Education, Health Care and Research in Health Care in Cuba.

So: Educ. Med. Salud. 6. 2. P 130-6. Apr-Jun. 72

Lg: SP

56. Au: Ferrer Serrate F.

Ti: Clinical Data Using Electronic Computers

So: Rev. Med. Univ. Navarra 16. 1. P 1-47, Mar 72

Lg: SP

57. Au: Ribeiro C. de M.

Ti: Administrative Management of the Entire Heatlh Services

So: Rev. Bras. Enferm. 24. 2. P 70-100. Jan-Mar. 71

Lg: PT

58. Au: Deniston O.L., Rosenstock I.M., Welch W. Getting V.A.

Ti: Evaluation of the Efficiency of Health Programs

So: Bol. of Sanit. Panam. 67. 5. p 389-99 Nov. 69

Lg: SP

59. Au: Campos O.

Ti: Study of Demand and Necessities and Their Importance in Health Planning

So: Rev. Bras. Malariol Doencas Trop. 22. 2. P 469-73. Apr.-Dec. 70

Lg: PT

60. Au: Gutiérrez O., Nawrath J, Bravo I., Cariola N., Freile B., Janzana J'. Budinic M., Mikcic P., Muñoz E., Dekovic J., Bejarand J., Robles O.

Ti: Administration in the National Health Service, Problems and Recommendations

So: Rev. Med. Chil. 98. 2. p 124-32. Feb. 70

Lg: SP

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525 TWENTY-THIRD STREET, N.W., WASHINGTON, D.C. 20037, E.U.A. CABLEGRAMAS: OFSANPAN

SELECCION DE BIBLIOGRAFIA SOBRE ANALISIS DE SISTEMAS E INVESTIGACION DE OPERACIONES EN EL CAMPO DE LA SALUD

P O R

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Desiderata for Selection of the Bibliographic References

In addition to the methodologic direction indicated by the titles "health systems analysis" and "operational research", the Pan American Health Organization (PAHO) suggested several subdivisions: project evaluation, health manpower scheduling, research allocation, forecasting demand for services, cost benefit studies (especially in primary care), inventory control, technology assessment and catchment area analysis. The several bibliographic lists with which I am familiar, plus a quick computer search of available citations in the Health Sciences Library at the University of North Carolina, provide a count of thousands of articles which impact on these categories. Many of these should be important for Latin American training in health administration and other fields concerned with the output of this workshop, due to the interrelation among methodological techniques and the feasibility of applying them in the numerous, and broad, areas suggested. Even if we restrict the set of articles to only those including direct application of health systems techniques to the above references application areas, the count still involves hundreds of citations.

When we add to this the need to consider the importance of evaluating data bases, methodological approaches, political realities and the other ubiquitous stages involved in the successful application of systems analysis and operations research to operating level problems in the health sector, we understand immediately why the selection and review of the literature cannot be comprehensive.

One further issue, that of the "quality" of a prospective article, should be brought forth. For some methodologists, an article which does not employ all aspects of a rigorously developed approach to problem solving is viewed as weak. Whereas a simple operational procedure, when well explicated, may be of immediate use to the practioner. Moreover, a competently done academic piece, even though it suggests comprehensive consideration of a problem, may be unimplementable in

particular areas; for example, data bases may be, and often are, insufficient; the mechanisms for an interdisciplinary approach among possibly competing political groups may not have been established; etc.

The intersection of the above constraints suggests an eclectic approach to selection of articles for this bibliography. Thus, within categories, I have selected both old (classical or primary) and new articles which vary greatly in their coverage and vary somewhat in the degree of quantitative difficulty. I have eschewed articles which have high levels of mathematical content. Generally, the articles referenced herein contain either no mathematics (but are of interest primarily due to other factors) or provide, at most, systems derived from consideration of simulations, regressions, and simpler models considered "traditional" in operations research.

In several cases, due to the socio-economic significance and the current political climate, articles found their way into this bibliography because of an important national priority. For example, numerous articles which have impact on determining the costs (and possible benefits) of delivery of health care services appear.

Perhaps even more important to the training objectives of the Health Care Administration Education Program of the Division of Human Resources and Research at PAHO is a list of books containing material in the general area of health systems analysis and operational research. Eventually, individuals involved in both training and research in Latin America will build an increasing number of case studies in the referenced areas to complement and supplement the basic methodological training needed to accomplish the educational goals of the Latin institutions concerned with health systems. Thus, an important attitude to take in using this bibliography is that, by necessity, we must all abstract the approaches, opinions, and value judgments inherent in these articles and refine them for our own particular uses.

We have not attempted, for at least the reasons stated above, to criticize the applicability of approaches and importance of issues discussed in these articles. We have adopted abstracts contained either in the articles themselves or in abstracting services referring to these articles and books. Perhaps, as time and resources allow, future sessions will narrow the focus to particular areas of application and evaluate both the literature and the feasibility of application of quantitative techniques in specific health areas.

The bibliography is organized by the PAHO subdivision topics and some articles, with multiple goals, appear more than once. I have added patient (case) mix studies and assessments to category 7, Technology Assessment, and books are in category 10.

While I wish to thank, and commend, Professors Larry J. Shuman of the University of Pittsburgh, George T. Kastner of the Instituto Estudios Superiores en Administracion, Arnold Reisman of Case Western Reserve University and Dr. Humberto Novaes of PAHO for their help and discussion on these issues, please direct your criticisms and suggestions about selection to me.

CONTENTS

PROJECT EVALUATION

TITLE: "An Evaluation of Various Presurgical Testing Procedures"

AUTHORS: Donna Maria Barbaro, Larry J. Shuman and Robert B. Swinkola

SOURCE: Inquiry, 14, pp. 369-383, 1977.

LANGUAGE: English

ABSTRACT: Preadmission testing (PAT) of elective patients is a purported means for controlling hospital cost by reducing preoperative length of stay (LOS). Other purported advantages of PAT include: providing a mechanism for identifying patients unable to undergo surgery, thereby eliminating unnecessary admissions; improving the quality of medical care; increasing the efficiency of scheduling elective surgery admissions and procedures.

No study to date, however, has demonstrated conclusively that a reduction in length of stay occurs because of preadmission testing. Much that is written about PAT ignores factors that affect length of stay, particularly preop LOS. The effects of PAT cannot be determined solely by equating testing time saved to hospitalized days saved. Rather, it is necessary to analyze all factors that determine preop LOS, including aspects of hospital organization and operations. Among these considerations are:

1. Admissions office - coordination with the operating room (OR), the utilization review (UR) function, and the nursing function.
2. The OR - confirmed surgery scheduling; communication among the OR supervisor, the admissions office, and the surgical staff; the relative uniformity of the number of surgical procedures performed throughout the week.
3. The ancillary departments- staffing patterns, turnaround time for test results, and whether ambulatory or nonambulatory testing is used.
4. Medical practice - acceptance of test result validity, preferred preop LOS, and flexibility and cooperation in affecting discharges.

If any of these aspects of hospitalization are handled inefficiently, the advantages of PAT will be negated.

This paper presents an assessment of the influence of preadmission testing on LOS thorugh analysis of various presurgical test (PST) procedures and their appropriateness in various organizational settings. PAT often is thought to apply to both medical and surgical patients. For the purpose of this study, PAT will be considered only with respect to elective surgical admissions.

TITLE: Evaluation of an Automated Blood Pressure Measuring Device Intended for General Public Use

AUTHORS: David Berkson, Ira Whipple, Larry Shireman, Murray Brown, William Raynor and Richard Shekelle

SOURCE: American Journal of Public Health, Vol. 69, No. 5, May, 1979

LANGUAGE: English

ABSTRACT: Responding to Chicago newspaper reports, measurements of blood pressure by a publicly available, automated coin-operated device were compared with those of human observers using the standard duff and auscultatory technique. One machine was examined in the laboratory, and eight others at randomly selected sites. Analysis of readings made on 100 persons in the laboratory and 227 in the field led to the following conclusions: 1) On the average, the machines measured fifth phase diastolic blood pressure at nearly the same level as did human observers; 2) The machines were more variable measuring systolic blood pressure with four differing from the average human reading by 1mm Hg or less, but two differing by 8mm Hg or more; 3) The agreement between machine-human pairs of readings was not as good as between human-human pairs, but the differences in level of agreement -- both in determining the actual value and in categorizing the values as normal, borderline, or high -- were small and have little practical importance; 4) Linear regression analyses of the relationship between simultaneously determined machine and human readings indicated that the average human-machine difference was the same over the range of pressures tested. Publicly available blood pressure measuring devices should be labeled concerning their purposes, capabilities, and limitations. Rules and regulations governing their use in the City of Chicago are being prepared by this city's Legal Department.

TITLE: A Model of Prehospital Death from Ventricular Fibrillation Following Myocardial Infarction

AUTHORS: Shan Cretin and Thomas Willemain

SOURCE: Health Services Research, Vol. 14, No. 3, Fall, 1979

LANGUAGE: English

ABSTRACT: Current efforts to reduce prehospital cardiac mortality focus more on deployment of specially equipped ambulances than on reduction of patient or ambulance delays. To evaluate this strategy, we needed to find a method that would isolate the separate effects of patient delay, ambulance delay, and the resuscitative capability of the ambulance. Using published data, we have generated a mathematical model of death from ventricular fibrillation following myocardial infarction that shows the relationship among these three factors. Analyses based on the model indicate that the potential life saving impact of a defibrillation-equipped ambulance is severely limited due to typical patient response patterns. If the ambulance arrives ten minutes after the onset of infarction, defibrillation capabilities will reduce prehsopital mortality from 6 percent to 2 percent. After a more typical delay of 60 minutes, the mortality rises sharply to 13 percent for an unequipped ambulance. With a delay of this length, defibrillation capabilities reduce mortality only to about 12 percent.

TITLE: Psychiatric Health Care and Costs Under Comprehensive Public Health Insurance: Experience in a Canadian Province

AUTHORS: Carl D'Arcy, Guin Bold and Janet A. Schmitz

SOURCE: Medical Care, September, 1981, Vol. XIX, No. 9

LANGUAGE: English

ABSTRACT: Psychiatric service delivery was studied over a 6-year period in the Province of Saskatchewan, which has had comprehensive universal medical insurance since 1962. That experience is relevant to current issues of costs and quality of care, methods of financial reimbursement and organization of service delivery. A unique patient-centered data base permitted the examination of significant differences between the private and public service delivery sectors in volumes and types of patients treated as well as treatment costs. A dominant picture emerged of distinct types of patients that differ significantly in terms of severity and duration of illness, as well as in the amount of resources they consume. Their differing needs for intervention and prevention should be taken into account in mental health care planning.

TITLE: Paramedic Programs and Out-of-Hospital Cardiac Arrest: Factors Associated with Successful Resuscitation

AUTHORS: Mickey Eisenberg, Lawrence Bergner and Alfred Hallstrom

SOURCE: American Journal of Public Health, Vol. 69, No. 1, January, 1979

LANGUAGE: English

ABSTRACT: As part of an evaluation of whether the addition of paramedic services can reduce mortality from out-of-hospital cardiac arrest compared to previously existing emergency medical technician (EMT) services, factors associated with successful resuscitation were studied. A surveillance system was established to identify cardiac arrest patients receiving emergency care and to collect pertinent information associated with the resuscitation. Outcomes (death, admission, and discharge) were compared in two areas with different types of prehospital emergency care (basic emergency medical technician services vs. paramedic services). During the period April, 1976 through August, 1977, 604 patients with out-of-hospital cardiac arrest received emergency resuscitation. Eighty-one percent of these episodes were attributed to primary heart disease. Considered separately, four factors were found to have a significant association with higher admission and discharge rates: 1) paramedic service, 2) rapid time to initiation of cardiopulmonary resuscitation, 3) rapid time to definitive care, and 4) bystander-initiated CPR. Using multivariate analysis, rapid time to initiation of CPR and rapid time to definitive care were most predictive of admission and discharge. Age was also weakly predictive of discharge. These findings suggest that if reduction in mortality is to be maximized, cardiac arrest patients must have CPR initiated within four minutes and definitive care provided within ten minutes.

TITLE: "On Lies and Health Statistics: Some Latin American Examples"

AUTHORS: Jose Carlos Escudero

SOURCE: International Journal of Health Services, 10, No. 3, pp. 421-434, 1980.

LANGUAGE: English

ABSTRACT: New methods of demographic analysis are producing estimates of fertility and mortality which are sometimes at great variance with "official" figures generated by the statistics organizations of the different countries and which are reproduced in international reference books. This discrepancy is greatest with regard to infant mortality. Using Latin American examples, the magnitude of this discrepancy is explored, biases in estimating causes of mortality are identified, and a consideration is made of morbidity figures, which, as they are generated by health care systems with very low coverages of population, tend to seriously underrepresent the prevalent levels of disease. A structural interpretation is made of the Latin American situation, linking this crisis of health statistics with a more general crisis of the "developmentist" model under which these systems flourished, and with an upsurge in political repression in the Continent which will tend in future to increase the inaccuracy of "official" health statistics data. Finally, alternative health statistics procedures are proposed.

TITLE: "A Health-Status Index And Its Application To Health-Services Outcomes"

AUTHORS: S. Fanshel and J. W. Bush

SOURCE: Operations Research, 18, pp. 1021-1066, 1970.

LANGUAGE: English

ABSTRACT: In order to develop an operational definition of health, we found it necessary first to develop the concept of function/dysfunction as a continuum, based on one's ability to carry on the usual daily activities appropriate to social roles. Then, to those operating the health system, each member of the population can be seen as belonging to one and only one state from a class of functional states that can be defined on an ordinal scale. Next, we found it necessary to assign to each state a weight defined on a cardinal scale, the set of weights for these states being called the Health Status Index (HSI). The HSI rests on value judgments, of a societal nature, expressed by the administrators responsible for policy decisions. Prognosis is then defined as the transitional probability of a change in functional state with time. Thus, the concepts 'state of health' and 'severity of illness' are decomposed into the parameters function/dysfunction and prognosis. Finally, together with an operational definition of time and target population, it becomes possible to give a quantitative definition of the output of a health program (or health system) as the changes in the functional history of the target population resulting from the intervention of the health program (or system). Other concepts that are given quantitative definitions are program effectiveness and population health status. This study next explores the relation between health program output and modern decision theory for program planning, and shows how these analytical tools are useful for fitting the results of the study into larger conceptual frameworks. Finally, the method developed is illustrated, first with a simplified simulated program for computer use, and then with an analysis of a small section of a tuberculosis-control program.

TITLE: "Case Mix Definition by Diagnosis-Related Groups"

AUTHORS: Robert B. Fetter, Youngsoo Shin, Jean L. Freeman, Richard F. Averill, and John D. Thompson

SOURCE: Medical Care, 18, No. 2, Supplement, pp. 1-52, 1980.

LANGUAGE: English

ABSTRACT: During the past decade, health care financing researchers have sought to develop equitable methods to constrain the rate of increase in health care expenditures. The need for a successful national hospital cost containment program has been highlighted as a major step toward overall health care cost containment and a comprehensive national health plan.

In early efforts to compare and control hospital costs, researchers calculated product costs by unit of service, such as lab tests, radiology tests, or days of routine hotel service. Several incentive schemes were devised to encourage hospital efficiency and low unit cost. Experience has shown that focusing on unit cost alone encourages increased length of stay and ancillary utilization and argues that attention should be focues on medical-practice patterns.

Recently, much attention has been focused on the cost per patient stay or per case treated. Shifting to a single hospital product required that techniques be developed to adjust for variations in hospitals' patient or case mix.

To group hospitals with a similar case mix, researchers have generally concentrated on proxy measures, such as the mix of services or facilities available in each hospital. While these approaches are relatively easy to calculate, they normally do not address either the extent or the use of a hospital's available services or facilities.

What is required is a classification scheme that is both manageable in terms of the number of case types defined and reasonable in terms of the variation in resources needed to treat each case type. This should permit direct measurement of a hospital's case mix.

The development of the Diagnosis-Related Groups (DRGs) represents a significant step in case mix measurement and application for reimbursement purposes. DRGs classify 383 types of cases encountered in the hospital acute-care setting. Each DRG represents a class of patients requiring similar hospital services. Since DRGs are medically meaningful, they help provide a common basis for comparing cost effectiveness and quality of care delivered. DRGs also have the potential to assist the hospital administrator as he manages his institution and communicates with the medical staff.

Many PSROs have already explored the use of DRGs to review length-of-stay and treatment patterns. New York and Maryland have incorporated the DRG concept into their hospital cost containment programs and both New Jersey and Georgia will soon be incorporating DRG methodologies in new hospital cost containment programs. At the federal level, DRGs are being considered for incorporation in new reimbursement procedures for acute care hospitals. Given the current emphasis on hospital cost containment, the development of DRGs is both an important and timely advancement of the health care financing field.

TITLE: "Evaluation of Medical Practices"

AUTHORS: Harvey V. Fineberg, and Howard H. Hiatt

SOURCE: The New England Journal of Medicine, 301, No.20, pp.1086-1091, 1979.

LANGUAGE: English

ABSTRACT: We believe that the systematic evaluation of medical practices, especially those that are risky or costly, deserves more attention. Available methods are limited, and definitive assessments of innovative or controversial practices are infrequent. Nevertheless, some evaluations have successfully enhanced the use of effective practices and diminished the reliance on ineffective ones.

Greater efforts at evaluation can improve the quality of patient care, avoid waste and promote the more rational use of health resources. The cost of assessing new practices should be viewed as an intrinsic part of the cost of medical care.

Physicians and medical societies bear primary responsibility for recognizing the need for this evaluation, for enlisting other experts, participating in technology assessment and working to translate the results of evaluation into practice. The commitment of government agencies, insurance companies and teaching institutions is also essential to an effective program of evaluation.

TITLE: "A Computer Simulation Model for the Control of Rabies in an Urban Area of Colombia"

AUTHORS: Ralph R. Frerichs and Juan Prawda

SOURCE: Management Science, Vo. 22, No. 4, pp. 411-421, 1975.

LANGUAGE: English

ABSTRACT: A simulation model is developed describing the transmission of canine rabies within and between 116 spatially distributed barrios (neighborhoods) in Cali, Colombia. The discrete time, dynamic model considers both discrete random variables (incubation and infective periods, appearance and movement of rabid dogs through the city, etc.) and deterministic variables (demographic components of barrio canine populations). Values for the input variables were acquired through field observations, other Colombian sources, and a review of the literature. Various canine vaccination strategies were tested in the model over a ten-year planning horizon for their cost-effectiveness with regard to the prevention of canine rabies. The model is recommended to the Pan American Health Organization to be used as an interactive gaming model to aid health system managers in Cali, Colombia and in other Latin American cities in scheduling the time and locations of vaccination teams in a more cost-effective manner.

TITLE: "Local Priorities for Allocation of Resources: Comparison with the IMU"

AUTHORS: Dennis G. Fryback, David H. Gustafson and Don E. Detmer

SOURCE: Inquiry, 15, No. 3, pp. 265-274, 1978.

LANGUAGE: English

ABSTRACT: The Index of Medical Underservice (IMU) was developed in response to provisions contained in the Health Maintenance Organization Act of 1973. That Act mandated that priority in allocation of federal funds supporting development of HMOs be given to areas designated by the Secretary of DHEW as being medically underserved. At the time the IMU was developed no formal definition of "medical underservice" existed, nor does one exist today. There seemed to be substantial disagreement among health experts concerning what ought to constitute measures of medical underservice. However, it was observed that the same health experts consistently tended to agree when asked to rank-order various communities (with which they were personally familiar) according to degree of perceived underservedness. The IMU, as developed by the Wisconsin Health Services Research Group, was designed to correlate with local health professionals' assessments of medical underservice.

The purpose of this study is to determine the degree of correspondence between local health professionals' priorities for resource allocation and their judgments of medical underservice as represented by the IMU.

TITLE: "Cost-Effectiveness of Cardiopulmonary Resuscitation Training Programs"

AUTHORS: G. Anthony Gorry and David W. Scott

SOURCE: Health Services Research, 12, No. 1, pp. 30-41, 1977.

LANGUAGE: English

ABSTRACT: A model is presented to analyze the cost-effectiveness of programs to train large numbers of citizens in the techniques of cardiopulmonary resuscitation (CPR). From a planner's estimates of certain key factors, the model determines the probability of intervention for various numbers of trained citizens and for several allocation strategies and patterns of population density. These key factors are the maximum distance from which a person with CPR training could intervene in an emergency, the cost of training, and loss of skill with time. The model is used to analyze possible training efforts in Houston, Texas.

TITLE: Comparison of a Criteria Map to a Criteria List in Quality-of-Care Assessment for Patients with Chest Pain: The Relation of Each to Outcome

AUTHORS: Sheldon Greenfield, Shan Cretin, Linda Worthman, Frederick Dorey, Nancy Solomon, George Goldberg

SOURCE: Medical Care, March, 1981, Vol. XIX, No. 3

LANGUAGE: English

ABSTRACT: In a prospective study we compared the ability of two quality assessment methods -- the standard criteria list and the criteria map -- to predict the appropriateness of the disposition decision for 421 patients with chest pain who presented to two emergency departments. To evaluate the quality of this decision, each patient was followed at home or in the hospital to determine whether an acute condition requiring hospital admission was present. Among the 169 discharged patients, the map scores of the eight with admissible disease were significantly higher than the score for those without admissible disease ($p=0.02$). For the 252 admitted patients, a similar relationship between map score and the admissible disease outcome was observed ($p=0.0001$). There was no significant relationship between list score and outcome among either the admitted or the discharged patients. Multivariate logistic analyses confirmed the importance of the map score as a predictor of admissible disease. The map score was superior to the list score and to demographic variables in its ability to correctly classify patients with and without admissible disease. The demonstrated relationship between map score and patient outcome enables the map to be used in a quality assurance system. An institution can ensure that physicians review an enriched sample of the inappropriate discharges and the unjustified admissions by selecting admitted patients with low map scores and discharged patients with high map scores.

TITLE: The Case-Control Method in Medical Care Evaluation

AUTHORS: Sander Greenland, Erica Watson and Raymond Neutra

SOURCE: Medical Care, August, 1981, Vol. XIX, No. 8

LANGUAGE: English

ABSTRACT: The case-control method has been applied extensively to the study of chronic diseases, largely because of its advantage in cost and statistical power over other study designs. However, problems in ensuring the validity of case-control results have led to certain reservations regarding the general utility of the method. We discuss how several of the major validity problems in case-control studies of chronic disease are limited or absent in case-control evaluations of medical care and medical technology. As a consequence, the case-control method has important potential for application in evaluation and technology research.

TITLE: The Incidence and Economic Costs of Cancer, Motor Vehicle Injuries, Coronary Heart Disease, and Stroke: A Comparative Analysis

AUTHORS: Nelson Hartunian, Charles Smart and Mark Thompson

SOURCE: American Journal of Public Health, Vol. 70, No. 12, December, 1980

LANGUAGE: English

ABSTRACT: The economic impact of disease and injury has most often been calculated by examining the costs associated with the prevalence of the impairments in the reference year. An alternative accounting approach is to assign all disease costs to the year of incidence, an approach which entails present-valuing to the year of incidence both health care expenditures and lost productivity. The incidence approach is the more appropriate for gauging the economic gains achievable through prevention, immediate rehabilitation, and arresting progression. Incidence-based costs have been estimated for the United States in 1975 for cancer, coronary heart disease, motor vehicle injuries and stroke. A noteworthy finding is the relative economic importance of motor vehicle injuries, which frequently have been overlooked in the ordering of public health expenditure priorities. After cancer, which generated approximately $23.1 billion in present-valued costs in 1975, motor vehicle injuries and coronary heart disease constitute the next most expensive conditions -- having generated estimated annual costs of $14.4 billion and $13.7 billion, respectivly Stroke, at $6.5 billion, follows in economic importance.

TITLE: Planning and Budgeting in the Crippled Children's Sector through Goal Programming

AUTHORS: Carl Joiner and Albert Drake

SOURCE: American Journal of Public Health, Vol. 71, No. 9, September, 1981

LANGUAGE: English.

ABSTRACT: This article describes how the goal programming methodology was applied to a state level Crippled Children's Program. The various organizational goals are incorporated into the programming model to indicate the trade-offs associated with the resource allocation process. Alternative allocations are presented in terms of a "what if" approach to programming.

TITLE: Episodes of Psychiatric Utilization

AUTHORS: Larry Kessler, Donald Steinwachs and Janet Hankin

SOURCE: Medical Care, December, 1980, Vol. XVIII, No. 12

LANGUAGE: English

ABSTRACT: The continued growth of outpatient psychiatric care has been accompanied by a large number of research studies concerning the determinants of psychiatric utilization. One of the major limitations of these efforts has been the inability to go beyond distributional data on the use of services. This article describes a methodology for generating episodes of psychiatric care given a data set with a small amount of routinely collected data present in many medical information systems. Both demographic and medical characteristics are significantly associated with health services resource use as defined by the number of visits in an episode. A model predicting recurrent episodes of care is also described. The general utility of this approach and the substantive implications of the specific results are discussed.

TITLE: The Effects of Changes in Smoking Habits on Coronary Heart Disease Mortality

AUTHORS: Joel Kleinman, Jacob Feldman and Mary Monk

SOURCE: American Journal of Public Health, Vol. 69, No. 8 August, 1979

LANGUAGE: English

ABSTRACT: Coronary heart disease (CHD) mortality declined by about 20 percent between 1965 and 1976. During the same period there were substantial decreases in the proportion of adults who smoked based on data from the National Health Interview Survey (HIS). This study examines the extent to which changes in smoking can account for the decrease in CHD mortality for men and women aged 35-64 years. By applying US smoking levels (estimated from HIS) to data from four epidemiologic studies on the relative risk of CHD death by amount smoked, we obtain estimates of the portion of the decline in CHD mortality attributable to changes in smoking. Smoking changes among women were not generally consistent with declines in CHD mortality. For men, the estimated impact of smoking on CHD mortality varied considerably depending upon which study was used to estimate the relative risk by amount smoked.

TITLE: "Patient Flow Analysis and the Delivery of Radiology Service"

AUTHORS: Benjamin Lev, George Revesz, Francis Shea, and Robert Caltagirones

SOURCE: Socio-Econ. Plan. Sci., 10, pp. 159-166, 1976.

LANGUAGE: English

ABSTRACT: In recent years there has been an increased awareness regarding the cost of radiologic health care, and the patient delays encountered in the delivery to the consumer. The purpose of this paper is to demonstrate that, at least in one case in the Diagnostic Radiology Department at Temple University, the assumption that better service can be given to patients provided more technicians and orderlies are available, is not valid. The facts tend to indicate that the real problem lies in scheduling techniques, and improved utilization of available equipment. Therefore, it is safe to conclude that for improved radiologic services, the emphasis should be directed towards the design of the management systems and scheduling techniques, and not the staff and/or facilities.

TITLE: "Narcotics and the Community: A System Simulation"

AUTHORS: Gilbert Levin, Gary Hirsch, and Edward Roberts

SOURCE: American Journal of Public Health, 62, pp. 861-873, 1972.

LANGUAGE: English

ABSTRACT: We present here a summary of work still in progress after a year of effort devoted to the problem of narcotics addiction and its control. While the investigation has drawn substantially from consideration of a specific ethnically and economically heterogeneous geographic region in New York City, an area of eight square miles with a population of about 180,000 persons, the processes described are believed to apply substantially to a wide range of urban and suburban environments, excluding only those of exceptional wealth or exceptional poverty.

The computer model that has been developed describes the flow of numbers of people in a community through various drug use statuses: potential users, soft drug users, heroin users, addicts in the community, addicts in community care, addicts in custody; each of which is regulated by one or more associated rate of change. Other sectors of the model describe the important variables in the community that affect the rate at which people move through the various statuses. The model treats explicitly migration into and out of the community of addicts and other population subgroups, the consequences of community alarm versus inaction, crime and other visible manifestations of drug use, attitude of the community toward addiction, attractiveness of the area to pushers, as well as other important, but often elusive, forces. Computer experiments assess the probably short- and long-range consequences of each of the programs and policies that have been advocated or tried. To our knowledge this constitutes the first attempt to integrate and systematically manipulate the large and unwieldy body of scientific knowledge and knowledgeable opinion relevant to this problem.

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The information used in constructing the model has been gathered from a variety of sources including a critical review of the literature, an area study of an urban community, and interviews with treatment program directors, addicts, ex-addicts, research scientists, teachers, parole officers and other informant groups. The purpose of this investigation is to provide knowledge of use to a variety of groups responsible for making policy to control drug abuse.

While we will take a position on some issues, our intention in this paper is not primarily to advocate a particular policy, but to describe the work we have done and to show how it can contribute to the understanding and evaluation of any proposed policy.

TITLE: "Program Evaluation Techniques in the Health Services"

AUTHORS: Jack Meredith

SOURCE: American Journal of Public Health, 66, No. 11, pp. 1069-1073, 1976.

LANGUAGE: English

ABSTRACT: This article addresses the issue of program evaluation in the area of health services; examples are drawn from the field of mental health. Current arguments concerning the goals, characteristics, and methodologies of program evaluation are discussed and two generally useful quantitative evaluation models are presented. The models are compared and their advantages for clinicians and administrators are detailed.

TITLE: "Program Evaluation in a Hospital for Mentally Retarded Persons"

AUTHORS: Jack Meredith

SOURCE: American Journal of Mental Deficiency, 78, No. 4, pp. 471-481, 1974.

LANGUAGE: English

ABSTRACT: The application of a Markov chain model as an aid to treatment program evaluation in a hospital for mentally retarded persons was described. Three hospital programs - Intensive Training, School, and Behavior Modification - were compared with the hospital's Standard Care Program in terms of the expected progress and long-range costs and outcomes of a cohort of severely and profoundly retarded children. The hospital's Foster Home Program was also considered in the analysis. In addition, the Markov model was found to be an important aid in the evaluation of new programs and modification of existing programs, in terms of cost as well as "benefit". Use of the Markov model allowed the determination of an effective "worth" of these new or modified programs which could then be compared with their cost to ascertain their value.

TITLE: Assessing the Performance of Medical Care Systems: A Method and Its Application

AUTHORS: Paul Nutting, Gregory Shorr and Barton Burkhalter

SOURCE: Medical Care, March, 1981, Vol. XIX, No. 3

LANGUAGE: English

ABSTRACT: As health care becomes more differentiated, fewer people receive the majority of their care from a single source. Yet, most methods for assessing health care focus on the care provided by a single facility or group of practitioners. A method is described which tracks individuals through the diffuse medical care "system" and examines the process of care received for complete episodes of care. Through the use of tracer conditions the individual's pathway through the system is followed and the contribution of the various system components (e.g., facilities and providers) is assessed for various functions of care (e.g., screening, diagnosis, treatment), thus pinpointing deficiencies in the process of care. The method is designed to sample systematically from the entire provider and consumer system. Use of this methodology in a variety of settings, including American Indiana communities, has proved to be feasible and has uncovered deficiencies in the delivery of health services which might have been overlooked by other approaches. This article describes the assessment method and presents selected results which demonstrate the assessment outputs.

TITLE: "Using a Model as a Practical Management Tool for Family Planning Programs"

AUTHORS: Ronald W. O'Connor and Glen L. Urban

SOURCE: American Journal of Public Health, 62, pp. 1493-1500, 1972.

LANGUAGE: English

ABSTRACT: One point of departure for examining the use of information and reporting systems by managers in an organization, including those concerned with family planning, should be a review of what those managers actually do. What activities are carried out? What kinds of decisions does the manager face? What information supports these acitivites - and how, in fact, is the information used to meet managerial needs?

In organizing this discussion of local family planning program management, we will briefly: (1) introduce a framework to define and position the decisions faced by family planning managers; (2) use this framework to outline the areas in which most management information systems work has been done to date and where substantial work remains to be done; and (3) present an approach to the structuring of some strategic planning decisions related to family planning: Specifically, experience with a planning model, use of supporting data systems, and a particular application in Atlanta, Georgia, will be discussed.

TITLE: "A Birth-Life-Death Model for Planning and Evaluation of Health Services Programs"

AUTHORS: Jorge Ortiz and Rodger Parker

SOURCE: Health Services Research, 6, pp. 120-143, 1971.

LANGUAGE: English

ABSTRACT: A Markov model of the birth-life-death process is developed to relate two input decision variables - specific mortality rates by age and group of diseases and specific fertility rates by age - to output criteria involving life expectancy, time-dependent structure of mortality by age and cause of death, and other time-dependent demographic structures. Experimentation in the form of computer simulation is used to determine the input of health services programs in terms of the output criteria when the cost of a program and its estimated alteration of the input variables are known.

TITLE: "A Consumer Preference Approach to the Planning of a Rural Primary Health-Care Facilities"

AUTHORS: Barnett R. Parker and V. Srinivasan

SOURCE: Operations Research, 24, pp. 991-1025, 1976.

LANGUAGE: English

ABSTRACT: A problem in planning the expansion of a rural primary health-care delivery system is to determine the set of facilities to be added to an existing system so as to maximize the incremental benefit to the community subject to a cost constraint. The proposed approach involves the following five steps: (1) identification of facility attributes relevant to patients in their choice of health-care facilities, (2) modeling of an individual's overall preference for alternate facilities as a weighted linear function of these facility attributes, (3) transformation of each consumer's preference model into a benefit function expressing the individual's benefit in dollars/year for an existing or potential facility, (4) provision of a method for determining the total incremental benefit to the community from a set of proposed health-care facilities that yields near optimum total incremental benefit subject to the cost constraint. A practical application of the proposed approach reveals that the consumer preference model has substantial reliability and predictive validity.

TITLE: "Systems and Procedures of Patient and Information Flow"

AUTHORS: Arnold Reisman, Joao Mello da Silva, and Joseph B. Mantell

SOURCE: Hospital & Health Services Adminstration, Winter, 1978, p. 42-71.

LANGUAGE: English

ABSTRACT: The task of properly scheduling an annual load of several hundred thousand patient visits to more than 100 doctors in 28 different departments, and supporting these visits with timely, accurate, and complete flows of information is very complex.

This task is further complicated by the fact that patients generally require timely sequencing of laboratory tests, X-rays, and consultative appointments. From 1968 to 1973 in the clinic of one large health center, the number of patient visits per year increased approximately 20% (Figure I) and the institution's physical plant was greatly expanded, tying up much of the administrative talent and resources. More importantly, however, the staff capability had become more diversified. It had disproportionately increased in number to serve the rapidly expanding inpatient population and to perform additional research and teaching activities. The systems and procedures for scheduling and processing the patients through the outpatient clinic degraded to the consternation of patients, doctors, and administrators alike.

The objective of this study was to investigate the systems and procedures for outpatient flow and to recommend improvements.

TITLE: "The Swine-Influenza Decision"

AUTHORS: Stephen C. Schoenbaum, Barbara J. McNeil and Joel Kavet

SOURCE: The New England Journal of Medicine, 295, No.14, pp.759-765, 1976.

LANGUAGE: English

ABSTRACT: We analyzed the economic aspects of mass immunization against swine-like influenza in 1976-77, and have used the Delphi technic for estimating the likelihood and characteristics of an epidemic.

If an epidemic occurs and no preventive efforts are made, total costs could exceed $6 billion for the whole population and $3 billion for those in the high-risk group. Expected net benefits from immunization vary with (1) the target population, (2) costs of vaccine administration and (3) vaccine acceptance rates. With an epidemioc probability of 0.10 and with costs of purchasing and adminstering the vaccine each estimated at $0.50 per person in the target population, maximum net benefits cannot be obtained by an offer of vaccine to the entire population. Economic considerations do not require limitation of vaccination to high-risk groups. If the program is restricted to adults 25 years of age and over, and if acceptance rates exceed 59 per cent, the program is economically justifiable.

TITLE: "The Potential for Use of Stochastic Models in Mental Health Evaluation Research"

AUTHORS: Richard H. Shachtman and E. J. Feuer

SOURCE: Mental Health Service System Reports: Operations Research and the Mental Health Service System. Volume I, 1981. Edited by Larry G. Kessler. U.S. Department of Health & Human Services, pp.44-76

LANGUAGE: English

ABSTRACT: We propose that mental health evaluation researchers employ stochastic models, such as Markov chains, to reflect the CHANGING PATTERNS OF CHANGE endemic within numerous categories of mentally deficient patients. Experimental designs involving pre- and post-measurements, while useful, usually cannot reflect the dynamics in patient status which is possible with stochastic models. We list criteria for constructing and validating stochastic models, discuss measurement problems and outline several implementation challenges which must be considered when using these models for mental health services evaluation.

TITLE: "Decision Analysis Assessment of a National Medical Study"

AUTHORS: Richard H. Shachtman

SOURCE: Operations Research, 28, No. 1, pp. 44-59, 1980.

LANGUAGE: English

ABSTRACT: To decide whether or not to undertake an expensive national survey to determine the effectiveness of infection control, we devised a quantitative decision model to analyze the costs and probabilities of successful study outcomes. The result allowed us to determine whether the proposed study method and design would provide sufficient statistical power to ensure meaningful conclusions from the research. The model was robust in assessing the adequacy of method accuracy and, within the range of assumptions specified, it suggested that the project should be undertaken. The results helped to secure official approval and funding for this large-scale research project. A novel approach to evaluating sensitivity analysis is included. As constructed, the model is applicable to other projects in applied research and, with some modification, to projects in basic research as well.

TITLE: "Feasibility of National Population Growth Targets in LDC's"

AUTHORS: R. Paul Shaw

SOURCE: Socio-Econ. Plan. Sci., 10, pp. 17-26, 1976.

LANGUAGE: English

ABSTRACT: This study employs a simulation model and data on desired family size to evaluate feasibility of national population growth targets. A basic claim is that neglect to consider desired family size in population planning has resulted in spurious target setting by a number of governments. It is proposed that if presently attainable family size is below desired family size in any society i, then low utilization of family planning services can be expected to continue as a function of absence of demand. Policy implications of this claim for allocation of scarce international family planning funds are discussed.

TITLE: "The Role of Operations Research in Regional Health Planning"

AUTHORS: Larry J. Shuman, Harvey Wolfe and R. Dixon Speas, Jr.

SOURCE: Operations Research, 22, pp. 234-248, 1974.

LANGUAGE: English

ABSTRACT: Operations-research workers have not met with much success in being accepted as integral members of regional-health-planning teams, owing in part to a lack of understanding by health planners of the skills the operations researcher has to offer and in part the analyst's inability to demonstrate that he can close the gap between theoretical modeling and the implementation of his results. This paper explores the growth of regional health planning in the United States and highlights its important problem areas. The literature of operations-research applications to health planning is reviewed critically with respect to the feasibility of models and the appropriateness of assumptions. Specific problems with the types of studies currently in the literature are identified and recommendations are made for improved coordination between operations-research workers and health planners..

TITLE: Programming, Budgeting, and Control in Health Care Organizations: The State of the Art

AUTHORS: Robert Vraciu

SOURCE: Health Services Research, Vol. 14, No. 2, Summer, 1979

LANGUAGE: English

ABSTRACT: The planning, budgeting, and controlling processes (PBCP) largely subsume all of the planning and controlling activities of an organization. This paper discusses these activities within the context of a single management control system, focusing on three topics. First, a brief historical perspective of management concerns which relate to PBCP is presented and several important external pressures currently imposed on the health care industry are discussed. Second, normative models of the processes -- programming, budgeting, and controlling -- are presented. The discussion focuses on the elements and relationships of these processes, and numerous references to the literature are provided. Third, several issues related to the gap between the state of the art in PBCP for hospitals and the current state of practice are discussed.

TITLE: "Assessment of the AUTOGRP Patient Classification System"

AUTHORS: Wanda W. Young, Robert B. Swinkola and Martha A. Hutton

SOURCE: Medical Care, 18, No. 2, pp. 228-244, 1980.

LANGUAGE: English

ABSTRACT: This study was conducted to assess the adaptability of the AUTOGRP Patient Classification System (APCS) to the patient population of western Pennsylvania. The APCS consists of a fixed set of 383 patient categories, each of which is purported to contain similar patients with respect to resource consumption as measured by length of stay. The assessment of the APCS examines both the reproducibility of the classification using western Pennsylvania patient data and the homogeneity of the resultant categories. The results indicate that the APCS categories examined were not statistically optimal using western Pennsylvania data, and that individual diagnostic-related groups within the APCS do not contain similar patients with respect to resource consumption and with respect to other patient and hospital characteristics.

HEALTH MANPOWER SCHEDULING

TITLE: "A Three-Stage Manpower Planning and Scheduling Model - A Service-Sector Example"

AUTHORS: William J. Abernathy, Nicholas Baloff, John C. Hershey and Sten Wandel

SOURCE: Operations Research, 21, No. 3, pp. 693-711, 1973.

LANGUAGE: English

ABSTRACT: This paper presents a staff planning and scheduling model that has specific application in the nurse-staffing process in acute hospitals, and more general application in many other service organizations in which demand and production characteristics are similar. The aggregate planning models that have been developed for goods-producing organizations are not appropriate for these types of service organizations. In this paper the process for staffing services is divided into three decision levels: (a) policy decisions, including the operating procedures for service centers and for the staff-control process itself; (b) staff planning, including hiring, discharge, training, and reallocation decisions; and (3) short-term scheduling of available staff within the constraints determined by the two previous levels. These three planning 'levels' are used as decomposition stages in developing a general staffing model. The paper formulates the planning and scheduling stages as a stochastic programming problem, suggests an iterative solution procedure using random loss functions, and develops a noniterative solution procedure for a chance-constrained formulation that considers alternative operating procedures and service criteria, and permits including statistically dependent demands. The discussion includes an example application of the model and illustrations of its potential uses in the nurse-staffing process.

TITLE: "Physician Location and Distribution: A Social Systems Approach"

AUTHORS: James G. Anderson and David E. Bartkus

SOURCE: Socio-Econ. Plan. Sci., 10, pp. 213-221, 1976

LANGUAGE: English

ABSTRACT: A social systems model of the health services system serving the state of Indiana is presented. The model specifies the causal relationships hypothesized as existing among a set of social, demographic and economic variables known to be related to the supply of health manpower and facilities. Inclusion of feedback into the model as well as lagged values of physician supply variables permits the examination of the dynamic behavior of the social system over time. Estimates of the model parameters are based on data obtained from the U.S. census, the American Medical Association's physician distribution series and the annual guide issue of Hospitals, the journal of the American Hospital Association.

Methods for deriving the reduced form and the final form of the structural model are presented along with the reduced and final form equations. These equations provide valuable information for policy decisions regarding the likely consequences of changes in the structure of the population and in the supply of health manpower and facilities. The structural and reduced forms of the model have been used to examine the likely consequences of several proposed policies that would affect the delivery of health services in the state of Indiana.

TITLE: "Design of Alternative Provider Team Configurations: Experience in Both Developed and Developing Countries"

AUTHORS: Lilia Duran and Arnold Reisman

SOURCE: Technical Memo 947, Department of Operations Research, Case Western Reserve University, Cleveland, Ohio. Approx. 1980.

LANGUAGE: English

ABSTRACT: Job Evaluation, a time-honored industrial engineering technique developed for manual labor rate-setting was used to design new personnel resource teams for providing anesthesiology services in well-known U.S. hospitals on the one hand, and for delivering primary care in regions of Latin America on the other. This paper discusses the use of this technique in designing job descriptions for new allied professionals, and for designing the curricula necessary to train same. Experience to date in integrating the products of these curricula into health provider teams in U.S. tertiary care institutions and in primary care within several countries of Latin America indicates the soundness of this approach.

TITLE: Paramedic Programs and Out-of-Hospital Cardiac Arrest:. Factors Associated with Successful Resuscitation

AUTHORS: Mickey Eisenberg, Lawrence Bergner and Alfred Hallstrom

SOURCE: American Journal of Public Health, Vol. 69, No. 1, January, 1979

LANGUAGE: English

ABSTRACT: As part of an evaluation of whether the addition of paramedic services can reduce mortality from out-of-hospital cardiac arrest compared to previously existing emergency medical technician (EMT) services, factors associated with successful resuscitation were studied. A surveillance system was established to identify cardiac arrest patients receiving emergency care and to collect pertinent information associated with the resuscitation. Outcomes (death, admission, and discharge) were compared in two areas with different types of prehospital emergency care (basic emergency medical technician services vs. paramedic services). During the period April, 1976 through August, 1977, 604 patients with out-of-hospital cardiac arrest received emergency resuscitation. Eighty-one percent of these episodes were attributed to primary heart disease. Considered separately, four factors were found to have a significant association with higher admission and discharge rates: 1) paramedic service, 2) rapid time to initiation of cardiopulmonary resuscitation, 3) rapid time to definitive care, and 4) bystander-initiated CPR. Using multivariate analysis, rapid time to initiation of CPR and rapid time to definitive care were most predictive of admission and discharge. Age was also weakly predictive of discharge. These findings suggest that if reduction in mortality is to be maximized, cardiac arrest patients must have CPR initiated within four minutes and definitive care provided within ten minutes.

TITLE: Parameters Affecting Hospital Occupancy and Implications for Facility Sizing

AUTHORS: Walton Hancock, David Magerlein, Robert Storer and James Martin

SOURCE: Health Services Research, Vol. 13, No. 3, Fall, 1978

LANGUAGE: English

ABSTRACT: Simulation is used to investigate the effects on hospital occupancy of the number of beds in the facility, the percentage of patients who are emergencies, the percentage of elective patients who are scheduled, and the average lengths of stay of emergency and elective patients. A practical method is presented for estimating the optimum size of a short-term hospital on the basis of expected demand, and use of the results in planning is discussed.

TITLE: Estimating the Need for Additional Primary Care Physicians

AUTHORS: Anthony Hindle, Nicholas Dierckman, Charles Standridge, Harry Delcher, Raymond Murray and Alan Pritsker

SOURCE: Health Services Research Research, Vol. 13, No. 3, Fall, 1978

LANGUAGE: English

ABSTRACT: A systems approach is used to assess the primary health care delivery system in Indiana. The output (office visits) of primary care physicians is estimated and compared with the demand for their services. Indexes of demand, supply, cost, and need are derived and used to determine the additional number of primary care physicians needed in each area. The results of this study are being used to encourage graduating medical students to practice in areas in need of additional primary medical care.

TITLE: "Supply and Demand of Anesthesiologists in Cuyahoga County, Ohio"

AUTHORS: A. Reisman, B.V. Dean, A.O. Esogbue, V.V. Aggarwal, V.B. Kaujalgi, P.M. Lewy, C.A. de Kluyver, J.S. Gravenstein

SOURCE: The Ohio State Medical Journal, 69, No. 10, pp.760-763, 1973.

LANGUAGE: English

ABSTRACT: We can prepare sensibly for the future only if we can forecast demands for and availability of services. Such forecasts also enhance planning for facilities that are related to manpower and require long lead time for realization. Our study was conducted in Cuyahoga County, Ohio, which contains most of Greater Cleveland's population and its 31 general and special hospitals.

The principal phases of the study were: (1) A survey by questionnaire and interview on bed capacities, operating rooms, surgical procedures, anesthesia personnel, and on the desired manpower level. (2) Development of models for forecasting the supply of anesthesiologists in Cuyahoga County through 1980. (3) Development of models for forecasting the demand for anesthesiologists in Cuyahoga County through 1980.

TITLE: "Physician Supply and Surgical Demand Forecasting: A Regional Manpower Study"

AUTHORS: A. Reisman, B.V. Dean, A.O. Esogbue, V. Aggarwal, V. Kaujalgi, P. Lewy, and J.S. Gravenstein

SOURCE: Management Science, 19, No. 12, pp. 1345-1354, 1973.

LANGUAGE: English

ABSTRACT: This paper discusses the methods and the results of a forecast for the demand for operative and obstetrical procedures and the supply of anesthesiologists in Cuyahoga County, Ohio. The techniques and results of a ten-year forecast for the demand for and supply of anesthesiologists and auxiliary personnel in greater Cleveland are discussed. Several regression models were used to forecast supply based on population, number of physicians, and the income per capita. The demand models were based on population, age and sex distribtuion projections, and historical data regarding operative and obstetrical procedures. The results of these "objective" models were then compared to forecasts under uncertainty generated by a panel of experts using the Delphi Method. Alternative states of health care delivery were investigated and implications for future anesthesiologist manpower requirements detailed.

TITLE: "Innovative Functions of Health Personnel in Other Countries: Lessons for U.S. Health Planners"

AUTHORS: Milton I. Roemer

SOURCE: Inquiry, 16, pp. 259-263, 1979.

LANGUAGE: English

ABSTRACT: With the objective of learning lessons for the United States, Ruth Roemer and I undertook studies of health manpower policies and practices in five other industrialized countries during the period from 1973-1977. Among the several topics explored were various functions of health personnel that could be considered "innovative," relative to American customs. These innovations included the use of entirely new categories of health workers, as well as modified types of functions performed by familiar types of personnel.

In these five national settings, several noteworthy features characterize the functions of physicians (general and specialist), nurses, and dental and other classes of personnel; influencing the capacities of all these health personnel is a movement to develop health centers. We will consider, in turn, each of the main health manpower categories.

TITLE: "Health Manpower Systems: An Application of Simulation to the Design of Primary Health Care Teams"

AUTHORS: Dean H. Uyeno

SOURCE: Management Science, 20, No. 6, pp. 981-989, 1974.

LANGUAGE: English

ABSTRACT: A method was developed for the evaluation of alternative primary health care team compositions and for the examination of skill levels for new categories of personnel. This procedure determines the appropriate composition of primary health care teams for differing demand levels and facility availabilities.

A simulation model of a general primary health care delivery unit was developed as part of this procedure. This simulation model, given demand schedules, team compositions, and facility levels, procedures information relating to the efficiency and effectiveness of that alternative.

An application of the simulation model and the evaluation procedure was made to the area of pediatrics. A time study was taken of pediatric office practice. The data gathered therein were analyzed and used to create various demand schedules. Task-capability lists were created for various proposed categories of allied child health personnel, and these personnel were incorporated into various alternative team compositions and tested against varying facility and demand levels. Results indicate there are instances where a team structure is inappropriate and that the first member added to aid the physician is probably a person to assume lower level repetitive tasks.

RESOURCE ALLOCATION

TITLE: "A Spatial Allocation Model for Regional Health-Services Planning"

AUTHORS: William J. Abernathy and John C. Hershey

SOURCE: Operations Research, 20, No. 3, pp. 629-642, 1972.

LANGUAGE: English

ABSTRACT: In planning for health servies, the need arises to determine the location, capacity, and number of health centers for a geographically defined region. The present paper formulates this problem in a form convenient for solution and presents results from the model to clarify some important aspects of this allocation decision. The planning region is assumed to consist of geographically defined subareas or census blocks, of known location. The population is stratified in such a way that each stratum exhibits relatively homogeneous patterns of health-care utilization. The model characterizes the effects of center locations upon aggregate utilization and utilization of individual centers, and gives optimal locations of centers with respect to several alternative criteria. An example illustrating computational feasibility and the implications of various criteria for the location decision is presented.

TITLE: "A Computer Simulation Approach for Planning in Hospital Ancillary Services"

AUTHORS: Wynn A. Abranovic and William A. Wallace

SOURCE: Socio-Econ. Plan. Sci., 5, pp. 429-448, 1971.

LANGUAGE: English

ABSTRACT: This investigation was concerned with the following propositions: (1) how can the number of service units requested in hospital ancillary departments be estimated? and (2) can a model be designed to link service demands to resource requirements (manpower, equipment, floor space, costs and revenues)?

A methodology that utilized multiple regression analysis and computer simulation was developed and evaluated at a short-term general teaching hospita. Discussions with hospital management were an integral part of the research process.

TITLE: A Two-Stage Model for the Control of Epidemic Influenza

AUTHORS: Stan Finkelstein, Charles Smart, Andrew Gralla and Cecilia d'Oliveira

SOURCE: Management Science, Vol. 27, No. 7, July, 1981

LANGUAGE: English

ABSTRACT: We developed a two-stage model to help predict the circumstances under which alternative public immunization strategies for influenza are likely to be best suited to national needs. The first stage is a deterministic epidemic model which, when solved numerically, describes the fraction of the population that becomes infective during a hypothetical epidemic. The second stage is a cost/benefit model that allows policy alternatives to be compared in economic net benefit terms. Our assemptions lead us to predict that immunization programs directed at the population at large are in some cases favored over those which target selected high-risk groups.

TITLE: "How to determine the Optimum Number of Operating Rooms"

AUTHORS: Jay Goldman and H.A. Knappenberger

SOURCE: Modern Hospital, 111, pp. 114-116, 1968.

LANGUAGE: English

ABSTRACT: How many operating rooms do you really need? Is it necessary to acquiesce meekly when the surgical staff says more are needed? How can you determine objectively the point at which more rooms can be added at economic cost?

To keep within the total hospital budget, the decision to add an operating room must be based on several factors. First, there is the cost associated with building, equipping and staffing an additional room. Second, there is the cost associated with overtime which will occur due to lack of flexibility in handling cases which run longer than estimated in a tightly scheduled system. Finally, as the utilization of the existing facility increases, the number of patients placed on the waiting list will increase. While it may be difficult to assign a cost to patient waiting, it does exist and must be taken into consideration.

TITLE: "Simulation-Based Occupancy Recommendations for Adult Medical/Surgical Units Using Admissions Scheduling Systems"

AUTHORS: Walton M. Hancock, James B. Martin and Robert H. Storer

SOURCE: Inquiry, 15, No. 1, pp. 25-32, 1978.

LANGUAGE: English

ABSTRACT: Minimum cost operation of a hospital requires the correct number of beds to meet the demand placed on the facility. An excess of beds results in inflated operating and construction costs, while a bed shortage is unacceptable for a variety of reasons, such as the lack of quality care to the community.

Several models have been developed and used to assist planners in finding the correct bed size to meet a given demand. These models are inadequate in an environment where stringent cost containment is second only in importance to quality of care. The previous models, such as the Hill-Burton formulas and the Poisson approximation, are inadequate because they are incompatible with contemporary admissions scheduling systems. These systems alter the behavior of the census so that analytical models based upon the Poisson assumption do not fit the results and, along with normative models such as the Hill-Burton program, allow too many beds.

The implications of the Poisson assumption will be discussed at length here because the contention in the remainder of the paper is that almost any hospital medical/surgical (M/S) unit should operate well in excess of that model's widely used occupancy recommendations. In most cases this also leads to operation in excess of the state Hill-Burton recommendations for medical/surgical units, thus Hill-Burton is rejected as a consequence.

TITLE: Parameters Affecting Hospital Occupancy and Implications for Facility Sizing

AUTHORS: Walton Hancock, David Magerlein, Robert Storer and James Martin

SOURCE: Health Services Research, Vol. 13, No. 3, Fall, 1978

LANGUAGE: English

ABSTRACT: Simulation is used to investigate the effects on hospital occupancy of the number of beds in the facility, the percentage of patients who are emergencies, the percentage of elective patients who are scheduled, and the average lengths of stay of emergency and elective patients. A practical method is presented for estimating the optimum size of a short-term hospital on the basis of expected demand, and use of the results in planning is discussed.

TITLE: A Stochastic Service Network Model with Application to Hospital Facilities

AUTHORS: John Hershey, Elliott Weiss and Morris Cohen

SOURCE: Operations Research, Vol. 29, No. 1, January-February, 1981

LANGUAGE: English

ABSTRACT: This paper presents a methodology for estimating expected utilization and service level for a class of capacity constrained service network facilities operating in a stochastic environment. A semi-Markov process describes the flows of customers (patients) through a network of service units. We model the case where one of the units has finite capacity and no queues are allowed to form. We show that the expected level of utilization and service can be computed from a simple linear relationship based on (a) the equilibrium arrival rates at each unit which are associated with the case of infinite capacity, (b) mean holding times for each unit, and (c) the probability that the finite capacity unit is at full capacity. We use Erland's loss formula to calculate the probability of full capacity, show this calculation to be exact for two cases, and recommend its use as an approximation in the general case. We test the accuracy of the approximation on a set of published data. In the discussion, we present a technique for analyzing collected patient flow data using the results of this methodology.

TITLE: "Patient Flow Analysis and the Delivery of Radiology Service"

AUTHORS: Benjamin Lev, George Revesz, Francis Shea, and Robert Caltagirones

SOURCE: Socio-Econ. Plan. Sci., 10, pp. 159-166, 1976.

LANGUAGE: English

ABSTRACT: In recent years there has been an increased awareness regarding the cost of radiologic health care, and the patient delays encountered in the delivery to the consumer. The purpose of this paper is to demonstrate that, at least in one case in the Diagnostic Radiology Department at Temple University, the assumption that better service can be given to patients provided more technicians and orderlies are available, is not valid. The facts tend to indicate that the real problem lies in scheduling techniques, and improved utilization of available equipment. Therefore, it is safe to conclude that for improved radiologic services, the emphasis should be directed towards the design of the management systems and scheduling techniques, and not the staff and/or facilities.

TITLE: "Allocation of Nursing Personnel in an Extended Care Facility"

AUTHORS: Judith S. Liebman, John P. Young and Mandell Bellmore

SOURCE: Health Services Research, 7, pp. 209-220, 1972.

LANGUAGE: English

ABSTRACT: A model of the assignment of the direct-care tasks to nursing personnel, based on nurses' concepts of effective personnel use, is described. Using an ordinal scale of perceived effectiveness, the model generates daily task assignments indistinguishable from or superior to those used by nursing team leaders. A modification of the model has potential use in long-range planning of personnel needs, allowing comparison of alternative staffing patterns by their relative effectiveness profiles and facilitating cost/effectiveness comparisons.

TITLE: "The GPSS Simulation of Scheduling Policies for Surgical Patients"

AUTHORS: N. K. Kwak, J.P. Kuzdrall and Homer H. Schmitz

SOURCE: Management Science, 22, No. 9, pp. 982-989, 1976.

LANGUAGE: English

ABSTRACT: The purpose of this study is to determine and evaluate utilization levels of the operating-room and recovery-room facilities of a hospital under different policy considerations governing patient flows. The utilization rates are examined under constraints that apply to the particular hospital from which the empirical data was obtained; however, the model and approach were designed with general applications in mind. The range of values for critical timing measurements is obtained from a model employing the Monte Carlo simulation technique. The model is programmed in GPSS and was run on an IBM 360/165. An optimal policy that satisfies the "real world" constraints of an active hospital is sought. The output from the model is interpreted. It is revealed that increases in facility utilization can be made while meeting the constraints dictated by normal hospital routine, thus offering the possibility of reducing costs.

TITLE: "The Monte Carlo Simulation of Operations-Room and Recovery-Room Usage"

AUTHORS: Paul J. Kuzdrall, N. K. Kwak and Homer H. Schmitz

SOURCE: Operations Research, 22, pp. 434-440, 1974.

LANGUAGE: English

ABSTRACT: Based on empirical data, Schmitz and Kwak have carried out a Monte Carlo simulation of operating-room and recovery-room usage. The purpose of this follow-up study was to replicate and supplement the original techniques employed, using a model constructed in the GPSS simulation language, and to compare the results of this method with those obtained previously. The same assumptions were followed rigidly. The results highlight the advantages of using the computer-simulation approach.

The original work involved manual simulation. The later computer model was run for a ten-day simulation. Although the computer system maintains automatically a much more detailed set of 'accounting' records, enabling the user to build a great deal of flexibility into the model, many of the same conclusions were reached. The GPSS model thus verified many of the original conclusions, while giving the investigators some very useful additional information. Finally, some significant comparisons were noted.

TITLE: "Nurse Scheduling Using Mathematical Programming"

AUTHORS: Holmes E. Miller, William P. Pierskalla and Gustave J. Rath

SOURCE: Operations Research, 24, pp. 857-870, 1976.

LANGUAGE: English

ABSTRACT: This paper formulates the nurse-scheduling problem as one of selecting a configuration of nurse schedules that minimize an objective function that balances the trade-off between staffing coverage and schedule preferences of individual nurses, subject to certain feasibility constraints on the nurse schedules. The problem is solved by a cyclic coordinate descent algorithm. We present results pertaining to a six-month application to a particular hospital unit and draw comparisons between the algorithm and hospital-generated schedules.

TITLE: "Hospital Admission Systems: Their Evaluation and Management"

AUTHORS: John H. Milsum, Efraim Turban and Ilan Vertinsky

SOURCE: Management Science, 19, No. 6, pp. 646-666, 1973.

LANGUAGE: English

ABSTRACT: The paper presents a holistic analysis of hospital management admission systems. It outlines control strategies which will facilitate a system's effectiveness for various organizational attributes. In particular, attention is focused on bed occupancy levels and on the stability of flows into the hospital as interacting control variables.

The paper surveys the major available mathematical models and evaluates their use vs. the use of simulation. It emphasizes the potential use of an iterative assignment model which explicitly considers the alternative profiles for preferences for service attributes held by the various participants in the admission system. To reconcile conflicting objectives of these participants the DELPHI and the Multi-attribute Reduction methods are proposed.

TITLE: "A Stochastic and Deterministic Model of Medical Care Utilization

AUTHORS: Vicente Navarro, Rodger Parker and Kerr L. White

SOURCE: Health Services Research, 5, pp. 342-357, 1970.

LANGUAGE: English

ABSTRACT: A previously reported stochastic model predicting the future distribution of a stable population in various states of health care is here modified and expanded to take into account the stochastic process of varying rates of utilization among different age groups and the stochastic and deterministic processes that determine changes in size and age structure of the population. The functioning of the model is described and its use illustrated by application to a hypothetical population. Given an adequate data base, the model offers a quantitative tool for estimating future resources required by each component of the health services system.

TITLE: Optimal Resource Allocation in Community Hypertension Programs

AUTHORS: Albert Nichols and Milton Weinstein

SOURCE: Management Science, Vol. 24, No. 14, October, 1978

LANGUAGE: English

ABSTRACT: This paper presents a simple model to guide the efficient allocation of resources in community programs to detect and treat hypertension. We model such programs as n-component series systems, where each stage must function in sequence in order for the system as a whole to operate. The model differs from standard series reliability models in that, if a component fails, costs at subsequent stages are not incurred. This "pay-as-you-go" aspect implies that widespread screening is inefficient, and that resources could be better spent ensuring continued treatment of identified hypertensives. Calculations based on actual programs suggest that an optimal allocation of a fixed budget could increase significantly the number of hypertensives controlled, by about 40 percent in our example. This conclusion is robust under all but the most pessimistic assumptions.

TITLE: "A Consumer Preference Approach to the Planning of a Rural Primary Health-Care Facilities"

AUTHORS: Barnett R. Parker and V. Srinivasan

SOURCE: Operations Research, 24, pp. 991-1025, 1976.

LANGUAGE: English

ABSTRACT: A problem in planning the expansion of a rural primary health-care delivery system is to determine the set of facilities to be added to an existing system so as to maximize the incremental benefit to the community subject to a cost constraint. The proposed approach involves the following five steps: (1) identification of facility attributes relevant to patients in their choice of health-care facilities, (2) modeling of an individual's overall preference for alternate facilities as a weighted linear function of these facility attributes, (3) transformation of each consumer's preference model into a benefit function expressing the individual's benefit in dollars/year for an existing or potential facility, (4) provision of a method for determining the total incremental benefit to the community from a set of proposed health-care facilities that yields near optimum total incremental benefit subject to the cost constraint. A practical application of the proposed approach reveals that the consumer preference model has substantial reliability and predictive validity.

TITLE: "Systems and Procedures of Patient and Information Flow"

AUTHORS: Arnold Reisman, Joao Mello da Silva, and Joseph B. Mantell

SOURCE: Hospital & Health Services Adminstration, Winter, 1978, p. 42-71.

LANGUAGE: English

ABSTRACT: The task of properly scheduling an annual load of several hundred thousand patient visits to more than 100 doctors in 28 different departments, and supporting these visits with timely, accurate, and complete flows of information is very complex.

This task is further complicated by the fact that patients generally require timely sequencing of laboratory tests, X-rays, and consultative appointments. From 1968 to 1973 in the clinic of one large health center, the number of patient visits per year increased approximately 20% (Figure I) and the institution's physical plant was greatly expanded, tying up much of the administrative talent and resources. More importantly, however, the staff capability had become more diversified. It had disproportionately increased in number to serve the rapidly expanding inpatient population and to perform additional research and teaching activities. The systems and procedures for scheduling and processing the patients through the outpatient clinic degraded to the consternation of patients, doctors, and administrators alike.

The objective of this study was to investigate the systems and procedures for outpatient flow and to recommend improvements.

TITLE: "Facility Location: A Review of Context-free and EMS Models"

AUTHORS: Charles ReVelle, David Bigman, David Schilling, Jared Cohon and Richard Church

SOURCE: Health Services Research, 12, No. 2, pp.129-146, 1977.

LANGUAGE: English

ABSTRACT: EMS location models are those formulated to address specific problems of emergency medical services systems; context-free location models are those developed without reference to particular applications. The literature on these two types of public facility location models is reviewed, and the development of the maximal covering model from several earlier context-free models is described, with emphasis on problem statements and articulation of service objectives. An application of the maximal covering model to fire truck location points up the ability of this model to handle multiple objectives; its ability to compare alternative solutions gives it great utility for planning and evaluting EMS systems of a wide range of complexity. Potential applications of the maximal coverning model are discussed regarding EMS problems involving multiple time standards and service objectives, location of special equipment, and siting of fixed facilities.

TITLE: "A Systems Analysis of a University-Health Service Outpatient Clinic"

AUTHORS: Edward J. Rising, Robert Baron and Barry Averill

SOURCE: Operations Research, 21, No. 5, pp. 1030-1047, 1973.

LANGUAGE: English

ABSTRACT: This paper presents a case study on the use of mathematical-computer models in developing operating policies for a university-health-service outpatient clinic. Based on results predicted by the models, actual policy changes were made in the system; the paper compares the subsequent real-world results with those predicted by the models. The comparison demonstrated the validity of the models, and significant improvements were realized in the changed system. An analysis of daily arrival patterns was used to schedule more appointment patients during periods of low walk-in demand in order to smooth the overall daily arrivals. A Monte Carlo simulation model showed the effects of alternative decision rules for scheduling appointment periods during the day to increase patient throughput and physician utilization.

TITLE: "Monte Carlo Simulation of Operating-Room and Recovery-Room Usage"

AUTHORS: Homer H. Schmitz and N. K. Kwak

SOURCE: Operations Research, 20, pp. 1171-1180, 1972.

LANGUAGE: English

ABSTRACT: The purpose of this paper is to provide an insight into the increased need for operating-room and recovery-room facilities and space, based on an increased bed complement. The problem is formulated into three primary questions: (1) How many more surgical procedures will be performed because of the increased bed capacity? (2) How much operating-room time and space will the surgical procedures require? (3) How much recovery-room time and space will the surgical procedures require? To answer these questions, a simulation model of the lengths of stay in the operating room and the recovery room is constructed by the Monte Carlo method, it is tested statistically and its results interpreted. This simulation model can facilitate planning, decision-making and managerial control by providing management information.

TITLE: "On Applying Marketing Models to the Family Planning Process"

AUTHORS: Richard H. Shachtman and C. P. McLaughlin

SOURCE: Med. Progr. Technol., 2, pp. 29-36, 1973.

LANGUAGE: English

ABSTRACT: One may consider potential models of the family planning process as Markov chains or as marketing models. The choice of model is related to the characteristics of the process and to the needs for improved management decisions. The marketing model is presented as a simplified network flow and an elementary case is developed mathematically and expanded to illustrate the administratively important dynamic (multiperiod) case and methods for making efficient resource allocations and training administrators. Although the Markov chain approach is outlined for the reader, the authors do not argue for its application in this case.

TITLE: "Implementation of a Model for Census Prediction and Control"

AUTHORS: Ralph W. Swain, Kerry E. Kilpatrick and John J. Marsh, III

SOURCE: Health Services Research, 12, No. 4, pp. 380-395, 1977.

LANGUAGE: English

ABSTRACT: A model is described that predicts hospital census and computes, for each day, the number of elective admissions that will maximize the census over the short run, subject to constraints on the probability of overflow. Where a computer is available the model provides detailed predictions of census in units as small as 10 beds; used with manual computation the model allows production of tables of the recommended numbers of elective admissions to the hospital as a whole. The model has been tested in five hospitals and is part of the admissions system in two of them; implementation is described, and the results obtained are discussed.

TITLE: "Analytic Framework and Measurement Strategy for Investigating Optimal Staffing in Medical Practice"

AUTHORS: Kenneth R. Smith, A. Mead Over, Jr., Marc F. Hansen, Frederick L. Golladay and Ester J. Davenport

SOURCE: Operations Research, 24, pp. 815-840, 1976.

LANGUAGE: English

ABSTRACT: This paper presents the application of a mixed integer linear programming model to the choice of an optimal staff for an ambulatory medical care practice. Instead of adding further institutional and financial constraints to earlier models, this paper describes a strategy for the measurement of the key empirical constructs on which such analysis must rest. The analysis illustrates the use of the model for selecting the optimal staff and shows the relationships of this staff to the types of problems presented to the practice and the scale of activity. The effect of scale and patient mix on average cost per encounter are examined and the dual solution is used to determine the relative costs of producing encounters in the various groups. Finally, the allocation of responsibilities for different types of patient problems among the various members of the medical team is presented as part of the optimal solution.

TITLE: "A Branch and Bound Algorithm for Optimum Allocation of Float Nurses"

AUTHORS: Vandankumar M. Trivedi and D. Michael Warner.

SOURCE: Management Science, 22, No. 9, pp. 972-981, 1976.

LANGUAGE: English

ABSTRACT: This paper discusses a methodology developed for allocation of float nurses in short-term general hospitals. The severity of need for nursing care on a unit is measured from the perceptions of head nurses of the unit. A multivariate regression model is used to predict head nurses' perception at the beginning of a shift from certain auditable variables. The multivariate regressions are used as an objective function in a branch and bound allocation model designed to allocate float nurses before the start of a shift. The model is tested in five nursing units of a study hospital, and results are presented.

TITLE: "Selecting a Suitable Appointment System in an Outpatient Setting"

AUTHORS: J. Vissers

SOURCE: Medical Care, 17, No. 12, pp. 1207-1220, 1979.

LANGUAGE: English

ABSTRACT: One of the principal causes of waiting time in outpatient departments is the lack of well-designed appointment systems. A conceptual framework is given for dealing with existing appointment systems and to explain their working. The variables that play a role with respect to the appointment system are discussed. All different appointment systems can be compared according to their effect on the patients' waiting time and the physician's idle time, when the systems are expressed in terms of a new variable called "prepunctuality." Prepunctuality means the difference between the time of a patient's arrival at the clinic and the expected time of treatment, and is caused by the patient's own earliness, physician's lateness and the earliness induced by the appointment system chosen. The relationship between prepunctuality and both waiting and idle time was investigated by means of a computer simulation model. In this way, the consequences of using different appointment systems have been clarified, expressed in mean waiting time for the patient and total idle time for the physician. Given certain standards for waiting and idle time, the calculated results can be used to determine an appropriate appointment system and the corresponding waiting and idle time for the range of most common clinic situations. Examples are given to illustrate how these results can be used.

TITLE: "A Management Planning Model for the Delivery of Family Planning Services"

AUTHORS: Glenn O. Ware and Phillip M. Dickert

SOURCE: Socio-Econ. Plan. Sci., 10, pp. 155-158, 1976.

LANGUAGE: English

ABSTRACT: A management planning model for the delivery of family planning services is presented. Markovian probabilistic properties have been adapted for projecting patient flow for a set of various alternative strategies for scheduling patient visits in a health care system. By quantitatively formulating the scheduling problem in terms of pertinent inputs, management objectives and imposed restrictions, optimization of patient flow in the system for efficient utilization of health care resources is achieved through standard linear programming techniques.

TITLE: "Scheduling Nursing Personnel According to Nursing Preference: A Mathematical Programming Approach"

AUTHORS: D. Michael Warner

SOURCE: Operations Research, 24, pp. 842-856, 1976.

LANGUAGE: English

ABSTRACT: This paper describes a nurse scheduling system, the heart of which poses the scheduling decision as a large multiple-choice programming problem whose objective function quantifies preferences of individual nursing personnel concerning length of work stretch, rotation patterns, and requests for days off. The constraints provide for minimum numbers of nursing personnel of each skill class to be assigned to each day and shift of a four- or six-week scheduling period. The problem is solved by a modification of Balintfy and Blackburn's algorithm for multiple-choice programming problems. We include a description of the implementation of the scheduling system on nursing units of several hospitals.

FORECASTING DEMAND FOR SERVICES

TITLE: "A Computer Simulation Approach for Planning in Hospital Ancillary Services"

AUTHORS: Wynn A. Abranovic and William A. Wallace

SOURCE: Socio-Econ. Plan. Sci., 5, pp. 429-448, 1971.

LANGUAGE: English

ABSTRACT: This investigation was concerned with the following propositions: (1) how can the number of service units requested in hospital ancillary departments be estimated? and (2) can a model be designed to link service demands to resource requirements (manpower, equipment, floor space, costs and revenues)?

A methodology that utilized multiple regression analysis and computer simulation was developed and evaluated at a short-term general teaching hospita. Discussions with hospital management were an integral part of the research process.

TITLE: "The Long Island Blood Distribution System as a Prototype for Regional Blood Management"

AUTHORS: Eric Brodheim and Gregory P. Prastacos

SOURCE: Interfaces, No. 9, No. 5, pp. 3-20, 1979.

LANGUAGE: English

ABSTRACT: Each year over two million hospitalized Americans depend upon the timely availability of the right type of blood products at 6,000 hospital blood banks (HBB's) in the United States. If the right blood products are not available at the HBB when required, then medical complications or postponements of elective surgery can result which translates to extra days of hospitalization and expense. On the other hand, since most blood products may only be administered to a patient of the same blood type within 21 days of collection, overstocking at HBB's leads to low utilization, which increases costs and is wasteful of the scarce blood resource.

The Long Island blood distribution system was set up as a prototype of a regional blood center and the hospital blood banks that it services collaborating to preplan regional blood flow. It maximizes blood availability and utilization according to a Programmed Blood Distribution System (PBDS) model and strategy that has been shown to be generally applicable. PBDS schedules blood deliveries according to statistical estimates of the needs of each HBB and monitors actual requirements to adjust deliveries when indicated by control chart techniques. In addition, it provides a daily forecasting of short-term shortages and surpluses for the next several days that results in controlled movement of blood to and from adjoining regions. Finally, the system is able to adjust the regional strategy so that availability is reduced uniformly at all HBB's during periods of seasonal, regional shortages.

PBDS has drastically improved utilization and availability of blood on Long Island: wastage has been reduced by 80%, and delivery costs by 64%. This prototype is acting as a model for other regional blood centers in the United States and for other national blood services as a basis for planning and controlling blood flow in a geographic area. It usually replaces preexisting procedures where a regional blood center collects blood based upon gross estimates and reacts to requests for blood by individual HBB's on the basis of experience and on the currently prevailing inventory situation.

TITLE: "A Suggested Process for Selecting a Forecasting Model"

AUTHORS: Edward J. Lisk

SOURCE: Hospital & Health Services Administration, 25, Special Issue I, pp. 23-37, 1980.

LANGUAGE: English

ABSTRACT: The effective operation of the institution's short-run control system in part depends upon the accuracy of the forecasts used to develop information regarding expected performance. If forecasts are subject to material error, then a material proportion of the variance (expected performance less actual performance) will be due to forecast error rather than an actual performance deviation.

When the institution's control system is rudimentary or the activity to be forecasted is not subject to material variation, simple forecasting models may be used economically. However, as the control system becomes more sophisticated or the activity to be forecasted is subject to material variation, more complex and costly models may be required to develop useful information. Therefore, the relationship between the sophistication of the institution's control system and the nature of the activity to be forcasted should be evaluated to select an appropriate model from the numerous forecasting alternatives (see Pindyck and Rubinfeld, 1976).

TITLE: Prediction of Neonatal Death or Need for Interhospital Transfer by Prenatal Risk Characteristics of Mother

AUTHORS: Paul Jones, Henry Halliday and Susan Jones

SOURCE: Medical Care, August, 1979, Vol. XVII, No. 8

LANGUAGE: English

ABSTRACT: A closed-circuit television system is implemented between neonatal specialists at a large neonatal care hospital and nurses caring for infants in the newborn nursery in a small community hospital located in an inner city, predominantly black, economically deprived area. Data are systematically collected relating prenatal risk characteristics of mothers to outcome measures, including selected intrapartum maternal complications, neonatal morbidity and mortality, neonatal therapeutic interventions, and transfer of neonates from the small hospital to the larger hospital. To our knowledge, study of factors predicting transfer has received little attention in the literature. A log linear model is used to identify specific groups of prenatal risk characteristics capable of predicting maternal and neonatal outcomes.

TITLE: "Forecasting Areawide Demand for Health Care Services: A Critical Review of Major Techniques and Their Application"

AUTHORS: Michael B. Harrington

SOURCE: Inquiry, 14, pp. 254-268, 1977.

LANGUAGE: English

ABSTRACT: Since well before Cassandra, people have sought to forecast the future. In modern times, forecasting methods have adopted fairly scientific guises. But it is not clear that their predictive accuracy has improved appreciably over that of their predecessors. This is especially true of methods applied to large-scale public problems, such as areawide health planning. Improved methods have been offset substantially by the greater complexity, more rapid change, and more pervasive interdependence characteristic of modern society. Forecasting skills have grown, but so has the difficulty of the task.

The impetus for developing improved methods for use by areawide health planners, begun under the Comprehensive Health Planning legislation of 1966, no doubt will be reinforced by the Health Planning and Resources Development Act of 1974 (P.L. 93-641). Somewhere between perfect forecasts of the health care future and none at all lies a "zone of feasible forecasting" (i.e., forecasts both useful and within the capabilities and budgets of health planners). This paper explores the zone of feasible forecasting, by considering the following points:

- -The objectives of forecasting in areawide health planning;
- -Specific factors contributing to the demand for health services that enter into any serious forecasting effort;
- - Major sources of change and continuity in the areawide health care system that are identified in conjunction with demand forecasts;
- -Six generic kinds of forecasting techniques in the health planning context, including an evaluation of the strengths and weaknesses of each;
- -A simple framework through which each forecasting method might be brought to bear most effectively;
- -Some apparent dimensions of the "zone of feasible forecasting," given the current state of the art.

TITLE: "Using Computer Simulation to Predict ICU Staffing Needs"

AUTHORS: N. Duraiswamy, R. Welton and A. Reisman

SOURCE: The Journal of Nursing Administration, pp. 39-44, February, 1981.

LANGUAGE: English

ABSTRACT: This article describes a computer simulation study to determine the number of full-time registered nurses required to deliver safe nursing care in a 20-bed medical intensive care unit. The authors' computer simulation model predicts different staffing levels for two six-month periods. The article illustrates how the computer simulation was accomplished and discusses the cost and feasibility of using computer simulation in other settings.

TITLE: "Markov Chain Model for Events Following Induced Abortion"

AUTHORS: Richard H. Shachtman and Carol J. Hogue

SOURCE: Operations Research, 24, pp. 916-932, 1976.

LANGUAGE: English

ABSTRACT: This paper presents a Markov chain model for investigating questions about the possible health-related consequences of induced abortion. The model evolved from epidemiologic research questions in conjunction with the criteria for Markov chain development. It has been developed to apply to data collected on 928 women who participated in an historical-prospective study conducted in Skopje, Yugoslavia. Formulas employing the transition probabilities may be used to answer specific questions of interest to epidemiologists, physicians, and health policy makers.

TITLE: "On Applying Marketing Models to the Family Planning Process"

AUTHORS: Richard H. Shachtman and C. P. McLaughlin

SOURCE: Med. Progr. Technol., 2, pp. 29-36, 1973.

LANGUAGE: English

ABSTRACT: One may consider potential models of the family planning process as Markov chains or as marketing models. The choice of model is related to the characteristics of the process and to the needs for improved management decisions. The marketing model is presented as a simplified network flow and an elementary case is developed mathematically and expanded to illustrate the administratively important dynamic (multiperiod) case and methods for making efficient resource allocations and training administrators. Although the Markov chain approach is outlined for the reader, the authors do not argue for its application in this case.

COST BENEFIT STUDIES

TITLE: Evaluation of an Automated Blood Pressure Measuring Device Intended for General Public Use

AUTHORS: David Berkson, Ira Whipple, Larry Shireman, Murray Brown, William Raynor and Richard Shekelle

SOURCE: American Journal of Public Health, Vol. 69, No. 5, May, 1979

LANGUAGE: English

ABSTRACT: Responding to Chicago newspaper reports, measurements of blood pressure by a publicly available, automated coin-operated device were compared with those of human observers using the standard duff and auscultatory technique. One machine was examined in the laboratory, and eight others at randomly selected sites. Analysis of readings made on 100 persons in the laboratory and 227 in the field led to the following conclusions: 1) On the average, the machines measured fifth phase diastolic blood pressure at nearly the same level as did human observers; 2) The machines were more variable measuring systolic blood pressure with four differing from the average human reading by 1mm Hg or less, but two differing by 8mm Hg or more; 3) The agreement between machine-human pairs of readings was not as good as between human-human pairs, but the differences in level of agreement -- both in determining the actual value and in categorizing the values as normal, borderline, or high -- were small and have little practical importance; 4) Linear regression analyses of the relationship between simultaneously determined machine and human readings indicated that the average human-machine difference was the same over the range of pressures tested. Publicly available blood pressure measuring devices should be labeled concerning their purposes, capabilities, and limitations. Rules and regulations governing their use in the City of Chicago are being prepared by this city's Legal Department.

TITLE: "Prevention of the Wernicke-Korsakoff Syndrome"

AUTHORS: Brandon S. Centerwall, and Michael H. Criqui

SOURCE: The New England Journal of Medicine, 299, No.6, pp. 285-289, 1978.

LANGUAGE: English

ABSTRACT: The Wernicke-Korsakoff syndrome is a thiamine-deficiency disorder occurring primarily among alcoholics. To determine the economic feasibility of preventing this disease by fortification of alcoholic beverages with thiamine, we compared the cost of fortification with the cost of institutionalizing alcoholics with the disorder.

The estimated annual incidence of institutionalization is eight per million adult population. The cost of long-term institutionalization, discounted to present value, is $70 million per year. The cost of adequately fortifying alcoholic beverages is estimated to range from $3 million per year if allithiamines are used, to as much as $17 million per year if thiamine hydrochloride proves necessary. Thus, the cost-benefit ration may range from 1:23 to 1:4.

It is economically advantageous to prevent the Wernicke-Korsakoff syndrome by forticiation of alcoholic beverages with thiamine. The stability, safety and marketability of thiamine and the allithiamines in alcoholic beverages should be studied further.

TITLE: "The High Cost of Low-Frequency Events: The Anatomy and Economics of Surgical Mishaps"

AUTHORS: Nathan P. Couch, Nicholas L. Tilney, Anthony A. Rayner, and Francis D. Moore

SOURCE: The New England Journal of Medicine, 304, No.11, pp. 634-637, 1981.

LANGUAGE: English

ABSTRACT: We conducted a one-year prospective survey to identify adverse outcomes due to error during care in the field of general surgery. We identified 36 such cases among 5612 surgical admissions to the Peter Bent Brigham Hospital, but in 23 cases the initiating mishap had occurred in another hospital before transfer. In two thirds of the cases the mishap was due to an error of commission: an unnecessary, defective, or inappropriate operative procedure.

Twenty of these patients died in the hospital, and in 11 death was directly attributable to the error. Five of the 16 survivors left the hospital with serious physical impairment. A satisfactory outcome was achieved in only 11 cases (31 per cent).

The average hospital stay was 42 days, with the duration ranging from one to 325 days; the total cost for the 36 patients was $1,732,432.

We suggest that all hospitals develop comprehensive methods to identify and prevent these costly and unnecessary events.

TITLE: "Cost/Benefit Analysis of Treatment and Prevention of Myocardial Infarction"

AUTHORS: Shan Cretin

SOURCE: Health Services Research, 12, No. 2, pp. 174-189, 1977.

LANGUAGE: English

ABSTRACT: The benefits resulting from introduction of coronary care units, mobile coronary care units, and a screening and intervention program to decrease the incidence of myocardial infarction (MI) are reduced to a common basis by modeling the effects of the three strategies as applied to a cohort of 10 year-olds. Published data on MI are used with a semi-Markov model of death from MI and other causes to estimate program effects on long-term survival, and cost/benefit ratios are compared for the three programs with both costs and benefits discounted over the lifetime of the cohort. Some problems of selecting a discount rate for comparing programs that incur costs and accrue benefits at widely separated times are discussed.

TITLE: Psychiatric Health Care and Costs Under Comprehensive Public Health Insurance: Experience in a Canadian Province

AUTHORS: Carl D'Arcy, Guin Bold and Janet A. Schmitz

SOURCE: Medical Care, September, 1981, Vol. XIX, No. 9

LANGUAGE: English

ABSTRACT: Psychiatric service delivery was studied over a 6-year period in the Province of Saskatchewan, which has had comprehensive universal medical insurance since 1962. That experience is relevant to current issues of costs and quality of care, methods of financial reimbursement and organization of service delivery. A unique patient-centered data base permitted the examination of significant differences between the private and public service delivery sectors in volumes and types of patients treated as well as treatment costs. A dominant picture emerged of distinct types of patients that differ significantly in terms of severity and duration of illness, as well as in the amount of resources they consume. Their differing needs for intervention and prevention should be taken into account in mental health care planning.

TITLE: "Benefit-Cost Analysis: A Review of its Applicability in Policy Analysis for Delivering Health Services"

AUTHORS: David W. Dunlop

SOURCE: Social Science & Medicine, 9, No. 3, pp. 133-139, 1975.

LANGUAGE: English

ABSTRACT: The use of benefit-cost analysis for programmatic decision making in health is reviewed focusing on the kinds of health programs analyzed, the impact on health policy, and the problems encountered when using such an analytical tool. Alternatives to benefit-cost analysis are discussed in light of their policy relevance. A concluding section provides a broader perspective for health planning and program development.

TITLE: "Physician Responsibility for the Cost of Unnecessary Medical Services"

AUTHORS: John M. Eisenberg and Arnold J. Rosoff

SOURCE: The New England Journal of Medicine, 299, No. 2, pp. 76-80, 1978.

LANGUAGE: English

ABSTRACT: Most diagnostic and therapeutic services are ordered by physicians, but physicians practicing under fee-for-service conditions have few incentives to contain the costs of medical care. Without such incentives, effective cost control through mechanisms such as Professional Standards Review Organizations have been disappointing. Several legal approaches might be used to increase physicians' responsibility for the cost of unnecessary services - expansion of tort law, implied contract, redesign of insurance mechanisms, equitable estoppel and informed consent. However, increasing physician responsibility will require uniform but flexible definitions of medical necessity, reliable means for predetermining the need for services and effective penalties or incentives. We propose a peer-review system that would incorporate the sharing of financial risk among physician, hospital, insurer and patient in the fee-for-service sector.

TITLE: "A Cost-Benefit Analysis of a Mandatory Premarital Rubella-Antibody Screening Program"

AUTHORS: Matthew E. Farber and Stan N. Finkelstein

SOURCE: The New England Journal of Medicine, 299, No. 5, pp. 857-859, 1979.

LANGUAGE: English

ABSTRACT: In 1969, two attenuated rubella vaccines were licensed for use in the United States. Since that time, the practice in this country has been to immunize school-age children to reduce the reservoir and spread of the virus. This policy is in contrast with the immunization strategy of the United Kingdom, which is to vaccinate only girls 10 to 14 years of age who do not have detectable hemagglutination-inhibiting antibodies to rubella virus. Although little has been written about the success of the British strategy, continual outbreaks of rubella in the United States are indicative of the difficulty in achieving herd immunity for this disease. Some experts have suggested that the American approach has not been effective enough in controlling rubella.

A proposed alternative strategy is to screen women of child-bearing age for rubella antibodies routinely when they apply for a marriage license and to immunize those found to be susceptible. At least three states - California, Colorado and Rhode Island - have already adopted laws making rubella-antibody determination a prerequisite for a marriage license. To shed light on whether Massachusetts should consider the adoption of such a law, we examined premarital rubella screening programs in an attempt to justify them on the basis of economic considerations. In our analysis, we used data from a national rather than statewide registry because the reported incidence of congenital rubella syndrome, a critical variable in the analysis, is low.

TITLE: A Two-Stage Model for the Control of Epidemic Influenza

AUTHORS: Stan Finkelstein, Charles Smart, Andrew Gralla and Cecilia d'Oliveira

SOURCE: Management Science, Vol. 27, No. 7, July, 1981

LANGUAGE: English

ABSTRACT: We developed a two-stage model to help predict the circumstances under which alternative public immunization strategies for influenza are likely to be best suited to national needs. The first stage is a deterministic epidemic model which, when solved numerically, describes the fraction of the population that becomes infective during a hypothetical epidemic. The second stage is a cost/benefit model that allows policy alternatives to be compared in economic net benefit terms. Our assemptions lead us to predict that immunization programs directed at the population at large are in some cases favored over those which target selected high-risk groups.

TITLE: "Decision Analysis and Medical Malpractice"

AUTHORS: Brian E. Forst

SOURCE: Operations Research, 22, No. 1, pp. 1-12, 1974.

LANGUAGE: English

ABSTRACT: Normative decisions theory has been applied to the problem of evaluating alternative diagnosis-treatment strategies. The courts rely on a different set of doctrines in performing the same sort of evaluation. This paper investigates the differences. It is suggested that the alleged 'malpractice crisis' results largely from the application of a set of ambiguous and mutually inconsistent medio-legal principles such as "reasonable medical certainty," "standards of good medical practice in the community", and "proximate cause." The expected utility criterion of decision analysis is proposed as an alternative to this melange, both for the purpose of establishing the existence of negligence and for determining the proper amount of compensation.

TITLE: "Can the PSRO's be Cost Effective?
A Study of the Effect of the Commonwealth Health Agencies Monitoring Program on the Length of Stay of Medicaid Patients in Massachusetts.

AUTHORS: Anita Fulchiero, Steven Miller, Cornelius R. Foley, H. Thomas Bailantine, and Charles S. Amorosino, Jr.

SOURCE: The New England Journal of Medicine, 299, No. 11, pp. 574-580, 1978.

LANGUAGE: English

ABSTRACT: To analyze the effect of the Commonwealth Health Agencies Monitoring Program on the length of stay of a sample of Massachusetts Medicaid patients, we compared their experience with that of non-Medicaid patient. We found a consistently decreasing trend in the length of stay of Medicaid patients during the 2 1/2 year period studied. The average length of stay of Medicaid patients decreased by 11.9 per cent relative to the norm, whereas the non-Medicaid length of stay decreased by only 6.6 per cent. We infer that the Program may be credited with the 5.3 per cent differential decrease. The consistency and reliability of the data suggest that similar results may be extrapolated to the hospitals not sampled.

We conclude that Professional Standards Review Organizations, of which this program was a precursor, can be cost effective, given an expanded review mandate and the application of suitable evaluative processes.

TITLE: "Cost-Effectiveness of Cardiopulmonary Resuscitation Training Programs"

AUTHORS: G. Anthony Gorry and David W. Scott

SOURCE: Health Services Research, 12, No. 1, pp. 30-41, 1977.

LANGUAGE: English

ABSTRACT: A model is presented to analyze the cost-effectiveness of programs to train large numbers of citizens in the techniques of cardiopulmonary resuscitation (CPR). From a planner's estimates of certain key factors, the model determines the probability of intervention for various numbers of trained citizens and for several allocation strategies and patterns of population density. These key factors are the maximum distance from which a person with CPR training could intervene in an emergency, the cost of training, and loss of skill with time. The model is used to analyze possible training efforts in Houston, Texas.

TITLE: "A Cost-Benefit Study of a Hypertension Screening and Treatment Program at the Work Setting"

AUTHORS: Edward L. Hannan and J. Kenneth Graham

SOURCE: Inquiry, 15, No. 4, pp. 345-358, 1978.

LANGUAGE: English

ABSTRACT: The purpose of this study is to develop a model that will enable a specific company or organization to predict the costs and benefits which would result if a hypertension screening and treatment program were introduced at the work setting.

TITLE: The Incidence and Economic Costs of Cancer, Motor Vehicle Injuries, Coronary Heart Disease, and Stroke: A Comparative Analysis

AUTHORS: Nelson Hartunian, Charles Smart and Mark Thompson

SOURCE: American Journal of Public Health, Vol. 70, No. 12, December, 1980

LANGUAGE: English

ABSTRACT: The economic impact of disease and injury has most often been calculated by examining the costs associated with the prevalence of the impairments in the reference year. An alternative accounting approach is to assign all disease costs to the year of incidence, an approach which entails present-valuing to the year of incidence both health care expenditures and lost productivity. The incidence approach is the more appropriate for gauging the economic gains achievable through prevention, immediate rehabilitation, and arresting progression. Incidence-based costs have been estimated for the United States in 1975 for cancer, coronary heart disease, motor vehicle injuries and stroke. A noteworthy finding is the relative economic importance of motor vehicle injuries, which frequently have been overlooked in the ordering of public health expenditure priorities. After cancer, which generated approximately $23.1 billion in present-valued costs in 1975, motor vehicle injuries and coronary heart disease constitute the next most expensive conditions -- having generated estimated annual costs of $14.4 billion and $13.7 billion, respectivly Stroke, at $6.5 billion, follows in economic importance.

TITLE: "Consequence Evaluation in Decision Analytic Models of Medical Screening, Diagnosis, and Treatment"

AUTHORS: J. C. Hershey

SOURCE: Methods of Information in Medicine, 13, pp. 197-203, 1974.

LANGUAGE: English

ABSTRACT: This paper examines the problem of assigning values, or utilities to separate consequences in decision analytic models of medical screening, diagnosis, and treatment. Several important issues related to this problem are studied, and a number of methodologies proposed for various applications are reviewed in relation to these issues. Finally, suggestions for future research in this area are proposed.

TITLE: "Cost Analysis of Leasing Hospital Equipment"

AUTHORS: James B. Henry and Rodney L. Roenfeldt

SOURCE: Inquiry, 15, No. 1, pp. 33-37, 1978.

LANGUAGE: English

ABSTRACT: In an attempt to determine why hospitals choose to lease, administrators and controllers of 25 non-profit hospitals in South Carolina were interviewed. Several reasons were offered for their choosing leasing as a financing vehicle. Six of the reasons most frequently suggested are listed below:

1. The asset is viewed to have a high degree of technological obsolescence, therefore the ability to trade in equipment is desired.
2. Service is better on leased equipment than on purchased equipment. The ability to stop making lease payments seems to influence performance on maintenance contracts.
3. The asset is only available under a lease agreement.
4. The hospital can be reimbursed faster under a lease than under a purchase agreement.
5. Leasing provides capital funds when other sources are scarce.
6. Leasing rates are lower than borrowing rates.

TITLE: "Foundations for Medical Care: An Empirical Investigation of the Delivery of Health Services to a Medicaid Population"

AUTHORS: John Holahan

SOURCE: Inquiry, 14, pp. 352-368, 1977.

LANGUAGE: English

ABSTRACT: The health care system in the United States is commonly criticized for encouraging excessive utilization, permitting inefficient modes of service delivery, and for absorbing an inordinate share of the nation's resources. In particular, it has been argued that fee-for-service solo practice medicine has resulted in too little concern with the efficient delivery of health care. Because the physician's income varies directly with the number of (and complexity of) services rendered, the physician has a strong incentive to provide people with more services than "necessary." Concern with alternative reimbursement arrangements has led in recent years to considerable interest in health maintenance organizations (HMOs).

In this paper we present arguments and some empirical evidence that foundations for medical care may not be effective mechanisms for the long-term control of costs. The major problem with fixed budget, fee-for-service arrangements is that all physicians in the association have an incentive to overprovide because gains from overprovision will typically exceed the losses from the pro rata reductions.

TITLE: Planning and Budgeting in the Crippled Children's Sector through Goal Programming

AUTHORS: Carl Joiner and Albert Drake

SOURCE: American Journal of Public Health, Vol. 71, No. 9, September, 1981

LANGUAGE: English

ABSTRACT: This article describes how the goal programming methodology was applied to a state level Crippled Children's Program. The various organizational goals are incorporated into the programming model to indicate the trade-offs associated with the resource allocation process. Alternative allocations are presented in terms of a "what if" approach to programming.

TITLE: "Application of Cost-Benefit Analysis to the Health Services and the Special Case of Technologic Innovation"

AUTHORS: Herbert E. Klarman

SOURCE: International Journal of Health Services, 4, No. 2, pp. 325-352, 1974.

LANGUAGE: English

ABSTRACT: As an economic technique for evaluating specific projects or programs in the public sector, cost-benefit analysis is relatively new. In this paper, the theory and practice of cost-benefit analysis in general are discussed as a basis for considering its role in assessing technology in the health services. A review of the literature on applications of cost-benefit or cost-effectiveness analysis to the health field reveals that few complete studies have been conducted to date. It is suggested that an adequate analysis requires an empirical approach in which costs and benefits are juxtaposed, and in which presumed benefits reflect an ascertained relationship between inputs and outputs. A threefold classification of benefits is commonly employed: direct, indirect, and intangible. Since the latter pose difficulty, cost-effectiveness analysis is often the more practicable procedure. After summarizing some problems in predicting how technologic developments are likely to affect costs and benefits, the method of cost-benefit analysis is applied to developments of health systems technology in two settings- the hospital and automated multiphasic screening. These examples underscore the importance of solving problems of measurement and valuation of a project or program in its concrete setting. Finally, barriers to the performance of sound and systematic analysis are listed, and the political context of decision making in the public sector is emphasized.

TITLE: "Planning of Specialized Health Facilities"
Size vs. Cost and Effectiveness in Health Surgery

AUTHORS: Maurice McGregor and Gerald Pelletier

SOURCE: The New England Journal of Medicine, 299, No. 4, pp. 179-181, 1978.

LANGUAGE: English

ABSTRACT: To those who have come to look on the postwar boom years as "normal," the very idea of planning for the development of health facilities is anathema. They are used to a world in which specialized facilities have burgeoned, almost irrespective of cost, wherever they have been planted. The sole limitation has been the availability of patients with insurance, Medicare or Medicaid funds to bear the costs.

This unrestricted freedom to develop specialized services such as neurosurgery or heart surgery, together with their necessary support facilities, has been extraordinarily rewarding. Those concerned have been able to command the best of tools to work with and even to feel "virtuous" since this example of free enterprise at work has allowed some wonderful technical achievements to be widely applied very rapidly after their development - sometimes even before proof of efficacy has been obtained. But the evidence is that the era of indiscriminate growth and the resulting waste is drawing to a close, not only for sources of energy, water and space but for the development of health facilities as well.

Although in the future the clinical introduction of expensive technologic innovations for rare diseases will probably continue to be allowed to proceed unchecked by financial considerations, expensive innovations for common disorders will henceforth require review. Their development will have to be planned lest they tap off more resources than can be spared. The "medical commons" are reaching the limits of their capacity.

Thus it is probable that in the future it will not again be possible for expenditure on a single operation such as coronary bypass to increase from zero to around $1 billion per annum in the U.S. alone over a single decade, without extensive preliminary testing to establish what benefits can be anticipated.

TITLE: "A Markovian Analysis of a Geriatric Ward"

AUTHORS: Jack Meredith

SOURCE: Management Science, 19, No. 6, pp. 604-612, 1973.

LANGUAGE: English

ABSTRACT: This paper evaluates the cost-effectiveness of a specialized geriatric program in a California mental hospital by analyzing the movement of patients into, through, and out of the program. The procedure for modelling the patients' movements between states with a Markov chain is detailed and the results analyzed. First passage times, long-term trends, and stay times until death are derived as well as the associated costs the hospital must endure. Lastly, ways to simulate the effect of possible program modifications are illustrated.

TITLE: Evaluation of the Costs and Benefits of Motorcycle Helmet Laws

AUTHORS: Andreas Muller

SOURCE: American Journal of Public Health, Vol. 70, No. 6, June, 1980

LANGUAGE: English

ABSTRACT: Since 1976, 28 states have repealed or significantly amended their motorcycle helmet laws. The change in legislation was not based on an evaluation of the costs and benefits of such laws. This paper attempts such an assessment by comparing the cost of motorcycle helmets with the medical costs averted due to helmet use using data primarily based on motorcycle crashes in Colorado, Oklahoma, and South Dakota. Nationwide, at least $61 million could be saved annually if all motorcyclists were to use helmets. Helmet law repeals have been observed to lead to a 40 to 50 percent point reduction in helmet use. The associated additional medical care costs substantially exceed cost savings produced by reduced helmet use. It is estimated that helmet law repeals may produce annually between $16 nad 18 million of unnecessary medical care expenditures. Several alternatives to increase motorcycle helmet use are briefly discussed. It is concluded that helmet laws are effective in encouraging necessary medical expenditures as well as unnecessary pain and suffering among injured motorcyclists.

TITLE: "The Swine-Influenza Decision"

AUTHORS: Stephen C. Schoenbaum, Barbara J. McNeil and Joel Kavet

SOURCE: The New England Journal of Medicine, 295, No.14, pp.759-765, 1976.

LANGUAGE: English

ABSTRACT: We analyzed the economic aspects of mass immunization against swine-like influenza in 1976-77, and have used the Delphi technic for estimating the likelihood and characteristics of an epidemic.

If an epidemic occurs and no preventive efforts are made, total costs could exceed $6 billion for the whole population and $3 billion for those in the high-risk group. Expected net benefits from immunization vary with (1) the target population, (2) costs of vaccine administration and (3) vaccine acceptance rates. With an epidemioc probability of 0.10 and with costs of purchasing and adminstering the vaccine each estimated at $0.50 per person in the target population, maximum net benefits cannot be obtained by an offer of vaccine to the entire population. Economic considerations do not require limitation of vaccination to high-risk groups. If the program is restricted to adults 25 years of age and over, and if acceptance rates exceed 59 per cent, the program is economically justifiable.

TITLE: "Decision Analysis: A Look at the Chief Complaints"

AUTHORS: William B. Schwartz

SOURCE: The New England Journal of Medicine, 300, No. 10, pp. 556-559, 1979.

LANGUAGE: English

ABSTRACT: Physicians who are troubled at the prospect of decision analysis coming into clinical use often seem to believe that the technic will force a major change in their usual mode of practice. It should not: formal decision analysis is warranted only in cases of unusual seriousness or complexity. For most common medical problems, the correct course of action has been well defined on the basis of expert medical opinion; the territory is familiar and requires no special effort at analysis. Indeed, much clinical instruction, whether on the management of a suspected urinary-tract infection, hypertension or acute pulmonary edema, is based, at least implicitly, on choices dictated by detailed mental road-maps. For several conditions such protocols have been explicitly converted into flow charts for use in patient care.

In some circumstances, however, a physician must choose among several similarly plausible courses of action, each with potentially serious short-term and long-term consequences. In such cases, a fixed recipe for management, as defined by a standard protocol, is inappropriate, and it becomes worth thinking hard and systematically about the alternatives.

TITLE: "Decision Analysis Assessment of a National Medical Study"

AUTHORS: Richard H. Shachtman

SOURCE: Operations Research, 28, No. 1, pp. 44-59, 1980.

LANGUAGE: English

ABSTRACT: To decide whether or not to undertake an expensive national survey to determine the effectiveness of infection control, we devised a quantitative decision model to analyze the costs and probabilities of successful study outcomes. The result allowed us to determine whether the proposed study method and design would provide sufficient statistical power to ensure meaningful conclusions from the research. The model was robust in assessing the adequacy of method accuracy and, within the range of assumptions specified, it suggested that the project should be undertaken. The results helped to secure official approval and funding for this large-scale research project. A novel approach to evaluating sensitivity analysis is included. As constructed, the model is applicable to other projects in applied research and, with some modification, to projects in basic research as well.

TITLE: "Cost Effectiveness of Vaccination Against Pneumococcal Pneumonia"

AUTHORS: Jane Sisk Willems, Claudia R. Sanders, Michael A. Riddiough, and John C. Bell

SOURCE: The New England Journal of Medicine, 303, No. 10, pp. 553-559, 1980.

LANGUAGE: English

ABSTRACT: We used cost-effectiveness analysis to examine the medical-care costs of vaccination against pneumococcal pneumonia in relation to its effects on health. Vaccination could add a year of healthy life among all age groups for about $4,800 in net medical-care costs. Cost-effectiveness ratios vary according to the age of the person vaccinated - from $1,000 per year of healthy life for an adult 65 years old or older to $77,000 per year of healthy life for a child between the ages of two and four. These ratios may change substantially with variations in such factors as the cost of vaccination, the duration of immunity, the efficacy and composition of the vaccine, and the percentage of pneumonia that is pneumococcal.

This analysis has particular relevance for the Medicare program, since present legislation excludes coverage of most immunizations and other preventive services. Provision of pneumococcal vaccine to the elderly and inclusion of the vaccine as a Medicare benefit merit serious consideration.

TITLE: "Clinical Decision Analysis"

AUTHORS: T.R. Taylor

SOURCE: Methods of Information in Medicine, 15, pp. 216-224, 1976.

LANGUAGE: English

ABSTRACT: Attempts have been made for almost two decades to use computers to make clinical diagnoses. Interest in such techniques persists despite little practical success in their application to routine patient care. The explanation of this lack of success is complex and includes (i) lack of understanding of the decision-making process itself and (ii) the need for a theoretical framework within which such systems can be developed. A major objective of this paper is to illustrate the contribution that the concepts and technques associated with Decision Theory can make to both of these problems.

After attempting to analyse the deficiencies of current approaches to computer-assisted diagnosis the paper discusses some of the basic concepts of decision theory. It then illustrates the role of decision theory in studies using different forms of clinical decision analysis.

Finally, the paper indicates the relevance of decision analysis to medical education and to the provision of health care.

TITLE: Programming, Budgeting, and Control in Health Care Organizations: The State of the Art

AUTHORS: Robert Vraciu

SOURCE: Health Services Research, Vol. 14, No. 2, Summer, 1979

LANGUAGE: English

ABSTRACT: The planning, budgeting, and controlling processes (PBCP) largely subsume all of the planning and controlling activities of an organization. This paper discusses these activities within the context of a single management control system, focusing on three topics. First, a brief historical perspective of management concerns which relate to PBCP is presented and several important external pressures currently imposed on the health care industry are discussed. Second, normative models of the processes -- programming, budgeting, and controlling -- are presented. The discussion focuses on the elements and relationships of these processes, and numerous references to the literature are provided. Third, several issues related to the gap between the state of the art in PBCP for hospitals and the current state of practice are discussed.

TITLE: "Cost-Benefit and Cost-Effectiveness Analysis in Health Care"

AUTHORS: Kenneth E. Warner and Rebecca C. Hutton

SOURCE: Medical Care, 18, No. 11, pp. 1069-1084, 1980.

LANGUAGE: English

ABSTRACT: Concern about the escalating costs of health services is reflected in the rapid growth of the literature on cost-benefit and cost-effectiveness anlaysis (CBA and CEA, respectively) in health care. A search of that literature for 1966-78 produced a bibliography of more than 500 relevant references, growing from half a dozen per year at the beginning of the period to close to 100 each of the most recent 2 years. The literature growth has been more rapid in medical than nonmedical journals and a preference for CEA over CBA appears to be emerging. Studies related to diagnosis and treatment have gained in popularity, while the early prominence of studies with a substantive prevention theme has diminished. Consistent with the increasing medical focus of the literature, numbers of articles oriented toward individual practitioner decision making have grown more rapidly than those oriented toward organizational or societal decision making. In addition to documenting these trends, this article identifies published reviews of health care CBA/CEA and books and articles attempting to convey the principles of CBA/CEA to the health care community. The article concludes with speculation on likely near-future trends in the literature and consideration of the quality implications of the rapid growth.

TITLE: "A Decision Analysis Approach to the Swine Influenza Vaccination Decision for an Individual"

AUTHORS: David L. Zalkind and Richard H. Shachtman

SOURCE: Medical Care, 18, No. 1, pp. 59-72, 1980.

LANGUAGE: English

ABSTRACT: We present a method to analyze the decision by an individual whether to receive the swine influenza (A/New Jersey) vaccine, including an approach for health care personnel to use in informing an individual about the personal costs, benefits and probabilties, as well as indicated choices of actions, associated with such decisions. This analysis is a prototype for cases where informed consent requirements have prompted increased patient involvement in personal medical decisions. Probabilities and personally assessed values that affect the decision are: reaction to the injection, attack rates, vaccine efficacy, chances for an epidemic and concomitant probabilities of contracting influenza, and mortality. We specify a preference ordering for consequences of receiving the vaccine. The analysis yields a preference ordering for possible actions because relative values reflecting preferences are compared on a fixed consistent scale. The solution exhibited, determined in the fall of 1976, indicates conditions when selection of the action to receive the vaccine is automatic. In cases where the decision is not automatic, an individual needs additional information about the personal value of death (life), relative to other possible outcomes. We previously have developed a noneconomic approach to the determination of the value of death and the results, briefly described in this paper, are used to construct a decision region for the choice of receiving the vaccine that depends on both the probability of an epidemic and the value of death. Surprisingly, inclusion of information about the Guillain-Barre syndrome does not necessarily alter the decision to receive the vaccine, even though recognition of the increased incidence of the syndrome caused by the vaccine caused cancellation of the federal program.

INVENTORY CONTROL

TITLE: "The Long Island Blood Distribution System as a Prototype for Regional Blood Management"

AUTHORS: Eric Brodheim and Gregory P. Prastacos

SOURCE: Interfaces, No. 9, No. 5, pp. 3-20, 1979.

LANGUAGE: English

ABSTRACT: Each year over two million hospitalized Americans depend upon the timely availability of the right type of blood products at 6,000 hospital blood banks (HBB's) in the United States. If the right blood products are not available at the HBB when required, then medical complications or postponements of elective surgery can result which translates to extra days of hospitalization and expense. On the other hand, since most blood products may only be administered to a patient of the same blood type within 21 days of collection, overstocking at HBB's leads to low utilization, which increases costs and is wasteful of the scarce blood resource.

The Long Island blood distribution system was set up as a prototype of a regional blood center and the hospital blood banks that it services collaborating to preplan regional blood flow. It maximizes blood availability and utilization according to a Programmed Blood Distribution System (PBDS) model and strategy that has been shown to be generally applicable. PBDS schedules blood deliveries according to statistical estimates of the needs of each HBB and monitors actual requirements to adjust deliveries when indicated by control chart techniques. In addition, it provides a daily forecasting of short-term shortages and surpluses for the next several days that results in controlled movement of blood to and from adjoining regions. Finally, the system is able to adjust the regional strategy so that availability is reduced uniformly at all HBB's during periods of seasonal, regional shortages.

PBDS has drastically improved utilization and availability of blood on Long Island: wastage has been reduced by 80%, and delivery costs by 64%. This prototype is acting as a model for other regional blood centers in the United States and for other national blood services as a basis for planning and controlling blood flow in a geographic area. It usually replaces preexisting procedures where a regional blood center collects blood based upon gross estimates and reacts to requests for blood by individual HBB's on the basis of experience and on the currently prevailing inventory situation.

TITLE: "A Collections Planning Model for Regional Blood Suppliers: Description and Validation"

AUTHORS: P.D. Cumming, K.E. Kendall, C.C. Pegels, J.P. Seagle and J.F. Shubsda

SOURCE: Management Science, 22, No. 9, pp. 962-971, 1976.

LANGUAGE: English

ABSTRACT: A planning model has been developed to assist regional blood suppliers in alleviating seasonal imbalances between supply and demand of blood. A Markovian population model is used to project various performance measures for a blood supply region. These measures are summarized in graphs covering a planning period of several months to one year. The planner improves projected performance by changing collection plans and using the planning model iteratively to evaluate each plan. The data required by the model are generally available: past performance of bloodmobile sponsors, quotas and demand forecasts. In this paper the model is described, projected performance measures are validated against actual measures, sensitivity to errors in inputs is analyzed and the model is evaluated relative to less complex models. The planning model is shown to be sufficiently accurate for its purpose and highly effective for its cost. It has been implemented by two regional blood suppliers using remote computer terminals.

TITLE: Formulating Blood Rotation Policies with Multiple Objectives

AUTHORS: Kenneth Kendall and Sang Lee

SOURCE: Management Science, Vol. 26, No. 11, November, 1980

LANGUAGE: English

ABSTRACT: Human blood is perishable. Therefore it must be systematically redistributed to hospital blood banks where it will have a high probability of transfusion. Ideally this redistribution, referred to as blood rotation, should be performed in such a manner as to minimize the outdating and improve the quality of blood while keeping the frequency of blood shortages and regional operating costs at reasonable levels. Priorities for attaining these multiple objectives are different in every blood region. Consequently, in this paper, a goal programming model is developed to attain multiple goals as identified by the administrator of a regional blood center. Included in the model are goal constraints related to inventory levels, the availability of fresh blood, blood outdating, the age of the blood, and the cost of collecting it. The paper reports the results of applying the methodology in a large urban-rural blood region in the midwest. Use of the model demonstrated that: (1) the percentage of blood collected for use within the region but not used could be reduced from 14.9% to 9.2% without increasing the frequency of shortages; (2) overstocking of hospital blood banks would be eliminated; (3) sufficient fresh blood could be made available to meet the needs of special surgery; and, (4) the amount of blood needed to be collected for use within the region could be reduced by over 5%, saving approximately $115,000 per year.

TITLE: PBDS: A Decision Support System for Regional Blood Management

AUTHORS: Gregory Prastacos and Eric Brodheim

SOURCE: Management Science, Vol. 26, No. 5, May, 1980

LANGUAGE: English

ABSTRACT: Efficient management of the regional blood resources is a difficult task. The Regional Blood Center is faced with some typical characteristics of a Health Care management problem: (i) the performance of a regional blood management system can be evaluated in terms of more than one criteria, some of which are conflicting (e.g., shortages vs. outdates), and (ii) quantitative cost measurement of the system's performance, and, therefore, comparison of alternative policies using simple cost criteria, is very difficult since the estimation of many costs involved (e.g., unavailability of blood) is purely subjective.

The two most common performance measures of a blood region are the shortage rate (i.e., the percentage of days when "supplementary" deliveries have to be made to satisfy a hospital's demand), and the outdate rate (i.e., the percentage of a hospital's supply that becomes outdated) for the hospitals in the region. The system described in this paper (PBDS) has been designed so as to provide a decision support mechanism to the Regional Blood Center to address the following fundamental inventory management questions related to these measures: (i) what are the minimum achievable outdate and shortage targets that can be set for the region, (ii) what is the distribution policy to achieve those targets, and (iii) what should the level of regional supply be in order to achieve alternative targets.

The system is based on a mathematical program model whose primary objective is to optimize the allocation of the regional blood resources while observing policy constraints. It is characterized by (i) a centralized management of blood, rather than management by individual hospitals, (ii) prescheduled deliveries, and (iii) a distribution system according to which blood is "rotated" among the hospitals.

TECHNOLOGY ASSESSMENT AND PATIENT MIX

TITLE: "Computer Tomography Evaluation"

AUTHORS: Karen Ehlert and Ronald Evlow

SOURCE: Health Care Technology Compendium Series Publication, UMC/HCTC/C008, University of Missouri, Columbia, 1979.

LANGUAGE: English

ABSTRACT:

TITLE: "Case Mix Definition by Diagnosis-Related Groups"

AUTHORS: Robert B. Fetter, Youngsoo Shin, Jean L. Freeman, Richard F. Averill, and John D. Thompson

SOURCE: Medical Care, 18, No. 2, Supplement, pp. 1-52, 1980.

LANGUAGE: English

ABSTRACT: During the past decade, health care financing researchers have sought to develop equitable methods to constrain the rate of increase in health care expenditures. The need for a successful national hospital cost containment program has been highlighted as a major step toward overall health care cost containment and a comprehensive national health plan.

In early efforts to compare and control hospital costs, researchers calculated product costs by unit of service, such as lab tests, radiology tests, or days of routine hotel service. Several incentive schemes were devised to encourage hospital efficiency and low unit cost. Experience has shown that focusing on unit cost alone encourages increased length of stay and ancillary utilization and argues that attention should be focues on medical-practice patterns.

Recently, much attention has been focused on the cost per patient stay or per case treated. Shifting to a single hospital product required that techniques be developed to adjust for variations in hospitals' patient or case mix.

To group hospitals with a similar case mix, researchers have generally concentrated on proxy measures, such as the mix of services or facilities available in each hospital. While these approaches are relatively easy to calculate, they normally do not address either the extent or the use of a hospital's available services or facilities.

What is required is a classification scheme that is both manageable in terms of the number of case types defined and reasonable in terms of the variation in resources needed to treat each case type. This should permit direct measurement of a hospital's case mix.

The development of the Diagnosis-Related Groups (DRGs) represents a significant step in case mix measurement and application for reimbursement purposes. DRGs classify 383 types of cases encountered in the hospital acute-care setting. Each DRG represents a class of patients requiring similar hospital services. Since DRGs are medically meaningful, they help provide a common basis for comparing cost effectiveness and quality of care delivered. DRGs also have the potential to assist the hospital administrator as he manages his institution and communicates with the medical staff.

Many PSROs have already explored the use of DRGs to review length-of-stay and treatment patterns. New York and Maryland have incorporated the DRG concept into their hospital cost containment programs and both New Jersey and Georgia will soon be incorporating DRG methodologies in new hospital cost containment programs. At the federal level, DRGs are being considered for incorporation in new reimbursement procedures for acute care hospitals. Given the current emphasis on hospital cost containment, the development of DRGs is both an important and timely advancement of the health care financing field.

TITLE: "Elective Hysterectomy: A Cost-Benefit Analysis"

AUTHORS: Morgan N. Jackson, James P. LoGerfo, Paula Diehr, Carolyn A. Watts, and William Richardson

SOURCE: Inquiry, 15, No. 3, pp. 275-280, 1978.

LANGUAGE: English

ABSTRACT: Hysterectomy is one of the most frequently performed major surgical procedures in the United States today. The fact that incidence rates vary considerably between England and the United States, and vary even within the same geographic area of the U.S., has caused it to be cited as an example of a procedure which is often performed unnecessarily. Although the surgery obviates a woman's concern about the risks of an unplanned pregnancy or cancer of the cervix or uterus and frees her from menstruation, it may expose her unnecessarily to the risks of mortality and morbidity from the surgery or its complications. This study was undertaken to analyze the direct costs and direct benefits of elective simple hysterectomy. Costs of alternative methods of contraception and their complications were not included in the analysis.

TITLE: Episodes of Psychiatric Utilization

AUTHORS: Larry Kessler, Donald Steinwachs and Janet Hankin

SOURCE: Medical Care, December, 1980, Vol. XVIII, No. 12

LANGUAGE: English

ABSTRACT: The continued growth of outpatient psychiatric care has been accompanied by a large number of research studies concerning the determinants of psychiatric utilization. One of the major limitations of these efforts has been the inability to go beyond distributional data on the use of services. This article describes a methodology for generating episodes of psychiatric care given a data set with a small amount of routinely collected data present in many medical information systems. Both demographic and medical characteristics are significantly associated with health services resource use as defined by the number of visits in an episode. A model predicting recurrent episodes of care is also described. The general utility of this approach and the substantive implications of the specific results are discussed.

TITLE: The Effects of Changes in Smoking Habits on Coronary Heart Disease Mortality

AUTHORS: Joel Kleinman, Jacob Feldman and Mary Monk

SOURCE: American Journal of Public Health, Vol. 69, No. 8 August, 1979

LANGUAGE: English

ABSTRACT: Coronary heart disease (CHD) mortality declined by about 20 percent between 1965 and 1976. During the same period there were substantial decreases in the proportion of adults who smoked based on data from the National Health Interview Survey (HIS). This study examines the extent to which changes in smoking can account for the decrease in CHD mortality for men and women aged 35-64 years. By applying US smoking levels (estimated from HIS) to data from four epidemiologic studies on the relative risk of CHD death by amount smoked, we obtain estimates of the portion of the decline in CHD mortality attributable to changes in smoking. Smoking changes among women were not generally consistent with declines in CHD mortality. For men, the estimated impact of smoking on CHD mortality varied considerably depending upon which study was used to estimate the relative risk by amount smoked.

TITLE: Health Care Administration: A Managerial Perspective

AUTHORS: Samuel Levy and Paul Loomba

SOURCE: 1973 - Ref. pp. 421-444.

LANGUAGE: English

ABSTRACT: Evaluation material for technology assessment.

TITLE: Assessing the Performance of Medical Care Systems: A Method and Its Application

AUTHORS: Paul Nutting, Gregory Shorr and Barton Burkhalter

SOURCE: Medical Care, March, 1981, Vol. XIX, No. 3

LANGUAGE: English

ABSTRACT: As health care becomes more differentiated, fewer people receive the majority of their care from a single source. Yet, most methods for assessing health care focus on the care provided by a single facility or group of practitioners. A method is described which tracks individuals through the diffuse medical care "system" and examines the process of care received for complete episodes of care. Through the use of tracer conditions the individual's pathway through the system is followed and the contribution of the various system components (e.g., facilities and providers) is assessed for various functions of care (e.g., screening, diagnosis, treatment), thus pinpointing deficiencies in the process of care. The method is designed to sample systematically from the entire provider and consumer system. Use of this methodology in a variety of settings, including American Indiana communities, has proved to be feasible and has uncovered deficiencies in the delivery of health services which might have been overlooked by other approaches. This article describes the assessment method and presents selected results which demonstrate the assessment outputs.

TITLE: "A Utility Maximization Model for Evaluation of Health Care Programs"

AUTHORS: George W. Torrance, Warren H. Thomas and David L. Sackett

SOURCE: Health Services Research, 7, pp. 118-133, 1972.

LANGUAGE: English

ABSTRACT: A linear health utility scale is described, complete with measurement instruments, that allows assignment of utility values to health states for any disease or treatment program. Given that the change produced by a health care program in the health states of a population is determinable, this utility scale permits assessment of the effectiveness of that program in terms of the change it produces in overall health utility. This is the basis of a model that will rank programs by their effectiveness/cost ratios or select them into a subset achieving the maximum effectiveness under specific cost or other constraints. Two algorithms are described, suitable respectively for priority ranking and for selection of programs giving maximum effectiveness under constraints, and the application of the model is discussed.

TITLE: Evaluation Research: Methods of Assessing Program Effectiveness

AUTHORS: Carol H. Weiss

SOURCE: Prentice Hall, 1972, Ref. pp. 24-91

LANGUAGE: English

ABSTRACT: Evaluation material for technology assessment.

TITLE: "Assessment of the AUTOGRP Patient Classification System"

AUTHORS: Wanda W. Young, Robert B. Swinkola and Martha A. Hutton

SOURCE: Medical Care, 18, No. 2, pp. 228-244, 1980.

LANGUAGE: English

ABSTRACT: This study was conducted to assess the adaptability of the AUTOGRP Patient Classification System (APCS) to the patient population of western Pennsylvania. The APCS consists of a fixed set of 383 patient categories, each of which is purported to contain similar patients with respect to resource consumption as measured by length of stay. The assessment of the APCS examines both the reproducibility of the classification using western Pennsylvania patient data and the homogeneity of the resultant categories. The results indicate that the APCS categories examined were not statistically optimal using western Pennsylvania data, and that individual diagnostic-related groups within the APCS do not contain similar patients with respect to resource consumption and with respect to other patient and hospital characteristics.

CATCHMENT AREA ANALYSIS

TITLE: Evaluation of an Automated Blood Pressure Measuring Device Intended for General Public Use

AUTHORS: David Berkson, Ira Whipple, Larry Shireman, Murray Brown, William Raynor and Richard Shekelle

SOURCE: American Journal of Public Health, Vol. 69, No. 5, May, 1979

LANGUAGE: English

ABSTRACT: Responding to Chicago newspaper reports, measurements of blood pressure by a publicly available, automated coin-operated device were compared with those of human observers using the standard duff and auscultatory technique. One machine was examined in the laboratory, and eight others at randomly selected sites. Analysis of readings made on 100 persons in the laboratory and 227 in the field led to the following conclusions: 1) On the average, the machines measured fifth phase diastolic blood pressure at nearly the same level as did human observers; 2) The machines were more variable measuring systolic blood pressure with four differing from the average human reading by 1mm Hg or less, but two differing by 8mm Hg or more; 3) The agreement between machine-human pairs of readings was not as good as between human-human pairs, but the differences in level of agreement -- both in determining the actual value and in categorizing the values as normal, borderline, or high -- were small and have little practical importance; 4) Linear regression analyses of the relationship between simultaneously determined machine and human readings indicated that the average human-machine difference was the same over the range of pressures tested. Publicly available blood pressure measuring devices should be labeled concerning their purposes, capabilities, and limitations. Rules and regulations governing their use in the City of Chicago are being prepared by this city's Legal Department.

TITLE: "Locational Efficiency of Chicago Hospitals: An Experimental Model"

AUTHORS: Richard L. Morrill and Robert Earickson

SOURCE: Health Services Research, 4, pp. 129-141, 1969.

LANGUAGE: English

ABSTRACT: An experimental simulation model is described by which imbalances in the distribution of hospitals may be evaluated and location shifts suggested to meet future needs. The model, partly deterministic and partly probabilistic, is here used to project the effects on patient travel of shifting capacity and of shifting demand. Applied to the metropolitan Chicago hospital system, the model results indicate that relocation of hospital beds would considerably decrease patient travel, but that the same improvement in patient travel and in hospital utilization could be achieved, with a far less radical and costly shift of beds, by relaxing existing constraints of income and race.

TITLE: "Location of Ambulatory Care Center in a Metropolitan Area"

AUTHORS: Larry Shuman, C. Patrick Hardwick and George A. Huber

SOURCE: Health Services Research, 8, pp. 121-138, 1973.

LANGUAGE: English

ABSTRACT: A mathematical model is developed for determining the best locations for prepaid group practice or HMO ambulatory care clinics within a metropolitan area. Several possible forms of a function for estimating enrollment are investigated on the basis of available data, and the model is applied to metropolitan Allegheny County in Pennsylvania to determine clinic locations under uncertainty in enrollment estimates, using existing ambulatory care facilities as potential sites. Both fixed and variable costs are considered in the model, which projects the unit cost per plan subscriber with various combinations of contstraints and enrollment functions.

OTHER

a. Review and critique
b. General

TITLE: Potentials of Local Health Surveys: A State-of-the-Art Summary

AUTHORS: Lu Ann Aday, Charles Sellers and Ronald Andersen

SOURCE: American Journal of Public Health, Vol. 71, No. 8, August, 1981

LANGUAGE: English

ABSTRACT: This paper provides a state-of-the-art summary of the potentials and limitations of local surveys for assessing health problems in local areas. The information they provide may be helpful for a variety of purposes such as measuring the need for services, planning programs to address these needs, and evaluating their impact. Particular advantages of surveys are that they: provide information on the needs of people who have not sought care; permit special studies of particular target groups; provide data on variables which are only available from "asking" people; enable information to be collected on a range of correlates and indicators of health care behavior; provide an opportunity for examining relationships among variables; and permit well-timed community estimates of the impact of experimental programs. Limitations include the validity and reliability of survey data, and the costs and other problems of survey implementation.

TITLE: "How to Keep Up with the Literature"

AUTHORS: Robert F. Allison

SOURCE: Hospital & Health Services Administration, 25, No. 4, pp. 73-79, 1980.

LANGUAGE: English

ABSTRACT: Academic programs in health services administration encourage students to continue reading the relevant literature after graduation. However, programs give students little appreciation of the literature and even less instruction on what to read and how to read it. My survey of ten of the leading programs revealed that not one of them provided students any formal, systematic instruction in this area.

Conversely, I have noticed that much of the literature that is read is not generally considered scholarly. Seasoned administrators know that the publication most widely read in hospitals and clinics is Medical Economics -- certainly not the kind of publication that earns scholars credit toward tenure. Conditions seem ripe, therefore, for a discussion of the literature within our field, its value, and how we can better use the literature relevant to our roles.

TITLE: A Model of Prehospital Death from Ventricular Fibrillation Following Myocardial Infarction

AUTHORS: Shan Cretin and Thomas Willemain

SOURCE: Health Services Research, Vol. 14, No. 3, Fall, 1979

LANGUAGE: English

ABSTRACT: Current efforts to reduce prehospital cardiac mortality focus more on deployment of specially equipped ambulances than on reduction of patient or ambulance delays. To evaluate this strategy, we needed to find a method that would isolate the separate effects of patient delay, ambulance delay, and the resuscitative capability of the ambulance. Using published data, we have generated a mathematical model of death from ventricular fibrillation following myocardial infarction that shows the relationship among these three factors. Analyses based on the model indicate that the potential life saving impact of a defibrillation-equipped ambulance is severely limited due to typical patient response patterns. If the ambulance arrives ten minutes after the onset of infarction, defibrillation capabilities will reduce prehsopital mortality from 6 percent to 2 percent. After a more typical delay of 60 minutes the mortality rises sharply to 13 percent for an unequipped ambulance. With a delay of this length, defibrillation capabilities reduce mortality only to about 12 percent.

TITLE: "Shattuck Lecture - Health Care in the Developing World: Problems of Scarcity and Choice"

AUTHORS: John R. Evans, Karen Lashman Hall, and Jeremy Warford

SOURCE: The New England Journal of Medicine, 305, No. 19, pp. 1117-1127, 1981.

LANGUAGE: English

ABSTRACT: The World Health Organization (WHO) and UNICEF, together with representatives of 134 member governments, launched a campaign in 1978 to achieve "Health for All by the Year 2000" through primary health care. The objective of this campaign was to increase the political commitment of member countries to address the health needs of their people and particularly to improve the health status of the rural and urban poor in the Third World. Our presentation describes the difficulties of putting this objective into practice, and what may be possible on the very limited budget available for health in most developing countries.

TITLE: Bibliography of Operations Research in Healthcare Systems: An Update

AUTHORS: Brant Fries

SOURCE: Operations Research, Vol. 27, No. 2, March-April, 1979

LANGUAGE: English

ABSTRACT: This bibliography augments that published in Operations Research in September 1976 and brings it current to January 1978. We present a total of 154 new references, all concerning health applications of operations research.

TITLE: "What Can We Learn from the International Health Experience?"

AUTHORS: Gary L. Filerman

SOURCE: Hospital & Health Services Administration, 22, No. 4, pp. 6-23, 1977.

LANGUAGE: English

ABSTRACT: In the 1960s, we emerged from a long period of complacency about the quality of life for the average American. One of the forces jarring us was a flood of facts about life in other societies, juxtaposed dramatically against comparative information of our own. We learned that the aged in some countries are cared for more effectively and with greater equality of access than many Americans. We learned that maternal and infant mortality is substantially lower in a number of countries; that longevity is greater elsewhere.

Perhaps even more challenging were disclosures that there are countries where primary care is readily available in remote areas. There are also countries with lower ratios of beds to population, or with a lower ratio of surgeons to population, which have better care.

It is impossible to isolate the political impact of such information, but we may speculate that it lent perspective to evaluations of how we have invested social capital and perhaps it even stimulated some interest group pressures in the political arena. Certainly approaches found in other nations have increasingly been held up for emulation by professional and public groups interested in social services.

TITLE: "Guidelines for Model Evaluation: An Abridged Version of the U.S. General Accounting Office Exposure Draft"

AUTHORS: Saul I. Gass and Bruce W. Thompson

SOURCE: Operations Research, 28, No. 2, pp.431-439, 1980.

LANGUAGE: English

ABSTRACT:

TITLE: Comparison of a Criteria Map to a Criteria List in Quality-of-Care Assessment for Patients with Chest Pain: The Relation of Each to Outcome

AUTHORS: Sheldon Greenfield, Shan Cretin, Linda Worthman, Frederick Dorey, Nancy Solomon, George Goldberg

SOURCE: Medical Care, March, 1981, Vol. XIX, No. 3

LANGUAGE: English

ABSTRACT: In a prospective study we compared the ability of two quality assessment methods -- the standard criteria list and the criteria map -- to predict the appropriateness of the disposition decision for 421 patients with chest pain who presented to two emergency departments. To evaluate the quality of this decision, each patient was followed at home or in the hospital to determine whether an acute condition requiring hospital admission was present. Among the 169 discharged patients, the map scores of the eight with admissible disease were significantly higher than the score for those without admissible disease ($p=0.02$). For the 252 admitted patients, a similar relationship between map score and the admissible disease outcome was observed ($p=0.0001$). There was no significant relationship between list score and outcome among either the admitted or the discharged patients. Multivariate logistic analyses confirmed the importance of the map score as a predictor of admissible disease. The map score was superior to the list score and to demographic variables in its ability to correctly classify patients with and without admissible disease. The demonstrated relationship between map score and patient outcome enables the map to be used in a quality assurance system. An institution can ensure that physicians review an enriched sample of the inappropriate discharges and the unjustified admissions by selecting admitted patients with low map scores and discharged patients with high map scores.

TITLE: The Case-Control Method in Medical Care Evaluation

AUTHORS: Sander Greenland, Erica Watson and Raymond Neutra

SOURCE: Medical Care, August, 1981, Vol. XIX, No. 8

LANGUAGE: English

ABSTRACT: The case-control method has been applied extensively to the study of chronic diseases, largely because of its advantage in cost and statistical power over other study designs. However, problems in ensuring the validity of case-control results have led to certain reservations regarding the general utility of the method. We discuss how several of the major validity problems in case-control studies of chronic disease are limited or absent in case-control evaluations of medical care and medical technology. As a consequence, the case-control method has important potential for application in evaluation and technology research.

TITLE: "The Venezuelan Public Health Service - An Impossible Task for Management"

AUTHORS: George Kastner, Richard H. Shachtman and Ludwig H. Schmidt

SOURCE: Working Paper, Instituto de Estudios Superiores Administracion, April, 1981.

LANGUAGE: English and Spanish

ABSTRACT: This working paper assesses bureaucratic complexities which limit the direct applicability of modern managerment techniques to the Venezuelan public health service. We further indicate why OR/MS project development and implementation is made difficult.

TITLE: An Annotated Bibliography of Decision Analytic Applications to Health Care

AUTHORS: Jeffrey Krischer

SOURCE: Operations Research, Vol. 28, No. 1, January-February, 1980

LANGUAGE: English

ABSTRACT: This paper describes 110 applications of decision analysis to health care. Each paper is characterized according to the particular problem it addresses and the methods employed in the application. These applications span 15 years of study and are reported in a widely dispersed literature. Nearly half of the published articles appear in journals with a medical audience and more than 25% of the studies remain unpublished. The major areas of application identified in this review have been the evaluation of alternatives in treatment and health policy planning. Studies discussing conceptual issues in the application of decision analysis represent a substantial portion of those identified. Almost equal numbers of applications involve the use of single and multiattribute utilities in scaling decision outcomes and relatively few apply to group utilities. General discussions of decision analysis methods and applications focused on probability assessments/analyses represent the other major categories of studies cited.

TITLE: "The Role of Operations Research and Systems Analysis in Holding Down the Costs of Hospitals and Clinics"

AUTHORS: Amar J. Singh, Phillip R.A. May and Janice M. Messick

SOURCE: Journal of Psychiatric Nursing & Mental Health Services, 16, No. 9, pp. 24-29, 1978.

LANGUAGE: English

ABSTRACT: In the past, medical care facilities have concentrated primarily on professional clinical evaluation. With the cost of treatment rising rapidly, it is becoming increasingly important to critically review and analyze our delivery systems so that scarce resources can be used optimally. In this paper the applications of operations research (O.R.) and systems analysis techniques that have been employed successfully in private industry are explored to find ways to improve clinical operations and hold costs down.

TITLE: Planning, Budgeting, and Controlling -- One Look at the Future: Case-Mix Cost Accounting

AUTHORS: John Thompson, Richard Averill and Robert Fetter

SOURCE: Health Services Research, Vol. 14, No. 2, Summer, 1979

LANGUAGE: English

ABSTRACT: This paper outlines the system for cost accounting and managerial control which is an extension of the usually accepted departmental costing systems and takes as its units the 383 Diagnosis Related Groups (DRGs) considered to be the hospital's products. It is held that such an approach offers hospital managers a more powerful, analytic, budgeting, and cost-finding tool and offers the opportunity to involve the medical staff in the issues of how their practice patterns are affecting hospital costs.

TITLE: "A Management Planning Model for the Delivery of Family Planning Services"

AUTHORS: Glenn O. Ware and Phillip M. Dickert

SOURCE: Socio-Econ. Plan. Sci., 10, pp. 155-158, 1976.

LANGUAGE: English

ABSTRACT: A management planning model for the delivery of family planning services is presented. Markovian probabilistic properties have been adapted for projecting patient flow for a set of various alternative strategies for scheduling patient visits in a health care system. By quantitatively formulating the scheduling problem in terms of pertinent inputs, management objectives and imposed restrictions, optimization of patient flow in the system for efficient utilization of health care resources is achieved through standard linear programming techniques.

TITLE: "Implementation of Computer Simulation Projects in Health Care"

AUTHORS: J.C. Tunnicliffe Wilson

SOURCE: Journal of Operational Research Society, 32, pp. 825-832, 1981.

LANGUAGE: English

ABSTRACT: In a survey of computer simulation in health care, few projects were found which reported any success in implementing their results. These few studies have been examined in detail to evaluate the success of their implementation and extract possible reasons for it by comparing these studies with the many unsuccessful ones. Discussion includes the criteria for selecting potentially successful projects before they are started and the reasons why health care is a particularly difficult area for implementation.

TITLE: Decision Models for Capital Investment and Financing Decisions in Hospitals

AUTHORS: Robert Vraciu

SOURCE: Health Services Research, Vol. 15, No. 1, Spring, 1980

LANGUAGE: English

ABSTRACT: The literature on capital investment and financing decisions for hospitals has suggested several approaches to analyzing sets of options. In this paper, I present a taxonomy of the different approaches; analyze and compare the different elements of the taxonomy; and illustrate and discuss the information that can be gained by using each approach. I view these different analytic methods as complementary rather than competing methods of providing information to decision makers, and argue that the complex nature of hospital objectives demands the use of more than one approach. Failure to do this may lead to biased evaluations and poor decision making.

The next five articles are probably too clinically oriented for the direct interests of health administrators, but are good examples of methodological approaches and not difficult.

TITLE: "Measures of Clinical Efficacy: The Value of Case Finding in Hypertensive Renovascular Disease"

AUTHORS: Barbara J. McNeil and S. James Adelstein

SOURCE: The New England Journal of Medicine, 293, No.5, pp. 221-226, 1975.

LANGUAGE: English

ABSTRACT: An attempt was made to discover the difference in outcomes between treating all patients with essential and renovascular hypertension by drug therapy independent and ignorant of etiologic classification and identifying the patients with renovascular disease and operating on them. Outcomes were categorize as well without complications of hypertension, alive but suffering from a related morbid illness such as coronary or cerebral arterial disease, and dead from the complications of diagnosis, surgery or high blood pressure. The identification and surgical treatment of hypertensive renovascular disease resulted in an incremental benefit in morbidity over blind antihypertensive medical therapy only when the compliance with medical treatment was about 50 per cent or less (the rate suggested for most patient populations). The study underscores the extent to which the quantitative efficacy of diagnostic and therapeutic procedures depends not only on the inherent risks and benefits but also on related social and medical factors.

TITLE: "Primer on Certain Elements of Medical Decision Making"

AUTHORS: Barbara J. McNeil, Emmett Keller, and S. James Adelstein

SOURCE: The New England Journal of Medicine, 293, No. 5, pp. 211-215, 1975.

LANGUAGE: English

ABSTRACT: The value of a diagnostic test lies in its ability to detect patients with disease (its sensitivity) and to exclude patients without disease (its specificity). For tests with binary outcomes, these measures are fixed. For tests with a continuous scale of values, various cutoff points can be selected to adjust the sensitivity and specificity of the test to conform with the physician's goals. Principles of statistical decision theory and information theory suggest technics for objectively determining these cutoff points, depending upon whether the physician is concerned with health costs, with financial costs, or with the information content of the test.

TITLE: "Cost-Effectiveness Calculation in the Diagnosis and Treatment of Hypertensive Renovascular Disease"

AUTHORS: Barbara J. McNeil, Paul D. Varady, Belton A. Burrows and S. James Adelstein

SOURCE: The New England Journal of Medicine, 293, No. 5, pp. 216-221, 1975.

LANGUAGE: English

ABSTRACT: The sensitivity and specificity of the hypertensive intravenous pyelogram and the iodohippuran renogram have been determined for the diagnosis of renovascular disease, and cost-effectiveness calculations have been made for the diagnosis and surgical treatment of patients with renovascular hypertension. When the intravenous pyelogram alone is used to screen a representative hypertensive population, 78 per cent of patients with renovascular disease are located, but at the same time an equal number of patients without renovascular disease have abnormal pyelograms.

The renogram, on the other hand, is associated with varying true-positive and false-positive rations. These data can be plotted in the form of a receiver-operating-characteristic curve.

The cost of finding a patient with renovascular disease is about $2,000, and that of a surgical cure is about $20,000. The number of deaths for 100 surgical cures is approximately 15. The dollar cost of screening and treating the total American renovascular hypertensive population is of the order of 10 to 13 billion dollars.

TITLE: "What Do We Gain From the Sixth Stool Guaiac?"

AUTHORS: Duncan Neuhauser and Ann M. Lewicki

SOURCE: The New England Journal of Medicine, 293, No.5, pp. 226-228, 1975.

LANGUAGE: English

ABSTRACT: The six sequential stool guaiac protocol has been advocated for screening of colonic cancer. Analysis of the expenditures involved in such a program shows that the cost of detecting cancer rises exponentially so that the marginal cost of the sixth test may be 20,000 times the average cost. The marginal cost is decreased with lower test sensitivity and increased with lower prevalence of colonic cancer. This result shows that even an inexpensive test can become quite costly in terms of cases detected. The marginal cost per case detected depends on the prevalence of the condition in the population screened and the sensitivity of the test applied.

TITLE: "Therapeutic Decision Making: A Cost-Benefit Analysis"

AUTHORS: Stephen G. Pauker and Jerome P. Kassirer

SOURCE: The New England Journal of Medicine, 293, No.5, pp. 229-234, 1975.

LANGUAGE: English

ABSTRACT: To help the physician decide whether or not to treat a patient who may or may not have a disease, a method has been developed for calculating a therapeutic threshold. If the probability of disease in a given patient exceeds the threshold, the preferable course of action is to treat; if the probability is below the threshold, the preferable course of action is to withhold treatment. This method is applicable in many medical and surgical settings in which some diagnostic uncertainty exists after all appropriate studies have been carried out. The technic not only exposes some of the basic principles of therapeutic decision making in the fact of diagnostic uncertainty but also forms a convenient framework for analyzing the impact of "soft" clinical data on the decision-making process.

BOOKS

TITLE: Mathematics, Statistics, and Systems for Health

AUTHORS: Norman T.J. Bailey

SOURCE: John Wiley & Sons, New York, 1977.

LANGUAGE: English

ABSTRACT: The purpose of this book is to promote a greater understanding of the role quantitative methods could play in helping develop and improve medical care and health services throughout the world. Special attention is paid to the significance and potentialities of mathematics, statistics, modeling, computers, OR/MS, systems analysis, and system dynamics. In promoting this multidisciplinary approach, purely mathematical aspects are kept at a minimum. The emphasis is on general notions and principles rather than on technical details. As each quantitative method or area is introduced, its basic characteristics are outlined. It is then applied, in general terms, to related aspects of medical care and/or health services.

TITLE: Explorations in Quality Assessment and Monitoring Vol. 1: The Definition of Quality and Approaches to its Assessment

AUTHORS: Avedis Donabedian

SOURCE: Book, published by Health Administration Press, (Ann Arbor), 1980.

LANGUAGE: English

ABSTRACT:

TITLE: Hospital Production: A Linear Programming Model

AUTHORS: William L. Dowling

SOURCE: Lexington Books, Lexington, Mass., 1976.

LANGUAGE: English

ABSTRACT: The objective of this book is to describe an approach for studying production in a community general hospital. Of particular interest is the mechanism by which the outputs of the various medical departments of a hospital are combined to produce inpatient care (in the short run) where the equipment, facilities, and skilled personnel of these departments are fixed. The book describes in detail the four major steps of the proposed approach: (1) development of a conceptual linear programming model of hospital production; (2) empirical estimation of the model parameters and empirical testing of the model assumptions; (3) application of the model in studying the efficiency of production of a study hospital; and (4) appraisal of the model's utility for measuring efficiency (and for evaluating the effects on efficiency) of alternative operating policies and technological changes.

TITLE: Cross-National Study of Health Systems: Concepts, Methods, and Data Sources -- A Guide to Information Sources

AUTHORS: Ray Elling

SOURCE: Book, published by Gale Research Co.,(Detroit), 1980.

LANGUAGE: English

ABSTRACT:

TITLE: Resource Allocation Model for Public Health Planning: A Case Study of Tuberculosis Control

AUTHORS: Martin S. Feldstein, M.A. Piot and T.K. Sundaresan

SOURCE: Bulletin of the World Health Organization. Supplement to Vol. 48. World Health Organization, Geneva, 1973.

LANGUAGE: English

ABSTRACT: The health sector planning problem seeks allocation of scarce health resources (i.e., funds, manpower, and facilities) among different disease control programs and/or individual activities to yield the optimum feasible output in terms of reduced mortality, morbidity, and economic loss. This monograph presents a conceptual scheme for formulating the problem within a linear programming CBA framework using a case study of tuberculosis control for purposes of illustration. The authors proceed by first describing the general structure of a public health problem. The concepts of public health benefits, economic benefits of health, and the valuation of social benefits from public health programs are discussed, and then tied into a general health resource allocation model. Finally, this linear programming formulation is applied to the problem of tuberculosis control in the Republic of Korea. Findings and additional model variations are discussed.

TITLE: "Applications of Operations Research to Health Care Delivery Systems"

AUTHORS: Brant E. Fries

SOURCE: Lecture Notes In Medical Informatics, Vol. 10, Edited by D.A.B.Lindberg and P.L. Reichertz. Springer-Verlag Berlin Heidelberg, New York, 1981

LANGUAGE: English

ABSTRACT: This paper presents a review of the articles describing applications of operations research techniques to health care delivery systems appearing in English in journals prior to September, 1977. The articles are classified according to their area of application and described in the context of other articles with similar scope.

TITLE: A Guide to Models in Governmental Planning and Operations

AUTHORS: Saul I. Gass and Roger L. Sisson

SOURCE: Sauger Books, Potomac, Md., 1975.

LANGUAGE: English

ABSTRACT: This book of contributed papers provides an overview of the basic structures of models, and how they have been used in a number of important social-urban areas. The emphasis is on how (OR/MS-based) models can aid decision-makers in the public sector. In general, each author describes the critical decisions within his field, the models which have proven of value in analyzing these decisions, and some specific applications. (In several instances, authors add their own assessment and critiques.) The book presents twelve papers, the first of which constitutes a primer on the basics of models and model building. The second paper discusses why models are not being used in the analysis of significant policy decisions and then presents an approach for overcoming this problem. The remaining ten papers describe the use of OR/MS-based models (principally simulation and mathematical programming) in a variety of social-urban fields including air pollution, water resources, solid waste, urban development, and health services.

TITLE: Location, Layout, and Information Systems for Efficient Operations

AUTHORS: Richard J. Giglio

SOURCE: Ambulatory Care Systems, Vol. II, Lexington, Mass.: Lexing Books, 1977.

LANGUAGE: English

ABSTRACT: The purpose of this monograph is to present OR/MS-based methodologies and guidelines for the location and layout of freestanding ambulatory care facilities. The design of information systems for these facilities is also considered. In discussing each of these three major facility decision-areas, the author provides an introduction and some background to the problem, outlines a step-by-step planning methodology, and to this applies a quantitative solution procedure. Part I (three chapters) is concerned with (outpatient) facility location, and begins with a review of the location planning literature. This is augmented by some practical considerations and general principles of clinic location. A computer-based mathematical programming procedure for the regional planning of facilities, is then introduced. Part II (two chapters) deals with planning the layout of an outpatient facility by providing general guidelines for determining the size of specific service areas within a facility, a procedure for determining their relative placement (layout) and specific layout recommendations. Part III (two chapters) involves the design of clinic information systems including a procedure for assessing the cost and feasibility.

TITLE: Measuring Hospital Performance

AUTHORS: John Griffith

SOURCE: Inquiry Supplement, 1978

LANGUAGE: English

ABSTRACT:

TITLE: Quantitative Techniques for Hospital Planning and Control

AUTHORS: John R. Griffith

SOURCE: Lexington Books, Lexington, Mass., 1972.

LANGUAGE: English

ABSTRACT: This text provides conceptual understanding of a variety of techniques useful in hospital decisions, particularly in the areas of planning, forecasting, scheduling, and cost and quality control (see also text by Warner and Griffith). Potential applications of the techniques are presented throughout the volume. The main portion of the text is divided into three parts. (1) Forecasting Demand (four chapters) identifies the forecasting problem and discusses simple time series and multivariate analyses. Two special areas of application are considered: population service areas and hospital-based demand rates. (2) Models for Resource Allocation (four chapters) introduces, discusses, and applies a series of quantitative resource allocation methodologies: total value analysis; queueing and simulation; PERT and mathematical programming; and CBA. (3) Control Systems (four chapters) first discusses the nature and application of hospital control systems and then analyzes statistical quality control techniques. The text concludes with discussions of computerized quality of care measurement and information systems for hospital planning and control.

TITLE: Health Practice Research and Formalized Managerial Methods

AUTHORS: F. Grundy and W.A. Reinke

SOURCE: World Health Organization, Geneva, 1973
Public Health Papers No. 51.

LANGUAGE: English, French

ABSTRACT: This monograph describes the principles of health practice (services) research and the managerial (OR/MS) method employed in analyzing health practice problems. The necessity and general nature of the application of quantitative methods to health problems is extensively discussed and is followed by a brief review of the more important OR/MS techniques. A series of applications of OR/MS to important large-scale health practice problems, such as hospital service utilization and planning, disease control, and health manpower planning is then presented. Techniques employed to solve these problems include linear programming and simulation.

TITLE: The Growth of Medical Information Systems in the United States

AUTHORS: Donald Lindberg

SOURCE: Book published by Lexington Books, (Lexington, MA)

LANGUAGE: English

ABSTRACT:

TITLE: Nursing Assignment Patterns: User's Mannual

AUTHORS: Fred Munson, Joanne Beckman, Jacqueline Clinton, Carolyn Keper and Lillian Simms

SOURCE: Book published by AWPHA Press (Ann Arbor), 1980.

LANGUAGE: English

ABSTRACT:

TITLE: Materials Management for Health Services

AUTHORS: Arnold Reisman

SOURCE: Lexington Books, D.C. Health and Company, Lexington, Mass, 1981.

LANGUAGE: English

ABSTRACT: Purchasers of health services, such as employers, labor unions, the government, and the public, are increasingly calling for the containment of health-care-related costs. Effective management of materials is one area where costs can be contained without sacrificing the quality or the accessibility of health care.

Effective management of materials addresses the apparently conflicting objectives of minimizing material-related costs while simultaneously reducing the incidence of stockouts. Indeed, it is possible to make intelligent tradeoffs between materials-related costs and the desired levels of materials accessibility. Moreover, not all materials in any one institution require the same degree of accessibility. It is wasteful and not necessarily desirable to take the position that stockouts must never occur for all items at all stocking locations.

A materials-management system must be capable of addressing, speedily and economically, the informational issues of who has what, where, and when. Moreover, such a system must provide prescriptions for who ought to have what, where, and when. Finally, the system should be kept in control. This requires a management infrastructure with clear-cut lines of responsibility and authority for maintaining the proper stocks in the proper locations at the proper time.

This book provides an integrated approach to the many issues of concern in the proper management of materials. An extensive glossary of terms used by materials managers, buyers, producers, sellers, shippers, data processors, and so on is provided as an aid in this integrative process. Each major chapter is followed by appendixes in the form of checklists, with questions relevant to the issues discussed; these, in turn, are often followed by detailed audit procedures that might be invoked or at least considered in maintaining a well-functioning materials-management system. The various economic-lot-size, cost-parameter evaluations, and other decision rules usually expressed in mathematical equations have been reduced to easy-to-follow worksheets requiring no more than the simplest arithmetic operations of addition, substration, multiplication, and division.

Materials Management for Health Services (continued)

Arnold Reisman

Current and prospective workers in the health-care services who are concerned with proper pruchasing, storing, distribution, stocking, and replenishing of consumables, reusuables, and disposables should find this a basic and readable text.

TITLE: "Systems Analysis in Health-Care Delivery

AUTHORS: Arnold Reisman

SOURCE: Lexington Books, D.C. Health and Company, Lexington, Mass., 1979.

LANGUAGE: English

ABSTRACT: This book is concerned with the tools of systems analysis as they apply to the administration of health services operations. Specifically, it defines the terminology and presents the various verbal, graphic, and algebraic methods for describing systems--their structure, functions, flows, decision rules, and behavior. It discusses methods for acquisition of both "hard" and "soft" data, the various formal aids to creative thinking, the art of systems analysis, and the strategies for implementing systems studies. The emphasis throughout the book is on defining and structuring the real problem for a creative and implementable solution. All the methodologies and discussions are illustrated with examples drawn from real-life studies in hospitals, outpatient clinics, and doctor's offices. Ample references are given to the various techniques for obtaining the "optimal" solutions to the problems once defined and structured using the methods discussed in this book. The book presumes that the reader has a knowledge of college algebra in chapter 4 only. The rest of this book should be quite readable for anyone with an interest in the subject of systems analysis as it applies to health care services.

In summary, this book provides the language and tools of systems analysis in a concise yet readable format. It is intended for line management and for staff analysts concerned with planning, delivering, teaching and administering health service operations.

TITLE: Health Care Delivery Planning

AUTHORS: Edited by A. Reisman and M. Kiley

SOURCE: Gordon and Breach Science Publishers, New York, New York, 1973.

LANGUAGE: English

ABSTRACT: This book presents a collection of papers which apply operations research and systems analysis techniques in planning for the delivery of health care. It is intended for those responsible for planning but hopefully will also be read by administrators, nurses, physicians, social workers, and the gamut of paramedical personnel who have responsibility for the delivery of health care. While the health services system has two major components, environmental and personal health services, only planning concerned with personal health services is emphasized here. Throughout the book, effort is directed toward developing an understanding of the tools of Operations Research/Management Science and the practical applicability of the results. In each paper, a computer or a mathematical model is developed. With one exception, specific application of the model to a real life problem using actual data was made. The intention of this book of readings is to expose the method and its potential, and to point up the extreme need for an interdisciplinary approach in dealing with complex systems such as the health service system. The editorial remarks introducing each part set the papers in that section into a framework in which the reader will be able to visualize the overall implications of the problem for analytical, quantitative problem solving techniques while seeing the segment of the problem with which the study deals. In this way, it is hoped that the existing dialogue between the health and operations research professionals will be expanded, and that applications of this approach toward the solution of health care problems will grow.

TITLE: Design for Improved Patient Flow

AUTHORS: Edward J. Rising

SOURCE: Ambulatory Care Systems, Vol. I, Lexing, Mass.: Lexing Books, 1977.

LANGUAGE: English

ABSTRACT: This monograph defines and analyzes the problem of patient flow in outpatient facilities. Using the OR/MS techniques of queueing and simulation, the author seeks "solution" of this problem through improved schedule designs. The first two chapters of the book contain an introduction and discussion of the problems and techniques of patient flow (including a primer on queueing theory). The next chapter describes the mechanics of the design and implementation of an appointment system to control patient flow. The following two chapters focus on the development and design of improved schedules; a simulation model is developed to assist in this function. The final three chapters present technical discussions of methodologies (including forecasting methods, data collection procedures, and decision-making with multiple objectives) relevant to the patient flow problem.

TITLE: Operations Research in Health Care: A Critical Analysis

AUTHORS: Larry J. Shuman, R. Dixon Speas, Jr., and John P. Young

SOURCE: Baltimore, Maryland. The John Hopkins University Press, 1975.

LANGUAGE: English

ABSTRACT: This book reviews and evaluates the current (1975) status of operations research techniques as applied to problems in health care. The objective is to look at the performance record, noting where contributions have been made, where failures have occurred, where problems have been overlooked or communications with related disciplines have failed, and where tools of the discipline are simply inadequate for the task. The book consists of chapters contributed by noted Health-OR researchers. Each discusses a single OR/MS technique (e.g., simulation, mathematical programming, stochastic processes, effectiveness measures, information systems) with respect to its overall impact on the solution of health care problems. Extensive bibliographies are supplied.

TITLE: Hospital Management Engineering: A Guide to the Improvement of Hospital Management Systems

AUTHORS: Harold Smalley

SOURCE: Book published by Prentice Hall: (Englewood Cliffs, New Jersey), 1982

LANGUAGE: English

ABSTRACT:

TITLE: Operations Research in Hospitals: Diagnosis and Prognosis

AUTHORS: David H. Stimson and Ruth H. Stimson

SOURCE: Hospital Research and Educational Trust, Chicago, Illinois, 1972.

LANGUAGE: English

ABSTRACT: What does the operations researcher have to offer hospitals at a time when mounting criticism is forcing the hospital and health care administrator to seek new ways of improving services?

What relationship between the operations researcher and the administrator is desirable if operations research studies in hospitals are to be useful and implemented successfully?

This book seeks to answer these questions through a critical assessment of the accomplishments and shortcomings of operations research in hospitals over the past 20 years. Many studies have been reported in the literature since the early 1950s; apparently few have been implemented. An analysis of what has been studied, and why studies have not had more influence on hospital operations, should be of use to a number of persons: hospitals and their staffs; health planners; faculty and students in hospital and health care administration; operations researchers, systems analysts, and industrial engineers in the health field; faculty and students in operations research, systems analysis, and industrial engineering; government officials involved in determining health policy and in administering health care programs; and those who fund research.

TITLE: Benefit-Cost Analysis for Program Evaluation

AUTHORS: Mark S. Thompson

SOURCE: Sage Publication, Beverly Hills, California , 1980

LANGUAGE: English

ABSTRACT:

TITLE: Systems Science in Health Care

AUTHORS: Charles Tilquin, Editor

SOURCE: Proceedings of the International Conference on Systems Science in Health Care, Montreal, July 14-17, 1980. Volumes I and II.

LANGUAGE: English and French

ABSTRACT: Contents, approximately 150 papers.

Volume I:
Strategic Planning
Health Development
Health System Regulation
Programs and Technologies Evaluation
Health Services Utilization
Manpower Planning
Data Bases
Health Status
Community Health
Health Policy
Ethical Issues
Human Factors
Education

Volume II
Emergency Medical Services
Ambulatory Care
Mental Health
Occupational Health
Long Term Care for the Elderly
Hospitals Classification
Hospital Planning
Hospital Productivity Monitoring
Hospital Organization and Design
Nursing Care
Information Systems

TITLE: Exercises in Quantitative Techniques for Hospital Planning and Control

AUTHORS: Michael D. Warner and John C. Griffith

SOURCE: Health Administration Press. Ann Arbor, Michigan, 1974

LANGUAGE: English

ABSTRACT: This workbook presents a series of discussion questions, exercises, and cases (with answers) dealing with hospital-oriented problems involving forecasting, CBA, OR/MS modeling, and statistical quality control. The organization of questions follows the text Quantitative Techniques for Hospital Planning and Control by J. R. Griffith. The authors believe, however, that many of the exercises can be used independently of that text.

TITLE: Decision Making and Control for Health Administration: The Management of Quantitative Analysis

AUTHORS: Michael D. Warner, and Donald C. Holloway

SOURCE: Health Administration Press, Ann Arbor, Michigan. (Forthcoming)

LANGUAGE: English

ABSTRACT: The objective of these authors is to provide a text that will prepare health administrators for managing the work of quantitative specialists. In their attempt, the authors emphasize both a general decision-making and control framework, as well as specific OR/MS solution techniques. The book contains ten chapters, divided into four parts: I -- Introduction (two chapters), defines and exemplifies the notions of (health) administrative decision-making and control. These concepts are used as a frame of reference for all techniques and problems discussed in later chapters. II -- Analysis for Decision Making (four chapters), presents a series of standard OR/MS techniques including inventory (deterministic and probabilistic). PERT/CPM, decision theory, queueing, simulation, and mathematical programming. III -- Forecasting and Measurement (two chapters), discusses various aspects of long- and short-term forecasting, and measurement theory. IV -- Cybernetic Control (two chapters), describes the application of control processes to three important health administration concepts: admission-scheduling, nurse-staffing systems, and physician peer review.