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INCREASING THE OPERATIONAL CAPACITY OF THE
HEALTH SERVICES FOR THE ATTAINMENT OF THE GOAL OF
HEALTH FOR ALL BY THE YEAR 2000

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SUMMARY

The present document, prepared as a contribution to the Technical Discussions of 1984, is arranged in four chapters dealing with the impact of services on health conditions, the factors affecting operational capacity, the sectoral determinants, and the social and political implications of operational capacity.

The impact of services is viewed at the micro level as the combination and use of resources for the production of activities, at the intermediate level as the obtaining and allocation of resources in the production infrastructure, and at the macro level as the apportionment of resources among priority problems and population groups.

The factors considered as affecting operational capacity are overall development, population dynamics, the measures taken by government and the private sector, and the political process of resource allocation and the operation of services.

The points considered with a view to strategies for increasing operational capacity are the potential of the work force, the part to be played by technological development, and the financing and management of health services.

The paper closes with an acknowledgement that low operational capacity makes for increasing inequality among social groups in the Region.

The socioeconomic setting in which an improvement of the performance of the sector is sought is twice as unfavorable for reducing the existing pattern of inequity. The outlook is, on the one hand, for an aggravation of health risk factors for the population and, on the other hand, an impasse in regard to its health systems.

Strategic intervention is suggested in shifting the present emphasis on manpower training, in controlling the advance of technological development in the sector, in the obtaining and allocation of finance, and in the organization and methods for the management of services.

Raising the level of participation of the various political-economic and social forces that today are relatively less active in the political arena of the sector is an imperative condition for strategic action.

It is concluded, finally, that, while in technical content it involves the combination of service production factors, increasing the operational capacity of the health sector is mainly a political matter.

INTRODUCTION

The present document is intended as a contribution to the Technical Discussions of the XXX Meeting of the Directing Council of PAHO, XXXVI Meeting of the Regional Committee of WHO for the Americas. It is an attempt to isolate some of the more critical determinants of the present operational capacity of health services in the Region.

The document does not, however, exhaust the full range of implications associated with the subject. Other crucial matters may be discussed by delegates in whose countries these issues have acquired decisive importance.

The document is organized into four chapters. The first discusses the impact of services on the structure of health needs. It is this impact which ultimately defines the operational capacity of health services in a broader sense.

The second chapter deals with the major influences exerted on operational capacity by economic development and the dynamics of the Region's population, and by changes in the roles of government and private enterprise in the sector and the political process in relation to health. Most of these influences are extrasectoral and impose the frames of reference in which services are produced and used.

The third chapter discusses the sectoral determinants of operational capacity, which are human, technological and financial resources, and the reorganization and management of and participants in the production of services. A number of strategies and studies for a better approach to the subject are suggested for consideration in the Technical Discussions. Finally, the conclusions sum up the social and political implications of increasing the operational capacity of services at the present juncture.

The document focuses on the situation of Latin America and the Caribbean in particular and disregards the health services in the United States of America and Canada. However, it does in places cite data on developed countries either for comparison or to explain observed facts in Latin America and the Caribbean.

While stressing regional trends, the analysis that follows does take cognizance of distinctive national features in different aspects of the operational capacity of services. This variation among countries and their health systems implies a need to consider different approaches to the analysis of problems detected in this field. The implicit assumption here is that specific problems in different settings require solutions that do not always converge toward the same model.

Problems also vary in the historical sense that, as countries and their health systems develop, new issues are constantly being raised for which traditional approaches no longer offer adequate responses. Here, the document points out the existence of several gaps in current knowledge of health problems and services, which suggest lines of research hitherto unaccustomed in the Region. At the same time, it is found timely and advisable to incorporate methodologies developed in other fields for analysis of the problems emerging in the health sector.

Throughout the document attention is drawn to important changes that have taken place in the Region's health sector in recent years. Some of these changes have not been given the attention they deserve in technical analyses and Government policy. Hence, isolating the essential features of the sector's dynamics by an objective analysis of its evolution is an essential requisite for improving the management of services with a view to enhancing their impact on health conditions in the Region.

1. THE OPERATIONAL CAPACITY OF SERVICES AND HEALTH NEEDS

Many meanings have been attached to the term health services, ranging from care itself to the establishments, the institutions and the institutional complex that dispenses it in a given country. Accordingly, in this document the operational capacity of health services is used in different senses.

At the micro level, operational capacity is understood as the combination and use of resources by an establishment for the production of activities such as consultations and hospitalizations. At this level, operational capacity may be evaluated on the basis of the productivity of the resources and the efficiency of the establishment in converting them into care activities for the benefit of its client population. The questions to be considered then are what services are dispensed, in what numbers, at what level of productivity and effectiveness, and at what costs.

At the intermediate level, operational capacity pertains to the obtaining of resources and their distribution among service delivery units. In essence, this distribution is also an allocation of resources among the social groups served by the establishment. Those tasks are usually a responsibility of the institution to which the health establishment belongs.

There, the evaluation of operational capacity is concerned with the relationship between the production of services, their use by social groups, and their quantitative and qualitative evaluation. What we want to know here is the quality of the output and how it is used. Also of interest is how systems for the guidance and support of first-line service units operate.

At the macro level, operational capacity relates to the formulation of policy and the allocation of resources among priority problems and population groups. These are activities at Government decision-making and planning levels for the whole country.

The key to the evaluation of operational capacity from a macro perspective is the relationship between the use made and accessibility of services, including their effects on health problems. The questions to be answered here are: what problems are being addressed?, who are the beneficiaries of the health policies?, and to what extent are the services being used and what results do they produce?

At the same time, any analysis of the operational capacity of health services must take account of the structure of the specific needs of the population, and of the strategies by which the population satisfies them. Surveys of perceived morbidity and use of services show that there are differences--and sometimes marked differences--between the problems reported by a population and the demands it makes on the formal services. Little is known about this discrepancy between needs and visible demands, though a few hypotheses are already available to account for it.

The most straightforward explanation is a natural remission of a problem before it becomes a demand. In other cases the problem may have been solved by recourse to private care, self-treatment or the "popular" or "traditional" forms of medicine existing in countries. Finally, the demand presented may have remained unmet because of the inaccessibility or incapacity of the formal services.

These explanations indicate that services have no absolute value for the satisfaction of needs if, in addition to them, the population adopts other means for the care of its health as well. In other words, the health "system" through which the population seeks to meet its needs may not be congruent with the official health system.

There is evidence that the part played by the official subsystem in the health "system" used by the population has varied historically with the social group to be served. One piece of this evidence is the development of private expenditures for health care.1/ Traditional health planning schemes have not yet managed to take cognizance of that "competition" facing the official subsystem in services to the population.

If services are legitimized by their contributions, even if only relative, to the satisfaction of needs, this satisfaction must be the basis for any evaluation of their operational capacity. This raises a few methodological difficulties, chiefly in nonexperimental situations.

The first difficulty is that of defining and quantifying health needs. Services are known to be overloaded by the demands made upon them by the population, to which the sector has little or no possibility of offering any technically effective response. Medicalizing these demands only defers their satisfaction in addition to tying up resources that might be better employed in attending to other problems that would yield to the sector's technology.

The panorama of Latin America and the Caribbean area reveals inequalities among the health situations in the countries and of availability of the resources needed to improve it.[2] Many of these problems are of socioeconomic origin, and may be expected to diminish as regional development progresses. Thus, health needs are defined as problems for the reduction of which the sector has a technologically effective response.

Differences between the health levels of countries may be an extension of inequalities within the individual country. In developed countries, for example, the mortality rates of unskilled laborers are more than twice as high as those of professional people.[3] It is possible that differences of health levels among social groups in the Region are even greater and increasing in the short-term because of the trends of their development, as will be seen further on.

In the aggregate, it is known that half of the mortality in the Region may be assigned to seven groups of causes: cardiac diseases, accidents, enteritis and diarrheas, perinatal causes, tumors, acute respiratory infections, and cerebral vascular diseases.[4] This classification is still skewed toward the absolute magnitude of causes of death without allowing for the social structure of mortality.

Analysis of risks, with the idea of reducing imbalances between socioeconomic groups by enhancing the operational capacity of services, requires the development of methods that bring out in detail the range of inequalities accumulated in the generation of health problems and in the allocation of resources for their solution.[5]

Other difficulties are encountered in measuring the impact of services on the satisfaction of health needs. Some approximations, such as evaluations of existing services--or their supply--, their productivity, accessibility, utilization and coverage, yield estimates of that impact that depend on the quality of the available data.

Usual measurements of that supply, such as the availability of beds per 1,000 inhabitants, reveal wide variations among countries and also that the existing services have increased throughout the recent decades.[6] However, they assume a static population and disregard changes in other factors such as means of transportation, which appreciably change the availability of care from a given resource.

Besides, those measurements are inadequate to convey the composition of the services to which they refer. Hence, the preference for data on utilization, especially when they afford evaluation of the patterns of individual institutions, organizational arrangements, facilities, etc.

The productivity of health resources is a key indicator for evaluation of the operational capacity of services. According to the data for the 70's, the hospitals of the Region vary widely in the levels of their productivity.[6] Part of the observed variation is due to the fact that hospitals are public or privately owned, to the nature of the care they provide, and to their size.

Comparisons here are still problematic owing to a lack of more detailed information on the quality of the hospitals and the care they produce. Also needed are systematized data on the productivity of the hospitals in individual countries, and of other material and human resources.

The available data on the accessiblity of services conceal differences in the population and do not consider that the implications of a given cost and transportation time can be different for different social strata. As in other sectors, the spatial distribution of health services seems to respond more to the interests of the consumer elites and the producers than to those of other groups. The location of services is one of the factors that determine land and housing values. Or they can be scattered around a large hospital so as to optimize the mobilization of resources used in common by service producers.

In both cases the result is different accessibilities for different social groups. The lowest-income strata tend to live and work farther away from health facilities, and they take longer to obtain services. In addition, transportation to cover those distances costs them more and has a relatively stronger impact on their consumption level than on that of higher-income groups.

The accessibility of services, defined on the basis of institutional, financial, cultural and other criteria, is usually also skewed toward the more privileged groups.[7] These groups are able to combine different care alternatives that afford them cumulative levels of accessibility greater than those available to other groups.

There are also large gaps in the information on the utilization of health services in the Region, and particularly on how it is apportioned among social groups, and intercountry comparisons of the utilization of some services at the end of the seventies suggest that the differences are sizeable.

Until recently, in most Latin American countries and some in the Caribbean area the ratio of hospital discharges/population averaged about 5% a year.[4] In Chile, Costa Rica, Cuba, Peru and most of the Caribbean area the ratio was already about 11 discharges per 100 inhabitants. In some of the countries in this group the utilization of hospital care today exceeds that in the United States of America and Canada.

Of 16 countries in the Region, only in Costa Rica and Cuba was the number of medical consultations double the target of two per inhabitant per year of the Ten-Year Health Plan for the Americas.[4] In the other countries this target had not been met, and in nine the figure had not even reached one consultation per inhabitant.

These utilization levels are consistent with the availability of services in those countries but not with per capita GDP or other classification criteria. This suggests that the supply and utilization of services depends not only on the level of the national income but also on its distribution among the strata of the society.

Data on the situation in individual countries are scarcer and not always comparable. Those on some countries indicate that increased utilization of services results from expanded coverage of the social security system.[8], [9]

It has been found that the use of services, even those provided by the public subsector, varies directly with personal income.[10] Private expenditures for health have a relatively greater effect on the family budgets of low-income groups than on those of high-income earners. Rural populations usually use fewer services and spend more on consumption than urban groups at the same income level.

These findings reflect a pronounced social stratification of the utilization of health services, as has already been found.[11] The prospect is for this situation to grow worse if there is no change in the conditions for access to and utilization of services in the Region.

Indicators of the coverage of services relate services to the numbers of people presenting a need for them. These indicators provide data for the estimation of an average coverage and for comparisons between countries, regions, etc. They are still not broken down far enough to bring into view and afford analysis of the coverages obtained by different population groups and to pinpoint those for which the more services must be provided.

Comparing morbidity and mortality in Latin America and the Caribbean area with the services offered to the population, it is found that coverages have been increasing in recent decades, though the levels obtained remain below those in the developed countries.[12] There is no direct connection between the increases that have taken place and the needs of the disadvantaged groups, which makes it unlikely that the inequalities of service coverage have been reduced.

Despite the difficulties in arriving at a more accurate estimate, the available data indicate that the operating capacity of services in the Region seems to have improved over time, but is still low compared with the position reached by the developed countries in all of the previously mentioned aspects--health facilities, institutions and systems.

In addition, low operating capacity affects different social groups differently. Those whose situation is most acutely worsened by the unequal distribution of health problems are also those who are least served by the formal care system. This dual inequity has been called "the inverse care law," which implies that accumulations of health problems and of deficiencies in their care result all stem from the same cause.13/

Hence, low operating capacity of health services creates an additional factor for discrimination against deprived human groups. Moreover, the quest for its improvement is becoming an important political issue along with other measures for greater equity in the societies of the Region.

2. INFLUENCES ON THE OPERATING CAPACITY OF HEALTH SERVICES

The overall development process affects populations, changing at the same time their needs and the resources available for their satisfaction. What follows will discuss the salient features of the development process and the aspects of population dynamics bearing on the operating capacity of health services in the Region. Other influences considered are the actions of government and private institutions, of increasing importance in the sector, and the political process in relation to the allocation of resources and the operation of services.

The document does not address all the implications of these influences, but only those most relevant to the Technical Discussions. Observation of these influences suggests that the Region is passing through a time of difficulty in regard to needs and the production of services. The situation is even more serious when it is considered that these influences are beyond the control of the health sector and should persist at least in the middle run.

2.1 Economic Development

In aggregate terms, the economies of the Latin American and Caribbean countries grew at an accelerated rate from the 50's to the end of the 70's, when they began to feel the effects of the present international economic crisis, which has been spreading progressively into the Region.2/, 14/

The contribution of industrial production to our national economies has increased, and in almost half of the countries the value of industrial production has exceeded that of primary production. Moreover, services have grown and been transformed as a consequence of industrial development. Government has been an important promoter of industrial production either through credit and subsidies, customs protection and labor policy, or by directly taking over the management of economic infrastructure sectors.

In the absence of adequate local savings, this economic growth was financed by attracting external resources, particularly through public and private indebtedness. In 1978 these countries owed about 50% of the external debt and had only 14% of the population of the developing world.15/

The need for foreign exchange to pay its debts had become the dynamic factor of the Region's economy, and has strengthened its long-standing tendency toward exports. At the same time, the terms of international trade have deteriorated at the expense of the underdeveloped countries. In consequence, the proportion of the foreign exchange earnings from exports of goods and services allocated to repayment of the debt mounted rapidly from 12.4% in 1977 to 35% in 1983.15/

As interest rates have risen more and more on the international financial market, fresh loans are increasingly needed to prevent payments due from becoming delinquent, so that the debt has become a process that feeds on itself.

This difficult external situation implies further difficulties on the domestic front such as an increase of the public debt and accelerating inflation. To readjust their economies at this critical juncture, the Governments of the Region have adopted recessive policies, which usually include a reduction of public expenditures, credit restrictions, incentives to exports, and the containment of wage increases.2/, 15/

This economic setting affects the operation of health services in different ways. Firstly, a reduction of economic activity brings about a lowering of employment and income levels, which has the affect of curtailing consumption and increasing health risks. Current development styles have in many cases concentrated economic activities in certain regions of the countries, which has generated serious imbalances in the distribution of national resources, to the detriment of the health situation.

Moreover, the containment of public expenditures strikes directly at the level of sectoral financing, which is reduced yet further by the mounting inflation. Increasing the sector's share in the public budgets is not always politically workable or economically feasible.

Shortages of local funds to cover investments in the sector, and the dependence of the latter on imported equipment, inputs and drugs, prompts countries to seek foreign grants and loans. While the interest rates and terms on these loans are relatively favorable, they are usually hard to get because of control on foreign idebtedness and the competition of other foreign exchange-poor sectors.

These influences are beyond the control of the sector, and a realistic projection offers no prospect of their softening before the middle- and long-term. Consequently, the operating capacity of services must be analyzed and strategies for increasing it established in the setting of an unfavorable economic juncture.

2.2 Status of the Population

There are still relatively high population growth rates in Latin America and the Caribbean area despite the reduction of fertility observed in the preceding decades. An increase of population implies a quantitative increase in the demand for services, and can compromise the coverage already attained unless accompanied by proportional investments in the sector. Just to maintain the present ratio of available services to the population requires a 50% increase in the sector's installed capacity down to the year 2000, which implies investments beyond the means of the countries.

In addition to the absolute growth of the population, its life expectancy at birth is growing longer and its age structure is changing significantly. Judging from the experience of the developed countries, this aging of the population should increase and change yet further the demand for services.

Mirroring the current development process taking place in the Region, the labor force is shifting from agriculture into industry and services in a rapid urbanization that has already claimed 64.1% of the population and could increase that proportion to 72.4% by the year 2000.[2/] This process should more than double the present population of the cities with more than 100,000 inhabitants, in which the health services are concentrated.

The spreading association of populations with modern production systems, with the related insurance schemes, and the spread of urban behavior patterns to rural populations should all reinforce pressures for more and better services. A narrowing of the physical distance between populations and services is another factor that generates demand for health care.

Rapid urbanization has brought with it makeshift housing and sanitation, an increase of occupational and traffic accidents, and unnecessary risks deriving from new life-styles. All these circumstances contribute to the generation of health problems, which again have the effect of overloading the services.

Despite the rise in the Region's income levels over the last decades, they are still about six times lower than per capita GDP in the developed world.[14/] Inside the countries, income distribution has worsened and remains more unequal than in the industrialized countries.

If the present patterns of income concentration hold, their consequences, including underconsumption of goods and services, will continue to affect the health of the population and raise the demand for services. For example, extreme differences in per capita food consumption are seen both within and between countries.[16] This picture could be made even worse by the exportation of foods to generate the foreign exchange earnings needed to make payments on the debt.

At the same time, there should be an increase in the demand for the services of government and public and private insurance schemes in consequence of the declining purchasing power of the population. If the supply of care does not rise proportionally, the population will have to rely on and commit more of its declining income to private services or remain underserved--both alternatives being equally injurious to its health.

It is concluded from the foregoing that the effect of the dynamics of the population in the Region will continue to be to raise the demand for services. Many of the determinants of this trend are also beyond the control of the sector and should persist in the middle run. Thus, the current unfavorable economic situation is aggravated by a social scenario in which a deterioration of the living conditions of the population should increase the additional pressures on the operating capacity of services.

2.3 Government, the Private Subsector and Health Services

The countries of Latin America and the Caribbean area have undergone major political changes in recent decades.[17] About one third of them have become independent countries, and the constitutional systems of more than half of them are now considerably different from what they once were. Political equilibrium in the Region is shaky, and political disputes have sometimes erupted into military confrontation.

There is an institutional mosaic of government agencies in which the central, local, and at times provincial levels of government are combined in different ways. The distribution of responsibilities and resources among these levels is often hard to trace, particularly in countries whose governments have a relatively less evolved organizational configuration.

Although decentralization and regionalization have figured in recent regional debate and practice, the dominant trend in the Region seems to be in the other direction with a strengthening of the central levels of government at the expense of the peripheral.[2] In this context, the Governments of the Region have taken on an increasing role in the sector, involving:

a) the direct production of services;

b) financing the sector out of government and social security funds;

c) regulation and supervision of the sector;

d) promotion of the development and production of critical resources such as personnel and infrastructures, etc.

Paralleling government are the mutual aid societies, which have emerged on the initiative of workmens', communal and migrant groups for the provision of services to their beneficiaries. As they have developed, many have become mixed institutions (combining the social group and government) or paragovernmental agencies, and in some countries have been the origin of the social security institutions.7/, 9/

The emergence and consolidation of social security systems, with their health care resources and programs, is a remarkable development. At the beginning of the 60's, social security in Latin America covered only 20% of the population, which is usually concentrated in the major urban centers and connected to the most dynamic and organized sectors of the economy.11/

At the end of the 70's, however, 174 million persons--56% of the population of 16 Latin American countries--were beneficiaries of health care provided by the social security system.7/ In seven of those countries, with an aggregate population of 234.4 million, the mean level of nominal social security coverage was 71%. It is worth mentioning that the composition of the services provided by insurance schemes and the definition of their beneficiaries vary greatly from one country to another.

Everywhere in the Region social security is becoming at least as important as the Ministries of Health in the production of health services, which brings new implications for organization and coordination in the sector. Among these is the difficulty of integrating the strategies of the Health Ministries, which cover open populations, and those of insurance, with its clientele of insured beneficiaries, including the most active strata of the labor force.

This institutional mosaic cannot be complete without consideration of the private subsector. Around 1978, of a total of about 870,000 beds in Latin America and the Caribbean, 62.7% belonged to public institutions and 37.3% to the private subsector.6/ This situation ranged between one extreme at which there were four countries without a single private hospital, to the other at which two thirds of the beds belonged to the private sector.

However, the importance of the private subsector lies not only in the proportion of the sector's installed capacity which it holds. Another factor is its dynamism in the adoption of technologies, in the

production of services for the social security systems, in the competition for manpower with the public subsector, and in the introduction of rules that affect the entire sector.18/

The long-term evolution of the health sector has been marked by radical transformations of the technical, organizational and financial basis of service production. On the one hand, there has been increasing introduction of new techniques and of the associated inputs and equipment. At the same time, health work is divided both horizontally by specialization and vertically by the enhanced standing awarded to the knowledge and skills required for the provision of care.

Both tendencies help prompt changes in other areas of the production of services. The support of management activities tends to be increasingly needed for the control of technology and personnel in the health field. Care is no longer provided by the professional physician in his consulting room, but is an institutional activity carried on in large outpatient and hospital facilities.

The rising cost of care is outstripping the purchasing power of individuals, who are forced to resort to collective arrangements for financing the provision of services. Hence the emergence of mutual aid societies, insurance schemes, employers' aid, and government financing. Relationships between individual patients and professionals working alone are giving way to relationships between groups of users and health institutions, mediated by the bureacratic offices of government, insurance companies, mutual aid societies, and health enterprises.

This trend is not proceeding in the same way in all the countries nor is it a balanced progress in any of them. Hence, their health systems cannot be regarded as homogeneous, but must be seen as complexes in which dynamic establishments push the process of change while others, less dynamic, fall by the wayside.

Pure forms of social organization for the production of service appear to be diminishing. Those that appear on the market are increasingly regulated by government, and government services are under constant pressure from market forces.

In consequence, that a service is provided by a public or private establishment no longer means in most of the Region that it is controlled exclusively by government or the market. What we now see in both subsectors is a highly dynamic mosaic of mixed institutional and operational arrangements in which the laws of the market and government intervention are combined in shifting proportions.18/

In this setting the possibilities for and constraints on government action to increase the operational capacity of services must be viewed both in the aggregate and sectorally. In the aggregate, attempts can be made to surmount obstacles imposed from outside the sector. In some countries these attempts can be initiated in the health sector or in any other sector, and in others may arise out of the overall planning process.

The success of intersectoral action depends on the articulation and coordination between the different components of the government and social apparatus, which vary widely in the Region. No less important is the extent to which problems that affect health services, and arise from or are subject to action in another sector, may be effectively rectified.

The inability of the health sector to hold its own against the economic sectors--as is frequently the case in Latin America and the Caribbean area--warrants the assumption that any benefit to health services from intersectoral action will be unlikely, and marginal at best. It is not reasonable to expect, for example, that the exchange limitations weighing on the health sector will be removable when they are central to the government's economic and financial policy.

Moreover, action within the sector appears more likely to be successful even if it must contend with the problems generated by the organization and power structure of the sector. For example, it is possible for a multi-institutional subsector to obtain more resources on its own than it could if it were integrated into the rest of the sector. Also, some "competition" among institutions may help increase productivity in the sector as a whole.

However, a multiplicity of institutions can be wasteful of resources either in duplicating technical and administrative support activities or through irrational final allocation of resources to services. These problems appear to be smaller in integrated health systems which, however, are more vulnerable to centralization of power and the vagaries of bureaucratic change.

Nor should one overestimate the capacity of the public sector to plan and carry out its own activities or its efficiency in so doing. The lack of managerial maturity and fondness for privilege observed in the Region definitely compromise the delivery of services.

The sector's operational capacity is also affected by deficiencies in private services such as the spatial concentration of their facilities, overuse of more complex and advanced technologies, and a tendency to at costs without particular concern for the quality of the care. These deficiencies derive from the conflict between profitability of private investments in health and the requirements for social efficiency of the services.

It thus becomes important for government to be able to work with the private subsector when the latter is a partner in implementing health care policies and a rival for the sector's resources. Government must consider the use of regulatory, credit and fiscal instruments to secure the participation of the private subsector in the production of services that conform to the requirements of its health policy.

2.4 The Political Process in the Health Sector

In recent decades the production of health services has risen without any proportional reduction of differences in their use by different social groups. Broadly speaking, inequalities in the use of health services do not differ from those observed in the Region in the distribution of other goods and services, including access to decision-making centers.

However, as the economic development and modernization of Latin America and the Caribbean area proceed, they are being increasingly joined in by social forces that are emerging in the political processes of the countries and thereby making those processes much more complex and dynamic.[19/] Some key elements in this trend may be found in:

a) the growth of industry and services in national economies, with the generation of a mass of urban workers;

b) economic integration of the Region with the developed countries, with the emergence of modern high-technology production sectors. This leads to stratification of urban wage-earners and the emergence of intermediate strata with demands similar to those observed in the industrialized countries;

c) the modernization of agricultural production and the gradual transformation of campesinos into urban wage-earners;

d) a rise in the educational level of populations and in the influence of the mass media, which accelerates the cultural integration of those populations into more developed societies, etc.

In this context, commensurate with their socioeconomic status in their national societies, social groups have political power to influence government action toward the furtherance of their interests. This general fact is are observable throughout the Region with variations from country to country. Thus, the institutional and organic mosaic of the health sector, referred to above, is paralleled by a mosaic of political forces that pressure institutions in defense of their demands.

While no proper study has been done of the political process in the Region's health sector, it appears to be dominated by more powerful institutions and sectors. There is increasing militancy among occupational organizations and interest groups in the sector, which seek to present their proposals as if they were the demands of broader social groups. The risk of domination of the political scene in the sector by

such interest groups will remain until more legitimate social forces can be organized to defend effectively the interests of the population, and particularly of the groups most severely penalized by unequal access to services.

Political maturity such as to open the door to full participation by the different groups interested in services is of the essence if the political process is to be of any practical help in extricating the sector from its present crisis. Thus, for the operational capacity of the services to be increased, it is essential first and foremost to improve the political management of the problems involved.

3. STRATEGIES FOR INCREASING THE OPERATIONAL CAPACITY OF SERVICES

There are some determinants of operational capacity, such as the work force, the technology, and the financing, organization and management of the services, which the health sector is best able to control. The fact that they are manageable by the health sector does not mean that these factors are free from extrasectoral influence, but it is through these determinants that the sector has the best prospect for improving the operational capacity of the services.

These factors have not always been in the health sector or accessible to its control. It is hence useful to review briefly their history and the extent to which they can be acted upon by the sector.

3.1 The Sector's Work Force

The available data for the Region in recent decades indicate that the sectoral work force has increased more sharply as a proportion of the population than in North America.[4] On the latter Continent the work force has grown less than the population, while the relative weight of the medical staff has been declining and that of the professional nursing and auxiliary staff has been growing. In Latin America and the Caribbean area, on the other hand, the growth has been generated chiefly by the accession of physicians and dentists to the sector.

However, the ratio of health personnel to population in North America is higher than that seen elsewhere in the Region. It must be noted that this difference is comparable to the difference between the per capita GDPs of the two areas. Personnel distribution in the individual country remains fairly uneven, with the greatest concentrations in the major cities at the expense of rural areas and less developed regions.[4]

There is a marked tendency to specialization among professional personnel, though at a slower pace than in North America. The selection of specializations is not very consonant with the nosological profile of the population, and is linked much more strongly to technological developments in the sector.

The conditions of employment of this staff vary widely. Generally speaking, professional incomes appear to be in gradual decline as part of the loss of purchasing power of the population at large. Moreover, fewer positions are opening up in the sector than new professionals are coming forward to fill them. The result is a worsening of the conditions of employment of the professionals who do have jobs, and growing numbers of unemployed and underemployed in the sector.21/

The underemployment and unemployment of health professionals constitutes profligate squandering of the resources invested in their training. Unless the present utilization profile changes, this loss could mount considerably by the end of the century, by which time the medical schools and students should increase to at least twice their present number.22/

The fact that the great majority of the work force in the sector is female gives the health services features of their own,23/ owing to the peculiarities of female employment that prevail in most Latin American and Caribbean societies, and result in trends to:

a) shorter careers than in sectors whose work force is predominantly male;

b) lower average remunerations in the sector, and

c) a greater turnover of the work force, with the consequences that follow for the services themselves.

The most significant change in the sectoral work force is the increasing conversion of self-employed professionals into salaried employees of the public and private subsectors. This entrains important implications for the development and operation of services.

This change does not take place overnight. There are actually intermediate stages involving combinations of private practice and salaried services, which are apparently expressions of "resistance" to the purely salaried status.18/

Moreover, arrangements for the organization of work in the medical profession are not uniform for all its practitioners in a country or a health system. Private practice predominates among the older generations, while the dominant trend among recent graduates is toward salaried employment. Here, the "explosion" of medical education and the increasing proportion of women in medical student bodies in Latin America and the Caribbean area in recent years are doing much to accelerate the growth of salaried medical service.

Other factors are the nature and dynamics of organization for the furtherance of occupational interests and the pressures exerted by professional people for the improvement of their conditions of employment. Throughout the Region, the pressures of professional organizations are evolving into more assertive trade unions. The former are animated by the liberal ideology of the older professionals, while in the latter the lead is taken by salaried employees, with an ideology very close to middle-class trade unionism.

In this transition other groups emerge that may once have been liberal, but are now the operators of health service businesses and, finally, employers of erstwhile peers. They are joined by the representatives of health institutions that have evolved from such beginnings as private insurance schemes, and hence, are not necessarily of professional origin.

The interests of these different groups realign them on two sides as employers and employees, giving rise to conflicts such as those already taking place in the Region. These disputes can affect the operation of services beneficially or adversely, as when remunerations in the sector or the prices of private services rise without any increase or improvement in the care dispensed.

However, the parties in controversy frequently allege that in defending their own interests they are safeguarding those of the population. Salaried employment in the health field, for example, is a typical target of criticism by professional associations which it is sometimes endeavored to make a concern of society. This results in a professional bias that hampers objective analysis of the relations between forms of work organization and the institutionalization of service production.

The purely salaried form is best suited to the institutional production of services to the extent that it affords optimal technical and administrative management of health personnel. At the same time, having been introduced in the sector relatively recently, this form has not yet realized its full optimizing potential. For example, the patterns for control of the work force differ with the degree of their organization and militancy vis-á-vis their employer, whether it be the government or the private subsector.

Purely private practice is increasingly unable to exert dominance in the sector because it has no solution to offer to the problem of rising costs and investments, improvishment of the population, and the need for more comprehensive health care strategies. However, it does seem to retain some potential as a complement to some types of services or for certain clienteles.

Thus, this spectrum of private, intermediate and salaried arrangements for professional service appears to find application to varying degrees in different health systems. The essential point would be to arrive at a proper balance among these forms for the organization of work in keeping with current health policies.

Current strategies on health personnel have not properly allowed for these changes in the sectoral work force. There has been too much emphasis on the training of human resources, which are viewed as beings without needs of their own and utterly committed to the cause of the health of the population. Nor has there been any attempt to analyze any other components, such as their utilization, their conditions of employment and work, and the development of their labor organizations for the protection of their interests and their survival.

These appear to be the best avenues through which the sector can move to increase the operational capacity of health services by acting upon its own work force. A mere change of attitude will not suffice; the purpose will require research and the devising of technical and administrative instruments that will enable the sector to understand better and deal more effectively with such aspects as:

a) the structure and history of the labor market in the health field and its position in the economy as a whole;

b) the work process and its relationship to technological development in the sector;

c) the political sociology of the health professions and its influence on the organization and operation of services;

d) personnel training and its relationship to the production of services; and

e) the history of the supply of, demand for and utilization of the sectoral work force.[21]

In this regard governments needs to acquire the capability to perform better in its functions as planner, regulator, trainer and user of manpower. Because of the adversarial nature of the interrelations between the work force, its employers and the population, changes in government action take on a political dimension whose development is recognized as an essential requirement for increasing the operational capacity of services.

3.2 Technological Development in the Health Field

The record of expenditures in the sector reveals a trend toward faster growth of those for technology, both products and processes, than of those for personnel.[8] This pattern in Latin America and the Caribbean area replicates events in the industrialized countries, where drugs and health inputs and equipment are claiming a growing share of the sector's budgets.

This trend is even more marked in capital-intensive establishments such as hospitals, in which much of the investment outlay is for equipment that is costly to maintain and becomes obsolete in a few years.[7] It is not always wise to replace obsolete technologies with others that are more modern, for this sometimes results in the needless operation of the two side by side, at the expense of overall efficiency.

Moreover, the annual cost of replacing and maintaining equipment in a hospital amounts to a large proportion of the initial investments, which makes it understandable that allocations to hospitals engross so much of the sector's expenditures, although hospital productivities in Latin America and the Caribbean area are widely variable.[6], [15]

In many cases technology has become the most dynamic factor for development in the sector. The equipment, input and drug industry exerts a well-recognized influence on the formulation and implementation of health policies and on manpower training, and producers of services and consumer elites are also known to play an important part in that those processes.[18]

The introduction of more advanced technologies makes possible a greater concentration of production, which changes the institutional and operational profiles of health establishments and their relations to the population. Thus, technological development and the expansion of institutions and their clienteles are mutually reinforcing processes.

However, the technological development of the sector is not a balanced process, and this limits its benefits for the operational capacity of services. For example, the introduction of new diagnostic and therapeutic resources makes possible a considerable deconcentration of care to more peripheral establishments. This potential has not yet been fully realized, however, as hospitals go on engrossing technology and taking upon themselves excessive demands for care whose satisfaction could easily be left to other facilities. Meanwhile, the network of health centers, which has expanded in recent years, remains relatively idle because of its limited response capability.

Nor is there any technological balance between care and management operations in the sector. The managerial technologies employed are usually found to be less sophisticated than those used in care services and than those that have emerged in the management field elsewhere. In other cases the sector is endowed with managerial technologies far too modern for the level of the accompanying care technology.

This means that the social impact of the sector's technology is not always commensurate with the financial resources invested in it. Moreover, the charge of technological complexity of the sector often springs from a bias against technical and scientific progress; it is then reactionary in denying that social progress is possible through technological innovation. In other cases technologies have been adopted uncritically, without any consideration of alternatives and for the sake of technical and scientific innovation *per se*.

The crux of the matter seems to be that for the provision of a given type of service there are technological alternatives involving different results, costs and social efficiency, and in most Latin American and Caribbean health systems these criteria are not always heeded when new technologies are to be introduced.[2]

Thus, there are different courses of action that the sector can take to increase the operational capacity of its services in regard to technology. The first of these is to create technical and institutional conditions for an evaluation of the technologies in use and the selection of those to be adopted. Technological research and production are, in turn, one way to get around the restrictions on trade with the industrialized world. This would require strengthening the nascent drug and health input and equipment industry in the Region and to assure to it, through horizontal cooperation, a demand on the scale needed for its sustained growth.[2], [24]

The requirements for the introduction and use of technologies are:

a) a search for a better balance among technological options at different levels of development in order to optimize expenditures for investments and maintenance;

b) an appropriate mix of capital and labor-intensive technologies for the improved utilization of the sector's work force;

c) the harmonization of technological alternatives for care and management to maximize their benefits to each other; and

d) a reallocation of technological potential among levels of care and the different types of establishments in order to make services more responsive to needs and increase the sector's redistributional capacity.[2], [24]

The realization of these possibilities opens up for the sector new avenues for work in the technical, administrative and legal areas, in personnel training, and in international cooperation. As in other issues, however, the choice of a technology--and the consequent rejection of its alternatives--is also a political problem with implications for the producers of services and inputs, and especially for the population concerned. Hence, it is also necessary to strengthen the sector's political capacity to make the right decisions on technology for its services.

3.3 The Financing and Cost of Services

One crucial factor in the operational capacity of services in the Region is the financing of the sector. Expenditures for health, today amounting to about 5% of the Regional GDP, have in the past risen faster than the coverage of the services has expanded.[2] Today, because of the crisis, public funds for financing services are either not increased or are actually reduced.[15]

This reduction of public expenditure is partly offset by growing private expenditure.[1] The contribution of social security funds has also grown in most of the countries, and today those funds far exceed those of Ministries of Health.[8], [15] Funds from external sources cover a very small fraction of the sector's expenditures in the Region.[2]

Owing to its regressive features, this financing structure has little distributional effect of any benefit to the lowest-income social strata. In other words, obtaining funds for the sector can affect the level of income, and thereby the level of the health, of the poorest population group without any compensating improvement in the distribution of services.[8], [19]

The distribution of expenditures for services to the different social groups is far from eliminating existing inequalities in the society. Expenditures per insurance beneficiary are usually much higher than the per capita expenditure of Ministries of Health for their clienteled.[8], [25] In the poorest regions of the countries per capita expenditures both of insurance schemes and ministries are usually lower than the national averages.[7], [18] These differences definitely reflect the fact that the benefits to the different groups are of very different composition.

These disparities suggest that inequity is greater in Latin America and the Caribbean area than in the developed world also in respect of expenditures for health services. Thus, the factors for inequality operate both in the acquisition and in the allocation of financial resources for health care.

The costs of services appear to be intimately bound up with a particular way of paying for them. In care paid for by units of service, the tendency is toward more benefits per patient and, consequently, higher costs. When a ceiling is imposed on per capita outlay, benefits and their costs tend to be more moderate. Remuneration for complete treatment in connection with a given diagnosis is an intermediate strategy between the first two which optimizes care and its cost. However, this optimization is compromised when there is no check on the number of problems diagnosed in each patient.

At least in theory, the program-budget optimizes the production and cost of government services. However, these services are expensive in the absence of means for their control either by the institutions in

the subsector or by the population. It has further been suggested that the behavior of the public subsector is sometimes similar to that of the private, as in the case of government services financed by social security.18/

In addition, the cost of benefits displays regionwide a definite upward tendency, what is referred to as "medical inflation." The relatively heavy weight in care of imported goods, such as equipment and drugs, definitely adds an exchange component to the causes of that inflation. The rising cost of services combined with budgetary restrictions on the governments of the Region implies a reduction of the sector's coverage, which, again, strikes most severely at the deprived social groups.2/

Thus we find that how the sector is financed influences the operational capacity of health services in different ways. At the present juncture in the crisis, it becomes yet more important to deal with these influences with a view to a better configuration and more equitable distribution of the sector's budget at a time when it tends to be, at least relatively, smaller.

Strategies in this direction in the Region appear to be directed more toward increasing the sector's share in government budgets without considering the social implication of this increase or how it is to be used. Nor is any thought given to the social distribution of the consequences of financial deficits in the sector when the budget cannot be increased. In these circumstances, funds are frequently allocated in accordance with the interests of the producers--both public and private--of services and inputs, or concentrated for the benefit of the more favored social strata.

If the sector's financing is to be responsive to claims for the increased operational capacity of services, more must be learned about the economics of the sector, the implications of where its resources come from and how it uses them, the economic relations between producers and users of services and inputs, the effects of open and disguised subsidies to private services, and the directions of change in the economy of the sector at the present crisis juncture, etc.

Similarly, instruments and mechanisms are required for the proper management of service production as an economic category, with a view to:

a) mitigation of the regressive effects of the sectoral financial structure and an enhancement of its income redistribution potential either within the society or among regions in the individual countries;

b) the control of investments in the sector within the limits of the country's capacity to incur current and capital expenditures;

c) containment of the costs of services to maximize the social efficiency of expenditures for health;

d) shielding of the sectoral budget from the pressures of interest groups; and

e) economic regulation of the production and consumption of health inputs and services.2/, 15/

The adoption of these practices implies a break with current approaches to planning and administration in the sector. It also requires that the sector acquire the political maturity needed to resolve the conflicts that will inevitably follow from the reallocation of funds among social groups called for by the new approach.

3.4 The Organization and Management of and Parties to the Production of Services

Over time, the institutional basis of the production of health services has grown increasingly complex. The health sector as a whole is made up of a variety of public and private institutions which are integrated or coordinated with one another at different levels.17/

These institutions have specialized in the performance of one or more functions--research, personnel training, planning, care, etc.--involved in the production of services. This division of labor is not always based on optimal criteria, and there are frequent jurisdictional disputes and overlappings of functions between institutions, just as occurs within the apparatus of government in the Region.2/

Similar problems are created by misallocations of responsibilities among the departments and facilities of institutions. As a result, the modernization of the health sector has been very uneven from one country to another and within the different institutions of each.

At the operational level, this modernization has given rise to more or less extensive networks of first-line service production units such as hospitals and outpatient clinics. Hence the necessary complexity of the flow of information and resources between these units and their parent institutions for the performance of their care functions.

All these problems, deriving from the institutional development of the sector, definitely affect the operational capacity of services. Many efforts have been made in the Region to solve them by reviewing the sector's organization and the managerial methods adopted in the aforementioned institutional setting.2, 17/

There is a long tradition of studies and efforts for the institutional integration of the health sector, but the successes have been confined to a few countries in well-defined historical settings and are not applicable elsewhere. In effect, institutional plurality remains the sector's most prominent organizational feature in the Region.

In view of the difficulty of integrating the health institutions, the next best thing is to seek higher levels of coordination among them, and in this direction the prospects are apparently more promising. However, considerable obstacles persist to the improvement of coordination between the Ministries of Health and social security administrations or between the public and private subsectors.

These difficulties are not confined to the institutions, but also compromise the operational capacity of facilities. We see this, for example, in the case of the facilities of an institution which are partly financed with funds from a scheme--usually social security. This duality of financing can inject a degree of duality in the technical and administrative rules governing the production of services. Differences between the Ministries of Health and social security administrations as to rules of coverage and types of benefits, already cited, are another example of technical conflict at the operational level.

In reviews of managerial methods, it has been endeavored to fit them to the complexity and the institutional diversity of the sector. Thus, another requirement for enhancing the efficiency of services is a satisfactory managerial response to the challenges of institutional plurality in the sector.

Some of the executive, support and managerial methods current in the Region are apparently still based on an assumption of the institutional unity of the sector. This assumption is realistic in only few cases, and such models are of little value in most of the countries.

The inadequacy of those models is exemplified by the difficulties encountered in trying to obtain data on resources and production and in comparing information obtained from different institutions in the same health system. Also cited is the relatively frequent use side by side of programming and evaluation methods that have very little in common by institutions and establishments operating with funding from different financial sources. The result of this is a considerable administrative overload, which impairs the operating capacity of the services.

However, those managerial methods are no better suited to the dimensions and complexity of health services today. Originating in the traditional public health administration, many of them are designed for the management of service networks less complex and less far-flung than those now in place in the countries.

Finally, the increase of institutional complexity in the sector reinforces the trend toward the concentration of power, which compromises the production and distribution of services. Here, too, there have been many attempts to make changes in the Region, but the results have usually been unsatisfactory.2/

Within institutions, attempts have been made to decentralize the planning and decision-making processes. Other levels have apparently been given a role in those functions, but it may be that in many cases what took place was not any transfer of real power to the local levels of the institutions, but rather a deconcentration of secondary planning and decision-making activities.

From a broader perspective, some participation by the population has been promoted in matters relating to the production of services.[20] In many instances, however, this participation has not extended to critical decisions for the sector, which have remained in the hands of the dominant forces--service producers, consumer elites and the sector's bureaucracies.

To summarize, the avenues for acting upon the organization and management of services with a view to enhancing their operational capacity lie in the following areas:

a) the development and improvement of sectoral coordination in institutionally pluralistic sectors;

b) the testing and application of management methods suited to situations of conflicting rules and multi-institutional financing, and to the scale and complexity of the services;

c) greater decentralization of decision-making and planning, and

d) expansion of the scope and frequency of participation by social groups in the sector.

The implementation of each of these strategies requires the application of measures subject to adequate technical and administrative control, and research on other hitherto poorly understood aspects. Also, the experience acquired in more modern sectors can serve as a source of reference for the managerial development needed in the health sector.

For this participation to be real and so help make services more equitable, it must be made a cornerstone of the organization and management of the sector. This means that decisions on and the control of the production of services must be opened to real participation especially by groups now excluded from those functions. Moreover, this participation must make itself felt at the different levels--of the facilities, the institutions and the sector itself--at which those decisions are taken and that control exercised.

4. CONCLUSIONS

It follows from the foregoing that low operational capacity of health services results in growing inequality among social groups in the Region. Hence, to increase that operational capacity is also to reduce existing inequities.

The socioeconomic situation in which it will be sought to improve the performance of the sector in the near future is doubly unfavorable for the purpose. On the one hand, the risks to health are expected to grow worse for the population, which will be moved to demand more and better services.

On the other hand, many countries have arrived at an impasse in regard to their health systems. These systems have arrived at a relatively well-equipped configuration which, however, is concentrated for service to only one part of the population. They are now faced with a choice between maintaining the present levels of operational capacity and a quest for a broader and more equitable distribution of its services.

The financial restrictions on the sector make it impossible to accelerate an improvement for some social strata without impairing the situation already achieved by others. The first alternative implies maintaining the present inequitable profile, which depends on the extent to which doing so is socially and politically acceptable. The second can result in stagnation or reduction of the level of use by priveleged groups, as new investments are channeled to meet the needs of the lowest-income strata. This option is as politically problematical as the first one.

In this restrictive context, importance attaches to any ways in which the sector is able to act upon factors and conditions susceptible to its influence. The first way would be to shift the present emphasis on manpower training to more effective efforts at its utilization, and to improve the conditions of employment of the sector's work force.

A second way would be to subject technological progress in the sector to more rigorous criteria of social efficiency. The growth of technical cooperation among countries, in addition to helping to make the Region self-reliant in health technology, would also reinforce international solidarity within Latin America and the Caribbean area.

The third possibility would be to reduce social inequity in the acquisition and allocation of the sector's funding. It is also important, particularly in multi-institutional systems, to set up appropriate machinery for relations among subsectors conducive to the extension of coverage and to reining in the cost of services.

A fourth way in which the sector could act would be to review the sectoral organization and management methods adopted for the production of services in relation to the complexity and dimensions of the health institutions. Implicit in this strategy is greater decentralization of decision-making functions and broader participation by the population in the functions of the sector.

A prerequisite to these strategies is conceptual and methodological approaches that will shed fresh light on health problems and services and on how they relate to the Region's socioeconomic and political development. No less important for measuring the absolute extent of poor health is to estimate the unevenness of its distribution among social groups. However, conventional epidemiology is of little help in this area.

This information is essential to arrive at sound solutions to the present critical situation in the health sector. Finding them is no mere bureaucratic or academic exercise, but a task that is becoming an increasingly urgent political undertaking of society as a whole.

It is therefore imperative to raise the level of participation of the various political-economic and social forces that today are relatively less active in the political arena of the sector, such as the deprived social groups. This participation must reach into the decision-making levels of government, of the institutions in the sector, and even into the facilities, as a means of countervailing the influence of consumer elites, producers of services and government bureaucracies on policy-making, planning and administration in the health sector.

The extent to which this democratization of the health sector is accomplished depends on the nature of the political process in the individual country. In addition, this process favors conditions in which demands of the health sector will have some chance of succeeding in the multisectoral arena.

It is hence concluded that, although the operational capacity of the health sector is, in the technical sense, a combination of factors for the production of services, increasing it is primarily a political matter. How and when this will be accomplished is impossible to say because this depends on a balance of political forces which, as already noted, remains highly unstable in Latin America and the Caribbean area.

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