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MATERNAL AND CHILD HEALTH DEVELOPMENT PROGRAM

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BACKGROUND

The Regional Program on Development of Maternal and Child Health, constitutes an effort directed to the utilization of the results of community centered research particularly those of the Inter-American Investigation of Mortality in Childhood and in Adults conducted by the Pan-American Health Organization.

From these Investigation the following recommendations pertinent to MCH and Family Health can be highlighted:

- a - There is a great need to improve the resistance of children through the prevention of low and deficient birthweights and of nutritional deficiency.
- b - There is a need to promote operational studies oriented to introduce modern system of registration of outcome of pregnancies and birthweights.
- c - The development of cooperative, coordinated training programs using various field experiences would be highly convenient.
- d - Promote geographic coordinated studies oriented to uncover health problems and to evaluate actions taken for solutions.
- e - Nutritional supplementation to pregnant and nursing women is recommended in populations at risk of giving birth to low and deficient birthweights and where early malnutrition is frequent.
- f - Greater emphasis on preventive actions and on community health education is much needed.

Once the field work stage of the Inter-American Investigation of Mortality was finished, contacts were initiated with the W.K.Kellogg Foundation for the design and implementation of a Regional Program based on the following considerations of basic strategies and general purposes:

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1. It is important to attain the improvement of health services promoting the implementation of projects oriented by five basic attributes:
 - a - Emphasis on preventive aspects, including not only the necessary protection against communicable diseases, but specially, introducing a positive concept about health through education, so that individuals feel responsible for their own health state.
 - b - Easy access to basic health services, vanishing as much as possible, geographic and financial barriers for extension of coverages.
 - c - Continuity in the delivery of health care so essential in MCH activities in view of the intimate relationships between the various phases of the vital cycle determined by the processes of reproduction, growth and development.
 - d - Good quality in terms of intelligent application of resources for greater benefit to a larger number of persons and within the concept of attaining biological and social goals.
 - e - Lower cost for a larger sum of benefits, which may imply the application of strategics and the extension of primary care, selection of high-risk populations for concentrated actions.

The availability and use of human resources are considered of the highest priority, which imply that services must count with mechanisms to train or to collaborate in training of that personnel necessary to function adequately.

2. The integration between service and teaching constitutes philosophically, an adequate system for development of basic programs and for positive changes.

3. In the case of Brazil, the following factors were considered for the establishment of projects:

- existence of a MCH program of the Ministry of Health, adequate to the needs of the States and with objectives consonant with those of the program PAHO/Kellogg;

- the existence of the II National Development Plan which gives priority to MCH activities and
- the existence of the law 6229 which created the National Health System with great possibilities of integrating resources.

In July 1st. 1974 the Kellogg Foundation approved a proposal presented by the Pan-American Health Organization for the implementation of the Program. The Organization decided to establish the quarters in Brazil in view of several circumstances:

- a - The two Inter-American Investigations of Mortality were conducted in several projects in Brazil.
- b - The importance given to MCH activities in the new plans of development.
- c - The great variety of conditions which justifies the creation of several projects and the conduct of comparative studies.
- d - The similarity of problems with those of other countries in the Region.
- e - The size and importance of the country in the continent's context and the existence of numerous schools of health sciences which justifies the creation of a network of community health programs with participation of health services and universities.

The Brazilian Program (componente of the Regional Program) would count with an increasing number of integrated teaching/service projects distributed throughout the macro-regions of the country. These projects would be in consonance with the objectives of the National MCH Program in relation to operational studies and human resources development.

OVERALL OBJECTIVES OF THE REGIONAL PROGRAM

Basically the program intends to develop a series of projects in several Latin-American countries, oriented towards two basic objectives:

a - Development of services methodology through operational studies in priority areas as revealed by the epidemiologic investigations already conducted, and

b - development of human resources for the work needed in MCH and family health programs, including the activities in rural areas wherever possible.

To achieve these objectives it was considered necessary to implement these projects in collaboration with universities already conducting or willing to conduct community-based service and training programs with different levels of training and service.

The program counts with funds for financial assistance in the form of small grants for specific projects. Besides, the Kellogg Foundation is assisting financially new projects on a direct basis and wants such projects to have working relationships not only with AMRO 1373 but with other PAHO programs as well. A pool of solid community centered teaching/service projects mounted within the framework of a regionalized health system would constitute an excellent opportunity for the Organization to develop integrated actions with participation of the field and central staff of various departments.

THE BRAZILIAN PROGRAM

The plan of work includes an initial phase of two years duration during which a series of projects will be initiated in Brazil and which will constitute the Brazilian Program.

After several conversations at the level of the Ministry of Health it was agreed that the specific community based projects to be developed in Brazil should constitute a sub-program in intimate coordination with the MCH Program of

the Ministry of Health and of the State Health Departments. An agreement between the Organization and the Ministries of Health and Education has been drafted jointly in Brasilia and is under the study for signature by the two Ministers for the execution of a program that will be the Brazilian component of AMRO 1373. The agreement signed in November 1973 between the Government of Brazil through the Ministries of Health and Education with the Pan American Health Organization for the development of a Program of Human Resources for Health, will serve as the basis to regulate the development of this Brazilian component. The objectives are translated from the draft Agreement.

1. General Objectives - This program aims the strengthening of the Maternal and Child Health Program of the Ministry of Health and of the States through the development of projects on integration of training and service.

2. Specific Objectives

2.1 Planning and putting into function a network of regionalized system for maternal and child care, utilizing the existing local structures and in such a way that the experience obtained be applicable in other areas.

2.2 Development of operational studies oriented toward the optimum use of resources in the solution of high priority problems.

2.3 Development of methodology for teaching and training programs at the pre-graduate, graduate and residency levels in health sciences, with emphasis on community aspects.

2.4 Utilization of the regionalized health system for training of personnel needed for delivery of care at all levels.

3. Work Plan

3.1 Administrative relations with national authorities - Upon approval and

signature of the Agreement being worked out, the Ministries of Health and Education will design persons to work with the regional consultant on:

- a - Formulation of the Brazilian Program
- b - Selection of the local projects, whenever possible.
- c - Establishment of mechanisms for development and execution, financing and evaluation of the same projects.
- d - Establishment of mechanisms for utilization of results and resources developed, within a plan of extension and as a means

to support the MCH national program, particularly in reference to human resources and operational studies.

- e - Mechanisms of coordination between the projects and between the pool of projects and the national program.

3.2 Planning Conference - A conference was held in Rio de Janeiro during the days 1-3 of Oct. 1975 with the participation of national and State health and university authorities and with the staff from Organization, Kellogg and Ford Foundations.

The objectives of the conference were:

- a - Definition of objectives of various types of future local projects.
- b - To define criteria for selection of new areas, for elaboration of new projects and for elaboration of work plan of these projects.
- c - Coordination of local projects with national program of MCH and nutrition.
- d - Establishing of methods of evaluation.
- e - Discussion of methods of multi-institutional collaboration.
- f - Defining strategies for utilization of results.

A comprehensive report was distributed

to the participants and copies sent to Brazilian and Central Offices of PAHO.

As a result of this Conference several groups were identified and the necessary critical mass of local projects was defined.

4. Work Plan for Local Projects

4.1 In the planning and implementation of new projects for development of integrated training and service activities on a regionalized basis the following steps are being followed:

a - Contact with university and health leaders in areas strategically located in such a way that the main macro-regions are represented.

b - Visit to the area to study the viability of conducting a project, putting emphasis on the possibilities of establishing coordinated (regionalized) health system utilizing the existing structures and resources, for delivery of continuous care, for conduct of teaching and training activities.

c - Provision of technical assistance to a local group in the planning of the project and in formulation of a proposal including:

- clear definition of the problems;
- selection and description of the area(s) selected;
- definition of purposes, objectives and quantified goals;
- work plan;
- institutional framework with definition of responsibilities;
- existing resources and additional contributions needed;
- methods of evaluation and expected impact of the local programs.

d - Gradual implementation of the local programs and training of personnel.

e - Formulation of technical and administrative norms related to clinical services, health education, in-service training, coordination mechanisms, personnel management, teaching, programming and other aspects.

f - Follow-up of local projects.

g - Designing implementation and follow-up of specific operational studies.

h - Utilization of results to introduce improvements in other local programs obeying plans of extension.

4.2 In those cases in which a community medicine program is already been conducted jointly by university and health agencies and if they so desire, technical and financial assistance will be provided within the limitations of the Regional Program for conduct of operational studies in priority aspects of MCH.

4.3 Specific Activities of Local Projects

4.3.1 Service to the community

Each project will program specific activities related to

a - Increasing of coverage and improvement of concentration of basic activities in MCH in relation to preliminary diagnosis and obeying goals clearly specified, and placing major emphasis in primary care activities.

b - Improving or establishing mechanism to secure continuity of services essential for a normal growth and development and reproductive function.

c - Improving the mechanism of integration of service, taking into account the multi-factorial nature of problems determining the health levels and the need for team approach.

d - Establishment of norms and operational procedures

for identification and concentrated care of individuals and groups at high risk.

4.3.2 Activities related to Education

a - To incorporate gradually the programs for students of medicine and nursing into the regionalized health system, with an active participation of those students as members of health team.

b - To plan and to execute training activities for personnel working in the health system.

c - To plan and to implement specific activities of health education for the community, in subjects of high priority. Special emphasis will be given to identification, training and control of empirical midwives in those areas in which home deliveries are numerous.

d - To establish system of collection and utilization of data obtainable through the basic services, to evaluate and orient educational and health programs.

4.3.3 Activities related to operational and community centered studies.

a - Planning and execution of studies in specific subjects, aiming the optimum utilization of resources in the solution of priority problems. Examples of such studies are:

- introduction of criteria for identification and proper treatment of high risk groups;
- establishment of mechanisms to extend primary care services with utilization of auxiliary personnel and with active community participation;
- testing of methods to prevent low and deficient weights at birth and nutritional deficiency in infancy and early childhood.

5. Progress of the Program - Despite the delay in the signature of the

agreement, a great advance has been made in the planning and implementation of steps leading to establishment of projects, and it is hoped that by the end of June 1976, 8 projects will be approved (or ready for approval) by the Kellogg Foundation and initiated or ready to be initiated in various areas of the country; thus finishing the phase of installation at the Brazilian level. This will allow the expansion of the Program to other countries as originally planned. Six of the eight projects being developed in Brazil are described briefly:

BELÉM- PARÁ - Community Health Program with emphasis on primary care and MCH.

Objectives: Planning of regionalized teaching/service community program.

Specific objectives:

- a - Planning of primary care system on a regionalized basis with emphasis on MCH.
- b - In-service training of personnel needed for health system.
- c - Introduction of teaching and training students and residents in the composing the network of health system.

The third objective includes the creation, for the first time, of a clinical residency program in the Amazonas Region.

Area: The project covers an area with approximately 45.000 people of which, over 50% are rural, corresponding to the District of Icoaraci, and including two rural villas also. A health center and two peripheral simplified units constitute the main sites of activities with the hospital in Belém for tertiary care.

Institutions involved:

- State Health Department

- Ministry of Health
- Superintendence for Development of Amazonia
- Federal University of Pará
- State Education Department
- Fund of Rural Worker
- Social Security Department
- Kellogg Foundation
- PAHO

Stage: The project has been prepared and presented to W.K.Kellogg Foundation for financial support of US\$ 213,350.00 during a period of three years. Objectives 1 and 2 are in full development. Training of auxiliary personnel is very active with approximately 20 courses per year, aiming the prevision of simplified units with human resources.

5.2 FORTALEZA - CEARÁ - Community Program with emphasis in MCH.

Objectives: Planning of regionalized teaching/service community program, with emphasis on Maternal and Child Health Program.

Specific Objectives:

a - Establishment of regionalized health system.

b - Integral attention to mothers and children,

with emphasis on:

- high risk pregnancy

- maternal and infant nutrition

- training and supervision of empirical midwives

- introduction of university teaching and training courses into the regionalized

health system.

Area: The project covers an urban and rural population of approximately 300:000 people. The centers of activities are a maternity hospital, three health centers and a network of simplified posts in the near future.

Institutions involved:

- State and Municipal Health Departments
- Federal University of Ceará
- Social Security
- Ministry of Health
- Kellogg Foundation
- PAHO

Stage: - Project was approved by Kellogg on Dec. 1975 and is progressing very well. Specific projects such as high risk pregnancy, midwives training and nutrition supplementation to pregnant women are being conducted. Funds awarded by Kellogg amount to US\$ 200,000.00 in four years.

5.3 RECIFE - PERNAMBUCO - Family Health Community Program- Encruzilhada Project.

Objectives: Assisting local health and university authorities in the development of regionalized health system for teaching and training, for health services and for operational research with emphasis on MCH.

Specific objectives:

- a - Planning of operational studies on nutrition
- b - Studies of high risk
- c - Planning procedures for expansion of primary care in MCH to population not covered at the

present time.

d - Development of educational component of the MCH program for students, residents, personnel of health service and health education at the community level.

Area: The project covers the three setors included in the Inter American Investigation of Mortality in Childhood (Encruzilhada, Casa Amarela and Beberibe) with a population of approximately 300,000 people, all urban. It counts with a very active health center and a maternity hospital combined as a unit under the same direction and four peripheral simplified units, each one ran by an auxiliary nurse under supervision. This network works as a coordinated system and counts with the backing of hospitals for terciary care.

Institutions involved:

- State University
- State Health Department
- Ministry of Health
- Pan American Health Organization

Stage: - This project is functioning since June 1974 and has made a remarkable progress in the field of regionalization, delegation of activities, increasing of coverages and concentration of activities. It has established a system of residency for nurses and is conducting operational studies in the field of reproductive risk, distribution of livebirths by birthweight, follow-up studies during pregnancy, follow-up of morbidity in hospital and clinics and of mortality and natality in the area covered. It will start soon a sub-project on food supplementation for pregnant and nursing women and children under 5 years of age financed with a loan of the World Bank, through the National Institute of Alimentation and Nutrition (INAN). It is conducting studies in reproduction financed by Ford Foundation and will receive a grant for a comprehensive educational program from PAHO/Kellogg program.

5.4 CAMPOS- STATE OF RIO DE JANEIRO -Regionalized MCH program with emphasis in rural areas.

Objectives:

1. Expansion of network of primary care units for comprehensive care with emphasis in MCH activity in the rural district of the municipality of Campos.
2. Introduction of teaching activities at the pregraduate and resident levels using the rural simplified units.
3. Training of auxiliary personnel for simplified units.

Area: The project intends to cover gradually 13 of the 20 rural districts of the municipality with a population of approximately 120.000 people. This is a region whose main source of income is the sugar cane plantation. It counts with three rural posts attended by a rural health attendant and periodic visits by physicians. The idea is to extend these rural posts to all sub-districts and introduce primary health care with attendants, medical students and students of auxiliary nursing. Actions will cover also primary schools in these rural sub-districts.

Stage: Pilot work has been developed in three of the rural posts. An operational plan has been prepared for a gradual program of extention and consolidation in four years. The personnel is being recruited and trained; norms for service at varios levels are being prepared and modifications in curriculum of students are being under study to allow progressive community activities. The project, already approved by Kellogg Foundation, will receive US\$ 258,000 through a period of four years and will be administered by the school of medicine in agreement with state and municipal healt departments.

One of the sub-projects of special interest is the installation of a "Teaching Laboratory" to develop teaching material and techniques for training of personnel of various levels, with emphasis in auxiliary personnel.

5.5 SANTO ANDRÉ- SÃO PAULO - Regionalized MCH Program

Objectives:

1. Complement the activities of pediatric care of the municipality with prenatal delivery and puerperium services.
2. Increase the participation of School of Medicine of Santo André.
3. Create conditions for training of personnel at the auxiliary level.

The Foundation of Pediatric Care of Santo André (FAISA) follows 124.965 children 0-12 years of age out of 149.550 which constitutes all children in that age period in the city, that is, 83,6 per cent. This is done in a network of 18 centers, 2 emergency posts and 1 hospital for in-patient treatment. This system is very well administered and coordinated, directed by the same person that holds the charge of chief of pediatrics of the school of medicine. With that infra-structure, already functioning for 9 years, the idea is to add prenatal and post-natal control in 12 of those centers to take care of the maternal side and to improve the medical care provided during the delivery and during the new-born period.

Stage: Infra-structure for pediatric care already existing.

The project has been submitted and approved by Kellogg Foundation for financial assistance in the amount of US\$ 260.000 in three years. Personnel has been selected and trained. Procedures are being established for care and follow-up gestations and products. This may be considered as a model for MCH care in urban sector of metropolitan areas.

Participating institutions:

Fundação de Assistência à Infância de Santo André (FAISA)

School of Medicine of ABC

State and City Health Departments

Kellogg Foundation

PAHO

5.6 LONDRINA - PARANÁ - Family Health Community Program

Objectives:

1. To establish a regionalized health care system with emphasis in family health.
2. To develop educational and training activities utilizing the health system network.
3. To develop operational studies to improve health care delivery to high-risk groups.
4. To provide facilities for in-service training of human-resources needed to expand coverages and to improve the standard of health personnel.

Area: All the municipality of Londrina with a population of 230,000 people of which 64,000 are rural inhabitants.

The city serves as the center of reference for a very extensive area of the southwest region of the State of São Paulo and the northern area of the State of Paraná, with a population estimated in about 4,000,000 people. Londrina counts with a very good medical school with adequate medical facilities, with a health center and with four peripheral health units. The idea is to increase the simplified units to decentralize the delivery of health care.

Institutions involved:

- State University of Londrina
- State and City Health Departments
- Ministry of Health -
- Social Security
- Kellogg Foundation
- PAHO

Stage: Project was prepared and approved on January 1976 by Kellogg Foundation. Funds provided by the Foundation amount to US\$ 183.043,00 in a four years period. Contacts with local, state and national agencies and agreements, have been made; selection and training of personnel, preparation of community, equipment of units, have been made. Initiation of activities of health care delivery and community medicine teaching programs, stated on June 1976.

6. Operacional Studies - The results of community centered research as those data obtained from current health services to the community can be very useful to specific studies oriented to improve efficiency of the programs. The following are examples of the studies:

a - Introduction and utilization of hospital data on outcome of pregnancies for study of distributions of livebirths by birthweight, age of mother, birth order and for study of survival of products of gestation.

b - Analyses of infant mortality by multiple causes with special emphasis on conditions of increased vulnerability such as low birthweight and nutritional deficiency.

c - Definition of criteria to evaluate the nutritional state of pregnant women and introduction of procedures for food supplementation to those women at risk of giving birth to low-birthweight babies and to nursing women.

d - Definition and introduction of criteria for recognizing and handling high-risk pregnancies.

e - Establishment of procedures and norms for extension of basic health services to rural or uncovered urban populations, with emphasis on primary care.