Development of a maternal and child health/family planning program in Zaire; progress report, Aug. 1974-March, 1975

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THIRD PROGRESS REPORT

PROJECT
Development of a Maternal and Child Health/
Family Planning Program in Zaire

PLACE
Republic of Zaire

PERIOD
August 1974 - March 1975

CONTRACT No.
AID/CM/pha-c-73-9
Introduction

This report updates the activities of the ORT technical assistance team in realizing the objectives of this contract during the period cited. Technical assistance is being provided to the Government of Zaire within the context of a larger agreement between the GOZ and AID in which the expansion of family planning services and development of public health programs for the maternal and child sector are principal components.

ORT's role is aimed at helping the GOZ and its delegated agency for this program (FOMECO) develop a model for MCH/FP development. Elements of the model include curriculum design and training programs, operational guidelines, and channels for distribution of family planning materials and information.

Two of the six MCH centers envisaged for this program have been opened and are providing integrated MCH/family planning services. Two further centers have been designated and may be operational by the end of the year or early next. Approximately 100 paramedical staff have been trained for the program; nursing and medical interns rotate through the centers; health education courses for hospital nursing staff, modeled on programs of the centers, are in progress. Medical guidelines, established for pre-natal, maternity and under-5 services standardize nursing techniques and facilitate reference between MCH centers and the Hospital. Nurses are being trained to supervise and coordinate the health programs.

A health services inventory has been launched to identify existing MCH services in Kinshasa and what is needed to upgrade and standardize them. The new National Health Council stimulated interest in Public Health in general and MCH in particular, while the centers demonstrate the feasibility of giving auxiliaries a major share of the responsibility for delivering preventive health services.
Summary of Past Achievements

In the months preceding this report period, a pattern for delivering maternal/child health services was established in the Burumbu MCH Center; health education, particularly for nutrition, became a regular feature of the pre-natal and under-5 clinics; family planning (Naissances Desirables) clinics modeled on the central clinic in the Mama Yemo Hospital proved replicable in an MCH environment; and essential logistics requirements were assured. During the period between August 1974 and March 1975 emphasis was placed on program expansion.

The larger program necessitated emphasis on management and coordination of several centers. The ORT team, therefore, focused on the training of supervisory personnel and the refinement and standardization of operational guidelines, particularly medical ones. Further program expansion required as well continuing development of curriculum guidelines for both long and short-term training programs in either urban or rural milieus, and systematic approaches to broadening the MCH service base, which would include provision of baseline data and use of mass media to reinforce health education and concepts of preventive medicine.

The realization of the team's work was facilitated by the arrival of the final member of the ORT team, Dr. Willem Van Pelt, in September 1974. As team leader, he assured the direction, planning and coordination of various aspects of the program in collaboration with medical staff of the Ob/Gyn, Pediatrics, Naissances Desirable (family planning) and Community Medicine departments of the Mama Yemo Hospital. Technical assistance functions were reviewed and a strategy, chiefly emphasizing training of paramedical, medical, supervisory and administrative personnel, was set forth. Participation in operational matters was also considered necessary because of the functional overlap between training and program development.

Opening of the Second Center

The second center, MCH Bumbu, which opened on October 14, is located in a peri-urban area of Kinshasa which for the most part still lacks basic utilities.
The center, of similar construction as the Burumbu Center, also has 40 maternity beds and provides ante-natal care, delivery care and post-natal care, "under-5" child care clinics, and family planning (Naissances Desirables) clinics. The Center serves in reality several of the surrounding districts in addition to Bumbu, as health facilities, especially for the maternal and child sector, are scarce.

Prior to opening of the Center, the staff of 50 received an intensive 2-week training program. Administrative and operational mechanisms developed at Burumbu were instituted and accelerated the smooth operation of this Center. Cooperation with district officials has been satisfactory. They have helped popularize the Center; provided supplementary maintenance personnel; arranged to pave the road linking the Center to the main traffic artery; and supported efforts to coordinate existing health services in the area. Their backing resulted in high attendance figures as soon as the center opened, which compared favorably with those reported in the first center after several months of activity.

Additional Centers

Administrative constraints related to the reorganization of health services under the newly-created National Health Council delayed action on additional centers envisaged for the second phase of the program. The latter have now been designated and orders for medical equipment, drugs, and vehicles for the enlarged program have been placed. Although an operational schedule has not yet been fixed, it is hoped that the centers will be renovated and equipped by the end of the year and that staff will be available for service by this time next year.

Further Program Expansion

Under the National Health Council, the pace of program expansion may be stepped up. The centers have played an important role in generating new momentum in this direction, as they demonstrated the feasibility of introducing principles of public health and the possibilities of standardizing MCH health services. After having visited the centers, Salvation Army
officials decided to introduce pre-natal and under-5 services in their three Kinshasa clinics, modeled on those in the centers. The centers have helped popularize as well many preventive medicine techniques and the use of the Ilesha weight chart in many other urban and rural health services where there are efforts underway to develop public health programs.

Standardization is regarded as an important element in the expansion of the MCH program. On the one hand, it offers a practical way of assuring the quality of health services and evaluating the performance of personnel. On the other, it promotes establishment of training programs with equivalent educational objectives. This is particularly necessary where the health infrastructure has long been fragmented. Standardization has immediate benefits for urban areas: it would allow hospitals to institute follow-up and reference programs for pediatric and other outpatient clients in local clinics where standards are known and acceptable, reducing thereby their own costs and making continuing care and surveillance more certain.

To determine the present feasibility for standardizing MCH services in Kinshasa, ORT is assisting the community medicine department in carrying out a survey of city clinics to compile information on the kinds of service offered, and the possibilities of upgrading, introducing and standardizing MCH services. The results would be used to establish a register of reference clinics and also assess resources needed to upgrade them.

Supervision of Center Personnel

Training supervisory personnel is a priority because the only way to sustain the quality of new and existing MCH services is to incorporate supervision into plans for expansion. In this sense, supervisory functions are pivotal in the development of the MCH model.

The opening of the second center coincided with the official appointment of a coordination team composed of nurse-supervisors for the maternity and under-5 clinics, a pharmacist and an administrator. This coordination team is responsible for supervision at both centers. Following clearer delineation of job descriptions, the composition of the team was altered. Further
modification will continue to insure that supervisory functions and responsibilities conform to program needs. As part of their daily duties, supervisors presently direct the chief nurses of the centers, and when necessary individual personnel; instruct staff and students, plan group education in the continuing in-service education, and take care of discipline. Supervisors also work closely with ORT medical personnel in preparing teaching materials and in organizing and implementing training programs. They are being trained to act as a bridge between the medical direction and paramedical implementation of the MCH program.

Operational Guidelines

Medical guidelines are another key factor in the MCH model. They stipulate the modes of action to be taken by auxiliaries in various clinical situations and the circumstances under which clients are referred to higher consultation by doctors. In this way, they eliminate the need for full-time presence of a physician and, where doctors are in scarce supply, they provide a rational means of dividing clinical responsibilities so that doctors and auxiliaries are used efficiently in the program. Guidelines also have ramifications for standardization and supervision of health services and for curriculum content.

So far, medical guidelines have been prepared for the maternity and pre-natal clinic. There are provisional guidelines for the under-5 clinic and others will be forthcoming for the "Naissances Desirables" clinics as well. They were established by a committee of four physicians: Chiefs of Ob/Gyn, Pediatrics, Community Medicine and the ORT team leader. Nursing supervisors attended each session and contributed substantially to those for their respective areas of responsibility.

Training and Curriculum Design

Short-term orientation and refresher courses and continuing in-service education remain a crucial facet in the development of the MCH program, since the procedures for the immediate future will be to train team units for each center as it is added to the MCH network. Prior to the opening of the
second center, 50 auxiliary nurses and junior staff received two weeks of theory and orientation followed by a month of intensive on-the-job training. The latter has been instituted as a regular activity in both centers to reinforce public health practices and attitudes, as well as to improve the quality of nursing care. Talks followed by discussions, about various public health and curative medicine subjects are given by center supervisors, physicians from the Mama Yemo Hospital and the ORT medical staff. Individual instruction is provided as needed in both centers, assuring uniform and equitable coverage. Lesson plans and teaching materials developed for these courses are being edited and will eventually be collated into a manual for paramedical MCH staff.

This pattern of orientation and in-service education is only applicable for the most part to auxiliaries who have already received basic nursing education; but a series of such training centers in selected urban and rural areas would greatly accelerate the preparation of MCH personnel. As several rural MCH programs have been developed in areas with paramedical training facilities, a national training system of this type could be started by coordinating the programs with standardized curricula and equivalent practical educational objectives.

The internship for nursing students expanded as facilities opened up in the second center. A special two-week training program in public health was added for physicians, doing their internship at the Mama Yemo Hospital, at the centers under the tutorship of the ORT team leader. First year medical students began to receive preliminary orientation to public health in a program of regular visits to the center. Several physicians, one of whom interned in the center, are now studying Public Health in the US. The Director of Administration who was responsible for over-all direction of satellite programs of FOMECO, of which the MCH programs are part, will do Public Health Administration at Tulane University. Others are studying Public Health and Nutrition at UCLA. Selected personnel from the center are candidates for short-term courses in the US in Public Health Nursing, Nutrition and Statistics.
Curricula Design based on Task Analyses

ORT has embarked upon a project to provide the basis for standardizing curricula to ensure that training corresponds to job needs.

The ORT team believes that formal curriculum design most effectively proceeds from the analysis of actual jobs that health personnel perform; health service activities can be objectively analyzed and broken down into component tasks. After they are analyzed, they can be modified to reflect a consensus of professional opinion as to how the jobs should be performed. This process standardizes the jobs; it is then possible to determine the knowledge and skills health personnel need to carry out each task. The results of this procedure are a series of curriculum guidelines from which actual curricula can be designed to set up short or long-term training programs.

Health services in the two MCH Centers have reached a level of routine for objective analysis. The use of a methodology adapted from one developed by the Health Services Mobility study, a US research group funded by HEW and the Department of Labor, facilitated the analysis of the clinical work into component tasks. A preliminary draft identifying tasks in the prenatal and under-5 clinics, and noting the knowledge and skills required for two illustrative tasks has been prepared by ORT and presented to FOMEKO and National Health Council authorities. Maternity, postpartum and family planning consultation tasks and requisite knowledge for those tasks are being added. Curriculum guidelines will be derived and a curriculum and training program for short-term courses for personnel who will staff the next two centers will be prepared. It is hoped that the methodology employed and the results obtained will interest others working in this field, since they offer a wide range of uses for developing the MCH program.

The task analyses and the projected curriculum guidelines add two major parts to the MCH model. The analysis of health services into meaningful work units allows us to define an MCH health service according to the tasks which compose it. This is particularly useful in setting up a tiered MCH
program of successive levels of clinical service. By selecting tasks which constitute a desired level, the tiers can be organized progressively; one can determine the health benefits, the amount of duplication which may exist between tiers, staffing needs, medical guidelines and supervisory functions, referral traffic between the tiers, equipment, drugs and logistical requirements. Staff productivity, size of catchment populations, and other project elements can be extrapolated for each tier as well, using the task approach to defining the service. This approach also establishes relevant training needs, since curriculum guidelines from any grouping of tasks indicate the content requirements of curricula.

An MCH model which has these components offers a rational framework in which to plan for the expansion of the program and the utilization of resources, particularly if they are limited. The possibilities of providing relevant training for clusters of tasks (most of which would probably be found in any health setting) could pave the way for regional training programs for Francophone African countries.

Famil, Planning Activities

The FOCEDO family planning program added a third clinic to its network with the opening of the Bumbu MCH Center. There, the program proceeds cautiously since the area is fairly rural in aspect and the population less receptive than in urban zones. Meanwhile the clinic in the first Center gains about 50 new acceptors monthly. The Naissances Desirables clinic at the Mama Yemo Hospital, which is averaging monthly about 250 new clients, undoubtedly has the largest program in the country.

The major emphasis in the two MCH Centers is to integrate the Naissances Desirables clinics into other center services. Discussions continued with the new Chief of Naissances Desirables about the best ways of motivating center clientele and the responsibilities of ND personnel to the center and in its programs. Operational guidelines concerning several of these matters are being reviewed by health and other authorities.
In November, the Chief of Naissances Desirables began three months of training at Downstate Medical College and site visits in the US, Europe and several African countries. The program's administrator attended a Downstate course in family planning administration and statistics. On their return, they worked on a second training program, resulting in the addition of 10 more nurse-midwives to the ND staff. Social workers, secretarial and clerical assistance are also being sought.

Clinic statistics received attention during this period in order to simplify recording, tabulation and reporting. Certain questions along with the format for noting results of successive visits were modified to improve accuracy and clarity. New ways of classifying client dossiers are being tried out to permit easier retrieval of special information and rapid determination of continuing contraceptors and defaulters. In order to augment data about total clinic activities, a daily activity log was designed to record all classes of visits, from new enrollments to continuing contraception, method changes, related gynecological consultations, and treatment; this data is needed to assess clinic capacity, and staff productivity and efficiency. The results will be a useful tool in planning expansion and training programs for new staff. Regular reporting procedures are also being developed to make available relevant information on the progress of the Naissances Desirables program.

Tabulation of clinic data is still in the arithmetical phase; more sophisticated mathematical analysis would involve electronic data processing and consequently personnel qualified to use computer equipment, statisticians and programmers. Collaborating with statistical organizations which already have the needed technology, qualified staff, and programming expertise would be desirable in this regard.

Since the concept of family planning services has been allied to the delivery of MCH services, their rate of expansion will depend on the growth of suitable health infrastructure and the availability of trained paramedical personnel to deliver these services under responsible supervision. Naissances Desirables is in transition from an experimental program to a small urban
network; it presently needs to improve its clinical and administrative operations so that an enlarged program can function smoothly. Instituting clinical supervision, establishing medical guidelines and routinizing clerical tasks will rank high in the next period of development.

**Contraceptive Distribution**

ORT is continuing to assist the program in the area of distribution of contraceptives and statistics. A system for distributing contraceptives, started last August, has now become a routine administrative procedure which expedites inventory control and periodic calculation of material needs at each clinic and at the central depot. Eventually it will be useful in estimating annual contraceptive requirements. This system for distribution and inventory control will be applied in the third and fourth Naissances Desirables clinics when the two other centers join the current network. With additional clerks it would be suitable for a larger network, were other existing family planning programs consolidated or set up in health centers with fully developed or incipient MCH services. The system can also be easily computerized.

**Family Planning and Mass Media**

Preliminary groundwork still has to be laid before the media can be used to any effect in health education or motivational campaigns. More specific guidelines about their use, particularly in the area of family planning, will have to precede any technical efforts in program design, production and dissemination. In the interim, however, the media have voluntarily popularized the centers and their services, including the Naissances Desirables clinics at the centers and at the Mama Yemo Hospital. Television, radio and printed media regularly cover MCH and consequences of population growth are frequently debated. Several TV programs featuring interviews with professionals and lay persons about planning reproduction have positively influenced attendance at the Naissances Desirables clinics.

The content of the media programs in any future organized campaign might be improved and more effectively focused if their development were guided by
baseline data about the characteristics of the population they sought to reach. So far, the MCH program has progressed without benefit of baselines, though various data from previous household and recent nutrition surveys have provided insights into health needs on the communities the centers serve. Since the present target population of the two Centers and the two which will be added greatly exceed the actual catchment capacity, there is still time to survey these areas and obtain baselines that are relatively free from contamination, which will eventually permit objective evaluation of results of MCH services. Possibilities of utilizing facilities of existing research organizations, hereto the most logical approach to closing the information gap in the program, are being pursued.

**Goals for the Next Six Months**

Training and the design of curricula will receive further attention. Work will proceed on completing the description of all MCH tasks, deriving curriculum guidelines, developing curricula and training programs from them, and demonstrating their applicability and utility in meeting personnel requirements for MCH and other public health oriented programs. Special training will continue to be given to supervisory personnel as they will be critical to the management of health services in which paramedical staff are the chief agents and as they will be responsible for the most part in training MCH staff. As the current MCH health service survey is completed, other components necessary for a comprehensive model for a national MCH/FP program as well as features of the next stage of program expansion will be given detailed elaboration.

**Conclusions**

A nucleus for urban MCH/FP services has been developed in Kinshasa and has proved to be viable. Standardization of procedural guidelines has begun. A training program has been integrated into actual performance of services. Present achievements warrant controlled and systematic expansion to test the further replicability of the system of delivering MCH/FP services.
which has been instituted in the two Centers presently in operation. The MCH/FP model provides identification of the work units composing the service, medical guidelines designating paramedical clinic responsibility, supervisory and health management functions, and grades of personnel and their training requirements. This model is being developed concurrently with actual experience of setting up and running MCH/FP centers. It strives for a realistic approach to meeting educational and operational needs for maternal and child health and family planning service delivery.
<table>
<thead>
<tr>
<th>Month 1974</th>
<th>Maternity Deliveries</th>
<th>Pre-natal Clinic</th>
<th>Under-5 Clinic</th>
<th>Naissances Desirables - FP Clinic</th>
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<td>March</td>
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<td>1267</td>
<td>2297</td>
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<td>TOTAL</td>
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## Monthly Attendance during Current Report Period

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<th>Month 1974</th>
<th>Maternity Deliveries</th>
<th>Pre-natal Clinic</th>
<th>Under-5 Clinic</th>
<th>Naissances Desirables - FP Clinic</th>
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<td>March</td>
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<td>1471</td>
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| TOTAL      | 1,694                | 6,507            | 13,287         | 121                              |