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EVALUATION OF PHASE II
OF THE MCH EXTENSION PROJECT
IN THE GAMBIA AND BENIN

AMERICAN PUBLIC HEALTH ASSOCIATION

International Health Programs

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The evaluation team consisted of three persons: Mrs. Ruth C. Beeman, Public Health, Nurse Midwife Consultant to American Public Health Association; Dr. Jean-Pierre Bendel, Evaluation Consultant to American Public Health Association and Ms. Mellen Duffy, representative of AID/Africa Bureau. In addition, Dr. Marc Vincent, Chief Health Advisor, USAID/Senegal accompanied the team in the Gambia.

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I. CONCLUSIONS AND RECOMMENDATIONS

A. CONCLUSIONS

1. The evaluation team believes that the project purpose of Phase II "to replicate improved MCH/FP services in at least two other areas of the country" has been achieved. Adequate baseline data to test for a reduction in preventable maternal and infant/child mortality and morbidity is not available at this time, but both countries are working towards this.
2. The project has benefitted both countries by involving them in an acceptable way without greatly increasing their financial commitments. The host country personnel have been involved in decision making and have been mobilized and motivated through project activities. The productivity of people already in place has increased without a high recurrent cost. It can be assumed that when this type of productivity is combined with other efforts to improve the quality of life of the rural poor that it will have a positive impact on health status.
3. Acceptance of family planning continues to lag behind acceptance of prenatal consultations, care during labor and delivery, child health services and immunizations. There can be many reasons for this lag, but repeatedly the team was made aware of the reluctance families feel to limit or to space pregnancies when up to 50 percent of their children die before the age of five. Yet the teaching is well received, the concepts of family planning seem to be acceptable within the context of total family health, and family planning behavior will, without doubt, begin to change as total family health improves.
4. High prematurity and immaturity rates, as well as failure to thrive on breast milk alone after three to four months, point up the need to make a more concerted effort in any MCH/FP program to strengthen those aspects that will improve pregnancy outcome.
5. The regional project has demonstrated that

strengthening existing health delivery systems by improving MCH/FP services is a valid concept. To accomplish this, however, there must be: 1) a minimal infrastructure (a system of clinics and subdispensaries) in place; 2) enough people with the ability to benefit from this type of training; and 3) a commitment from the host country government that participates in the training will be used in ways that will utilize their upgraded skills and talents.

6. The team was unable to assess properly the cost-benefit ratio of this project, particularly since much of the effort has been in health education which will take years for the cumulative effect to be demonstrated. Measures of final health/nutrition status as a result of these project activities were not available, nor did pre-project measurements exist for comparison. The team was able to determine that access to health education and improved MCH/FP services had improved, since very little of these were available through public health clinics prior to the project. Time did not permit a careful accounting of total project costs within The Gambia and such information was not available within Benin. It is felt, however, that the added costs to the governments are minimal since the activities of personnel already on payrolls have not been altered in most cases, and no new personnel have been added to the Ministries as a result of this activity.

BENIN

7. The project objectives for the UCSC activity in Benin have either been met or are expected to be met within the project time frame. In some instances; for example, extending improved MCH/FP services to additional health centers, the objectives have been surpassed. The evaluation team feels that with the phasing out of UCSC technical support, scheduled for the remaining months of the project (which has actually begun already), the MCH/FP activities will continue to grow and improve in Benin.
8. The nutrition component of the total MCH/FP effort seems to have been least visible of the services. Since study after study links maternal nutrition with fetal outcome, future efforts in implementing any MCH/FP program might consider strengthening both health education and applied nutrition to improve maternal and fetal health.

THE GAMBIA

9. The evaluation team feels that to withdraw all project staff and support from The Gambia at this time would have a very serious detrimental effect on the significant progress that has been made to date. Recent changes in the leadership and MOH directions give every evidence that the objectives will be met with some additional time. The team feels there should be consideration of a mechanism for continuing the UCSC technical support in The Gambia until project objectives have been more fully attained.
 10. The recently developed in-country training on Pediatric Health Assessment is a good example of the cooperation between UCSC project staff and host country personnel in designing innovative approaches to improving MCH/FP services. Moreover, the fact that this training was requested by the GOTG demonstrates their interest and foresight. Such a training component might well be included for consideration in planning for any future programming.
- B. RECOMMENDATIONS FOR BENIN
1. Phase II Project activities should be phased out as scheduled.
 2. Future health activities should be considered that will be directed toward the improvement of pregnancy outcome through programs that might include an emphasis on more astute maternal-fetal assessments, and the implementation of specific nutritional management of targeted groups. Such projects would also address more attention to improving the quality of life for childbearing women.
- C. RECOMMENDATIONS FOR THE GAMBIA
1. The recommendation of the evaluation team for objectives to be achieved if a 12-month extension of project activities in The Gambia were to be approved are:
 - a. Project Output #5: "The Transportation, communication and supply systems are coordinated" should be improved. These systems do exist but should now be fully developed to ensure proper management, flow of supplies and optimum use of professional's time.
 - b. Project Output #6: "Twenty four TBAs

have been trained and utilized in the improved system" should be accomplished. Since most of the obstetrical care in the country is provided by TBSSs, a course for training the TBAs should be developed at Mansa Konko. Thought should be given to coordinating TBA training and supervision with the community health nurse program since the latter (graduates) could supervise and continue educating the TBAs in the villages.

- c. Project Output #9: Thirty-two nurse auxiliaries have been trained for 18 months in family planning. This output has been achieved, however; the team recommends that priority be given in the next year to assisting the Manso Konko School for community nurses (CHN) increase their enrollment. This category of worker is seen by the Ministry of Health as the backbone of the primary health care services in the community. An increase in the number of community nurses would increase coverage at a lower fee. This increase in the number of CHNs could be accomplished through perhaps more classes with a staggered use of classroom and clinical facilities, or perhaps by shortening the length of the on-site clinical training in favor of a preceptorship in an assigned health center.*

*In The Gambia it was estimated that the trekking team that travels to the rural subdispensaries provide services costing the government \$0.70 per child/visit. If each child visits six times in a year, it would mean \$4.20 per child, while the total health budget of The Gambia is \$3.00 per inhabitant per year, curative and preventive and administrative. In towns where the health services are closer to the patients, well child clinics can be provided at a somewhat lower cost. If one wants to serve the outlying areas they will reach a zone of diminishing return, where either the costs of services will go up and clearly exceed the financial limits, or they one will have to look for new solutions which will seek financial savings. Utilization of village health workers is clearly an option The Gambia might consider.

- d. Project Outputs #18 and 19: which pertain to the record systems, clinical and patient information, data collection and analysis should be emphasized. There is a system for recording clinical data which could be streamlined for easier management.
 - e. Project Output #20: There should be an effort to accomplish the advanced training for MCH/FP of administrative level physicians. These physicians are responsible for supervision of MCH/FP activities and should be familiar with information on the subjects.
2. An updated module emphasizing maternal health assessment of approximately two weeks duration should be developed by project technicians and counterparts for graduates of the School of Nursing and Midwifery. The faculty of the School of Nursing and Midwifery should have continuing education in new concepts and clinical skills to teach midwives who work in the MCH/FP clinics and supervise TBAs.
 3. Training in general management/health administration skills should be provided for key personnel in the Ministry of Health. Special seminars by UCSC personnel might be arranged or consultants brought in for short term assistance. The country-wide supervision system should be improved and a system for supervising the community health nurses developed.
 4. To accomplish the above objectives the team recommends that at least two full-time project technicians be provided in addition to one or two consultants for management skills. One technician should be a nurse/midwife with training skills. The second technician should have a health background with skills and experience in administration.

II. BACKGROUND INFORMATION

A. AFRICA BUREAU HEALTH SECTOR STRATEGY

The AID program in Africa is focused on improving the quality of life of the rural poor majority of the continent. A strategy for meeting basic human needs, of which health and nutrition are important components, is the primary emphasis of AID's assistance.

The major health problems in Africa include very high infant and maternal mortality, malnutrition, and a high incidence of communicable diseases. Frequent pregnancies, inadequate care during pregnancy and delivery, and hazardous cultural practices associated with childbirth and infant care are also major contributors to the high mortality and morbidity of mothers and children. These problems could be reduced through improved environmental sanitation, proper nutrition, and better use of existing health facilities for preventive health care, particularly maternal and child health and family planning services.

Delivery of effective health services in Africa is a complex problem compounded by widespread scarcity of financial and skilled human resources and a pattern of access skewed to greatly favor urban populations at the expense of rural people. The Africa Bureau strategy seeks to assist host country governments pursue a rural orientation in their health care by development of delivery systems that are efficient and affordable to the country.

B. PROJECT HISTORY AND PHASE I EVALUATION

The MCH/FP Extension Project attempted to find and demonstrate simple but effective ways to improve maternal and child health services, including nutrition and child spacing, and to extend these services to previously unreached rural populations without a substantial increase in facilities, personnel or operating costs. The project began in FY 1971 and has been carried out by the University of California at Santa Cruz (UCSC) in The Gambia, Benin and Lesotho. Phase I of the project has been evaluated and the project purpose was judged to be valid and achievable in pilot areas. The Lesotho activity was phased out of this project in 1976. Phase II of the project was designed to replicate improved maternal child health services in at least two other areas, one each in Gambia and Benin, in order to test Phase I achievements in diverse geographic and cultural regions of the countries.

The health infrastructure of each country provides at

least minimal hospital and public health service to all the major centers of population, and each has a beginning network of health centers and dispensaries radiating out from these centers into the rural areas. Health services that do exist in the most remote areas are almost entirely limited to the care of the sick. Personnel are in need of training and supervision, and medications and equipment are continually in short supply. About 80% of the health budget is spent in urban areas and 20% in rural areas, while from 80-90% of the people live in rural areas.

Following the evaluation of Phase I, it was clear that in The Gambia, Benin and Lesotho there have been successful MCH/FP delivery systems established in a pilot area of each country. These services have been judged to be reaching mothers and children not previously reached with MCH/FP preventive services and are determined to be feasible in terms of host government projected resources.

C. PHASE II AND PURPOSE OF EVALUATION

The first purpose of this evaluation was to determine the extent to which project objectives have been met and the ability and commitments of the host countries to assume responsibility for activities begun under the project. Thus the evaluation team has attempted to assess achievement of the following goal indicators:

- 1). That at least two additional areas in each country have effective MCH/FP services integrated into the existing health delivery system.
- 2). That the pilot area in each country is functioning effectively as a training center.
- 3). That host country personnel are fully prepared academically (trained), functionally (supervisory and logistics systems), and financially (funds for future operation of centers and continues training budgeted by the governments), to take over the activities begun under the project.

In order to ascertain the above, the team has looked at the progress made in terms of quality and quantity in a number of project outputs. By measuring project activities we hoped to determine the extent to which the project purpose has been achieved.

The second purpose of the evaluation was to determine the replicability of the project concept and activities for other African countries with similar needs and interests.

The Africa Bureau wants to use the experience gained through this and other pilot efforts to find the most effective manner for planning and delivery health services.

The evaluation of Phase II was held May 29 - June 2, 1978 in Benin and June 5 - 9, 1978 in the Gambia. The evaluation study and field assessment activities included a thorough review of all available documentation in AID/W and the field, discussions with U.S. project technicians and their Gambian and Beninese counterparts, and observation of on-going project activities in the pilot sites and rural areas. Interviews were held in each country with upper level Ministry of Health personnel and U.S. Embassy/AID officials. The UCSC Project Medical Director and Field Coordinator accompanied the team throughout the entire field visit. In addition, the team was able to talk with health professionals not directly related to this project about health sector activities within the two countries.

III. FINDINGS IN THE GAMBIA

A. ACHIEVEMENT OF PROJECT PURPOSE

The following goal indicators were used to help determine the achievement of project purposes:

1. Purpose: At least two additional areas have effective MCH/FP services integrated into the existing health delivery system.

Findings: The evaluation team found this has been achieved as far as staff in place and range of services are concerned; however, progress in construction and rehabilitation of facilities is lagging behind in rural areas.

Kuntaur: The team visited the health center at Kuntaur and talked with the nurse-midwife who seemed to be motivated and dedicated to her work. The MCH services offered are well utilized while the FP services continue to be less well accepted and utilized. It appears that this is so for the usual reasons -- cultural acceptance and high infant/child mortality rates. Education about child spacing has begun but a great deal more is needed. Health education talks, especially nutrition and environmental health, are being given by a recent graduate of the Mansa Konko Community Nurse Program. While the team was on-site visiting she left to travel to another village to conduct a health education session at their request. The physical facility presents both a health and safety hazard and possibly exerts a limiting influence on the effectiveness of attempts at health education. There is a new facility planned and when it is built the Sister will be able to more fully utilize the training she received at Santa Cruz.

Kerewan: The team was unable to travel to Kerewan, the second extension site. However, available data indicated here, as well, that the MCH services are well utilized while family spacing assistance is less well accepted. Regular health education talks are also given at this center. A new facility at Kerewan is 95% completed and will be fully utilized in the very near future.

Royal Victoria Hospital: The team visited the Royal Victorial Hospital and observed some of the clinics in operation. A full range of educational and clinical services are offered here and appear to be well utilized. From observations of the FP clinic it would appear that very high standards of care

are practiced and taught. Along with the usual clinical services, prevention and therapeutic care are especially strong points at this extension site.

2. Purpose: The pilot area is functioning effectively as a training center.

Findings: The team found that the pilot site is functioning as anticipated in training community health nurses. The 15 graduates of the first class have been posted and are working throughout The Gambia. Eighteen candidates are currently enrolled and studying nutrition, public health, nursing skills, anatomy and physiology, and other subjects. The physical education class is especially relevant because the students are actively engaged in applied nutrition through gardening on the school grounds.

The team talked at length with eight of the students currently enrolled and found them to be enthusiastic about their studies and their future work. They conducted a tour of the school and explained in detail about their curriculum and activities.

The Health Center at Manso Konko offers a full range of preventive MCH/FP services as well as curative and therapeutic care. There is an in-service training course for all Mansa Konko Health Center staff conducted biweekly. The activities observed while on tour, as well as information gleaned from interviews with staff of all levels, indicates that the pilot site is engaged in good quality health care and can stand as an example upon which to model further extensions.

Active discussion is underway in the Ministry of Health about how the Mansa Konko School can increase its training capacity for health workers needed in the rural areas. The team was fortunate to witness an interesting debate about the concept of competency based training versus full academic qualification that took place with Ministry personnel.

3. Purpose: Host country personnel are fully prepared academically (trained), functionally (supervisory and logistics systems), and financially (funds for future operation of centers and continued training budgeted by the governments), to take over the training begun under the project.

Findings: With respect to achievement in these areas, the team found that, due to a variety of circumstances, progress has been slower than

originally envisioned. The team did not feel that there are yet enough fully prepared personnel to adequately handle supervision and required training activities. The School at Mansa Konko is in a serious situation in respect to the number of staff, particularly in view of the prospects of increasing its class size or number of classes. The team talked with one health professional who mentioned that there were people in other positions who could be transferred to the School, but whether this can be accomplished is unknown.

The staff in the health centers appear to be working to capacity and there appears to be no provision for vacations, sick leave, other absences, or for time off for further training. There are several nurses/midwives who have been trained in MCH/FP techniques at Santa Cruz who apparently are not being utilized to their full capacity in connection with the MCH/FP Project. This issue is much under discussion now between USCS project staff and the Ministry.

With respect to physicians, the team did not see that there are sufficient physicians with advanced training in MCH/FP to supervise and backstop the services.

A supervisory network is currently being developed within the MOH. There appear to be numerous problems with respect to the supervision of posting responsibility: the assignments are being made by personnel other than the MCH/FP staff responsible for their supervision and training, couples are not posted together but are posted individually according to posting needs. The Ministry should consider establishing a plan for regional supervisory staff who could more easily travel to the widely scattered health centers and sub-dispensaries. Centrally stationed supervisors are not provided overnight accommodations in the rural areas.

The new Director of Medical and Health Services told the team that ensuring an adequate data base was the highest long range priority of this division. This would help ensure that the data system would become uniform, efficient and usable to obtain aggregate statistics for planning and evaluation.

In reference to support and logistics: there is a supply system which is subject to transportation difficulties and shortages in stock items. Commodities for FP seem to be in better supply than

some other items, for example, vitamin and iron supplements. The system is not supportive of optimum use of the nurses' time since they must often travel to Banjul to request and receive supplies.

The acting Director of Medical Services stated that the Government of The Gambia is 100% committed to the activities of this project. The Government is clearly committed to providing financial support for the activities of the project. Salaries of all personnel are being paid, facilities are being built, and some supplies are being furnished.

The Five Year Plan indicates that the Government is dedicated to allocation of a good share of their fiscal resources to preventive health care with emphasis in the rural areas. It is also obvious that the Government is working cooperatively with a number of donor agencies which can be counted on to provide technical and financial support.

In summary, the team found that some progress has been achieved in The Gambia since 1975, albeit slower than originally projected. A definite forward momentum is well apparent and there is every indication from the MOH and the dedication at the level of the local health services that progress can be expected to continue as long as the necessary assistance continues.

B. ACHIEVEMENT OF PROJECT OBJECTIVES

Project Output #1: A profile of local health practices, utilization rates, public knowledge of existing preventive services and survey of prevalent disease in the expansion areas was conducted prior to the start of other activities.

The only existence the team could find of such a profile was from a Rural Health Survey that was conducted in The Gambia in 1978 by Dr. Harrison Stubbs, a biostatistician from California. This survey involved structured interviews with 2,602 mothers and 1,241 head of compounds. Although the scope and structure of the study was fraught with many problems, it did provide the investigators with a great deal of descriptive material about village life in The Gambia.

Project Output #2: There has been an increase in utilization of MCH/FP services at the improved health centers which has resulted in a decrease in prenatal, neonatal and infant mortality.

Crude baseline data does exist on the basis of a WHO assisted census in 1973 and from records of RVH on preexisting services, but good countrywide health care statistics do not exist at this time. Yet all indicators are that services are reaching a significant portion of the population is evidenced by:

- 1) Even though health care centers that are due for improvements have not yet had renovations to bring them up to even minimal standards, the staff at Kuntaur, for instance, admitted 253 new prenatal patients in May 1978 for a total of 465 visits, 276 new infant welfare patients for a total 689 visits, and did 20 deliveries in what can be considered an extremely limited facility.
- 2) The RVH clinic in family planning has shown a consistent increase in utilization and clinic sessions continue to be added.
- 3) The staff at Mansa Konko which, in addition to a full range of services on-site, trek to seven different centers each two weeks to keep up with the demand for MCH/FP services in their area.

The work activity of the MCH mobile teams can be best described by following a typical workday. Around 8:00 a.m., a team of ten persons starts out: a driver, a Sister (head of the team), a senior midwife, two community health nurses, and five auxiliary nurses. They head towards a village with a sub-dispensary (an empty facility built by the community). Their equipment consists of doses of vaccines (BCG, DT, tetanustoxoid, measles), a trunk full of cards and ledgers, another one with drugs and medical equipment, as well as visual aids for health education. The village is reached about 10:00 a.m. Some 50 women with an infant and 30 pregnant women will be waiting, but eventually some 200 infants and 100 pregnant women will be seen. The mothers are gathered for a short health education talk. Babies are seen and weights are recorded, health is assessed and appropriate immunizations or medicines are given. Pregnant women have weight and blood pressure recorded, their abdomens examined and advice is given by the midwife. All pregnant women receive two injections of tetanus toxoid. Cards and records are well kept and a register allows for easy retrieval of patient information.

Even so, statistics from the clinic services are difficult to compile since each clinic maintains their own records and these are then sent monthly to a central office in the MOH, but do not come to the Project office.

Project Output #3: There has been a continuation rate

of 50% among FP acceptors.

This figure is difficult to document other than at the RVH clinic. There the Project staff has recently reviewed all records and found that currently some 55% of their patients have continued to use contraception for one year or more. Data from extension centers was too fragmented to even attempt to estimate rates.

Project Output #4: There have been 20,000 people taught about environmental health and malnutrition.

Specific records are not available to document this figure, but since each clinic site does conscientiously plan for and present short health talks prior to prenatal and child welfare clinics, it can be extrapolated from clinic records that a minimum of 20,000 people, and probably more, were exposed to such teaching.

At Kuntaur for instance, the team was told of the plan for talks to be given that week; even while the team visited the community health nurse left to give a requested talk in a nearby village. This clinic alone presented health talks to approximately all of the 1,154 patients who attended either the prenatal or child welfare clinics during the month of May 1978. Comparable activity is underway at Kerawan as well. Mansa Konko clinics, with the seven sites served by the trekking teams, would reach an even larger group of people with health education activities.

Unfortunately however, one has to speculate as to the ultimate effectiveness of such talks in the face of the almost insurmountable obstacles that face people in changing their practices as they relate to environmental health and nutrition. Of particular concern to the evaluation team and the UCSC Project staff is the poor physical condition of the facility at Kuntaur. We suggest that the government consider replacing the facility on a priority basis to make it an acceptable site in which to teach about environmental health.

Project Output #5: The transportation, communication, and supply systems are coordinated.

Transportation and supply between Banjul and Manso Konko appeared reasonably well coordinated. A good road exists and travel between the two points is frequent. Once beyond that point, however, roads become less accessible and supply systems seem to be less sure. Currently nursing Sisters and staff midwives are expected to come to Banjul on a regular basis to pick up their supplies. Medicines are sent out quarterly. Supplies are often in short supply and sometimes only partial treatment can be

given; i.e., seven vitamins pills and/or seven iron pills until the next scheduled prenatal visit.

Supplies appeared to be adequate at Manso Konko, but everything appeared to be in short supply at Kuntaur. Since there can be no charge for any of the services, their supplies are totally dependent on government purchase and other donor input.

Project Output #6: Twenty-four TBAs have been trained and utilized in the improved system.

This has not been accomplished to date. Originally it was decided that the School of Nursing would be given this responsibility since they prepare nurse-midwives. However, they have not felt that they have the time to take away from the pressure of running the schools of nursing and midwifery to give time to training TBAs. At the moment both Dr. Samba of the MOH and the staff of UNICEF are pressing to have this training started. Project staff has been willing to assist in this effort, but have not been free to take major responsibility. Some on-the-job training however, has taken place at the center at Kuntaur under the supervision of several of the Santa Cruz graduates.

Project Output #7: Developed health education methods and materials have been refined and adapted (when necessary) to each of the expanded areas.

Techniques of Health Education is part of the curriculum of the Community Health Nursing program. Students are required to make posters and graduates are provided construction paper, crayons, etc. to use when posted. The team saw a number of these, both in the school itself and at Kuntaur, stressing the principles of good nutrition. They were somewhat crude but accurate and pertinent.

Project Output #8: Nine health workers have been trained for three months in FP theory and techniques (3 per year):

This objective has been met. (See Appendix E). Occasionally there have been problems in posting the people properly since it appears that posting has been the responsibility of the Matron at RVH and she has insisted that the necessary time on "night duty" be met if that was owing. However, the Project staff has been effective in insisting that people be posted appropriately, or at least where they can use their training. With the anticipated changes in administrative responsibility, it is probable that Mrs. M'Boge, the MCH Senior Nursing Attendant, will assume more responsibility for the posting and can assure that people are placed

where they can more fully utilize their training.

Project Output #9: Thirty-two nurse auxiliaries have been trained for 18 months in FP.

This training takes place in the School for Community Health Nurses at Manso Konko. The training is much broader than purely FP and includes nutrition, public health, midwifery, nursing skills, health education.

One class has completed the 18 month training program; 16 people completed the course work, one did not take the exam. An additional 18 are now in the program and will finish in September 1979. Thus, 34 Community Health Nurses have been trained by the Project.

This group is seen by the MOH at the basic primary health workers in the field and Dr. Samba urges that enrollment be doubled immediately.

Project Output #10: Fifteen day-nursery workers have been trained for one year in outreach education.

Day-nurseries are under the direction of the Ministry of Economic Planning and Industrial Development. In addition to caring for children they also served as a focal point for the distribution of food supplies by Catholic Relief. Because of problems in finding suitable places for food storage prior to distribution, Catholic Relief stopped making food available and the nurseries closed soon after. Day-nurseries are seen as a necessary part of health care and efforts are underway to have them reopened. It is anticipated that workers in these nurseries would then be given training in FP outreach.

Project Output #11: Forty-eight TBAs have been trained in outreach education.

This has been addressed in Project Objective #6.

Project Output #12: Twenty-four village leaders have been trained for one year in outreach.

A program to train volunteers to work in the villages was envisioned and one such volunteer was trained. Once the training was completed the volunteer demanded a salary that was not forthcoming. Rather than perpetuate a program that started out with so much controversy, the activity was halted and there are no plans at this time to continue.

Project Output #13: Forty-five health center staff members have been trained for one year of in-service education (15 per center); and

Project Output #14: Twenty-four area-council-paid nurse auxiliaries have been trained for six months of OTJ training.

These objectives are difficult to evaluate as stated. It appears that Manso Konko has actively worked at developing training for those staff assisting in the Health Center and the trekking teams that go out into the seven dispensaries within the District. This training has included all levels -- nurses, nurse-midwives, area-council nurses, etc. Estimates are that at least 20 to 24 people have received both theory and on-the-job clinical supervision. In addition, every two weeks on a regular basis there is an on-going in-service training program for all staff. Subjects included such topics as problems in pregnancy, child care, nutrition, and family planning.

In addition, six family planning auxiliaries have been trained on-the-job to assist with the FP clinics in RVH. They were observed setting up clinic, handling sterile equipment, record-keeping and taking blood pressures. It seems they can also teach breast examination, can counsel family planning patients and take internal histories.

Mrs. M'Boge trained five area-council nurses once a week at Brikama for three months in nutrition, general hygiene, and record keeping.

Other training has included:

- 1) 20 Health inspectors have received lectures in MCH/FP and nutrition as part of the curriculum in the School of Public Health during 1977/78.
- 2) 16 Nursing students in the School of Nursing have had lectures in family planning 1977/78.
- 3) 13 Nurse-midwifery students have had lectures on family planning and child health in 1977/78.

Project Output #15: The staff members of four health centers have attended a two-day orientation program twice a year.

This program was altered from that originally envisioned. Instead, 16 nurses and nurse-midwives attended a six day "polyvalent" nurse practitioner seminar that was offered in the fall of 1976.

In addition, a pediatric health assessment course was developed and taught jointly by Paul Wilson, MD and Norma Wilson, PNP, UCSC in the spring of 1978 to five dresser-dispensers and midwives. Another such course

will be offered to six more candidates in July of 1978.

There is a good possibility that an additional course will be made available in the fall of 1978. This is a four week course of classroom instruction, work assignments and supervised clinical practice. This program was specifically requested by The Gambian Government.

The next pediatric health assessment course will also include some sessions including management by the MCH Senior Nursing Attendant.

Project Output #16: Four nurse midwives have attended a FP practitioner course in FY 76, two in FY 77, and two in FY 78.

This has been answered in #8.

Project Output #17: There have been 15 graduates of a training of trainers program.

In 1975, in Banjul, two technicians from Santa Cruz and the Field Coordinator did a two week training of trainers program for 15 nursing school graduates which was a replica of the program offered at Santa Cruz.

Project Output #18: There is an effective record system for MCH/FP patients in use in each improved health facility.

The Project staff has worked hard with their counterparts in this effort. However, much remains to be done since it has been difficult to persuade people to give up old ways of managing the record system. There is an effort made to have each patient maintain their own records so that they can move about the country and still keep immunizations up-to-date, etc. While record and reporting forms do appear to be standardized for the country, records are not kept in files but in boxes, folders, etc. and frequently are lost. All examinations, laboratory findings and treatment regimes are laboriously recopied by hand in three places -- patients own records, patients record that stays in the clinic, and in a log book. Consequently many of the record forms are very incomplete - understandable when 50 to 100 people come for clinic and no clerical staff is available for recording, filing, etc.

Project Output #19: There is a functioning system of clinical data collection and analysis in the country for data emanating from all improved health facilities.

Standardized recording forms have been developed for

health centers. Data are forwarded monthly to an office within the MOH charged with compiling such data. All data is hand tabulated. With the WHO assisted census of 1973, progress is being made in monitoring trends within the health care system.

Project Output #20: The MOH has assigned at least four administrative level physicians with advanced training in MCH/FP to supervise five areas.

- 1) Dr. Samba has been appointed Acting Chief Medical Officer and is responsible for the overall supervision of all preventive health services. While he has been trained, and previously worked, as a surgeon, he impressed the team with his understanding of the need for preventive health services and the problems he faces in implementing needed services. The team, along with Project staff, was impressed with his decisiveness in initiating change.
- 2) Dr. Ann Auchett is the designated medical officer for child health. She is currently engaged in clinical practice in pediatrics/child health.
- 3) Dr. Hattie N'Gie is the Medical Officer in charge of obstetrics but the team could get no information about any advanced MCH/FP training.
- 4) Dr. Prerei is the Assistant to Dr. Samba and is responsible for the overall public health efforts.

Until the rather recent retirement of the former Chief Medical Officer, there has been rather uneven support for the Project activities. With the recent changes in MOH leadership it seems assured that every effort will be made to take advantage of opportunities for increased MCH/FP training by those within the medical group.

Project Output #21: The supervision of middle level MCH/FP personnel and services has been made the responsibility of one nurse-midwife who is assigned to the Office of the Director of MCH at the national level.

Mrs. Bertha M'Boge, has received considerable out-of-country preparation for this position including training at UCSC. There are plans underway to provide her with skills in management training before the end of the project which will add to her ability to effectively supervise.

Project Output #22: The supervision of lower level MCH/FP personnel and services is the responsibility of nursing Sisters assigned at the health centers.

This supervision appears to be well understood and accepted. In each of the centers visited, roles seem well defined.

Project Output #23: The supervision of TBAs is the responsibility of nurse auxiliaries.

The team did not observe this activity, nor does it appear to be a part of the project responsibility at this time.

IV. FINDINGS IN BENIN

A. ACHIEVEMENT OF PROJECT PURPOSE

The following goal indicators were used to help determine the achievement of project purposes in Benin:

1. Purpose: At least two additional areas have effective MCH/FP services integrated into the existing health delivery system.

Findings: Ten centers with improved MCH/FP services are now in operation, with two more projected by the end of 1978. Two such centers were visited: Bohicon and Djougou. Both centers offer a full range of services including prenatal and postnatal consultations, child welfare services and family planning. Bohicon is staffed by one sage-femme trained at Santa Cruz who has already trained another sage-femme to provide the full range of FP services. Djougou has already been in operation with a full range of MCH/FP services despite the fact that the community orientation program was just taking place after delays due to problems of transportation. Components of health education were obvious in health centers: health education materials decorated the walls and schedules of health talks were available.

2. Purpose: The pilot area is functioning effectively as a training center.

Findings: The PMI in Cotonou is an incredibly busy clinic offering a full range of well and sick child care, family planning instruction, health education and nutrition counseling. An organized program of health education talks (causeries) is carried out by staff who are trained by graduates of the Santa Cruz program in the conduct of "causeries" i.e., development of specific objectives for the talk, presentation of the material, and eliciting "feedback" from the audience. One of these was observed and the team was very impressed with the relevance of the content, the method of presentation, and the extent of audience participation. A demonstration kitchen is set up at the Center for nutrition teaching. Unfortunately the team was not able to be present for a demonstration, but staff did conduct a tour of the kitchen and was able to review the general content of their teaching. Overall, the center demonstrates high standards of care that is essential for a training site.

The Maternite is equally busy, averaging about 1000

deliveries a month. FP services are provided by three sage-femmes, two of whom were trained in Santa Cruz and another trained on the job by the UCSC graduates. This staff will assist in the conduct of the forthcoming three month "in-country" training program that has heretofore been given in Santa Cruz. One member of this staff was the team leader for the two week community sensitization session observed in Djougou. Students from the Ecole d'infirmiers/ieres and the Ecole de Sage-femmes also receive clinical training in MCH/FP within this center. Thus, the pilot site functions in training in the following ways:

- 1) staff from other centers come to learn,
- 2) staff from Cotonou centers go out to teach, and
- 3) staff trained on-the-job are then sent out to existing centers.

3. Purpose: Host country personnel are fully prepared academically (trained), functionally (supervisory and logistics systems), and financially (funds for future operation of centers and continues training budgeted by the governments), to take over the activities begun under the project.

Findings: Academically there is a core group of top level physicians, sage-femmes and nurses who are well trained, are functioning effectively within the appropriate settings and with only minimal supervision and consultation as backstop. Another level, also well trained, are functioning effectively within the appropriate settings and with only minimal supervision and consultation. Another level, both those trained out-of-country, are functioning appropriately in the clinical settings.

Functionally, a supervisory network is planned for, the people with proved capabilities have been selected and trained, and some are beginning to function in their designated roles. UCSC staff are even now phasing out to allow host country personnel to assume their designated roles. A system is in place for requisitioning and receiving supplies that capitalizes on the good cooperation between government agencies with respect to transportation. The team feels however, that whether a smooth supply of basic commodities continues when UCSC personnel leaves is an open question.

Financially the country appears to feel they can continue to support the projects. To date they have taken over a number of the costs -- secretarial, office space, vehicle maintenance, utilities and some training costs. While it was impossible to determine whether, in fact, a national plan for health services exists and what the budget is within the GOB, there were assurances at each level, including the Minister of Health, that this project is important, that they agree that health of mothers and children is a priority, that family planning should be a part of maternal health, that improved nutrition and immunization are equally important, and that the government will support these.

Time and scheduling did not permit interviewing representatives from other donor agencies, but the team saw evidence of other donor input that will continue, i.e., contraceptive supplies and teaching materials from CNBPF (IPPF), vaccines and laboratory training from WHO, supplies for TBA's, molyettes for village workers, etc. from UNICEF. Catholic Relief also makes available various kinds of help. Thus with some planning and coordination, a considerable amount of help can be expected from other donor agencies concerned with MCH/FP.

B. ACHIEVEMENT OF PROJECT OBJECTIVES

Project Output #1: A system of standard records has been established to determine prevalent diseases, state of malnutrition, FP acceptors, etc.

Standard record forms have been developed and are in operation. These include: (1) "carnet de sante" (health card) that is purchased by each mother (30 CFA) and kept by her to record all of her child's immunizations--weights are graphed on an Ilesha weight grid, illnesses and treatments are recorded; (2) an individual prenatal record that is kept up-to-date by staff for the mother to carry with her to each visit and to present at the time of delivery; (3) standard family planning record, and (4) standard prenatal and postnatal record form; (5) standard labor and delivery record; and (6) standard statistical reporting forms.

These forms have been developed by UCSC and Beninoise staff. An official letter by the GOB to the UCSC project is now requesting that these forms be made available for use throughout all health centers in the country, rather than limited to the extension sites. These records will eventually provide a basis for minority problem areas and

progress in both health care and health delivery.

Project Output #2: There has been an increase in utilization of MCH/FP services at the improved health centers which has resulted in a decrease in prenatal, neonatal and infant mortality.

There is no data to document that increased utilization at the improved health centers has resulted in decreases in mortality since there is no baseline data to use as a comparison. It seems relatively easy to document increased utilization of MCH services since most clinics can show a steady increase in prenatal consultations, numbers of deliveries conducted, and child welfare consultations. However statistics on the utilization of family planning services are somewhat less clear. Shifts in staffing to allow time off for training, maternity leave, etc., have left some of the centers short staffed of people who could provide the full range of FP services; thus some centers indicate fluctuating patterns of new patients. Many other factors may also intervene; i.e., the initial intake of those who were motivated to become family planning users increased utilization rates in some centers, but as this initial group was served the less motivated acceptors will doubtless require more time and effort to be reached. However, it appears that family planning is now being increasingly presented as a health option, people do find the methods presented acceptable, and there is a move toward the use of contraception for child spacing.

A direct relationship between utilization of MCH/FP services and lowered mortality will have to await the development of the GOB's ability to implement a system of collecting and analyzing vital statistics on a national basis. It will also have to wait for enough time for people to go through several cycles of childbearing-child spacing to see trends.

One possible deterrent to acceptance of FP could be the GOB's requirement that each woman must have her husband's written consent for her to receive services. On the other hand, there appears to be a growing acceptance by the men of condoms as a method they are willing to use.

Project Output #3: There is a 50% continuation rate among FP acceptors.

This precise a computation is currently impossible to

even estimate. The IUD remains a very popular method. However, many of those, particularly in the more remote areas, find transportation back to the centers a problem and then often tend not to return unless they have a specific problem. Also, there is no system of using a "tickler" file that allows the staff to know immediately when people have missed follow-up appointments. It seems that staff does try to review records on a regular basis, but thus far most of the centers have no mechanism for trying to locate those who fail to return to find out whether they are continuing with the method. In several areas, as for example Natitango, there are village workers using mobylettes who work in the villages to teach, motivate and to follow-up on problems. When this kind of activity becomes more widespread, the statistics on continuation rates should be somewhat easier to determine. It is also possible to buy the oral contraceptive in the local pharmacy without a prescription; therefore it may be that women continue to use the method but do not necessarily return to the center for supplies, particularly if it involves a special trip for a particular clinic session.

Even in the Cotonou Maternite which averages some ten new FP acceptors a week, follow-up is difficult because so many of the women who deliver in the Center and receive their initial family planning there may prefer to utilize a center in their more immediate vicinity for continuing care.

Although data for continuation rates were not available, the percentage of women who returned to the FP clinic at the PMI and Maternite for their first follow-up visit was calculated. Approximately 65% of a random sample of 80 new acceptors in 1977 returned to the same clinic within three months of the scheduled follow-up appointment.

Project Output #4: There have been 20,000 people taught about environmental health and malnutrition.

This teaching is done mainly through the organized program of "causeries" conducted prior to every Child Health clinic and before every Prenatal clinic in all centers. The team observed "Causerie" on the care of wounds that was given at the PMI in Cotonou. Approximately 80 mothers were there that morning, each one very receptive to the presentation. This center alone registers 10,000 new patients a year. A comparable number register for prenatal care (deliveries average 12,000 per year). Thus it seems reasonable to assume that 20,000 people

taught about environmental health and malnutrition is a minimum estimate of the number of people who are reached in any one year with health education efforts at the Cotonou centers alone. In addition, extrapolating from the number of clinic visits, there have been at least 20,000 exposures to health talks in the MCH extension sites.

Project Output #5: The transportation, communication, and supply systems are coordinated.

The mechanism for this has been developed cooperatively with UCSC and the Ministry of Health. Regular restocking occurs twice yearly to all centers. All nurses and nurse-midwives, however, are taught to take a regular inventory, have a standard requisition form that is forwarded to the Director of Preventive Medicine for approval and then forwarded to UCSC for filling. Supplies are sent out by the next available means of transportation. This system seems to be working very effectively at this time. Requisition forms are dated at each location so that the time required for communication from Center back to Center can be monitored. Both the current Director of Preventive Medicine and the Beninoise MCH coordinator appear to be concerned that this system remain in effect.

Project Output #6: Sixty TBA's have been trained and utilized in the improved system.

Twenty-four TBA's have been trained by the Office of Health Education with input by the UCSC staff. This has been done in three three-week sessions to establish "brigades", i.e. a securiste (dresser-first aid) and a TBA to work at the village level. The UCSC staff furnished the Office of Health Education with training materials, consultation on curriculum, and provided simple, basic equipment for each of the trainees; i.e., (two hemostats, scissors, for the TBA). Additional training sessions are in the planning stages.

Project Output #7: Developed health education methods and materials have been refined and adapted (when necessary) to each of the expanded areas.

A two week program of community orientation to the concepts of FP as part of the MCH program has been developed for presentation by the Beninoise nurse-midwives in consultation with their counterparts on the UCSC staff. The MCH division and the Office of Health Education have collaborated

in this presentation. An extensive training manual has been developed. It contains factual material relative to human reproduction and contraception as well as rather sophisticated conceptual material presented through a variety of means -- communication games, role playing films, lectures, exercises, individual counseling, etc. This program is given at the Center just prior to opening the full range of MCH/FP services to prepare the Center staff and the local community, to sensitize and inform them about FP. It was originally planned for 35 participants, but local community interest has been such that up 80 or 100 people get some, or all of the training in each community. Participants take the entire manual home -- a ripple effect that must multiply the impact of each program beyond measure.

The evaluation team observed one complete session and talked with some of those who attended. It is obvious that the presentations by the Beninoise staff were very well done, the audience responses were animated, the questions were thoughtful and the interest unflagging. Of particular interest was the way in which Mme. Quendo, the MCH coordinator, handled the presentations and discussions of reasonably sophisticated conceptual material related to decision-making.

The team was also able to observe audience reaction to a Nigerian family planning film "My the Children of My Brother" at an unannounced impromptu showing. Interest was high, discussion and comment animated and involved.

It would seem that the staff has developed considerable competency in using health education methods and materials that are relevant and well received.

Additionally the UCSC has furnished two movie projectors, one overhead projector, one slide projector, slides, films and a flannelgraph to be used for A-V presentations.

Project Output #8: There have been 79 midwives trained in MCH/FP (59 in-country, and out-of-country).

- a. Twenty nurse-midwives and nurses have completed their training at UCSC.
- b. Forty-five nurse-midwives and nurses have completed in-country training by the UCSC trained group and project staff; an additional five are currently in training.

- c. Eight nurse-midwives and nurses will begin a three month in-country training program conducted entirely by the GOB staff that will be a duplicate of the Santa Cruz program. This training will begin in July; UCSC Project staff currently on-site with others from Santa Cruz will be available for consultation but not for training.

With the completion of the three month training program, a total of 78 nurse and nurse-midwives will have been trained to provide FP, health education, and MCH, and nutrition counseling services.

Project Output #9: There have been six doctors trained in MCH/FP (five in-country, and one out-of-country).

- a. Dr. Veronique Lawson -- Designated Director MCH, trained at UCSC, MCH administration.
- b. Dr. Joseph Kodja, Director Preventive Medicine -- four weeks MCH administration, Santa Cruz.
- c. Dr. Assini, Director, Maternite, Cotonou -- training at Johns Hopkins Hospital in fertility, infertility and laparoscopy.
- d. Dr. Alihonou, Director, Obstetrics-Gynecology, School of Medicine and Ecole de Sage-Femmes-- to receive training at Johns Hopkins later in 1978.

Additionally, several recent Beninoise medical school graduates have received special FP training from project staff.

Project Output #10: There has been one senior nurse-midwife trained in MCH/FP (out-of-country).

- a. Mme. Lucie Oeundo is the Designated National Midlevel MCH Coordinator for training of health personnel.
- b. Mme. Clarice Goure was trained at Santa Cruz and is on the staff of the Schools of Nursing and Nurse-midwifery where she is responsible for teaching family planning to students of medicine, nursing, and midwifery.

These two sage-femmes are included in the 20 who were trained out-of-country as described in #8.

Project Output #11: There have been 24 nurses trained in MCH/FP (in-country).

This group is represented in the total of nurses and midwives trained in-country as described in #8.

Project Output #12: There has been one assistant social worker trained in MCH/FP skills (in-country).

One social worker was trained at Santa Cruz and now works in a Social Center in Cotonou in counseling patients and teaching students to counsel in family planning.

Project Output #13: There have been 80 medical students from the University Medical School trained in MCH/FP techniques.

All medical students are now being rotated through the content and clinical practice component of MCH/FP. A graduate of the Santa Cruz program is responsible for the teaching and supervision in this area. There are approximately 30 students in each class of the medical school. Thus more than 80 medical students have received training in MCH/FP.

Project Output #14: There have been 60 TBAs trained in outreach education.

This has been addressed in Project Objective #6.

Project Output #15: There is an effective record system for MCH/FP patients in use in each improved health facility.

This has been addressed in Project Objective #1.

Project Output #16: There is a functioning system of clinical data collection and analysis in the country for data emanating from all improved health facilities.

Problems in this area have been discussed in Project Objective #1. At the moment, data from each of the local MCH/FP centers is recorded by the staff on forms developed by the UCSC Project staff in cooperation with the Beninoise staff. This data is forwarded monthly to the Director of Preventive Medicine who reviews the data and then forwards it to the department within the Ministry of Health responsible for the collection and analysis of such data. At the present, a duplicate is sent to the UCSC Project office where the data are tabulated and reviewed.

Project Output #17: The MOH has assigned at least four administrative level physicians with advanced training in MCH/FP/NUT to supervise the four areas.

- a. Dr. Assini (with additional training at Johns Hopkins Hospital) is responsible for the Maternite, Cotonou.
- b. Dr. Alihonou (additional training scheduled at Johns Hopkins Hospital) is responsible for the teaching and supervision in these areas in the School of Medicine and the School of Midwifery.
- c. Dr. Veronique Lawson (trained at Santa Cruz) is the Designated National Director of MCH services. Currently she is Medical Director of the PMI, Cotonou.
- d. Dr. Joseph Kodja (trained at Santa Cruz) Director of Preventive Medicine is generally responsible for all activity related to MCH/FP/NUT.

D R A F T M E M O R A N D U M

TO : See Distribution

FROM : AFR/RA, Paul A. Struharik

SUBJECT: Assessment of the Maternal and Child Health Extension Project
(MCHE), 698-0358

An assessment of the subject project will be conducted in late March and early April to determine the extent to which it has achieved the intended objectives (set forth below by country) and to which the host countries will assume responsibility for activities begun under the project. The evaluation will be conducted by personnel from the Office of Regional Affairs, Bureau for Africa, assisted by the A.I.D. officers in the Gambia and Benin. A.I.D. officers in The Gambia and Benin are requested to discuss this scope with UCSC project personnel and assist in the assessment. Tentative plans are to review activities in Benin from March 31 through April 6, 1978, and in The Gambia from April 7 through April 13, 1978. Exact ETAs will follow.

Scope of Assessment

The personnel will visit the pilot and at least two expansion areas in each country, consult available records, and conduct interviews with appropriate host government officials to ascertain the following:

1. That at least two additional areas in each country have effective MCH/FP services integrated into the existing health delivery system.
2. That the pilot area in each country is functioning effectively as a training center.
3. That host country personnel are fully prepared academically (trained), functionally (supervisory and logistics systems), and financially (funds for future operation of centers and continued training budgeted by the governments), to take over the activities begun under the project.

In order to ascertain the above, the team will determine if significant progress both in quality and quantity, has been made toward the following end of project objectives:

BENIN

1. A system of standard records has been established to determine prevalent diseases, state of malnutrition, FP accepters, etc. This will be determined from examination of health facility records.
2. There has been an increase in utilization of MCH/FP services at the improved health centers which has resulted in a decrease in pre-natal, neo-natal and infant mortality (from health facility records).
3. There is a 50% continuation rate among FP accepters - (from health facility records).
4. There have been 20,000 people taught about environmental health and malnutrition (from training records).
5. The transportation, communication, and supply systems are coordinated. (from supply records of the frequency of requests for medical supplies, delivery time, and on-site storage and distribution systems).
6. Sixty TBA's have been trained and utilized in the improved system (from training records).
7. Developed health education methods and materials have been refined and adapted (when necessary) to each of the expanded areas (by examining developed methods and materials).

8. There have been 79 midwives trained in MCH/FP (59 in-country and 20 out-of-country) - (from training records).
9. There have been 6 doctors trained in MCH/FP (5 in-country and 1 out-of-country) - (from training records)
10. There has been 1 senior level nurse/midwife trained in MCH/FP (out-of-country) - (from training records).
11. There have been 24 nurses trained in MCH/FP (in-country) - (from training records).
12. There has been 1 assistant social worker training in MCH/FP skills (in-country) - (from training records)
13. There have been 80 medical students from the University Medical School trained in MCH/FP techniques (in-country) - (from training records).
14. There have been 60 TBAs trained in outreach education (from training records).
15. There is an effective record system for MCH/FP patients in use in each improved health facility -(from observation of record system)
16. There is a functioning system of clinical data collection and analysis in the country for data emanating from all improved health facilities (from observation of written data and determination that the improved facilities collect and forward the data to the MOH and that an office in the MOH records, analyzes, and utilizes the data).
17. The MOH has assigned at least 4 administrative level physicians with advanced training in MCH/FP/NUT to supervise the 4 areas (from observation and supervisory records).

THE GAMBIA

1. A profile of local health practices, utilization rates, public knowledge of existing preventive services and survey of prevalent diseases in the expansion areas was conducted prior to the start of other project activities. (this will be determined from health facility records and contractor surveys).
2. There has been an increase in utilization of MCH/FP services at the improved health centers which has resulted in a decrease in pre-natal, neo-natal and infant mortality (from health facility records).
3. There has been a 50% continuation rate among FP accepters (from health facility records).
4. There have been 20,000/^{people}taught about environmental health and malnutrition (from training records).
5. The transportation, communication, and supply systems are coordinated (from supply records of the frequency of requests for medical supplies, delivery time, and on site storage and distribution system).
6. Twenty-four TBAs have been trained and utilized in the improved system (from training records).
7. Developed health education methods and materials have been refined and adapted (when necessary) to each of the expanded areas (by examining developed methods and materials).
8. Nine health workers have been trained for 3 months in FP theory and techniques (3 per year) - from training records.
9. Thirty-two nurse auxiliaries have been trained for 18 months in FP (from training records).

10. Fifteen day nursery workers have been trained for one year in outreach education (5 per year) - (from training records).
11. Forty-eight TBAs have been trained in outreach education (16 per center) - (from training records).
12. Twenty-four village leaders have been trained for 1 year in outreach education (8 per center) - (from training records).
13. Forty-five health center staff members have been trained for 1 year of in-service education (15 per center) - (from training records).
14. Twenty-four area-council-paid nurse auxiliaries have been trained for 6 months of OTJ training (8 per year) - (from training records).
15. The staff members of 4 health centers have attended a 2-day orientation program twice a year - (from training records).
16. Four nurse midwives have attended a FP practitioner course in FY 76, 2 in FY 77, and 2 in FY 78. (from training records).
17. There have been 15 graduates of a training of trainers program - (from training records).
18. There is an effective record system for MCH/FP patients in use in each improved health facility (from observation of record system).
19. There is a functioning system of clinical data collection and analysis in the country for data emanating from all improved health facilities. (from observation of written data and determination that the improved facilities collect and forward the data to the MOH and that an office in the MOH records, analyzes, and utilizes the data.
20. The MOH has assigned at least 4 administrative level physicians with advanced training in MCH/FP to supervise 5 areas (from observation and supervisory records).

21. The supervision of middle level MCH/FP personnel and services has been made the responsibility of one nurse/midwife who is assigned to the office of the Director of MCH at the national level (from observation and supervisory records).
22. The supervision of lower level MCH/FP personnel and services is the responsibility of nursing sisters assigned at the health centers (from observation and supervisory records).
23. The supervision of TBAs is the responsibility of nurse auxiliaries (from observation and supervisory records).

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Table 1
 QUANTITIES OF TRAINEES IN BENIN
 OBJECTIVES AND ACHIEVEMENTS

<u>Obj. No.</u>		<u>Objective</u>	<u>Achievement</u>
8	NM's trained in MCH/FP:		
	Out-of-country	20	20
	In-country	59	} 30/year (a)
11	Nurses (student) trained in-country	24	
10	Senior level NM's trained in MCH/FP	1	2
12	Asst. social workers trained in MCH/FP (in-country)	1	4
13	Med. students from University Med. School trained in MCH/FP (in country).	80	30/year
6 & 14	TBA trained in outreach education and utilized in the improved system	60	24(b.)
9	Doctors trained in MCH/FP:		
	In-country	5	0
	Out-of-country	1	4
17	Administrative level physicians with advanced training in MCH/FP not assigned to supervise 4 areas	4	4

- a. 5 more are expected to be trained by the close of 1978.
 b. Target is expected to be reached by the close of 1979
 utilizing one Santa Cruz graduate.

APPENDIX C

Distribution of MCH/FP trainees by place of work
and origin of training, Benin, June 1978

Location	Nurse-midwives, Santa Cruz trainees	Nurse-midwives trained by Santa Cruz trainees	Social worker, S.C. trainee	Social worker trained by S.C. trainee
Cotonou, PMI	1 ^{a,d}	3	-	1
Cotonou, Maternité	2	1	-	-
Cotonou School of Midwifery	2 ^b	-	-	-
Cotonou Social Center	-	-	1	-
Abomey-Calary	1	-	-	-
Porto-Novo	2	-	-	-
Adjarra	1	1	-	-
Bohican	1	1	-	-
Locosa	1	-	-	1
Natitingo	1	1	-	1
Djougou	-	1	-	-
Akpakpa	-	-	1	-
Dpt of Health Educat.	1 ^{c,d}	-	-	-
National Center of FP	1	-	-	-
Ouidha	2	-	-	-
Parakou	1	1	-	1
Other: Not yet allocated	2			
Left the country	1			
Total	20	9	2	4

a-Gave on the job training to approximately 30 nurses or midwives

b-Trained approximately 60 nurses or midwives a year

c-Assisted in training 24 TBAs

d-The Santa Cruz trainee in the PMI, Cotonou and in the Dpt of Health Education have together trained a minimum of 200 community sensitizers since March 1977

Family Planning Data in the RVH clinic, Banjul, GambiaTABLE C.1 Six months and one year continuation rates by method of contraception

	New acceptors in Oct. 1977		Six months later:		
			Continued with same method	Changed method	Dropped out
Pill	10	(34%)	8 (80%)	-	2 (20%)
IUD	9	(31%)	7 (78%)	-	2 (22%)
Depo-provera	8	(28%)	4 (50%)	2 (25%)	2 (25%)
Condom/foam	2	(7%)	-	-	2 (100%)
All methods	29	(100%)	19 (65%)	2 (7%)	8 (28%)

	New acceptors in April 1977		One year later		
			Continued with same method	Changed method	Dropped out
Pill	8	(33%)	5 (62%)	-	3 (38%)
IUD	11	(46%)	8 (73%)	-	3 (27%)
Depo-provera	5	(21%)	3 (60%)	2 (40%)	-
Condom/foam	-		-	-	-
All methods	24	(100%)	16 (67%)	2 (8%)	6 (25%)

TABLE C.2 Return rate of first follow-up by method

	Random sample of new acceptors, 1977	Returned for their first follow-up within 3 months of their scheduled appointment?	
		YES	NO
		Pill	28 (45%)
IUD	17 (27%)	13 (76%)	4 (24%)
Depo-provera	16 (26%)	15 (94%)	1 (6%)
Condom/Foam	1 (2%)	1 (100%)	-
All methods	62 (100%)	51 (82%)	11 (18%)

APPENDIX E

NURSE MIDWIVES TRAINING SPECIAL MCH/FP
COURSE - OUT OF COUNTRY - THE GAMBIA

<u>NAME</u>	<u>WHERE TRAINED</u>	<u>WHERE WORKING</u>
Adama Dabo	Nigeria	G. F. PA
Bertha M'Boge	Santa Cruz	MCH Project
Michelle Savage	Santa Cruz	MCH Project (School)
Marion Rollings	Santa Cruz	Mansa Konko MCH Centre
Angelic Stafford	Santa Cruz	Kuntaur Health Centre
Marion N'Dow	Santa Cruz	RVH (Medical Wd)
Anneta Davies	Santa Cruz	RVH (nights)
Ellen Aabee	Santa Cruz	Going to Kerewan (now on leave)
Jorjor Cham-Kinteh	Santa Cruz	Pediatric Unit RVH
Anna Batchilly	Downstate	Now Street MCH Clinic
Marie Shyngle	Downstate	Maternity Ward RVH
Aminata Jobe	Maherry	Studying in U.S.
Mary Dunn	Maherry	Maternity leave
Fatcumatta Owens	Downstate	Now at Downstate New York DMC

PEOPLE INTERVIEWED
AND PLACES VISITED

BENIN

PEOPLE INTERVIEWED

Dr. Paul WILSON, M.D., Project Medical Director and Field Coordinator, UCSC

Mlle. Emily LEWIS, R.N., M.P.H. Training Coordinator, UCSC

Mlle. Maryan SURMAN, R.N., C.N.M., M.S., Educational Technician III, MCH, UCSC

Mr. Herb WOOD, USAID Officer, Benin

*

Mme. Lucie OUENDO, Sage-femme, Director PMI, Cotonou, Designated National Mid-level MCH Coordinator for training of health personnel.

*

Mme. Bernadette DEHOUE, Sage-femme, Cotonou Maternite

M. Issifou BOURRAIMA, Minister of Health

Dr. Joseph KODJA, Director of Preventive Medicine

*

Mme. Henriette ANOUSSON-GENOU, Sage-femme, Office of Health Education

Dr. Veronique LAWSON, Director PMI, Cotonou, Designated National Coordinator of MCH Services

Mme. Victoire VIHO, Sage-femme, PMI, Cotonou

Dr. Theo, BANKOLE, Director of Public Health

*

Mme. Emilie CODJIA, Sage-femme, Maternite, Bohicon

Dr. GLELE, Chief Medical Officer, District of Djougou

PLACES VISITED

PMI, Cotonou - Tour of facilities, observed Child Welfare Clinic in session; returned to observe scheduled health education talk given to clinic mothers in morning before clinic started.

Maternite, Cotonou - Observed prenatal consultations, talked with sage-femmes concerned family planning, visited postpartum wards and talked with mothers and other nursing staff.

Office of Director, Preventive Medicine.

* Santa Cruz Graduates

Office of Director, Public Health.

Office of Minister of Health.

Project Headquarters, UCSC.

Maternité, Bohicon - Talked with sage-femme and staff, observed some patient activity.

Djougou - Observed entire session of one day of the two-week community training program conducted as preparation for initiation of complete range of MCH/FP services in the Djougou PMI/Maternité.

- Maternité and PMI facilities.

PMI - Protection Maternelle et Infantile

THE GAMBIA

PEOPLE INTERVIEWED

Dr. Paul WILSON, M.D., Sc.D

Mrs. Norma WILSON, R.N., M.S., P.N.P. UCSC Instructor Pediatric Health Assessment Course

Miss Norma BRAINARD, R.N., C.N.M., M.P.H., F.N.P. Technician, UCSC

Miss Beulah JOEL, R.N., M.S., UCSC

*

Mrs. Bertha M'BOGE, Nurse-Midwife, Designated Senior Nursing Superintendent, MCH

Mr. Douglas BROOME, USAID Officer, The Gambia

Dr. Ebou SAMBA, Acting Director, Medical and Health Services, The Gambia

Hon. M.C. JALLOW, M.P., Minister of Health, Labor and Social Welfare, The Gambia

Mr. M. FYE, Permanent Secretary, Ministry of Health, Labor and Social Welfare, The Gambia

Mr. Jerreh DAFFEY, Parliamentary Secretary

*

Sr. Angelique STAFFORD, Nurse-Midwife, Kuntaur Health Center

*

Sr. Michele SAVAGE, Nurse-Midwife, Instructor in Nutrition, Family Planning and Midwifery, School for Community Health Nurses, Nanskonko

Dr. Ann AUKETT, M.D., Medical Officer, MCH
Dr. Agnela FULLER, M.D., Pediatrician, RVH
*
Sr. JoJo Chan-KINTAH, Supervisor of Pediatrics, RVH
Miss Augie MOWCHAN, Peace Corps Volunteer, Nutrition
Dr. JOBARTEH, District Commissioner, Mansokonko
Miss PARTINGTON, Chief Nursing Officer, The Gambia

PLACES VISITED

UCSC Project Headquarters, Banjul.

Rural Health Center, Kuntaur - Reviewed clinic records, toured facilities,
talked with nurse-midwife and community health
nurse.

Mansakonko - Community Health Nursing School - Talked with students; toured
facilities; examined teaching
materials and equipment.

- Maternity Unit - Talked with staff and patients, reviewed records
and patient charts.

- Laboratory and Clinic facility - Examined records, toured
facilities.

Royal Victoria Hospital - Family Planning Clinic

- Pediatrics Unit

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Social Welfare. Republic of the Gambia,1978.
4. Country Development Strategy Statement for the Republic of the
Gambia. USAID/Banjul May 1978
5. Development Assistance Program for the Republic of the Gambia,
USAID/Banjul, April 1977
6. Maternity Care in the World. Report of a joint Study Group of the
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International Confederation of Midwives , Second Edition, 1976
7. A Preliminary Analysis of the 1973 Gambia Rural Health Survey
8. Hilborn, Elizabeth and Williams, Walker. Report of an Evaluation
of the Maternal and Child Health Extension Project in the Gambia
and Dahomey, APHA, May1975
9. Franks, James A and Minnis, Robert L. Maternal and Child Health/
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Republic of Benin, West Africa. First Semi Annual Report
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10. Franks, James A and Minnis, Robert L. Maternal and Child Health/
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