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EVALUATION REPORT

THE MATERNAL AND CHILD HEALTH/FAMILY PLANNING
TRAINING AND RESEARCH CENTER

MEHARRY MEDICAL COLLEGE

NASHVILLE, TENNESSEE

Evaluated in December, 1974

(Final Draft 4/29/75)

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AN EVALUATION OF THE MATERNAL AND CHILD HEALTH/FAMILY PLANNING
TRAINING AND RESEARCH CENTER, MEHARRY MEDICAL COLLEGE*

I. Introduction

A.I.D. and Meharry Medical College, Nashville, Tennessee, entered into a grant agreement 30 June 1971 using Title X funds. The purpose of the grant was to develop integrated maternal and child health/family planning services in selected African countries through a Training and Research Center in MCH/FP at Meharry.

The grantee, representing a group of institutions in Nashville and the surrounding area, was given the primary responsibility for the administration of the grant. The other participating institutions are the Vanderbilt University, Fisk University, Tennessee State University, George Peabody College for Teachers, Scarritt College, and the Family Planning Training Institute of Nashville. A coordinating committee composed of representatives of the participating institutions was to be established by the grantee to coordinate activities and establish policies.

The Center was to provide technical and professional competence which includes the following substantive areas.

Maternal Care (including family planning)

Child Health

Health Education and Community Organization

Social Sciences and Statistics.

Meharry Medical College fostered the construction of the Center on its campus and assigned administrative responsibility for it to the graduate faculty of the Medical College. The Center, however, adopted a system of operations that gives it considerable independence for day-to-day operations and program implementation.

The original grant was in the amount of \$2,231,000. In FY 1973 an additional \$796,000 was obligated bringing the total to \$3,027,000. The grant called for 12 technical specialists (including the Director who is highly skilled in medicine and nutrition), and clerical/administrative personnel including a language professor.

*Evaluated in December, 1974
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The grant is scheduled to terminate June 1975. The results of the review of this evaluation should determine the future role of the Center in A.I.D.'s worldwide population strategy.

II. Purpose of the Evaluation

The purpose of the evaluation is to determine the extent to which the MCH/FP Training and Research Center has developed an institutional capability to develop integrated maternal and child health/family planning services in selected African countries through a Training and Research Center in MCH/FP.

III. Summary of Findings and Recommendations

A. Findings

There are a number of indicators to measure institutional capability. While the following are in no way unique, they do provide a reasonable basis for assessing the strength and capability of the Maternal and Child Health/Family Planning Training and Research Center at Meharry.

1. Institutional Response Capability

The MCH/FP Training and Research Center demonstrates capability in the area of nutrition and to a lesser extent in POP/FP. Its staff capability and curriculum clearly indicate strengths in nutrition and general health areas. The Center's capability in producing a sound program design, research activities and a broad based academic training program in the area of family planning is not its strongest facet. Meharry concurs that improvements could be made in areas of FP program administration, education and research.

2. Capability in Extending its Own Knowledge Base

Research, studies, academic papers, special studies and evaluations in the family planning area are not available in the quantity and quality expected from the number of staff at the Center to support this element of the Center's capability. The Center is doing some work in the nutrition and child feeding area. Its activities in family planning, however, have not as yet taken on a priority status.

3. Capability in Developing Information Systems

The Center has not done very much in developing information systems in family planning or in its other areas of academic interest as

yet. The library facility at the Center is very limited. Other information systems have not been sufficiently developed and/or extended to maintain a professional dialogue with trainees that have returned to their home institutions. The Center has not identified POP/FP as a high priority focus and accordingly has allocated few resources to its development as is determined by the ratio of staff personnel assigned to MCH/Nutrition in comparison to those in the Family Planning training program.

4. Development of Purposeful Linkages and Institutional Networks with Developing Country Institutions

The Center has had some contact with both U.S. and African leaders in the health and family planning areas over the life of the grant. It has taken advantage of opportunities to host a number of visiting delegations and individuals who were in the United States for various reasons. In a recent African visit, Ms. Carol Spencer, Training Program Coordinator for the MCH/FP Center, Meharry Medical College, met health and Family Planning leaders in Swaziland, Lesotho and Nigeria.

The Center's Director and other staff members have visited other African countries and have participated in U.S. conferences with African leaders as a part of their interest in Africa's economic and social development problems.

It is perhaps premature to conclude that the MCH/FP Center has achieved purposeful linkages and institutional networks with developing country institutions as is envisioned in the proposed statement of the grant.

5. Advisory Assistance

The original grant envisioned a capability on the part of the Center to provide advisory assistance to developing countries and USAIDs. While it may be premature to assess this skill, the demand for the Center's services have been limited to date. The several instances in which Center staff were in travel status in Africa have been exceptions and their reception by host Government personnel was favorable and productive. The Center's staff believe they provided useful information to host country counterparts and to professional peers in their African visitations.

6. Research Capability

The Center's capability to design and implement research projects is limited, but growing. Its interest is clearly in the area of nutrition and child care rather than population and family planning. Most of the research undertaken by the Center is lab centered with a limited amount undertaken in the field thus far. The MCH Center has, however, submitted several proposals to A.I.D. which were not approved for implementation.

B. Recommendations

That the MCH/FP Training and Research Center at Meharry be encouraged to pursue nutrition and MCH as its major focus. It may wish to continue to provide family planning information and training insofar as it is in keeping with its institutional objectives.

That the institutional development grant for family planning be scheduled for phase out and provide a no-cost time extension through June 30, 1976 to allow for an orderly transition to other programming instrumentalities, providing that Meharry prepares an adequate work plan covering the period July 1, 1975 - June 30, 1976. The limited achievement of institutional capability of the Center in view of the high expectations for its development as a dynamic FP training and research institute does not augur well for the continuation of the project under its present parameters with Title X funds. The team believes, however, that the Center represents a viable resource for interdisciplinary work in nutrition as well as MCH. To the extent that the Agency has resources to further develop Meharry's capabilities in nutrition, it should be encouraged to do so.

C. Observation

It is difficult to assess the role of an institution like the Meharry Maternal and Child Health Center in the future of A.I.D.'s global strategy for population and family planning. The Center became operational late in Calendar Year 1971 with the construction of facilities on the Meharry campus and the recruitment of staff. The Center had to struggle with A.I.D.'s Title X objectives in an environment that dictated a much broader perspective of the growing population problem in the world than was perceived for Title X activities. In following its institutional conscience, Meharry emphasized maternal child health and nutrition in its training programs. While family planning is viewed as an integral part of family life planning at Meharry, its role in training courses somehow pales in significance when evaluated against the Congressional mandate for reducing world population growth.

This is not to imply that the Center should or should not pursue one road in preference to another. As a matter of fact, the Center has decided for sound reasons to pursue the MCH/Nutrition alternative. For this they should not be faulted. However, we would be remiss if we did not make note of the fact that under current guidelines the population dollar could well fund programs whose benefits are more explicitly tied to the integration of MCH/FP/Nutrition and indeed to agricultural resource availabilities.

While the Meharry Center may well become a significant training and research institution in family planning in the long term, it has not as yet achieved this status nor has it demonstrated an interest to do so in the immediate future. It has taken a tack it believes appropriate in view of its philosophy and its individual character. A.I.D. should not attempt to divert it from its course.

IV. Evaluation Design and Progress to-date

A. Statement of Goal

The problem that is identified in the area of family planning institutional development is one of a lack of sufficient capability within U.S. institutions to assist in the development of integrated maternal and child health/family planning services in developing countries.

Measurement of Goal Achievement

Like so many institutional development projects, measurement of their impact on a higher goal is very difficult and requires a long lead time before definitive results are evidenced. It is difficult to see what impact this project may have on MCH/FP in selected African countries because of the relatively modest nature of the training results to date and the strong emphasis of nutrition in the training courses.

B. Project Purpose

To establish a capability within the Maternal and Child Health/Family Planning Training and Research Center at Meharry Medical College to train persons to integrate family planning into MCH programs in African countries.

Expected End of Project Conditions

1.0. A teaching capability at the Center to train professional and para-professional MCH/FP workers.

A. Progress to Date

1.1. The 23 professional teaching staff members, of whom 13 had doctorates, devoted a total of 1353.0 hours teaching in the classroom. An additional four outside lecturers, all with doctorates, taught a total of 38.5 classroom hours.

The teaching staff, the 23 professionals, were on board a total of 420 man months during the period 1971-1974 or 35 man years, assuming that the ten weeks course includes about 300 hours of instruction (5 days/week and 6 hours instruction/day) per course and 1,200 hours for the four

courses. The teaching load, based on 420 man months of available professional time, appears very light, i.e., 67,200 work man hours available for 1200 classroom hours. The ratio of 56 to 1 needs to be compared with other similar training and research activities in the population/health area.

There are two nurses (one a public health nurse and the other a nurse midwife) on the teaching staff who teach African participants who are largely nurses and nurse midwives. The nurse midwife devotes only about 50 percent of her time with the nurse midwife course.

1.2. A breakdown of the various divisions at the Center indicate the following:

(a) Administrative Division

The five professional members of the Administrative Division are highly qualified academically and have had a wealth of experience locally as well as internationally. Only two have never worked overseas. The Director and the Deputy Director have had experience in Africa and the Director has written a number of publications related to MCH/FP and nutrition.

(b) Training and Communications Division

The eight staff members of this division are also highly qualified and have had adequate experiences in their respective fields. Two have had working experience in the African region.

(c) Social Science Division

The head of this division is highly qualified academically, and has had a variety of experiences in his field both locally and internationally. The two other members of the division had resigned as of the time of the evaluation.

(d) Public Health Division

The 13 staff members are well qualified academically and have good work experiences in their respective fields. The nutrition-biochemists have had some research experiences, and four staff members have had overseas experience.

Of a total of 31 staff, including six administrative and program type personnel, only sixteen were on board at the time of the evaluation. The Center has difficulty keeping staff beyond their initial tours and in finding suitable staff to fill its vacancies.

B. Findings

As there is a disproportionate emphasis on MCH/Nutrition, very few of the Meharry staff have family planning experience. This situation tends to overload some staff members and under-utilize others.

One staff member, the nurse mid-wife, apparently devotes about one half of her time with the participants while being employed full time with the Center. According to the Center's documents she did not participate in the fourth training cycle, February 1974 - May 1974, and yet she is the only nurse midwife at the Center. The other nurse serving as the Program Coordinator taught a total of only 8 1/2 hours. However, as she has clinical practice responsibilities, her actual contribution may easily be several times the amount. The Nutrition-Dietician taught only three hours in the fourth cycle and yet she spent about 40-50 percent of her time with the participants. She is also employed on a full time basis with the Center.

The changes in the Center's organizational structure in early 1974 appear to have resulted in some overlapping of duties and has created a misunderstanding of personnel functions. It appears that some of the current personnel problems stem from lack of coordination and clearly defined individual responsibilities and duties. For example, there were conflicting reports from the Center staff about a participant from Sierra Leone. The debacle resulted in queries by the American Embassy in Freetown to AID/W for an explanation of the incident.

C. Recommendations

1. That the organizational structure of the Center require a clear definition of responsibilities of the Director and the administrator. The latter should be given some authority to supervise personnel and to run the daily activities of the Center. There is a need for functional duties to be clearly defined, and job descriptions prepared that would serve as the basis for annual personnel performance ratings.

2. That the Center conduct periodic and systematic evaluations of its activities based on its program objectives. The evaluation design should be developed for self-evaluation by the Center and for use by external evaluators and auditors.

3. That overstaffing be eliminated by redefining goal and purpose and reorganizing the curriculum as necessary.

That the Center use existing staff that are under-utilized rather than consultants in order to increase the Center's effectiveness and improve its staff morale.

4. In light of the new emphasis on training nurses and nurse midwives it appears that more nurse-tutors on the staff would be appropriate.

5. That a core staff be selected on a full time basis to support the new thrust of training nurses and nurse midwives, because of the present high turnover rate does not make for institutional stability.

1.2. Course outlines and teaching assignments are established to meet the requirements for family planning training to nurse-midwives.

A. Progress to Date

The listing of courses and instructors in Appendix A indicate that of 23 assigned teaching responsibilities about one half had left the Center as of September 1, 1974. Presumably others were recruited to fill in for the fall course that started early in September.

2.0. A research capability in planning, designing and carrying out studies in socio-cultural and anthropological areas.

A. Progress to Date

2.1. The grantee has three projects currently underway:

(a) An Investigation of Pesticides in Human Milk - 1972. This two year project, funded at \$20,000, is designed to investigate the pesticide levels in human breast milk of indigent black people exposed to pesticides in their environment of the rural south and southeastern U.S. The work is progressing, and preliminary results suggest there are much higher levels of pesticides (particularly chlorinated hydrocarbons) in the breast milk of these women than is generally considered safe.

(b) Assessment of Toxicological and Biological Consequences of Dietary Protein Deficiency - 1973. This three year contract, funded at \$30,000, will assess the modifying effect of protein malnutrition on the manifestations of toxins and foreign compounds. Aflatoxin and palmotoxin, which are common in the foods of tropical and subtropical countries, are being tested in protein malnourished rats. Animal testing is in progress to determine effects on weight, mortality, and pregnancy.

(c) Effect of Oral Contraceptives on Nutritional Status in Less Developed Countries - 1974. This two year contract, funded at \$143,000, is part of a larger multi-institutional grant to study the effects of OCs on several nutritional parameters. The Nashville component consists of blood biochemical analyses for vitamins conducted at Vanderbilt University. Quality control efforts related to some of the other measurements in the study will also be supported through the Center.

2.2. Projects currently under consideration for funding:

(a) The Development of a Consensus Definition of Social Marketing and the Production of Social Marketing Cases for the Instruction in Maternal and Child Health/Family Planning - 1973. The proposed project would develop a consensus definition of social marketing that meets the needs of educators in business and the social and medical services. A body of social marketing teaching cases would also be developed.

(b) Institutional Grant Project 211(d) - National Nutrition Planning - 1974. This grant proposal is being submitted to A.I.D. for a life of five years and total funding of \$527,595. One of the five components of this project would be developing an applied research capacity related to regional and local planning, implementation, and evaluation of programs to combat malnutrition in developing countries.

2.3. Projects not funded:

(a) A Weaning Foods Network and Action-Oriented Research on Infant Nutrition in Developing Countries - 1973.

(b) Project to Determine if There is an Association Between the Use of Contraceptive Agency Methods, or Related Procedures and the Subsequent Development of Congenital Malformation in the Offspring - 1973.

(c) The Consequence and Determinance of Fertility - 1973.

(d) Alternative Health Delivery System for Developing Countries: A Research Training and Evaluation Project in Public Health and MCH/FP in Nigeria - 1973.

2.4. Letter of interest submitted to grantee - one proposal, The Impact of Contraceptives on Fertility - Iran - 1974, fits this category. This project would be a feasibility study for a quasi-experimental study originated by Duff Gillespie, Research Division, PHA/POP. Numerous aspects of background information, i.e., government support, resources, logistics, demographic data, registration systems, geographic characteristics, and

delivery systems would be investigated. Additionally, the letter implied willingness to conduct the overall project, which would be an extensive undertaking over several years. Unfortunately, it now appears that the project will not be conducted, at least not in Iran, although the feasibility study could have some application in other settings as well.

B. Findings

Ten proposals were developed in total, one in 1972, six in 1973, and three in 1974. The three funded and in progress are all in the area of nutrition-biochemistry-toxicology; and all are heavily oriented to laboratory work.

The research capabilities of the Center appear to reside primarily with six staff members having a background of research experience. One physician with extensive experience in clinical and research problems in health and nutrition has written several scientific publications and has a rich background of research activities. Two biochemist-nutritionists and an environmentalist are presently conducting laboratory work relating to nutrition. Two have extensive research experience. One Demographer has an extensive background in research and demographic techniques. Four of the ten projects were developed by this individual. One specialist in childhood development and education has published several papers and has research experience in this area. Several other staff members undoubtedly have the ability to participate and contribute to research efforts, although their experience has not emphasized research.

Several staff members having high professional qualifications for doing research have left the staff, making the development and execution of research activities extremely difficult.

Little has thus far developed in the area of research, and that which has is in laboratory work relating to biochemistry and nutrition. Socio-cultural and anthropological research has not developed, and the current staff has little experience in these areas. Vanderbilt University facilities appear to be more heavily relied upon than those at Meharry.

Given the sensitivities in Africa, it is not surprising that field research in Africa directly relating to family planning has not been forthcoming. Current projects are largely at the laboratory research level than at the social science or operational research level, although the largest effort, *The Impact of Oral Contraceptives on Nutrition*, appears quite relevant to the operational use of this contraceptive in Africa and other parts of the world.

Proposals prepared by the Center staff have experienced difficulty being funded, and the main research strength appears in nutrition. The development of new proposals seems to have slowed in 1974, and future work will be further handicapped if there are additional staff departures. Whether replacements can be found for those already departed remains to be seen. At any rate, a continued rapid turnover of staff would present severe difficulties for developing a strong research capability. Other endeavors of the Center, such as training, can probably be more productively utilized than research efforts.

There is little evidence to indicate that the Center staff is aware of and utilizes findings in the area of communications research being inducted at Chicago or the East-West Center. There is also no evidence that the staff is in close contact with other academic and family planning groups that are involved in social science research.

C. Recommendations

That the grantee concentrate its efforts on operational research problems that are identified as constraints to effective implementation of its training program. The grantee should also make use of research findings from programs at Chicago, East-West Center, and other institutions that are funded by A.I.D. as well as other sources.

3.0. A capability in training U.S. medical and paramedical personnel in MCH/FP as well as African staff.

(a) Capability in training U.S. medical and paramedical personnel.

A. Progress to Date

3.1. The project originally envisioned the training of U.S. medical and paramedical staff. While some training activity had taken place, the grantee staff was enrolled in various conferences and seminars over the life of the project. Some of the conferences were of general interest such as those sponsored by the National Association for the Education of Young Children, and annual meeting of the American Society of Tropical Medicine, others dealt with lectures on the use of contraceptives, observation of clinical facilities and seminar on waste water treatment and analysis.

One staffer, Carol **Spencer**, completed an intensive, short term training course in Maternal and Child Health and Family Planning in Chicago. Dr. Cleckley visited the Black Child Development Institute in Washington, D.C., Center for Allied Health Careers at Johns Hopkins and other organizations.

Dr. Ira Harrison delivered a paper at the African Studies Association meeting on Traditional Healers. Most of the staff are given an opportunity to travel to meetings of special interest to them.

The staff receives in-service training on an ad hoc basis when the opportunity is available. The grantee does not conduct special courses for either staff or U.S. personnel in areas other than language study.

The grantee retained a total of 30 core staff during the life of the project. These staffers provided a total of 560 man months of service, for example, less than 45 man months provided by one staff member, represented practical experience in family planning and MCH. On the other hand 96 man months were provided by nutritionists /biochemists, nutritionists/dietician and environmentalist.

While position titles alone do not provide the only indicator of staff capability, they do suggest a philosophy and focus on training. It appears that the emphasis, on the staff side at least, constitutes a broad based reservoir of talent in family life training.

The curriculum seems to support the findings above. The training emphasis is on nutrition, the environment, mother and child health, communications and sanitation. Family planning and demographic factors in fertility growth are also included as a part of the 16 weeks of instruction.

There is a question of the level of instruction for African nurse/midwives. While it is not fair to judge course work on the basis of titles, first hand knowledge by a member of the evaluation team indicates that a part of the instruction, at least, is viewed as highly theoretical by participants.

The staff's curricula vitae suggests that a great deal of the experience of the staff have been in teaching and research activities. There is a general weakness in the depth of experience, however, in family planning, particularly as it relates to Africa.

The performance of the staff in meeting their training responsibilities was not verified by the evaluators during the site visit. The team does not, however, question the capability of the core staff in this regard.

(b) A capability in training African MCH/FP personnel.

A. Progress to Date

3.2. Generally speaking the participants to the training program are nurse/midwives from English speaking African countries. A total of 206 participants were trained at the Center from 1972 to January 1975. These are as follows:

1. Five long-term (longer than one year). These were specially designed training programs to meet the needs of the participants.
2. Seventy-two participants have been trained in the short-term (four-and-one-half months) MCH/FP course, as of January 10, 1975.
3. Forty-six participants, nurses and nurse/midwives attended a special bilingual conference on MCH/FP in conjunction with the International Congress of Nurse Midwives which was held in Washington, D. C. in 1972.
4. Eighty-three participants have come to the center as short-term visitors. These visits last anywhere from a few days to a week.

The participants for the most part are practicing members of their chosen profession in both urban and rural areas. Some hold supervisory and administrative positions in health and FP activities.

Information on the current positions of the African participants is not available in the material reviewed by the evaluation team.

Followup data on returned participants is not available on a systematic basis nor is it available for all participants. Following are excerpts from a recent trip report prepared by an A.I.D. nurse/family planning project monitor.

(a) The Kenyan participants in this program had a debriefing session with AID/W in January, 1973, prior to their departure for Kenya. All of the participants complained about inadequate clinical training on contraceptive procedures and the fact that they were assigned night duty in the maternity ward as part of the clinical experience. This maternity ward experience was not only unsupervised but useless for the purpose of contraceptive/FP training.

(b) On a field trip to Kenya in April, 1974, the AID/W project monitor assisted the USAID/POP Officer evaluating FP training needs for Kenyan nurse/midwives and trying to determine what U.S. contractors would be useful. In every situation with Kenya MOH, the IPPF, and field FP staff, whenever U.S. clinical training was mentioned, further Meharry training of Kenyan participants was not encouraged.

(c) It appears that at least with the present generation of Kenyan MOH personnel, Meharry's reputation has been somewhat damaged. Meharry has lost an opportunity to participate in developing a MCH/FP program in an African country with a firm population policy. This marginal performance may also have cast doubt on the abilities of other U.S. contractors in the field of FP training.

(d) Botswana and Swaziland - ICM East African Field Visit Report - In June, 1974, the East African Regional Field Director in a trip report stated that the supervisors of the trainees sent to Meharry from Botswana and Swaziland felt their trainees received too much theory and not enough clinical practice. As a consequence, several participants were sent to the IPPF clinic in Nairobi for more clinical training.

(e) See Ms. Winifred Evans' Report on Visit to Meharry Affiliate, Harlem Hospital, New York City, December 12-14, 1973. Ms. Evans and Mr. A. Cole visited the Meharry trainees during the clinical portion of the training at Harlem Hospital. They found the clinical training, while deficient in IUD insertions, otherwise practical and at an acceptable level. Interviews were held with the Harlem clinical staff and the participants.

Dr. Deen, coordinator for the program, stated that the clinical course objectives set forth by Meharry could not be adequately covered in six weeks. She also believed that the Meharry didactic portion was too theoretical and probably at a higher level than most of the participants could absorb. There was not time for the participants to review or read materials in the course either.

Dr. Deen stated that she had received no materials or summary of the Meharry didactic portion and had no communication with the nurse faculty members concerning the integration of the training.

Dr. Kahn, of the staff, stated that he believed much of the program designed by Meharry was impractical and that the course needed to include relevant experience that could realistically be accomplished in the time frame. Dr. Kahn indicated that this revision was up to A.I.D. and/or Meharry, not Harlem.

The participants stated that didactic technical course content was given too fast and with too much material.

The participants rated the nurse midwife instructor as a very helpful and effective person but felt she was too busy to spend sufficient time with them.

Other statements were:

The Planning Administration, etc., sessions were not developed as these areas relate to MCH/FP.

Some instructors did not have sufficient knowledge of the participants' countries.

Nutrition was weak and there was not enough time spent on FP. The participants rated MCH/FP, and nutrition as the subjects they needed most.

The participants felt comfortable in FP counselling but not secure in IUD insertion technique.

B. Findings

There is very little direct training of U.S. personnel for African MCH/FP advisory assistance. What there is, however, happens on an ad hoc basis without specific direction at the Center. While Meharry is responsible for a technical assistance effort in Botswana, the evaluation team did not review this particular activity. There is very little evidence, however, that the Center took definitive action to train its staff in population and family planning for work in Africa. There is also little evidence to demonstrate a need for the Center's services in family planning.

The Center's capability in training African professional medical and paramedical personnel in population and family planning has not as yet achieved the level perceived in the grant. Its limitations are more a function of its institutional goals rather than shortcomings in its administrative and professional personnel. Its expertise is clearly developing in the area of health and nutrition, a high priority consideration in developing countries today. When examined in light of Title X considerations, the project's funding mix needs to be altered to permit health and nutrition funds to supplement population funds in carrying out the project.

C. Recommendation

That further funding of this project by A.I.D. should be considered only on the basis of a formula that requires equitable matching of Title X, health and nutrition funds.

4.0. African nurse midwives are instilled with the concept of the relationship between family planning, fertility, and nutrition, and are provided with the clinical skills to apply these concepts.

Progress to Date:

4.1. Short term didactic courses are organized to present a logical relationship between the subject areas of MCH/Nutrition/FP.

Meharry MCH/FP staff stated that they use the integrated approach in teaching maternal and child health care, nutrition and family planning. This is reflected to some extent in the curriculum.

Unit 1: Basic Orientation - In MCH/FP it is an overview of all the subjects taught and their relationship to family planning.

Unit 2: The MCH/FP courses run six weeks. This is the basic core of the whole MCH/FP program that includes Health Education, Environmental Health, Principles of Epidemiology, Laboratory Diagnosis, Nutrition in MCH, Development of New Allied Health Manpower, Health Care Planning and Administration, Theory of MCH/FP, Population Dynamics and Socio-Cultural aspects of Health.

Unit 3: Deals with the fundamentals of Pediatrics and Well Child Care as it relates to basic technical skills in determining the sick and well child, and nutrition as it relates to the sick and well child.

The USAID/Project Manager conducted a post-training evaluation in Freetown, Sierra Leone, and discovered that the two former participants have integrated family planning into their private clinics that are satellite clinics of the SLFPA. They are conducting information and education in family planning and providing contraceptive services.

In Monrovia, Liberia, the Administrator and Director of Nursing Education TNIMA - Tubman National Institute of Medical Arts at JFK Center (former participants-Meharry) informed the project manager that they have integrated the nursing curriculum with family planning and were engaged in teaching family planning to the nurses and paramedical staff. The other two former Meharry participants serving as District Nursing Supervisors told the project manager they were involved in teaching Traditional Birth Attendants family planning and supervising the operations in the clinics. They requested contraceptive supplies. This information was passed on to the USAID/Mission.

Miss Carol Spencer recently did a post-training evaluation of 16 returned participants in Nigeria, Lesotho, and Swaziland. Her visit revealed that the participants expressed satisfaction in the training they had received. The response to the questionnaire was positive for the most part. See

Appendix C for a summary of responses by the participants. There appears to be a lack of an explicit design in the selection process thus resulting in training individuals who in and of themselves are unable to bring about significant changes through their work. Most expressed frustration with obstacles of inadequately equipped facilities. She also discovered the quality of delivery of health services varied from place to place, and from one country to another.

4.2. The subject content of courses is presented at the appropriate academic level for the nurse midwife.

Progress to Date:

The evaluation conducted by the MCH/FP Center revealed that some of the participants felt that the courses in Planned Change and Socio-Cultural aspects were not taught at their level, and were difficult for them to understand. The demography and population courses were too technical, and as were the biochemistry and nutrition courses.

The revised curriculum for this session (September 1974-January 1975) includes a reduction in class hours in the above mentioned subjects and subject matter is designed at the participants level with special emphasis on relevance to their backgrounds.

During the debriefing in AID/W prior to the departure, the participants made the following comments:

1. They have acquired sound knowledge of the integrated approach in MCH/FP, and have developed the techniques in delivering MCH/FP services.
2. Need more nutrition training, more laboratory experiences and more clinical experiences in family planning and pediatrics.
3. They did not need any clinical experience in obstetrics.
4. They suggested that regional seminars be conducted by Meharry in Africa for former participants on a yearly basis to exchange views and share their experiences in the MCH/FP field.

4.3. The subject content is relevant to African health service delivery systems.

Progress to Date

The subject matter in MCH/FP courses appears to be relevant to African health delivery systems in general, but in some instances in our

discussions with some of the lecturers one was left with the impression, that the presentation was not relevant to the African participant needs. (For example, the nutrition Biochemistry Laboratory sessions at Vanderbilt University.)

Post-training evaluation in the field by the project manager revealed that the participants and their supervisors felt that their MCH/FP training was relevant to the delivery of health services in their country. Miss Carol Spencer's recent visit to three African countries revealed the training was relevant to their work in the clinics and hospitals in their respective countries. All the evidence to date is based on the participants' perception of relevancy. While this is important, it does not support participant comments regarding their frustrations in implementing some of their new found skills because of lack of adequately equipped facilities.

4.4. The special role of the African nurse midwife in delivering MCH/FP services is stressed.

Progress to Date

Our discussions with the MCH/FP Center Staff Nurse Midwife revealed the opportunity for the African nurse midwife was very good in the delivery of MCH/FP services because of the rapport established in the prenatal, natal and postnatal clinics sessions. She is usually a trusted friend that the patients depend on for advice in the MCH/FP field.

The project manager's visit to Freetown, Sierra Leone, on post-training evaluation of two nurse midwives who run their private maternity clinics found tangible evidence that the nurse midwife in Africa has a key role to play in the delivery of MCH/FP. These nurse midwives have established rapport with their patients, and they absolutely trust in their judgment.

4.5. Clinical training is integrated with the didactic portion of the course and emphasis is placed on learning new skills and techniques.

Progress to Date

The MCH/FP Center participants' classroom time has been reduced and more emphasis placed on clinical participatory learning. Special arrangements were made for on-site visits in the Nashville area:

Murfreesboro - Clinic - to observe and participate in postpartum and family planning services.

Hayes Street Abortion Clinic - observe the alternatives to family planning failure; participate in family planning counseling; gain an appreciation for the enlarged uterus; and gain experience in performing pelvic examinations.

Bethlehem Day Care Center: observe the performance of physical examinations on children, growth and development assessment of pre-schoolers.

Baptist Hospital: observe and perform physical examinations on children primarily infants (Neonates).

Lentz Public Health Center: observe public health nurses in the clinics and homes practicing family care which includes family planning.

The Center is making an effort with the new group of participants in this fall session to increase their clinical exposure during the didactic portion of the program. This effort would elevate and improve their overall proficiency level at the completion of the course.

4.6. Participants are monitored closely during the training course to insure that the training meets their expectations and needs.

Progress to Date

The discussion with the Center staff revealed that the participants are closely monitored during the didactic training and clinical exposure in the Nashville areas. During the six weeks clinical experience in MCH/FP away from Nashville, there is a question whether the participants are closely monitored. The preceptors in the clinical facilities that the project manager visited revealed that Harlem Hospital Preceptors provided close supervision but not at Howard University.

It was suggested that the nurses and nurse-midwives should accompany the participants to clinical sites. The Center nurse midwife said the institution providing the clinical clerkship must be willing to accept the Center staff. She said the Meharry staff would not be familiar with the clinical facility routine and, therefore, it would be difficult to supervise the participants in a new environment. Above all the Meharry Center staff would not be licensed to practice in the states where the clinical clerkships are provided.

4.7. Contact is maintained with former participants either through correspondence or field visits to provide ongoing support.

A. Progress to Date

Some of the participants do write to the Center telling them about their opportunity in using what they have learned in the MCH/FP field, and

also request additional materials in MCH/Nutrition/FP. The Center would then mail them the materials. Miss Carol Spencer's post-training evaluation visit to Africa is the most recent attempt by the Center to keep in touch with past participants.

B. Findings

There is no evidence from personal interviews that participants believe the training is useful, they increase their skills and enjoy their stay in the U.S. The extent to which their skills are relevant, the information current and their attitude in change is not well known. The grantee has not used attitude and knowledge studies prior to the training to determine the characteristics of the participants at the beginning of the training. Any followup surveys, therefore, must of necessity be of limited value in determining the effectiveness of the training courses.

C. Recommendations

1. That the grantee begin using acceptable testing methods to determine the knowledge and attitude of participants prior to the course, at the end of the course, and at some reasonable time following the course.
2. That several participant followup seminars be organized in Africa to review the usefulness and relevance of skills learned, difficulties encountered by returned participants and to provide reinforcement to some of the subjects taught in the course.

Outputs and Progress to Date

1.0. Assignment of essential core staff of about 30 administrators and professionals to Meharry College.

Progress to Date

1.1. The following core staff were on board during the period 1971-74:

	<u>Name</u>	<u>Position</u>	<u>Man Months</u>			
			<u>1971</u>	<u>1972</u>	<u>1973</u>	<u>1974</u>
1.	J. Carter, M.D., Dr. PH	Director	6	12	12	6
2.	L. Sam, B.S.	Deputy Director	1	12	12	6
3.	L. Taylor-Gilliland, B.A.	Assistant Administrator		7	12	6
4.	W. Williams, MBA	Accountant	6	12	12	6
5.*	J. Lowenthal	Management Analyst		2.1	6.0	
6.*	O. Oyemade	Pediatrician		7	7	
7.*	S. Nwosu	Obstetrician		9.5	12	3
8.	P. Gilpin, M.A.	Nurse-Midwife	2.5	12	12	6
9.*	B. Cleckley	Int'l Allied Health Training Coordinator			3.5	6
10.	H. Bratcher Bell, MPH	Nutritionist/Dietician	3.5	12	12	6
11.	J. Maslowski, Ph.D. (Soc.)	Demographer	2.5	12	12	6
12.	B. Woodard	Environmentalist		11.5	12	6
13.*	P. Narula	Epidemiologist		4.5	12	6
14.	M. Mgbodile, Ph.D. (Biochemistry)	Nutritionist/Biochemist		6.5	12	6
15.*	I. Harrison	Behavior Scientist/Anthro- pologist		9	12	6
16.	R. Kelley, B.S., Biology	Program Officer		9.5	12	6
17.*	C. Gentry	Assistant to Language Program Director	3.5	7.5		
18.*	N. Curry	Director, French Language Program	1.1	1.5		
19.	J. Schwarz, B.A. Linguistics	Language Instructor		4	12	6
20.*	E. Hines	Community Nutritionist		2		
21.*	P. Gomez	Pediatrician			.4	.6
22.	G. Nichoalds, Ph.D. Biochemistry	Nutritionist/Biochemist		1.8	3.6	.8
23.*	D. Dunlop	Health Economist		3.3	10	.5
24.*	D. Bhowmik	Mass Education Planner		6	12	6
25.*	I. Redlener	Pediatrician	3	3.6	3.6	.9
26.	B. Forrester, M.A. Psychology	Early Childhood Education Specialist		3	9	4.5
27.*	K. Rabin	Communications Media Specialist		7.5	7.5	
28.	L. Jones, M.S. Radio/TV	Communications Media Specialist			4.5	6
29.	E. Dore, M.S. Library Science	Library Technician			2	3
30.	C. Spencer, MPH	Training Program Coordinator				6

Total Hired - 30; presently on board - 16

29.10 178.80 237.10 115.3

*Resigned as of August 31, 1974

The staff curricula vitae included a number of publications produced by staff members, professional positions held and work experiences. A cursory review indicates an impressive core staff with a diversity of experiences in areas not only directly related to MCH/FP but other areas as well.

If an observation is warranted it is that the staff lacks depth of experience in areas of family planning and MCH. Those qualified to do the training in this area may be over extended.

1.2. MCH/FP Center hours of classroom instruction provided African participants by Center staff and other lecturers.

Progress to Date

See Appendix B for breakdown of staff and hours taught at each training cycle beginning September 1972.

Consistently the staff member who devotes the largest number of hours to each lecture is Mr. Schwarz, the language instructor. The record shows he devoted 380 hours to the four training cycles; the obstetrician 149 hours; environmentalist 119 hours; the mass education planner 97 hours and the nurse midwife 90 hours.

2.0. Develop MCH/FP curricula for short term and long term training.

A. Progress to Date

2.1. Short term courses have taken several forms.

(1) A special, one time only, Conference 11 days in duration (October 16-27, 1972) for 46 African and Laotian nurse-midwives, (2) A special, one time only, training course, 40 days in duration (June 11-July 20, 1973) for five U.S. and Botswana MCH/FP workers, and (3) Observation tours for 80 visitors to the Center July 1972-May 1974.

(1) The 11 day conference for midwives was held at the Meharry Center for 43 African nurse midwives, two Laotians and one Kenyan M.D. for a total of 46. A total of 30 classroom teaching hours were scheduled of which one hour dealt with contraception and one and one half hours with sterility and abortion. In general, the conference schedule indicates that the subject matter was relevant to nurse midwives and the instructors were well prepared in their area of expertise. A total of 35 instructors participated in the conference of whom nine were not from the Nashville area.

(2) The Botswana training course included 46 classroom teaching hours and about one week of clinical training in the Nashville-Chicago areas. The course was designed for the five members of the Meharry Botswana project and included three registered nurses, the team leader, MPH training, and the administrative officer. A total of 14 Center staff participated in the training course.

(3) The Center receives visitors who are scheduled by A.I.D., Governmental Affairs Institute, World Health Organization, Institute of International Education, and others. Over the period July 1972-May 1974, 83 visitors visited the Center, spending a total of 282 hours at the Center.

In addition to conferences, seminars and workshops which the Center sponsors as part of its training program, A.I.D. of the Department of State and other organizations and institutions refer their trainees to the Center on an average of from one to five days as part of the training program which participants receive while studying in the U.S. in similar programs for physicians, nurses, nurse midwives and other health professionals in MCH/FP. Their interests in the Center are to observe the type of training being provided for Africans which could be a model for them to adopt in their respective countries and to share ideas with staff and trainees in the area of the delivery of integrated MCH/FP services in developing countries.

During their visits, discussions are held with Center staff, centering on the visitors' evaluation of their training experiences in the U.S. and an analysis of the degree of acceptance of family planning in their countries. In addition, specific discussions are held with staff members whose fields relate to that of the participants. Moreover, observations of campus facilities and visits and meetings with Tennessee State Government officials and other organizations and agencies are arranged.

Short term study visits benefit the Center as well as the participants and provide an important extension to A.I.D.'s overall training program for foreign students. It also assists the Meharry MCH/FP Center in establishing ongoing contacts and publicizing its activities.

Finally, although these visits are of short duration, a great deal of Center planning and programming is involved to ensure that the participants receive the maximum benefit from their Nashville experiences.

2.2. Special training courses for nurse midwives.

The Center designed and is carrying out five special long term training courses for special students.

(1) Mr. Normand Mukegele, special course in MCH/FP and clinical pediatrics and obstetrics and English language. The course duration was from February 12, 1973 - March 9, 1973.

(2) Mr. Steven Nhilapo, environmental health and family planning administration. The course was of three and one half months' duration, February 11, 1974 - May 24, 1974.

(3) Mrs. Margaret Makhothu, nutrition and family planning. The duration of the course was from October 1, 1973 - February 8, 1974.

(4) Dr. M. Phaka, Zaire. English language and advanced MCH/FP and nutrition. The duration of the course was from January 20, 1974 - August 25, 1974. Dr. Phaka is a physician with training in pediatrics and nutrition which he received in France and with UNICEF in North Africa. He came to Meharry as a participant and visiting professor at the MCH/FP Care Center at Meharry. The focus of his work at the Center was in nutrition.

(5) Mr. Biselela Mbiya, English language and MCH/FP. An exchange of letters with AID/W indicates that the student was not to pursue a degree following completion of the short term training.

2.3. Development of regular short term training courses.

The organization of the course is as follows:

<u>Course Title</u>	<u>Formal Lecture/ Classroom Work</u>	<u>Field or Lab Work</u>	<u>Total</u>
Health Education	24 1/2	5 1/2	30
Environmental Health	6	0	6
Principles of Epidemiology	3	4	7
Laboratory Diagnosis	2	6	8
Nutrition in Maternal and Child Health	43 1/2	6	49 1/2
Development of New Allied Health Manpower	13	0	13
Health Care Planning and Administration	10	0	10
General Pediatrics and Well Child Care	14	7 1/2	21 1/2
Theory of Maternal Child Health and Family Planning	40	20	60
Population Dynamics	16	0	16
Socio-cultural aspects of Health	10	0	10

<u>Clinical Practice</u>	<u>Weeks</u>	<u>Hours</u>
Maternal Child Health Family Planning	4	160
Pediatrics and Well Child Care	<u>2</u>	<u>80</u>
Total	6	240

In January 1974 the curriculum was revised by an ad hoc committee of staff. The redesign did not alter substantive course content at all. The redesign occurred in the arrangement and length of course offerings rather than the basic course content.

Originally, the curriculum was designed to include three weeks of basic orientation to the overall concept of maternal and child health and family planning. Re-evaluation of the curriculum by participants and staff revealed this basic orientation program was too lengthy and could be significantly shortened and extra time could be used to provide clinical training for the participants. The basic orientation program contains basic background information and an overview of all courses taught in the general maternal and child health family planning course. The basic orientation course was shortened to one week and ten weeks devoted to providing classroom and some clinical experience in maternal and child health family planning. The ten weeks were divided into sections to include:

- I. Maternal and Child Health
- II. Family Planning and
- III. Pediatrics

Included in these sections were courses offered in the attached curriculum. The Center employs a multi-disciplinary staff and thus the integrated approach was used.

Each section consisted of a variety of subjects which related to the overall section. At the completion of the ten week course, the participants departed to various training sites for 6 weeks of clinical experience in maternal child health family planning. Upon completion of the 6 weeks' clinical training the participants returned to the Maternal and Child Health Family Planning Center for seminar sessions consisting of topics related to their didactic and clinical work and specific to their requested interests. This section of the curriculum lasts one week which terminates with graduation.

The curriculum organization, originally and currently.

	<u>Originally</u>	<u>Currently</u>
Basic Orientation	3 weeks	1 week
Classroom Instruction	6 weeks	10 weeks
Clinical Experience	6 weeks	6 weeks
Seminar Sessions; Wrap-up	1 week	1 week
	<u>16 wks. (4 mos.)</u>	<u>18 wks. (4 1/2 mos.)</u>

A. Findings

The Center has taken on more responsibility than was originally envisioned in special conferences and seminars. It has devoted a considerable amount of its staff time to special activities of individual students and for its Botswana project. One may question the cost of carrying out the special training activities when compared to benefits. In any event, it has taken something away from the regular course recruitment and course development.

The current training course has a strong emphasis in nutrition and MCH, health education and the theory of MCH and FP.

B. Recommendation

That the grantee be encouraged to continue its strong bent toward nutrition and MCH with funds largely from sources other than Title X.

6.0. Host country MCH/FP personnel provided with orientation and observation training.

C. Progress to Date

<u>Country</u>	<u>Total</u>	<u>Sept. 72- Jan. 73</u>	<u>Feb. 73- June 73</u>	<u>Sept. 73- Feb. 74</u>	<u>Feb. 74- May 75</u>
Kenya	7	7			
Zaire	3	1		1	1
Nigeria	4		1	2	1
Sierra Leone	4		2	1	1
Liberia	12		6		6
Ethiopia	5			5	
Swaziland	4			2	2
Lesotho	7			5	2
Botswana	6			1	5
Total	52	8	9	17	18

Two were doctors from the 52 participants, one was from Kenya and one from Zaire.

D. Findings

The grant agreement envisioned the selection and training of up to 50 A.I.D. sponsored trainees per annum, both American and African in either regularly specially prepared training programs relating to specific project requirements in African countries where such programs are economically and technically feasible.

The evidence does not indicate that this aspect of the grant has been achieved. While short term training was provided outside of the regular courses it does not appear related to specific project needs in Africa. The training was of a general nature appropriate to nurse midwives.

Furthermore, 52 regularly scheduled students and 46 specially scheduled trainees is the sum total of participants that received MCH/FP training for the three year period of the grant.

While there was some delay in start up, the grantee appears to be near the target of 50 students per year.

The September 1974 training course had 20 participants registered as of the first of September from Ethiopia (6), Sierra Leone (2), Swaziland (2), Nigeria (1), Botswana (5), Liberia (2), and Zambia (2).

7.0. Number of research projects initiated and number of projects completed.

A. Progress to Date

7.1. MCH/FP Center Research Proposals (1971-1974)

Researcher

(1) Bennie T. Woodward

Project - An Investigation of Pesticides in Human Milk - 1972.

Disposition - Funded by the U.S. Environmental Protection Agency for \$20,000 for a two-year period.

- (2) Prem N. Narula, Ph.D.
M.P.H. Epidemiologist/
Food Technologist
other Nutrition component

Project - A Weaning Foods Network and Action-oriented Research on Infant Nutrition in Developing Countries - 1973.

Disposition - Not Funded

- (3) James Maslowski, Ph.D.
Demographer, and Staff

Project - The Development of a Consensus Definition of Social Marketing and the Production of Social Marketing Cases for the Instruction in Maternal and Child Health/Family Planning - 1973.

Disposition - Under Review

- (4) James Maslowski, Ph.D.
Demographer, and Staff

Project - Project to Determine if there is an association between the use of contraceptive agents, methods, or related procedures and the subsequent development of congenital malformation in the offspring - 1973.

Disposition - Not Funded

- (5) James Maslowski, Ph.D.
Demographer, and Staff

Project - The Consequence and Determinance of Fertility, submitted to HEW - 1973

Disposition - Not Funded

- (6) Ira Harrison, Ph.D., M.P.H.
Anthropologist and Behavioral

Project - Alternative Health Delivery System for Developing Countries: A Research Training and Evaluation Project in Public Health and MCH/FP in Nigeria - 1973.

Disposition - Not Funded

- (7) Marcel Mgbodile, Ph.D.
Nutrition Biochemist

Project - Assessment of Toxicological and Biological Consequences of Dietary Protein Deficiency - 1973.

Disposition - Funded for \$30,000: A Future Leader-in-Nutrition grant, awarded by the Nutrition Foundation, Inc., New York, New York. A three-year project.

- (8) Marcel Mgbodile, Ph.D.
Nutritional Biochemist

Project - The Effect of Oral Contraceptives on Nutritional Status in Less Developed Countries - 1974.

Disposition - Funded; initially for two years for approximately \$143,000. Contract between A.I.D., SFRE and MCH/FP Center.

- (9) James P. Carter, M.D.
Director

Project - National Nutrition Planning grant - Proposal - 1974.

Disposition - Under Review by A.I.D.

- (10) James Maslowski, Ph.D. and
Dilip Bhowmik, Ph.D.

Project - The Impact of Contraceptives on Fertility - Iran

Disposition - Letter of interest being developed.

B. Findings

Of ten research projects submitted for review, A.I.D. funded one project, HEW funded one, the Nutrition Foundation funded a third and the U.S. Environmental Protection Agency funded a fourth. All of the others were either rejected or review is still pending.

For various reasons the Center has not produced the number and the quality research projects that its staff size would indicate it should produce.

8.0. Consultancies and feasibility studies provided to African countries.

Progress to Date

8.1. Consultancies

(a) Proposal for Handicapped Child in Africa: Conferences and technical assistance.

This was a proposal developed by the MCH Center and Peabody College. The proposal was to have been submitted to the Foundation for Child Development, The Ford Foundation and the March of Dimes.

(b) A proposal for a health unit, prepared by Dr. Dilip K. Bhowmik, Ph.D., in consultation with officials of the Ministry of Health, Botswana, May 1973.

(c) Proposal for a Guideline Texts for Charts, March 1974, by Dr. Sebina for Botswana on Child Spacing, Antenatal Care, Delivery, Child Care, Tuberculosis and Venereal Disease.

(d) A proposal for Radio in National Health Education Campaign in Botswana prepared by Dr. Leander Jones. The proposal followed on site observations by Dr. Jones of radio broadcasting activities.

(e) On Site Consultation in Liberia for Maternal and Child Health/Family Planning by Dr. Benjamin Major, July 1974. The visit was a familiarization trip for the consultant.

8.2. Feasibility Studies by Survey Teams.

(a) Zaire

Members of the Team:

Team A:

Dr. James Carter, Project Director, MCH/FP Center, Meharry Medical College.

Dr. George Nicholds, Obstetrician, Department of Ob-Gyn, Meharry Medical College

Dr. Edward High, Chairman, Department of Chemistry, Meharry Medical College

Team B:

Mrs. Helen Bratcher, Nutritionist, MCH/FP Center, Meharry Medical College

Mrs. Ruth Webb, Nurse-Practitioner, MCH/FP Center, Meharry Medical College

Objectives of Team A Visit

The major objectives of the Zaire Feasibility Team was first to investigate and observe the resources available to the Government of Zaire for the development of a good food and nutrition program in the country. Secondly, the feasibility team was concerned with ways to: (1) provide those types of support found to be needed to the Government of Zaire which would permit its Food and Nutrition Research Center (CERENA) to implement specific programs recommended and germane to national interest and (2) aid the Presbyterian Board of World Missions in drafting a proposed program for integrating nutrition and family planning services into a national health care delivery system.

Suggestions and Recommendations

A number of recommendations and suggestions for possible cooperation between Maternal and Child Health/Family Planning Center and Zaire were proposed. Some of the major suggestions and recommendations are as follows:

(a) A proposed program of study for Dr. Phaka Mbumba and an ONRD technician.

(b) A proposed program for the Development of a Biochemistry-Nutrition Component of CERENA.

(c) A number of other recommendations and suggestions were made concerned with a Proposal for Scientific Advisory Assistance to the Food and Nutrition Research Center (CERENA). A proposal to provide assistance to the Government of Zaire in the creation of a Maternal and Child Health/Family Planning Program in the Kinshasa area, and a proposal for the Integration of Nutrition and Family Planning services into African Health Care Delivery Systems.

Objectives of Team B Visit

The MCH/FP Center as a part of its staff development program sent two representatives to participate in maternal and child health related activities in Zaire during the months of June, July and August 1972. The representatives were Team B members

(b) Liberia

Team Members:

Dr. Matthew Walker
Professor and Chairman - Surgery
Meharry Medical College

Dr. David Hamilton, Dean, Department of
Agriculture, Home Economics and Nursing
Tennessee State University

Dr. Leo P. Sam, Jr., Deputy Director/Administrator
MCH/FP Center, Meharry Medical College

Mr. Bennie T. Woodard, Jr., Environmentalist
MCH/FP Center, Meharry Medical College

Dr. Nevia Wilson, Student Participant - Clinical
Experience in Liberia, Meharry Medical College

Objectives of Team Visit

The objectives of the Maternal and Child Health/Family Planning, Training and Research Center's Feasibility Team visit to Liberia was threefold. The team realized that in order to adequately serve a people, you must know them - hence our first objective, to learn about Liberia and its people. We were to observe health conditions and learn what health and training programs were currently in progress. Secondly, ours was the task of assessing training needs and identifying potential trainees for training in the United States at the MCH/FP Center. Finally, to seek avenues of cooperation between the Republic of Liberia and the MCH/FP Center of Meharry Medical College.

Suggestions and Recommendations

Due to the interest and cooperation of the Liberian Government and the suitability of their position to the goals and objectives of the MCH/FP Center of Meharry Medical College, we recommend the following:

- A. A comprehensive evaluation of the needs of Liberia in the areas of training and research with a favorable response to those needs.
- B. To provide technical assistance and training in the area of environmental health.
- C. To provide expanded training for trainers of Emperical midwives.
- D. To provide technical training and research in the areas of nutrition and biochemistry.
- E. To assist in the updating of their nursing program in all areas of MCH/FP.

F. Provide technical assistance in the areas of health economics and agriculture.

G. Assist in the establishing of a formal and an informal communication link between the different rural areas.

H. To serve as a resource for the exposure of all health professionals to different techniques and ideas in our representative disciplines.

I. To lend whatever financial assistance as may be necessary commensurate with the guidelines of MCH/FP and AID/Washington.

J. Train "trainers" and other health professionals in the multi-disciplinary approach to MCH/FP with emphasis on the "multiplier effect". It is hoped that this will assist in solving the manpower crisis in Liberia.

K. Student Programs.

(c) Ethiopia

Members of the Team:

Dr. Ralph Hines, Executive Vice-President of Meharry Medical College

Dr. James Worley, Professor of Economics and Director of the Graduate Program in Economic Development, Vanderbilt University

Miss Bettye Jeanne Forrester, Early Childhood Education Specialist, MCH/FP Center

Mr. Robert W. Kelley, Sr., Training Coordinator, MCH/FP Center

Dr. S.S.O. Nwosu, Obstetrician and Gynecologist, MCH/FP Coordinator for MCH/FP Center

Summary of Findings

Our visit aroused considerable interest as was reflected in the discussions we had with our university colleagues and health officials during our extensive survey of the scene in three urban areas in Ethiopia.

The health problems that we observed were enormous, so enormous that we felt that foreign medical schools and health training institutions can only offer technical assistance, while governmental agencies and rich foundations provide the necessary funds.

In the face of such problems, we consider inappropriate simply to talk of family planning, and we feel our Center policy of taking the integrated MCH/FP approach is fully justified.

Requests for assistance from Ethiopia on its health problems deserve prompt and considerate attention, and the priorities should recognize those in greatest need: mothers and children, and rural areas.

(d) Malawi

Members of the Team:

Dr. Ralph Hines, Executive Vice-President of Meharry Medical College

Dr. James Worley, Professor of Economics and Director of the Graduate Program in Economic Development, Vanderbilt University

Miss Bettye Jeanne Forrester, Early Childhood Education Specialist, MCH/FP Center

Mr. Robert W. Kelley, Sr., Training Coordinator, MCH/FP Center

Dr. S.S.O. Nwosu, Obstetrician and Gynecologist, MCH/FP Coordinator for MCH/FP Center

Summary of Findings

We did not feel that a sufficient amount of rapport was established between us and the officials with whom we had discussions to enable us to make meaningful recommendations.

Although family planning was offered in MCH clinics, the official attitude is entirely negative.

The MCH work being done was excellent, but the scope was very limited, and those responsible for running it did not feel that it was being given sufficient priority.

Although there was no USAID Mission, the U.S. Consul, Mr. John Buche, was very much interested, and knew a lot about the health problems in Africa. He had hoped we could have generated sufficient interest in the officials.

Our interpretation of the Permanent Secretary's position was that MCH/FP did not rate as one of his priorities, and he had no staff he could spare for any kind of further training elsewhere.

(e) Tanzania

Members of the Team:

Dr. Ralph Hines, Executive Vice President of Meharry Medical College

Dr. James Worley, Professor of Economics and Director of the Graduate Program in Economic Development, Vanderbilt University

Miss Bettye Jeanne Forrester, Early Childhood Education Specialist, MCH/FP Center

Mr. Robert W. Kelley, Sr., Training Coordinator, MCH/FP Center

Dr. S.S.O. Nwosu, Obstetrician and Gynecologist, MCH/FP Coordinator for MCH/FP Center

Summary of Findings

A. There is no doctrinaire opposition to family planning as is the case in some parts of Africa.

B. Family Planning is considered a vital and legitimate health measure, which at the moment is being offered by F.P.A.T.

C. Most of the grants for family planning are from private sources, the IPPF being the most important.

D. The clinical facilities and some of the staff belong to the Government and Voluntary Agency clinics and hospitals. Therefore any prospect of expanding family planning activities very much depends on what happens in the other health sectors.

E. The health problems in Tanzania are enormous, just as in the other African countries.

F. Tanzania is worse off than many of the others, having a huge land mass, and being very poor in natural resources, economic infrastructure and trained manpower.

(1) The total area of Tanzania is 339,000 square miles. The present population is 13,273,000 (1970). More than 45 percent of the population is under 15 years of age.

- (2) The birth rate is 4.9 percent.
- (3) The death rate is 2.2 percent.
- (4) The growth rate is 2.7 percent.

In other words, the population increases by 350,000 per year.

- (5) The per capita annual income is about \$100.

(6) Medical Facilities	<u>Now</u>	<u>At Independence</u>
Hospitals	122	98
Health Centers	90	22
Village Dispensaries	1400	945
Doctors	(123) 489	403 (12)

The figure in parenthesis indicate Tanzanians.

G. On the credit side are:

- (1) The fact that government priorities are right:

The GOT's Target for 1980

- 1,200-1,500 Medical Assistants
These are the U.S. equivalents of the paramedics who run the Rural Health Centers.
- 300 Rural Health Centers
- 3,000 Rural Medical Aides - (Exchange of rural dispensaries)
- 2,000 Rural Dispensaries
- 3,000 Village Midwives (These would have the responsibility of providing maternity care and family planning services at the village level).
- (2) The emphasis on rural health development (95 percent population live in rural areas) is also right.
- (3) The enthusiasm and determination of the population to succeed is evidenced by the successful running of F.P.A.T.

- (4) The prospect of the multi-national funding program which would attack health problems from a wide front, utilizing the expertise of many different areas, and for a change, favoring the rural bulk of the population.

(f) Botswana - May 1973

Members of the Team:

Dr. James Carter, Director (April 26 - May 3, 1973)

Mr. Leo P. Sam, Jr., Deputy Director/Administrator
(April 26 - May 3, 1973)

Dr. Dilip K. Bhowmik, Mass Education Planner (April 30-
May 12, 1973)

Mr. H. Wayne Williams, Accountant (April 30 - May 14, 1973)

Mr. Louis Grivetti, Newly Appointed Administrative Officer
of Botswant MCH/FP Project (April 28 - remains in
Botswana)

Purpose of Visit

A. In accordance with the A.I.D. guidelines established for the Meharry Medical College/Government of Botswana MCH/FP Project, an advance team was sent to Botswana to coordinate logistical support for the field staff assigned to the project prior to their arrival. The visit was designed to facilitate the provision of technical services and other assistance to the Government of Botswana through the development of a cadre of health personnel capable of providing MCH/FP services throughout Botswana.

B. Dr. Bhowmik accompanied the team for the specific purpose of evaluating present health education programs and developing strategies for setting up a health education unit in the Ministry of Health. However, Dr. Bhowmik participated in site visits and discussions with officials.

C. Mr. Louis Grivetti, the newly appointed Administrative Officer for the project remains in Botswana to commence his duties.

Summary of Findings

In connection with the team's visit, efforts were made to:

- A. Make preliminary arrangements for housing and other facilities

for the field staff.

B. Initiate official contact with the Government of Botswana in order to facilitate and develop a common understanding of the project content and its implementation process.

C. Establish administrative guidelines in reference to logistics and in-country operations, such as, ordering commodities and supplies, transportation and communication procedures.

D. Make general observations of the different sites (hospitals and clinics) where the field staff will be posted.

(g) Nigeria - January 1973

Planning Considerations on Maternal and Child Health/Family Planning Programs in Nigeria by Drs. O. Osborne, O. Oyenade and I.E. Harrison. The proposal was designed to provoke discussions for collaborative arrangements between some Nigerian university and the Meharry Medical College's Maternal and Child Health/Family Planning and Research Center.

Field visits in Africa by Carol Spencer, September 1974. The purpose of the visit to Africa was to initiate a mechanism of followup of the international participants trained in maternal and child health/family planning during the course of the project, September 1972-December 1973. A questionnaire was sent to all of the program graduates in an effort to solicit answers to questions regarding the application of learned skills, the adequacy of the training at Meharry, and suggestions for program changes.

Summary of Findings

When asked to evaluate the courses presented to them the participants replied as follows:

- (1) More than 60 percent of the students felt that more time should be given to pediatrics.
- (2) 33 percent of the students felt that the lectures were too short, particularly when new subject areas were introduced, e.g., Planned Change.
- (3) One participant requested more time for family planning.

- (4) "Most subjects contradict each other." (no further explanation.)
- (5) One comment - "Planned Change and Health Care Planning and Administration least valuable in current position."
- (6) Courses should be geared toward participants' home application.
- (7) All courses were valuable, subsequent groups should have the same.

Meharry MCH/FP Center Budget AID/afr-796
ACTUAL

	7-1-71 6-30-72	7-1-72 6-30-73	7-1-73 3-31-74	9 mos.
1	165,866	371,023	326,649	
2	17,610	35,926	36,556	
3	8,800	8,364	5,913	
4	27,600	34,372	8,747	
5	3,000	96,785	137,345	
6	8,900	51,933	5,464	
7	133,128	64,942	10,640	
8	33,474	85,558	77,589	
TOTALS	398,378 *	748,903*	608,902*	

INCEPTION THRU 3/31/74
(including accrued exp.)

1,756,184*

*Discrepancy of \$1 due to rounding.

Meharry MCH/FP Training & Research Center, AID/afr-796 - Budget

-14-

	<u>Projected</u> <u>7/1/71 to</u> <u>6/30/72</u>	<u>Actual</u> <u>Expenditures</u>	<u>Projected</u> <u>7/1/72 to</u> <u>6/30/73</u>	<u>Actual</u> <u>Expenditures</u>	<u>Projected</u> <u>7/1/73 to</u> <u>6/30/74</u>	<u>Estimated</u> <u>7/1/73 to</u> <u>6/30/75</u>
1. Salaries & Wages	\$356,000	\$165,866	\$373,575	\$371,023	\$391,974	\$829,687
2. Fringe Benefits @ 10%	35,600	17,610	37,355	35,926	39,197	84,751
3. Advisory Services	7,300	8,800	5,475	8,364	4,650	8,125
4. Travel & Transportation International United States Per Diem @ \$25 average	34,750	27,600	47,520	34,372	41,794	88,944
5. Participant Costs African Short-term African Long-term United States Faculty Fellowships & Staff development	85,000	3,000	173,000	96,785	173,000	321,000
6. Equipment, Materials & Supplies Equipment & Supplies Teaching Aids	29,500	8,900	15,000	51,933	5,000	16,000
7. Other direct costs Office Supplies Space Rental-Nashville/Field Printing & Computer Services Miscellaneous	51,000	133,128	56,000	64,932	54,000	123,000
8. Indirect Costs	71,200	33,474	74,715	85,568	78,395	183,942
TOTALS	\$670,350	\$398,378	\$782,640	\$748,903	\$788,010	\$1,655,449

APPENDIX A

Project Funded Personnel and Course Assignments

Project Funded Personnel and Course AssignmentsInstructor and Courses:

(1) Dr. Dilip Bhowmik

Mass Education Planner

Evaluation of Family Planning Communications
Theories and Objectives of Interpersonal Mass Communication
Health Administration and Planning
Interpersonal Relations in Health Delivery Systems
Health Education Attitudes, Behavior and Behavioral Change
Introduction to Media I and II
Micro-teaching & Videotaping Interviewing
Health Education & Use of Mass Communications in Family Planning
Health Education & Patient Motivation
Human Relations and FP
Communications Strategy for National FP
Multi-step Follow-up Message
Factors Affecting Communications
Diffusion of New Ideas
Role Playing: Interviewing and Counseling
Social & Psychological Factors in Health
Process of Communications

(2) Mrs. Helen Bratcher

Bell Nutritionist & Public
Health Dietician

Elementary Nutrition
Nutrition in Pregnancy
Social Problems
Food Value in Diet Evaluation
Infant Feeding
Fundamentals of Nutrition
Disorders of Nutrition in Children

Instructor and Courses:

- (3) Dr. James P. Carter Director, MCH/FP Center, Meharry
- Integrated MCH/FP
 - History of Family Planning
 - Infant Feeding
 - Anemias
 - Obesity
 - Health Status of Children in Developing Countries
 - Parasitology
 - Vitamin Deficiencies & Clinical Services
 - Disorders of Nutrition in Children
 - Nutrition in Pregnancy & Lactation
 - Cultural, Medical, Political Considerations in Fertility Control
- (4) Dr. Betty Cleckley Interallied Health Training Coordinator
- Exploration of Current MCH in Africa
 - Job Descriptions & Employment Practices
 - The Field of Social Work
 - Social Welfare
 - Cultural, Political, Medical Considerations in Fertility Control
 - Organizations & Communication Barriers
 - Designing Training Programs
 - Social Problems & Services for Problem Children & Families
 - Training and Supervision
 - Concept of New Allied Health Workers
 - Planned Changes & Development of Allied Health Manpower
- (5) *Dr. David Dunlop Health Economist
- FP in Socio-Economic & Developing Countries
 - Concept in Health Administration
 - Records & Reports in FP Services
 - Planning I, II, III
 - Economics of Health Care
 - Review of Record & Report Value & FP Clinic
 - Cultural, Political, Medical Considerations in Fertility Control

Instructor and Courses:

- (6) Ms. Bettye J. Forrester Early Childhood Development Specialist
- Early Childhood Development
Growth and Development
Well-Baby Care
Social Programs for the Child
Social Problems & Services for Problem Children and Families
- (7) *Ms. Katherine Fitts Family Life Educator
- Health Education
Dental Caries and Practices
Health Education-Use of Mass Communication
- (8) Ms. Pearline Gilpin Nurse-Midwife
- Role of Nurse-Midwifery in MCH/FP
Post-Partum Care
Review of Conduct of Normal Labor
Puerperium
History of Fertility Control
Nurse-Patient Interviewing
Psychological Aspects of Pregnancy
History of FP
Lab Methods
Reversible Fertility Control Method
Clinic Routines
Clinic Administration and Supervision
Fertility Control
Management of Normal Pregnancy Complications
Training Person
Health Administration Planning
Counseling for Rhythm, birth control methods and diaphragm
Methods Exercise with Pelvic Models

Instructor and Courses:

- (9) *Dr. Paul Gomez Pediatrician Baptist Hospital
- Organization of FP Services
 - Social Problems & Services for Problem Children & Families
 - Disorders of Hemophilic System
 - Problems of Gastro-Intestinal System
 - Central Nervous System
 - Basic Clinical Methods in Pediatrics
 - Case Assessment of New Born I, II, III
 - Acute Respiratory Problems
 - Health of Infant & Child Screening Procedures
 - TB in Children
 - Infectious Immunizations & Vaccinations
 - Disorders of Urinary Tract
 - Disorders and Dehydration
 - Pediatric Emergencies
- (10) *Dr. Ira E. Harrison Anthropologist & Behavioral Scientist
- Planned Change & Development of Allied Health Manpower
 - Cultural Factors & FP Afro-American Culture
 - Food Habits, Traditions & Cultures
 - Endocrinology of Pregnancy and Conception
 - Endocrinology of Menstruation of Preconception
 - Endocrinology of Reproduction
- (11) Dr. Leander Jones Communications Media Specialist
- Multi-step Follow-up Messages
 - Process of Communication: Introduction to Media
 - Micro-teaching: Video Presentation
 - Diffusion of New Ideas
 - Interviewing Theories & Objectives of Interpersonal Mass Communication
 - FP Communication
 - Factors Affecting Communication
 - Health Education Attitudes
 - Behavior & Behavioral Change
- (12) *Mr. Kenneth Malveaux Coordinator, Botswana Project
- Health Administration and Planning
 - Training of Personnel
 - Problem Solving

Instructors and Courses:

(13) Dr. James Maslowski

Demographer

Introduction to Population Studies
 Population Trends
 Population Distribution: Factors Related to Migration Trends
 Population Changes and the Economy
 Population Change and Political Development
 Demographic Transitions
 Morbidity Trends
 Population Problems in Developing Countries
 Economical & Social, Cultural Consideration in MCH/FP
 Population Change & Environment
 Population Change: Cultural Political, Medical Considerations
 Variables in Population Change
 Comparative Evaluation of Fertility Control Methods

(14) Dr. Marcle Mgbodile

Nutritionist/Biochemist/Toxicologist

Applied Nutrition Program: Fundamentals of Nutrition
 Environmental Toxicology
 Malnutrition: Combatting Malnutrition
 Disorders of Nutrition in Children
 Toxic Factors in Foods: Nutrition Policy in Africa

(15) *Dr. O. Oyemade

Pediatrician

Integration of MCH Services - Pros and Cons
 Preventive Pediatrics
 Toxic Factors in Food Care and Assessment of Newborn
 Pre-natal Influences
 Vaccinations and Immunizations
 School Health Services
 Post Conception Fertility Control
 Health of the Infant and Child
 Nutrition Policies in Africa
 Birth Injuries and other Diseases of NewBorns
 History and Objective of family planning

Instructors and Courses:

(16) *Dr. Prem Narula

Epidemiologist/Food Technologist

Environmental Factors in MCH/FP
Planning Evaluation
Clinical Signs and Infant Feeding
Vaccination and Immunization
Parasitology
Applied Nutrition Program
Nutrition of Pregnancy and Lactation
Failure to Thrive
Disorders of Nutrition in Children
High Risk Labor and Post-Partum Care
Physical Exam of Children
Obesity and Diet Evaluation
Fundamentals of Nutrition
Weaning Foods
Mother and Child Care in Developing Countries
Basic Epidemiology in MCH/FP Planning
Anthropometric Measures
History Taking and Pediatrics
Normal Growth and Development
Environmental Toxicology
Food Preparation and Preservation
Epidemiology and Ecology of Malnutrition
Anemias in Pregnancy

(17) Dr. George Nichoalds

Nutritionist/Biochemist

Man's Nutritional Status
Vitamin Deficiencies and Their Clinical Science
Nutrition in Pregnancy and Lactation
Anemias
Assessment of Nutritional Status

Instructor and Courses:

(18) *Dr. Sonny Nwosu

Obstetrician/Gynecologist

Essentials of the Human Reproductive System I, II, III
High-Risk Factors and Management in Labor
IUCD's/Tutorial-Counseling for IUD - Oral Contraceptives
Reproductive Biology
Birth Injuries and Other Diseases of Newborn
FP Distression of Traditional Methods
Use of Sterioids and Hormones in Family Planning
Post-Partum Approach
Traditional Fertility Control Methods
Introduction to Maternal Child Care
Basic Clinical Methods in MCH
Male and Female Sterilization
Contraceptive Drugs
Spermicidal Agents and Mechanical Barriers
Rhythm Method
Teratology of Pregnancy
Tutorial - Post-conception birth control methods
Health Status of Mothers
Vital Factors in Female Reproductive Performance
Common Gynecological Problems
Simple Fertility and Contraceptives
Exercises in Family Planning
Special Obstetrics of the Tropics
Hormonal Methods of Fertility Control
History and Objectives in Family Planning
Special OB problems of Performance in the Tropics
Medical History Taking
Common Problems in Gynecology
High-Risk Pregnancy
Fertility Methods of Future
Unit Exam and Family Planning
Prostaglandins
Pelvic Exams
Lab Methods
Female Responsibility
Introduction to Contraceptives
High-Risk Obstetrics Factors
Tutorial - Case Histories
Physiology of Pregnancy

Instructor and Courses:

(19) *Mr. Kenneth Rabin

Communications Media Specialist

Role of Communications Media in MCH/FP
 Drama and FP Motivation
 Micro-Teaching on TV about FP
 Afro-American Culture
 Health Education and Use of Mass Communication

(20) Mr. Jerome Schwarz

Language Coordinator

September 1972 - January 1973

Mukengele TEFL	25
Staff French	60
Total hours	<u>85</u>

February 1973 - June 1973

Mukengele TEFL	25
Staff French	30
Participants French	<u>10</u>
Total hours	<u>65</u>

Summer 1973	60
Total hours	<u>60</u>

September 1973 - January 1974

Staff French	20
Mbiya TEFL	15
Total hours	<u>35</u>

February 1974 - May 1974

Phaka TEFL	120
Staff French	15
Total hours	<u>135</u>
TOTAL HOURS	<u><u>380</u></u>

NOTE: Mr. Schwarz taught English Language to French-Speaking Participants and French Language Courses to Staff and Participants

Instructor and Courses:

- | | | |
|------|--|-------------------------------|
| (21) | Ms. Carol Spencer | Training Programs Coordinator |
| | <ul style="list-style-type: none"> Training of Personnel History-Taking and Interviewing Exercises in Family Planning Contraceptive Counseling Social Problems Unit Examination and Family Planning | |
| (22) | Mr. Wayne Williams | Accounting |
| | Budgeting | |
| (23) | Mr. Bennie T. Woodard | Environmentalist |
| | <ul style="list-style-type: none"> Economics of Health Delivery Systems Environmental Sanitation Occupational Health Environmental Sanitation Childhood Disease and the Environment Solid Waste Environmental Factors in MCH/FP Planning Case Studies in Environmental Health and MCH Environmental Health Planning | |

*Staff no longer on board as of September 1, 1974

APPENDIX B

MCH/FP Center Hours of Classroom Instruction Provided to
African Participants by Center Staff and Other Lecturers

MCH/FP CENTER HOURS OF CLASSROOM INSTRUCTION PROVIDED AFRICAN

APPENDIX B

PARTICIPANTS BY CENTER STAFF AND PAID LECTURERS (1972-1974)

Center Instructors	Training Cycles				*Total Classroom Teaching Hours
	Sept. '72- Jan. '73	Feb. '73- Jun. '73	Sept. '73- Jan. '74	Feb. '74- May '74	
Dr. Dilip Bhowmik, Mass Education Planner	12	38	17	30	97
**Mrs. Helen Bratcher Bell, Nutritionist & Public Health Dietician	0	11	45	3	59
Dr. James Carter, Director	1	11	9	0	21
Dr. Betty Cleckley, Interallied Health Training Coordinator	0	0	15	14	29
Dr. David Dunlop, Health Economist	8	3	9	1 1/2	21 1/2
Ms. Bettye Forrester, Early Childhood Development Specialist	0	11 1/2	10	0	21 1/2
Ms. Katharine Fitts, Family Life Educator	0	3	2 1/2	1	6 1/2
**Ms. Pearline Gilpin, Nurse-Midwife	34	37	19	0	90
Dr. Paul Gomez, Pediatrician, Baptist Hospital	0	0	16	15 1/2	31 1/2
Dr. Ira Harrison, Anthropologist and Behavioral Scientist	2	7 1/2	15 1/2	6 1/2	31 1/2
Dr. Leander Jones, Communications Media Specialist	0	0	15	19	34
Mr. Kenneth Malveaux, Coordinator, Botswana Project	0	11 1/2	5 1/2	2	19

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APPENDIX B

	Training Cycles				Total Classroom Teaching Hours
	Sept. '72- Jan. '73	Feb. '73- Jun. '73	Sept. '73- Jan. '74	Feb. '74- May '74	
<u>Center Instructors</u>					
Dr. James Maslowski, Demographer	2	34 1/2	26	13 1/2	76
Dr. Marcel Mgbodile Nutritionist/ Biochemist/Toxicologist	1	7 1/2	5 1/2	1 1/2	15 1/2
Dr. O. Oyemade. Pediatrician	0	20	0	0	20
Dr. Prem Narula, Epidemiologist/ Food Technologist	0	9 1/2	5 1/2	48	63
Dr. George Nichoalds, Nutritionist/ Biochemist	0	0	9 1/2	3	12 1/2
Dr. Sonny Nwosu, Obstetrician/ Gynecologist	42 1/2	33	39	34	149
Mr. Kenneth Rabin, Communications Media Specialist	19 1/2	20	0	0	39 1/2
Mr. Jerry Schwarz (See Note 2)	85	125	35	135	380
Ms. Carol Spencer, Training Programs Coordinator	0	3	3	8 1/2	14 1/2
Mr. Wayne Williams, Accountant	0	0	1	1 1/2	2 1/2
**Mr. Bennie Woodard, Environmentalist	0	40	8	71	119

APPENDIX B

****Outside Lecturers (Center-paid only)	Training Cycles				Total Classroom Teaching Hours
	Sept. '72- Jan. '73	Feb. '73- Jun. '73	Sept. '73- Jan. '74	Feb. '74- May '74	
Dr. Cicely Williams Tulane University	0	11 1/2	0	8	19 1/2
Dr. C. Butler, Ob-Gyn Emory University	0	6	0	0	6
Dr. Claudio Schuftan Chile	0	0	2	9	11
Dr. Fletcher Robinson Howard University	0	0	0	2	2
				Grand Total:	1391.5

Note 1: In addition to didactic training, participants received approximately six weeks' clerkship and practical experience in hospitals, clinics and other institutions in the Nashville area and the U.S. as part of their training in each cycle.

Note 2: Language instruction consisted of French and English to participants and staff for the four training cycles (see attached for breakdown).

*Three hours' preparation for each lecture-hour may be added to this total; these figures are approximations only.

**Total hours include instruction provided by these individuals in specially-designed programs for participants in Nutrition and Environmental Health.

***This staff member is currently on assignment (part-time) to Meharry's Department of Nursing Education to develop its Nurse-Midwifery Program which has been established. Our intentions are to place African participants in this program or in the three months refresher course in Midwifery, both programs are underway.

****Unpaid lecturers included Meharry faculty and individuals from cooperating institutions.

APPENDIX C

Participant Response to Field
Evaluation Visit by Spencer

TABLE I

Participant Response to Field
Evaluation Visit by Spencer*

<u>Title</u>	<u>Titles of Jobs/ Positions Currently Held by Participants</u>	<u>Title of Jobs/ Positions Held Prior to MCH/FP Training</u>
Senior Nursing Sister	2	2
Health Sister	1	1
General Staff Nurse	2	1
Clinic Sister	1	1
Health Education Nutritionist	1	1
Registered Nurse/Family Plan Practitioner	1	1
**Supervisor Traditional Birth Attendant	1	1
**Regional Supervisor	1	
County Supervisor		1
**Director Environmental Health	1	1
Ministry of Health & Social Welfare Admin	1	
Director, School of Environmental Health		1
Admin		
**Director School of Nursing	1	1
Staff Nurse Midwife	2	3
Nursing Sister	1	1
Total	<u>16</u>	<u>16</u>

**Indicates Promotion

In Table I above of the 16 responses received it was difficult to categorize positions as they differed according to setting and responsibilities. For instance, a clinic or health sister works primarily in an out-patient-health Center setting. Therefore I felt it best to list each job title response exactly as it was written rather than categorize. It was written as stated rather than categorized. It is important to note that not all participants in the study were nurses.

*Visit to Nigeria, Lesotho and Swaziland by Ms. Carol Spencer, Training Program Coordinator, Meharry MCH/FP Center.

TABLE II
Change in Job/Position Due to
MCH/FP Training

	<u>yes</u>	<u>no</u>
	4	12
Total		

N=16

The total number of responses is 16. Of those 16, four persons experienced a job change which was directly due to training at the MCH/FP Center. It is interesting to note that only two of the four received promotions which are shown on Table I. The other two had no change in position but primarily had changes in job responsibility without title change. They list an increase in responsibility without remuneration or prestige by title change. However, the remaining two who were promoted do not credit their promotions to the training received at the MCH/FP Center.

Thus the best interpretation here is that the two persons who had a positive response to this question despite the fact that they were not promoted, saw their current functions as a change as a direct result of training received at the MCH/FP Center.

Of the 12 who responded negatively to this question 8 had additional responses which include the following. Although their positions have not changed; they are practicing family planning. Some in rural health clinics; some in hospital outpatient antenatal care clinics; some are in teaching positions and are including family planning, obstetrics and midwifery in curriculae. Others are running family planning clinics independently or teaching family planning to others. One commented that a health education component has been added to her daily work due to the application of concepts taught here at Meharry. These were interpreted as increased job responsibilities.

TABLE III

Skills in Ob-Gyn/FP Learned at Meharry
Medical College and Currently Being Utilized

Skills Ob-Gyn/Family Planning	Was Skill Learned at Meharry			Skills Currently Being Used		
	Yes	No	No Response	Yes	No	No Response
Performing Complete & accurate Physical Examinations	10	4	2	10	4	2
Differentiating Normal from Abnormal findings	12	2	2	10	4	2
Selecting and interpreting appropriate lab tests	8	5	3	7	3	6
Counseling in Disease Prevention	11	3	2	13	1	2
Identifying normal Anatomy and Physiology	11	3	2	13	1	2
Performing pelvic examinations	10	3	3	8	3	5
Obtaining pap smear	12	1	3	5	5	6
Inserting IUD	12	1	3	7	3	6
Fitting Diaphragm	9	3	4	2	9	5
Counseling in Family Planning	14	1	1	10	4	2
Conducting Health Education Sessions	12	3	1	14	1	1

*Obstetrics-Gynecology/Family Planning

Although the Table is self-explanatory, it is interesting to note that, several persons who responded negatively to whether or not a particular skill was learned at the MCH/FP Center. There was special emphasis placed upon the fact that a particular skill was learned in basic schooling or nurses training. Over one-half of the respondents said they are not using diaphragms in their daily practice. Of these persons, several persons commented that this method is not available in their countries.

TABLE IV

Skills in Pediatrics Learned at Meharry
Medical College and Currently Being Utilized

Skills Pediatrics	Was Skill Learned at Meharry			Skills Currently Being Used		
	Total Number N=16			Total Number N=16		
	Yes	No	No Response	Yes	No	No Response
Obtaining Complete and accurate health history	<u>12</u>	<u>2</u>	<u>2</u>	<u>8</u>	<u>3</u>	<u>5</u>
Performing complete and accurate physical examinations	<u>8</u>	<u>4</u>	<u>4</u>	<u>5</u>	<u>6</u>	<u>5</u>
Selecting and interpreting pertinent lab tests	<u>9</u>	<u>3</u>	<u>4</u>	<u>4</u>	<u>7</u>	<u>5</u>
Counseling mothers in feeding and dietary problems of children	<u>12</u>	<u>3</u>	<u>1</u>	<u>12</u>	<u>2</u>	<u>2</u>
Planning and administering immunizations	<u>10</u>	<u>2</u>	<u>4</u>	<u>7</u>	<u>3</u>	<u>5</u>
Performing screening tests on children 0-5 years old	<u>12</u>	<u>1</u>	<u>3</u>	<u>7</u>	<u>4</u>	<u>5</u>
Managing common minor childhood diseases	<u>11</u>	<u>3</u>	<u>2</u>	<u>12</u>	<u>2</u>	<u>2</u>
Conducting Health Education Sessions	<u>12</u>	<u>2</u>	<u>2</u>	<u>12</u>	<u>2</u>	<u>2</u>

N=16

Table IV Interpretations

The Table is self-explanatory. However, of the seven who responded negatively to the skill of "selecting and interpreting laboratory tests, in some instances laboratory technologists were available while in other instances few, if any, laboratory facilities were available at all.

TABLE V

Feelings of Confidence in
Practicing Ob-Gyn/FP Skills or Functions

Functions or Skills in Ob-Gyn/Family Planning	Feeling of Confidence		
	Yes	No	No Response
Performing Complete & accurate Physical Examinations	<u>11</u>	<u>2</u>	<u>3</u>
Differentiating Normal from Abnormal findings	<u>14</u>	<u>0</u>	<u>2</u>
Selecting and interpreting appropriate lab tests	<u>6</u>	<u>6</u>	<u>4</u>
Counseling in Disease Prevention	<u>15</u>	<u>0</u>	<u>1</u>
Identifying normal Anatomy and Physiology	<u>15</u>	<u>0</u>	<u>1</u>
Performing pelvic Examinations	<u>15</u>	<u>0</u>	<u>1</u>
Obtaining pap smear	<u>13</u>	<u>0</u>	<u>3</u>
Inserting IUD's	<u>13</u>	<u>1</u>	<u>2</u>
Fitting Diaphragms	<u>11</u>	<u>1</u>	<u>4</u>
Counseling in Family Planning	<u>15</u>	<u>0</u>	<u>1</u>
Conducting Health Education Sessions	<u>15</u>	<u>0</u>	<u>1</u>

*Obstetrics-Gynecology/Family Planning
N=16 (Total Number)

Table V Interpretation

The vast majority of the participants feel confident in performing skills in Obstetrics-Gynecology and Family Planning except selecting and interpreting laboratory tests.

TABLE VI

**Feelings of Confidence in
Practicing Pediatric Skills or Functions**

Functions or Skills in Pediatrics	Feeling of Confidence		
	Total Number		
	Yes	No	No Response
Counseling mothers in feeding and dietary problems of children	<u>13</u>	<u>0</u>	<u>3</u>
Planning and administering immunizations	<u>12</u>	<u>0</u>	<u>4</u>
Performing screening tests on children 0-5 years old	<u>10</u>	<u>2</u>	<u>4</u>
Managing common minor childhood diseases	<u>14</u>	<u>0</u>	<u>2</u>
Conducting Health Education Sessions	<u>14</u>	<u>0</u>	<u>2</u>
Obtaining Complete and accurate health history	<u>14</u>	<u>0</u>	<u>2</u>
Performing complete and accurate physical examinations	<u>9</u>	<u>2</u>	<u>5</u>
Selecting and interpreting pertinent lab tests	<u>7</u>	<u>5</u>	<u>4</u>
N=16 (Total Number)			

Table VI Interpretation

It appears that the vast majority of participants feel confident in performing the skills listed in pediatrics except performing a complete and accurate physical examination in pediatrics and selecting and interpreting pertinent laboratory tests. Some of the comments made concerning improvement of the MCH/FP course offered at Meharry may explain these findings.

TABLE VII

Applicability of Theoretical Courses Taught
At Meharry Medical College to Current position

<u>Course</u>	<u>Applicable to Your Current Position</u>		
	<u>Yes</u>	<u>No</u>	<u>No Response</u>
Maternal Child Health	<u>13</u>	<u>1</u>	<u>2</u>
Pediatrics & Child Care	<u>11</u>	<u>2</u>	<u>2</u>
Family Planning	<u>14</u>	<u>1</u>	<u>1</u>
Nutrition	<u>15</u>	<u>1</u>	<u>0</u>
Health Education	<u>14</u>	<u>2</u>	<u>0</u>
Demography & Population	<u>10</u>	<u>6</u>	<u>0</u>
Social-Cultural Aspects	<u>16</u>	<u>0</u>	<u>0</u>
Planned Change	<u>13</u>	<u>3</u>	<u>0</u>
Environmental Health	<u>15</u>	<u>1</u>	<u>0</u>
Health Care Planning and Administration	<u>11</u>	<u>4</u>	<u>1</u>
Epidemiology	<u>14</u>	<u>2</u>	<u>0</u>

N=16 Total Number

Table VII Interpretation

With the exception of Demography and Population, the vast majority of participants felt that all theoretical courses taught at the MCH/FP Center were applicable to their current positions.

TABLE VIII

Need for Consultation of Technical Assistance
In Maternal and Child Health and Family Planning

Yes	11
No	3
No Response	2
N=16 Total	16

Interpretation of the Table reveals consultation was requested in the following areas; Family Planning, screening for disease in Family Planning, insertion of IUD's., pelvic examination, Identification of abnormal pap smears and cultural behavior affecting maternal and child health.

One participant responded that there is frequent consultation among field health workers, the family planning team and pre-school staff on various topics to which mothers would be receptive.

Technical assistance requests were submitted for pediatric theory and practice, Laboratory diagnosis, Administration of clinics, Requests for Family Planning supplies and equipment and a means of transport of the same; organizing and setting up a family planning clinic and selecting, and interpreting laboratory tests in adults in children.

The following Tables listed are self-explanatory

TABLE IX Adequacy of Clinical and Academic Training received at Meharry in Meeting Population's Health Needs Encountered Daily

	Total
Yes	15
No	0
No Response	1
N=16 Total Number	16

TABLE X Degree of value participants placed on Training received at Meharry Medical College, MCH/FP Center

	Total
Very valuable	10
Valuable	4
Not Valuable	0
No Response	2
N=16 Total Number	16

TABLE XI Expressed Need to Maintain Contact with MCH/FP for Continuing Education Purposes

	Total
Yes	11
No	0
No Response	5
N=16 Total Number	16

The following responses were returned from the question: In retrospect, how can the Maternal and Child Health/Family Planning Training and Research Center improve its training program to make it most beneficial to a participant from your country? (Please be specific.)

1. Expend more time on practicals and less on theory.
2. Provide more experience in laboratory work.
3. Provide more experience in pelvic examinations.
4. Provide more experience in identifying high risk infants and diseases in children.
5. Provide more experience in physical examinations especially for rural clinic nurses.
6. Involve the participant's administrators in developing curriculums in keeping with existing programs and in anticipation of future needs.
7. Increase the period of clinical work.
8. Increase time in MCH/FP theory and practice.
9. Spend less time in the classroom and more in practical application of theory taught.
10. Spend more time to learn insertion of the IUD's.
11. Allow exposure to All methods of family planning before returning home.
12. Place more stress on family planning in the classroom.
13. Give less emphasis to health education and more emphasis in pediatrics in the classroom.
14. Provide more classroom exercises.
15. Provide former students with refresher courses.
16. Include suggestions in the MCH/FP course work as how to initiate MCH/FP programs.
17. Include more laboratory tests and interpretation of the same.

18. More time is needed to learn to detect normal and abnormal findings during physical examination with the use of medical instruments.
19. Utilize a better approach and improved teaching methods in planned change and socio-cultural aspects of health.
20. During classroom work, the students should be given tests every two weeks to determine understanding of theoretical material.
21. Less classroom time should be devoted to theory and and more time devoted to clinicals.
22. Lengthen the entire course.
23. Place greater emphasis on practical aspects of the course.

CONCLUSION*

In conclusion, it appears that objectives of the study were accomplished. Most of the participants are working in the area of Maternal and Child Health and Family Planning. In areas where they are not, it appears to be due to circumstances beyond their control. Most of the participants feel they are practicing skills which they acquired at Meharry in the area of Maternal and Child Health and Family Planning. The vast majority of participants who participated in this study felt the training which was received at the Maternal and Child Health/Family Planning Training and Research Center is of value to them in their daily work. Most participants expressed a need for consultation and technical assistance in many areas including administration. All participants with the exception of one felt the training which they received was adequate to assist them in meeting the health needs of their country's population. The vast majority of participants (greater than 80%) received no change in position as a direct result of training received at this training center. Participants express a desire for continued contact with the MCH/FP Center for continuing education purposes.

Most, if not all, of the contact persons within the countries visited express a desire to send participants to be trained at this center. All of the supervisors of the participants expressed satisfaction regarding the level of proficiency of the participants upon return to the country and most of the participants who are practicing MCH/FP express confidence in performing most of the skills.

On the administrative level, some communication problems were identified between the USAID field staff and the MCH/FP Center in all three countries. These appear to be minor and indicative of increased communication between both parties.

I am grateful for the opportunity to visit these countries and observe the health problems which the nurses, physicians, environmentalists and health educators are confronted with daily. This trip has endowed me with a broader view of the participant from Africa, their country health needs and the participant's level of training needed. This experience was to me invaluable.

*Taken from a field visit by Ms. Carol Spencer, Training Program Coordinator, Meharry MCH/FP Center.