

PD-AAK-459

5/5 P.

CLASSIFICATION

PROJECT EVALUATION SUMMARY (PES) - PART 1

698-0358

attached 69803580060/

6980358001502
Report Symbol U-447

1. PROJECT TITLE Maternal Child Health Extension	2. PROJECT NUMBER 698-0358	3. MISSION/AID/W OFFICE AFR/RA
	4. EVALUATION NUMBER (Enter the number maintained by the reporting unit e.g., Country or AID/W Administrative Code, Fiscal Year, Serial No. beginning with No. 1 each FY) 698-81-06	
<input checked="" type="checkbox"/> REGULAR EVALUATION <input type="checkbox"/> SPECIAL EVALUATION		

5. KEY PROJECT IMPLEMENTATION DATES			6. ESTIMATED PROJECT FUNDING		7. PERIOD COVERED BY EVALUATION	
A. First PRO-AG or Equivalent FY <u>71</u>	B. Final Obligation Expected FY <u>79</u>	C. Final Input Delivery FY <u>80</u>	A. Total	\$ <u>6,873,000</u>	From (month/yr.)	<u>July, 1978</u>
			B. U.S.	\$ <u>5,614,000</u>	To (month/yr.)	<u>December, 1979</u>
Date of Evaluation Review						

B. ACTION DECISIONS APPROVED BY MISSION OR AID/W OFFICE DIRECTOR

A. List decisions and/or unresolved issues; cite those items needing further study. (NOTE: Mission decisions which anticipate AID/W or regional office action should specify type of document, e.g., airmgram, SPAR, PIO, which will present detailed request.)	B. NAME OF OFFICER RESPONSIBLE FOR ACTION	C. DATE ACTION TO BE COMPLETED
Project terminated in December, 1979. Final Report is attached. The only outstanding action is in regard to a cost overrun by the Contractor. A final audit is currently underway and a final determination on the overrun will be based on the audit findings.	M. Snyder CM/ROD/AFR and J. Dawson AFR/RA	6/30/81

9. INVENTORY OF DOCUMENTS TO BE REVISED PER ABOVE DECISIONS			10. ALTERNATIVE DECISIONS ON FUTURE OF PROJECT	
<input type="checkbox"/> Project Paper	<input type="checkbox"/> Implementation Plan e.g., CPI Network	<input checked="" type="checkbox"/> Other (Specify) <u>None</u>	A. <input type="checkbox"/> Continue Project Without Change	
<input type="checkbox"/> Financial Plan	<input type="checkbox"/> PIO/T	<input type="checkbox"/> Other (Specify)	B. <input type="checkbox"/> Change Project Design and/or	
<input type="checkbox"/> Logical Framework	<input type="checkbox"/> PIO/C		<input type="checkbox"/> Change Implementation Plan	
<input type="checkbox"/> Project Agreement	<input type="checkbox"/> PIO/P		C. <input checked="" type="checkbox"/> Terminated Project	12/79

11. PROJECT OFFICER AND HOST COUNTRY OR OTHER RANKING PARTICIPANTS AS APPROPRIATE (Name and Title)		12. Mission/AID/W Office Director Approval	
James W. Dawson, Sr. Project Officer, AFR/RA James R. Cumiskey, Health Officer, AFR/RA <i>James R. Cumiskey</i>		Signature <i>Donald F. Miller</i>	
		Typed Name Donald F. Miller	
		Date 5-13-81	

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SANTA BARBARA • SANTA CRUZ

SANTA CRUZ, CALIFORNIA 95064

June 6, 1980

Mr James W. Dawson
Room 3325
Office of Regional Affairs
U.S. International Development
Cooperation Agency
A.I.D
Washington, D.C. 20523

Dear Jim:

Enclosed are ten copies of the final report for our project in the Gambia and Benin under Contract AID/Afr-C-1295. Some of the material in this report dates back to the original project Contract AID/Afr.-799. This has been included to make the report more complete and comprehensible.

I have also included one copy of each of our Semi-Annual reports from project inception in 1971 to end of project in December, 1979.

We have had a tremendous amount of support from AID/Washington and from AID and U.S. Embassy personnel in Benin and the Gambia. This support coupled with the cooperation of local political and health personnel made this an exciting and worthwhile endeavor.

If you have any questions or comments, please contact me at any time.

Sincerely,

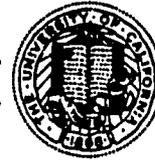
A handwritten signature in black ink, appearing to read "James A. Franks".

James A. Franks
Director
International Programs

6980358006801

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MATERNAL AND CHILD HEALTH/FAMILY PLANNING PROJECT

for

The Republic of the Gambia

and

The Peoples' Republic of Benin

West Africa

Contract AID/Afr-C-1295

Final Report

February 29, 1980

Submitted by:

**James A. Franks
Director
International Programs**

**Robert L. Minnis
Associate Director
International Programs**

**Paul E. Wilson, M.D.
Field Coordinator**

TABLE OF CONTENTS

<u>VOLUME ONE</u>	Page
I. Introduction	1
II. Summary & Recommendations	4
III. Guide to Materials Contained in this Final Report	33
IV. Materials from the Gambia	65
V. Materials from Benin	389
VI. General Materials	398
 <u>VOLUME TWO</u>	
VII. Semi-annual Reports Jan. 1, 1972 - Dec. 31, 1978	Under Separate Cover
VIII. Evaluation Report AID/Washington	
(each section (II-VIII) has separate table of contents)	

I. INTRODUCTION

December 31, 1978 marked the termination of the University of California/Santa Cruz Extension (UNEX) project in Benin and the beginning of the extension of UNEX technical assistance by the field coordinator to The Gambia until December 31, 1979. This report includes a summary of project activities and a list of the major observations and recommendations of the UNEX staff following termination of both projects.

During the years of the University of California's presence in Africa, changes in health practices and planning have been rapid and complex. The last seven years have seen a shift in priorities set by host countries from family planning to family health with an emphasis on care for the mother and child.

There are new medicines for cure and prevention of disease and new methods for achieving changes in knowledge, attitudes and behaviors of communities towards habits and customs affecting family health. The impact on the traditional ways of living by the stimuli of modern cultures, the pressures of epidemics and famine, the political manipulations of peoples and countries, the awareness of the need to deliver rural health care, give rise to a complex set of problems requiring experienced planning, evaluation and attention. As some problems give way to solutions, new ones appear and new priorities develop. There is an endless series of challenges in this ever-changing scene.

The roles of the community health worker, the health auxiliary, the volunteer, the traditional healer as problem solvers in rural health delivery systems are being redefined and are gaining new importance in assuming

responsibilities for solving these problems. Those of us with the advantage of practical field experience, and who have been involved in this development, strongly endorse this evolutionary process. We also strongly endorse the proposition that programs which are meeting the challenges with some success should not be replaced but should be encouraged to continue, to develop, to extend their work and to expand into new territories.

The present concept of a strict time limit on a health project should be abandoned. It is not realistic, it does not reflect the constantly changing pattern of reaction and adjustment of evolving events which is so characteristic of developing countries. This report is, in part, a plea to USAID to support the continuation of activities that are making progress, to encourage their replication in other developing countries, and to invite new ideas, new inputs, new contributors without terminating or replacing successful projects.

The focus of this project in Benin and The Gambia was on technical assistance in training health personnel, health planning and data collection, and the development of suitable training and teaching aids, and the supply of demonstration equipment and commodities.

The semi-annual reports contained in Volumes 2 & 3 of this report document project activities in each country and describe the manner in which development took place and where work between The Gambian and Beninise projects differed. At the most general level, within each project:

1. Most preliminary contract objectives were met
and in several cases exceeded

2. There was a successful termination to activities.
3. The Ministers of Health from both Benin and The Gambia requested the presence of a UNEX Maternal and Child Health (MCH) team to continue to aid in the development and implementation of new projects in the health sector with emphasis on training personnel and expansion of health services to the rural areas.

CONTENTS

II. SUMMARY AND RECOMMENDATIONS

	Page
1. Project Review	5
2. Specific Project Activities	6
3. The Gambia	9
4. Benin	11
5. Africanization	13
6. The MCH Coordinating Unit	17
7. Mansa Konko Rural Health Center	19
8. Counterparts	22
9. The Committee of Donors	23
10. Concerns & Problems	24
11. Recommendations	26

II. SUMMARY AND RECOMMENDATIONS

1. Project Review

In October 1970, USAID invited UNEX to submit a proposal for a Maternal and Child Health/Child Spacing Project to answer the requests it received from several developing African countries for assistance in improving in-country MCH programs. General project guidelines were:

- 1.1 to contribute to the reduction of preventable maternal and child morbidity and mortality and to the improvement of the quality of life of African families;
- 1.2 to promote awareness and acceptance of the values of child spacing;
- 1.3 to initiate child spacing services without necessitating the formal development of a national policy on population matters.

The approved project was to assist The Gambia, Benin, (formerly Dahomey) and Lesotho to initiate, improve and install outpatient MCH/FP services in rural health clinics. Project activities were to take place in existing facilities which had personnel already assigned on a permanent basis. The project was to supply field training, supervision, and clinical supplies necessary to provide minimal but effective MCH and child spacing services without over-extending the limited health resources of the three rural African countries. Based on project success, AID expected that other developing African countries would be encouraged to initiate similar programs which would be used to train their national trainers and supervisors.

The project designed and implemented by UNEX which met the contract conditions and guidelines completed the activities outlined below. The

The UNEX MCH/FP project:

- 1.4 contributed in a practical, visible way to the improvement and expansion of MCH/FP services which had been given high priority by the host countries, health administration;
- 1.5 provided a non-controversial basis for the introduction of child spacing and family planning;
- 1.6 demonstrated services which could be replicated throughout the country, particularly in rural areas, without substantial increases in capital, operating or personnel costs;
- 1.7 assisted host governments to create in-country training institutions for MCH/FP personnel;
- 1.8 assisted the host countries to plan and produce in-country continuing education training programs and workshops for health personnel;
- 1.9 developed an in-country training capability which did not rely on outside assistance to provide continuing education programs for MCH/FP personnel;
- 1.10 assisted in the development of a cadre of community based health personnel whose responsibilities included education and motivation of the rural population toward improving health practices and environmental conditions.

2. Specific Project Activities

These general activities listed above were accomplished by such specific tasks as:

- 2.1 expanding MCH services to include nutrition and family care

education, the identification of women for whom pregnancy would constitute a serious medical risk, the provision of contraceptive services for these women, and identification of children "at risk;"

- 2.2 establishing a School for Community Health Nurses at Mansa Konko in The Gambia;
- 2.3 conducting Training of Trainers sessions in each country;
- 2.4 conducting management seminars, Pediatric Assessment Workshops and other training programs for health personnel as needs developed;
- 2.5 providing technical assistance to the UNEX trained midwives in Benin who planned, directed and taught a 12-week FP/NP training cycle which duplicated the Santa Cruz based training;
- 2.6 conducting out-of-country training:
 - 2.6.1 a Maternal and Child Health/Nurse Practitioner (MCH/NP) program which stressed family planning was developed by UNEX staff and 12 cycles in English and 14 cycles in French were conducted during the eight years of the project's existence;
 - 2.6.2 special management programs were conducted for selected upper level administrative personnel from both countries at various times during the project;
 - 2.6.3 planning courses for nurses and nurse/midwives were offered during the project as training needs became apparent.

2.8 Outline of completed Training Sessions

Type of Training	Position of Participants	Total Number of Participants		Total Number of Sessions	
		Gambia	Benin	In country	US
FP/NP	Nurse Midwives	11	28	1 Benin	12
Health Planning and Management	Dir. of Medical Services	1	1		2
	Chief of MCH		1		1
TOT (1974)	Nurses, Nurse-Midwives	16		2 Gambia	
TOT (1979)	Dresser Dispensers, Doctors, Program Directors	23			
Polyvalent Nurse Midwife Seminar (1977)	Nurse Midwife	16		1 Gambia	
Pediatric Assessment	Nurse Midwife,	12-	7	4 Gambia 1 Benin	
	Dresser Dispense	10-			
	MD	1-			
Administration/Orientation	Director Medical Services	1			
	Director Preventive Medical Services		1		3
	Chief MCH clinics		1		

2.7 organizing in-country training:

The training programs and workshops conducted in the host country setting were the products of national MCH personnel working with UNEX counterparts. The aims of the training were: 1) to stimulate learning and to provide host country personnel with the opportunities to put into practice newly acquired knowledge and skills; 2) to implement skills in training others; and, 3) to encourage the development of capability for planning and implementing in-service training programs with the ultimate responsibility resting with the MCH personnel from the host country. A feature of UNEX training is that all cycles use the appropriate language for the group being trained. The UNEX training staff has multilingual capabilities in English, French and Spanish.

3. The Gambia

In this small West African Country with a population approaching 600,000, the UCSC/MCH project was able to assist the Gambian Ministry of Health to reach the following objectives:

- 3.1 one pilot MCH demonstration training center at Mansa Konko has become a model for replication of MCH services throughout the country;
- 3.2 one school for community health nurses at Mansa Konko was dedicated and officially opened December, 1977; students are now chosen from rural areas to which they are reassigned upon graduation;
- 3.3 one national MCH office was developed within the MOH. Mrs. Bertha M'Boge has been officially designated as coordinator

- of all MCH activities in the country;
- 3.4 eleven nurse/midwives have been trained in Santa Cruz each being certified as an MCH/Nurse Practitioner;
 - 3.5 the first class of fifteen students graduated, after eighteen months of training from Mansa Konko School for Community Health Nurses. They have been posted to rural areas throughout the country.
 - 3.6 the second class of eighteen students at Mansa Konko School for Community Health Nurses graduated in December 1979 and graduates were awaiting assignments to rural "outposts of health;"
 - 3.7 two MCH Centers were replicated at Kuntaur and Kerewan and were supplied with necessary MCH/FP equipment, contraceptives, materials and medications;
 - 3.8 ten auxiliary nurses were trained at Royal Victoria Hospital (RVH) Family Planning Clinic to assist in various Family Spacing Clinics;
 - 3.9 eighteen student nurse midwives were instructed at RVH Family Spacing Clinic as part of their training;
 - 3.10 two nursing sisters were given on-the-job training in Family Spacing as well as periods of formal instruction at the RVH Family Planning Clinic;
 - 3.11 fourteen area council nurses were trained in a two-week course at Bansang Hospital by MCH staff;
 - 3.12 health education talks were given to a total of 75,000 clients at various health facilities by MCH trained health personnel;

- 3.13 UNEX MCH staff has assisted in curriculum development, training and instruction in the School of Nursing and Midwifery, School of Public Health and Health Missions. MCH/FP material has been introduced into the curricula of these institutions.
- 3.14 a continuous in-service education program for nurses and nurse-midwives was initiated at Mansa Konko Health Center;
- 3.15 a committee of Health Donors was formed by the Director of Medical Services and the first meeting was held on October 3, 1978;
- 3.16 four four-week training cycles in Pediatric Assessment (PA) were given in-country. Twelve nurse midwives, ten dresser dispensers, and one physician were trained and posted to rural health facilities.
- 3.17 a KAP survey of health professionals was conducted and analyzed by UNEX staff.

4. People's Republic of Benin

In this country, the smallest is Francophone West Africa with a land area roughly the size of Pennsylvania and population of about 3.2 million (88% rural), the UNEX MCH project began its final phase of operations on January 31, 1977. At termination in December 31, 1978, achievements in the areas of training, health education, replication of MCH services, general technical assistance and supply have met and often exceeded original objectives:

- 4.1 twenty-one nurse midwives were trained at Santa Cruz in 12-14 week training cycles and were certified as Family Planning Nurse Practitioners,

- 4.2 seven nurse midwives were trained in-country in a twelve-week cycle (a duplicate of the Santa Cruz training) designed and directed by Beninise trainers who were graduates of the Santa Cruz FP/NP training program;
- 4.3 MCH services were installed in 15 health centers throughout Benin. Each center has a UNEX trained or in-country trained nurse or nurse/midwife as the responsible medical officer. Each center was supplied with the necessary equipment, contraceptives, materials and medications.
- 4.4 forty-eight nurses and nurse/midwives were trained on-the-job in Family Planning at various MCH centers;
- 4.5 twenty-four TBA's and twelve assistant dresser dispensers were trained in a pilot program to which UNEX staff contributed curriculum designs, teaching aids and basic clinic supplies;
- 4.6 MCH/FP concepts have been introduced into the curricula of the Schools of Nursing, Midwifery, and Medicine. They are taught by a Santa Cruz trained MCH/Nurse Practitioner.
- 4.7 three hundred thousand patient clients have received health education instruction;
- 4.8 fifteen Family Planning Clinics are in operation throughout the country, one at each MCH Center plus one national CNBFP Center in Cotonou. Each MCH Family Planning Clinic works in cooperation with CNBFP sponsored local committee.
- 4.9 data collection has been simplified and the identical data collection system has been made operational for all MCH clinics;

- 4.10 in-service education programs for all levels of health personnel have started at all centers. A monthly review of training activities for the three national trainers is a part of this in-service program.
- 4.11 five hundred paramedical health personnel attended the orientation/installation two-week seminars at the various facilities where MCH services were initiated;
- 4.12 Family Spacing acceptors and requests for information are increasing and there is an increasing number of males requesting FP information from FP facilities;
- 4.13 a plan for ongoing supervision of all centers was developed. Routine regular visits are now made by National MCH team.
- 4.14 ongoing cooperation with National Office of Health Education contributed to the success of training and Health Education Programs.

5. Africanization

UNEX was charged in the original contract to assist the governments of the Gambia and Dahomey (later the Peoples Republic of Benin (RPB)) to introduce MCH/FPP service and education models that the countries could afford and replicate in rural areas. Before undertaking these programs it was necessary in the project work plan to define the specific goals and objectives and to establish a detailed modus operandi for technical assistance which would assure the institutionalization of health services and training activities undertaken by project staff and host country counterparts.

Two policies regarding institutionalization of project training and service delivery models emerged during the initial planning for the project and were adhered to throughout the span of project activities. First, UNEX staff would only work in a counterpart context. Before any work could begin, the government was asked to select and assign one or more counterparts to work with UNEX staff members. Second, all activities related to the growth and development of MCH/FP services including the planning, health education, training of health personnel, etc., would be designed to create a capability within the host country MOH for continuing these activities as well as for programming, planning and implementing future growth in each of the activity categories.

The essential parts of this Africanization process involved the formation of an MCH coordinating unit in the MOH, 2) the development of a corps of national trainers, 3) the utilization by the host country of these trainers to conduct training cycles at in-country sites, and 4) ongoing support of MCH/FP development.

5.1 The specific steps by which this Africanization took form in The Gambia were:

5.1.1 the formation of a distinct MCH coordinating unit within the MOH with the appointment of a Santa Cruz trained nurse midwife as coordinator;

5.1.2 the founding of a school for Community Health Nurses (CHN's) at Mansa Konko with a suitable curriculum for equipping CHN's with the skills necessary to return to their villages to work. The school's directress and

trainers are Gambian and until termination of the project a UNEX advisor/counterpart was in residence and available to provide technical assistance.

- 5.1.3 by 1979 all TOT's, workshops and seminars were totally Gambian directed by the MCH coordinating unit. Until the end of 1978 UNEX counterparts were present in an advisory capacity.
- 5.1.4 Cycle IV of Pediatric Assessment training was planned, directed and taught by Gambian trainers. Several additional cycles have already been scheduled by the MOH for 1980.
- 5.1.5 course material on FP and related subjects was introduced into the curricula of the professional schools; courses contained FP information are now taught by Gambian instructors;
- 5.1.6 the MCH coordinator established a very successful FP clinic at the RVH in January of 1977 that meets three times weekly and has already seen its 3,000 FP service acceptor;
- 5.1.7 replication of FP clinics at 3 rural sites -- Mansa Konko, Kerewan, Kuntaur -- has now been completed;
- 5.2 The specific steps by which this Africanization process took place in Benin were:
 - 5.2.1 a national training coordinator has been recognized by MOH. She coordinates all MCH/FP training activity in Benin and has also trained and consulted abroad on FP issues.

- 5.2.2 two other UNEX trained midwives have been assigned fulltime to the national training team;
- 5.2.3 MCH/FP coordinating activities are directed out of the office of the Director of Preventive Medical Services;
- 5.2.4 a 12-week FP/NP cycle in Cotonou for eight participants was conducted by the Beninise national training team. This training duplicated the Santa Cruz-based cycles.
- 5.2.5 the national training coordinator and a UNEX-trained midwife who is posted to the National Bureau of Health Education, worked together to develop appropriate MCH/FP material for the instruction of TBA's, junior dispensers, and village health workers. This material is presently in use in service centers in rural areas.
- 5.2.6 the national training coordinator supervised a three-week training exercise for three Malienne and three Senegalese midwives in Abomey.

The Africans who participated in various UNEX training programs were in unanimous agreement with the principle of Africanization. Not only is it more economical, but it is more realistic. Participants cope with problems existing in situ, they use the locally available materials to aid them in problem solving, and they use their new skills to improve health services and health delivery systems within the existing national health infrastructure.

6. The MCH Coordinating Unit

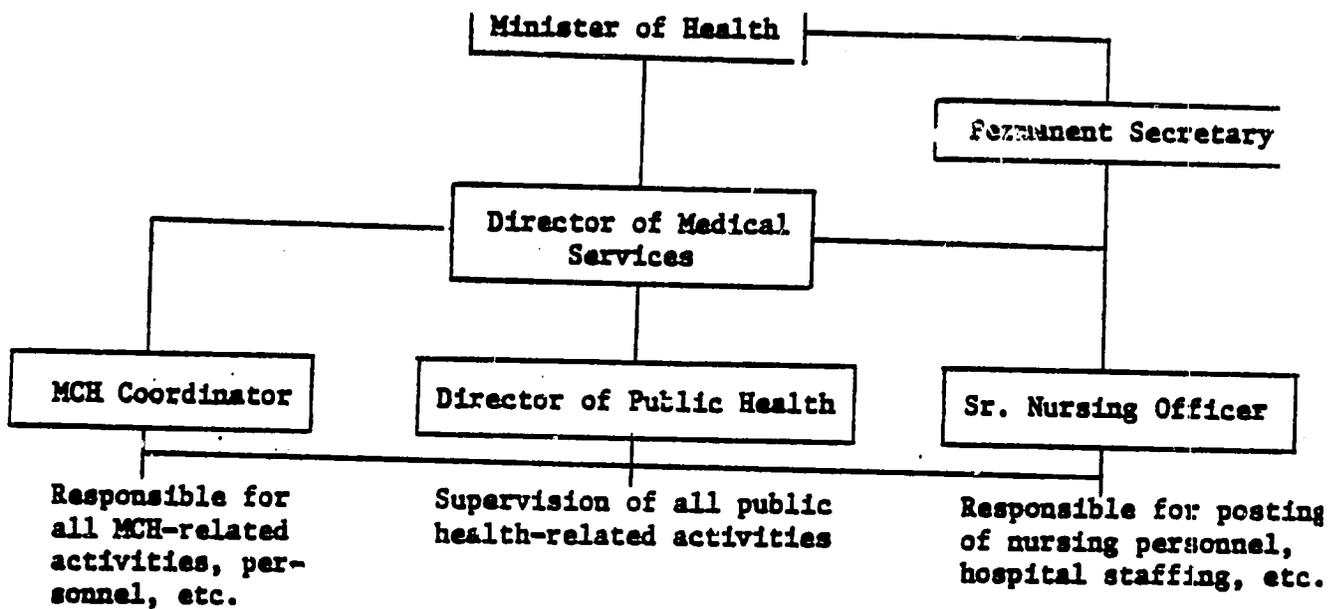
The original agreement included the expectation that each participating country would provide a focal point within the MCH for project development, administration, and coordination of all MCH/FP activities.

6.1 The Gambia met this expectation by placing early project activity in the office of the Director of Medical Services (DMS). When the first group of UNEX-trained midwives returned from training in 1973, one was selected to be the coordinator of MCH activities at the national level. This post was officially incorporated into the infrastructure in 1978. The responsibilities of this office are to:

- 6.1.1 supervise the activities of all MCH/FP centers;
- 6.1.2 standardize record keeping, nursing care (OPD), medication, procedures for treatment and presentation in the MCH clinics;
- 6.1.3 serve as consultant/advisor to the School for Community Health Nurses at Mansa Konko, curriculum development and review, selection of students, occasional training input;
- 6.1.4 plan and supervise MOH in-service education, seminars, workshops, relevant to MCH/FP;
- 6.1.5 liaison with other agencies and ministries in the health sector;
- 6.1.6 participate in the postings and reassignments of health personnel for MCH/FP centers;

6.1.7 supervise and evaluate MCH/FP activities in health facilities where they are included;

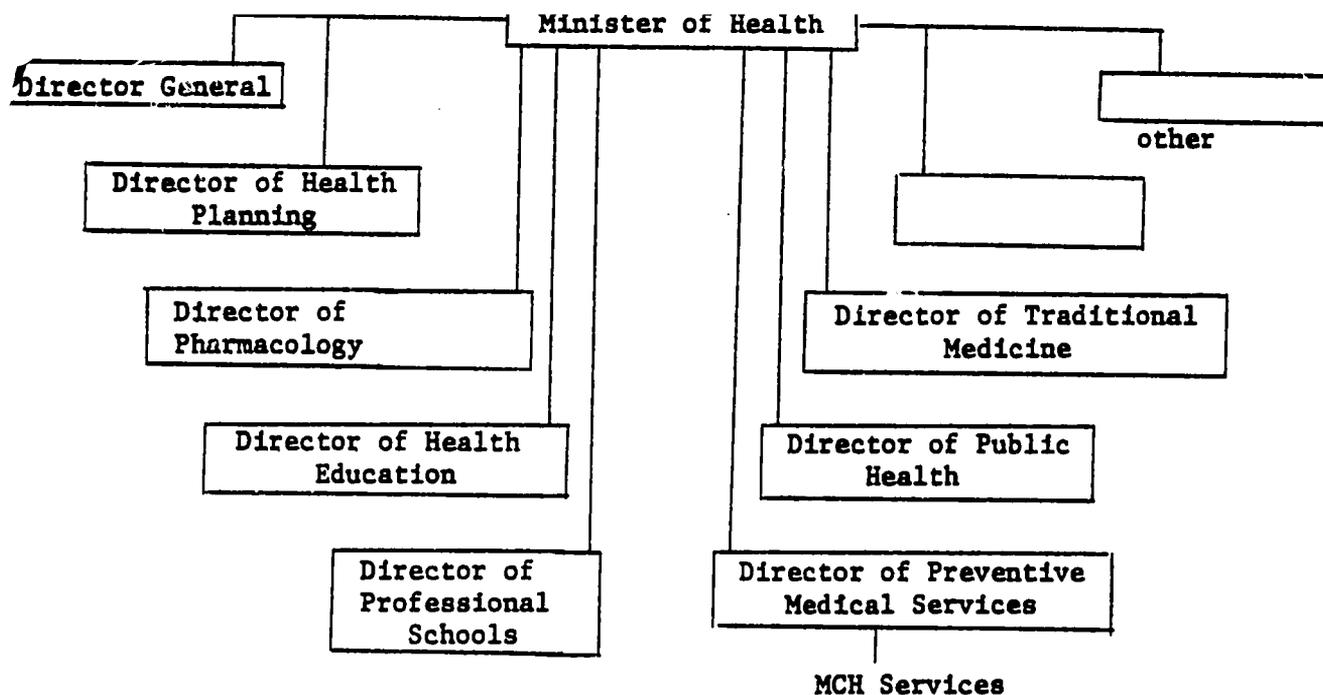
6.1.8 The Ministry of Health organization for The Gambia indicates the level and importance of the MCH coordinator:



6.2 Benin

All MCH activities were centered in the office of the Director of Preventive Medical Services (DPMS). A physician was appointed to direct all MCH programs but was unable to handle this assignment because of overwhelming service duties at the National PMI (MCH Center) in Cotonou. The DPMS then acted as coordinator, with the UNEX medical director as counterpart, and effectively assisted in the development of MCH/FP services throughout the country:

- 6.2.1 15 MCH/FP clinics (12 rural) were established in existing health centers; each clinic is supervised by a nurse midwife certified as an FP/NP by training in Santa Cruz or in-country;
- 6.2.2 a national MCH/FP training capability was achieved by forming a national training team composed of 3 certified FP/NP's;
- 6.2.3 MCH/FP course work in the professional schools' curricula is taught by a certified MCH/NP;
- 6.2.4 The Ministry of Health Organization for Benin indicated the placement of MCH services:



7. Mansa Konko Rural Health Center

7.1 The MCH/FP Clinic

The initial health sector analysis done by a USAID feasibility team and Gambian counterparts resulted in the selection of the Mansa Konko Health Center for development as a pilot health center. The clinic would provide all the essential services and include a complete MCH/FP unit with pre- and postnatal clinics, labor and delivery services, risk identification, curative and preventive pediatrics in the form of an under 5's clinic, nutrition, health education, family planning, and fertility and infertility counseling. Following the FP/NP training in Santa Cruz of a number of nurse midwives in 1974, one was posted to Mansa Konko to begin supervising the development of this health center. Through the last several years the center has continued to provide these services, has served as a model for replication of MCH/FP units for clinics in Kerewan and Kuntaur, and has provided training experiences for the students from the adjacent School for Community Health Nurses.

7.2 The School for Community Health Nurses

The decision to develop Mansa Konko Health Center was accompanied by a request from the DMS to use this facility as a training center for lower level health personnel; e.g., TBA's, auxiliaries, and other community health workers. Curricula were designed by UNEX technicians but use of the clinic as a training site was limited to a short period. The Gambian acting MCH coordinator and the DMS proposed the founding of a school to be built adjacent to the clinic at Mansa Konko for

training community health workers who would be selected from rural village communities and who would return there on completion of training. A job description and selection criteria for students were prepared and a curriculum developed for a Community Health Nurse (CHN) to be trained in the School for Community Health Nurses at Mansa Konko. The training was designed to prepare the CHN for posting to a rural setting to work directly with villagers and act as liaison between the health center trekking team and the health center itself. The "side-by-side" location of the school and the health center permitted close coordination between classroom learning and clinical practice.

During the initial period of academic planning, negotiations by MCH coordinator and the DMS were underway with 1) the U.S. Embassy to provide "self-help" funds for construction materials, 2) Public Works Department (PWD) to produce a simple design, 3) the local community to provide labor for construction. After several construction delays the facility was completed and ready for the first class in February 1976. The first class of 16 started classes in March of 1976. They completed an 18 month training cycle. Twelve months of this cycle were a combination of classroom study and clinical observation and practice. Six months of this cycle were field practice during which students were assigned to various rural health clinics where, under the supervision of the nurse midwife in charge, they were responsible for home visits, assisting at pre- and postnatal clinics and well

baby followups, health education talks, family planning counseling, and other related tasks.

The first class was graduated in December, 1977; the second entered in February, 1978 and was graduated in December, 1979. A few of the graduates were posted to the Banjul area to work in under 5's and well baby clinics. The majority were assigned to rural "outposts of health" where their duties duplicated those of the field training exercise plus identifying at-risk women and children for referral, doing normal deliveries, and providing minor curative care.

Informal communications from the MCH office indicated satisfaction with the contributions to health care and disease prevention which came from this group of health workers. These contributions included effective motivation of villagers, simple health education programs in operation, work with TBA's to upgrade the quality of their services. Currently the faculty of the school and the MCH coordinator are reviewing the curriculum and are planning to increase the intake to 40 students/year. Because the CHN is really the first Primary Health Care advocate in The Gambia, it is appropriate that the CHN has been chosen to be prepared as a Primary Health Care (PHC) trainer of village health workers, TBA's, and first aid attendants.

8. Counterparts

The counterpart system is essential to the continuation of any project activities undertaken in a developing country. We have learned from our experience in The Gambia and Benin that:

- 8.1 well run counterpart experiences help develop a corps of national technicians who learn new skills and develop responsibilities for their own programs;
- 8.2 expatriots working alone leave little of value -- once they're gone, nothing continues;
- 8.3 the exchange of ideas, the cooperative efforts of counterparts, lead to more relevant and practical project planning and implementation for the country;
- 8.4 counterparts should exist at all levels of project activity, nurse to nurse, trainer to trainer, director to director, etc.

9. The Committee of Donors

In most developing countries there is a multiplicity of donors in the health sector. For instance, in February 1979 a British Overseas Development Manpower (ODM) analysis of the health sector in The Gambia noted 28 different donor agencies. It has been a constant effort of the UNEX medical director to encourage the MOH of each country to convene a committee of representatives of these donors to work together to advise and help the ministry with its programs.

In 1978 this was accomplished in The Gambia. The DMS, responding to a UNEX suggestion, formed such a committee which meets several times each year to discuss various inputs and the responsibilities of mutual aid and planning, avoidance of duplication, economy of time and effort and other related issues. The UNEX medical coordinator and the DMS suggested the following policy statement for developing health services in a developing country -- "A project should address itself to the country's needs for improved health and a better quality of family life,

not to a donor's need to add another project to its list of accomplishments." Although it was too soon to judge the Committee's effectiveness at the end of the project, the Committee began work with enthusiasm and support from all related agencies.

10. Concerns & Problems

Some of the circumstances which made accomplishing the project's objectives difficult are listed below:

10.1 Infrastructure

- 10.1.1 There is a chronic shortage of adequately trained health personnel at all levels in The Gambia and in Benin. The institutions responsible for training health personnel need additional curriculum review and development and also they require better trained teaching staff.
- 10.1.2 Adequate incentives for attracting trainees and for keeping personnel within the infrastructure are lacking. Poor pay, poor housing, no opportunities for advancement or improvement, rewards dependent on an antiquated seniority system rather than on performance, do not encourage or attract trainees.
- 10.1.3 Assignments are frequently not related to needs or to assignees' abilities and training, but again on an antiquated idea that "everyone must take a turn at everything". For example, an FP/NP will be assigned to a tour of duty on surgery and an untrained nurse midwife will be given an MCH/FP post. Each individual

is frustrated and discouraged — the former unable to use special knowledge and skills, the latter ill equipped to accept the responsibilities of the position. The results are poor performance and occasionally resignation from the service.

10.1.4 Communication within a ministry and among several ministries regarding related interests and responsibilities is poor. There is no depth of personnel or sharing of tasks so that when an individual is ill or on leave or absent there is often no one to continue his work. For example, during the month of May when WHO has its annual meetings in Geneva and most health ministers and chief officers attend, health related decisions within the developing countries cannot be made because of the absence of a responsible health officer.

10.1.5 Health planning is haphazard. There is no adequate health planning unit in either Benin or The Gambia because there are no trained health planners. The position is frequently political and, when someone does receive training, he is lured to out-of-country positions because salaries and other rewards for such positions are far better than in either Benin or The Gambia.

10.2 Resources

Resources are inadequate in all areas of health services

primarily because of economic reasons. Purchases of medical supplies and materials, training aids, construction needs, transport, etc., depend mainly on donor funds. Equipment maintenance and repair are poor because of lack of trained manpower so that equipment breakdowns are frequent and of long duration. Transport and transfer of personnel and supplies are hampered by poor roads, vehicle breakdown, lack of adequate storage facilities for materials and living quarters for personnel.

10.3 Transportation

Project transport encountered difficulties for several reasons:

10.3.1 In The Gambia the American vehicles could not be properly maintained, serviced, or repaired. There were frequent long-term breakdowns. It was finally necessary for the GOG to purchase a vehicle more suitable to the country with which Gambian mechanics were familiar so that service and maintenance were manageable.

10.3.2 In Benin, a storeroom of replacement parts, plus a special U.S. Embassy-trained mechanic managed to keep the vehicles in service at great expense. In addition to maintenance difficulties, American engines consumed fantastic amounts of expensive "super" petrol which was not always available.

11. Recommendations

UNEX contracted with USAID to assist The Gambia and Benin to develop

replicable MCH/FP services which would not place additional strains on the host countries' finances or health personnel. Project activities began in 1971 and in Benin terminated in December of 1978, and in The Gambia termination was in December 1979. There were organizational and personnel changes within the Ministries of Health, but they did not block project progress or development, nor did they interfere with the dedicated effort of host country mid-level health personnel. At project's end the national staff at the implementation and service level in each country were continuing the work initiated and developed by the project, and they were actively engaged in planning for future development.

UNEX staff, following a review of project activities have several recommendations:

11.1 The Gambia

11.1.1 Outside consultative material and logistical assistance needed to continue FP work should be identified by the MCH unit within the Ministry of Health to support:

- 1.1 Local FP/NP training
- 1.2 Local Pediatric Assessment Training (PAT)
- 1.3 Development of coordinated FP activities (Gambia FP and MCH/FP MOH services) and continuing country-wide replication of MCH/FP services.

11.1.2 Institutional support should be developed for medical input (Pediatrics, OB/GYN, etc.) for localized training programs.

2.1 Two Gambian Trainers are now ready to conduct

future PAT cycles; the program would benefit from the continuation of advisory services plus limited amounts of material support. An Additional year of advisory technical assistance would insure successful continuation of PAT cycles by Gambians.

2.2 The Gambian Ministry of Health has stated its intent to replicate the PAT model for OB/GYN. Technical assistance and support to develop this program is advised. It should (1) lead to combining PAT and OB/GYN into one program, and (2) assist the professional schools to incorporate this training into their curricula.

11.1.3 Schools of Nursing, Midwifery, and Public Health should be assisted by curriculum advisors and tutorial staff as needed while local faculty personnel are updated in FNP/PAT/OB-GYN skills. The schools should be assisted in developing recruitment plans and strategies. Government support should continue to institutions to prepare them as field training institutions.

11.1.4 The School for CHN's should be assisted to:

- 4.1 Revise and strengthen curriculum -- a one year program is advised.
- 4.2 Double the intake of students.
- 4.3 Expand school facilities, if necessary, and to use school to aid in training of trainers for village health workers, TBA's, etc., for seminars, workshops, etc.

11.1.5 Full-time administrative capability to support the MCH unit in the MOH should be increased. An associate to the coordinator should be added. This will effectively promote the planning, coordination and implementation of MCH services and the continuation of evaluation, modification and improvement of health education and health delivery systems.

11.2 Benin

11.2.1 Outside consultative, material and logistical assistance should be identified as needed to:

- 1.1 Continue localized FNP training. Effective in-country training has been demonstrated. Technical assistance and specific material support should be continued to aid in the development of the two training centers requested by the GPRB to continue developing their own training capability;
- 1.2 Assist the Schools of Nursing, Midwifery, and Medicine to further develop their MCH/FP training capability and continue its integration with the schools' curricula;
- 1.3 Prepare a program of continuing in-service education for FNP's to provide ongoing upgrading of skills and knowledge;
- 1.4 Assist in the development and organization of an effective MCH unit within the MOH (with a designated

coordinator free of other duties) to plan, implement, expand and supervise countrywide MCH services.

- 11.3 General recommendations which apply to The Gambia and Benin:
- 11.3.1 Training for the rural sector should be emphasized and should occur in a rural setting. Host governments should receive assistance in writing training curricula, arranging student and faculty housing, providing training facilities, etc.
 - 11.3.2 Training should be oriented to family health with family planning integrated into the program and taught as a contribution to a healthy family. Within their limitations all health personnel should be polyvalent.
 - 11.3.3 Assistance should continue in the development of a decentralized supply system utilizing district center storage facilities and a "planning ahead" ability so that the storage centers never "go bare."
 - 11.3.4 Donor agencies should be encouraged to coordinate their efforts.
 - 11.3.5 Technical assistance to develop maintenance capabilities rather than expensive, gas-consuming 4-wheel vehicles, vehicles with easily available parts and in-country service facilities should be considered for project use.
 - 11.3.6 Future projects in the health sector should continue to supply diagnostic and educational equipment. When feasible, locally constructed items should be favored over commercial equipment shipped in from the outside.

- 11.3.7 Simple health surveys, such as those used in this project, should continue in order to assist in developing demographic and health data collection systems. They should be conducted in close cooperation with the proper departments within the Ministry of Health and other national planning offices.
- 11.3.8 Training of health personnel has been a vital component of these projects and should be included in future plans. Where possible, it should be held in-country by national trainers.
- 11.3.9 The unique requirements of health training demands special attention -- reference sources, visual and other educational materials and aids, work manuals, texts, classroom needs. A project should plan for these things for the term of its duration and for some time beyond. It is important to consider the replacement and renewal responsibilities of the host government after the project terminates. Many project needs can be met by local production; e.g., tables, desks, chairs, bookcases, and cabinets. Items such as paper, notebooks and writing materials, are usually locally available and should cause no problem.
- 11.3.10 Special equipment (e.g., microscopes, projectors, centrifuges, etc.) should be provided with instructions for use, and a host country technician must be trained to provide proper maintenance and repair. Electrical appliances should be made to use the available voltage supply

without the use of transformers. Replacement parts should be readily available locally.

11.3.11 Overall support of the field staff was well maintained by the Santa Cruz office. The occasional lapses in support were due to external influences — e.g., shipping, the mails, and money transfers. The semi-annual visits of "home" staff to field projects provided some opportunity for discussion and "feedback," but more contacts are necessary. The telephone is unreliable; the mails are too impersonal. Because of the geographic separation "we-they" attitudes built up and caused obstacles to understanding and rapport. Field staff sometimes felt isolated from planning and decision making processes, and were sometimes presented with a fait accompli for implementation without having had any input into the decision making or planning.

11.3.12 A procedures manual related specifically to project planning, administration and activity is a necessity. Those manuals derived from UCSC or USAID sources are useful for general reference only.

III- Guide to Materials Contained in this Final Report.

	Page
Section IV. Volume One : Materials from Gambia	
1. Project Overview	34
2. Polyvalent Nurse Midwife Training Program	38
3. Projection for the Continuation of UCSC/MCH Technical Assistance	55
4. Nutrition Rehabilitation Center Proposal	62
5. School for Community Health Nurses	65
6. Nutrition and Health Education Talks	69
7. Health Program Planning and Trainer Development Report	179
8. Health Survey	255
9. Pediatric Assessment Training Project (curriculum available upon request)	368
10. Consultation visit by Pat Goodale Logan	378
Section V. Volume One: Materials from Benin	
1. Final Report Family Health Training Program	390
Section VI. Volume One : General Materials	
1. MCH Extension Project Feasibility Study	399
2. Phase II. Subproject Papers for the Gambia and Benin	403
3. Road to Health Card	488
4. Consultant Report from Edwin W. Gold, M.D.	490

IV. Materials from The Gambia

1. **Brief Overview of The Ministry of Health**
UCSC/MCH Project
2. **Training Seminar on the Polyvalent Nurse Midwife**
Training Program
3. **Projection for the Continuation of UCSC/MCH Technical Assistance**
4. **Nutrition Rehabilitation Center proposal**
5. **Nutrition & Health Education talks. Developed by MCH office, resident**
British pediatrician and nutrition consultant
6. **Mansa Konko: School for Community Health Nurses**
 - 6.1 **Official Opening Statement**
 - 6.2 **Community Health Nurse job description**
 - 6.3 **Curriculum**
 - 6.4 **Evaluation Questionnaire**
7. **Final Report of Health Program Planning & Trainer Development**
 - 7.1 **Final report narrative**
 - 7.2 **Training Goals & Objectives**
 - 7.3 **Training Design**
 - 7.4 **Preliminary Plan**
 - 7.5 **Needs Assessment questionnaire & summary of responses**
 - 7.6 **List of Participants**
8. **Health Survey in The Lower River Division**
 - 8.1 **Report to Dr. N'Dow**
 - 8.2 **Informal reports on conduct of survey**
 - 8.3 **Sample forms**
9. **Pediatric Nurse Practitioner Training Project**
 - 9.1 **Project Proposal**

IV. Materials from The Gambia (con't.)

9.2 1978-1979 Report with Cycle IV summary & letter from
Dr. E.M. Samba

9.3 Syllabus Cycle IV

9.4 Schedule, training design, evaluation

10. Summary of Consultation Visit by Pat Goodale Logan, 1979.

BRIEF OVERVIEW OF THE MINISTRY OF HEALTH

UCSC/MCH PROJECT

The main goal of the MCH Project was to improve the quality of life of Gambian mothers and children through the reduction of preventable maternal and childhood mortality and morbidity.

Over the past seven years, the project has in many ways endeavoured to meet this seemingly unattainable goal.

Manpower Development

A total of 167 (one hundred and sixty-seven) health personnel were trained through project efforts. The training varied according to the national health needs and health situations. One of the basic obstacles in the Gambia health service is the lack of trained manpower, especially in the specialized areas of health management, administration and planning, and public health. The training of this cadre of health workers has not only assisted in improving health care in the Project Pilot Area, but in the Gambia as a whole.

Provision of Supplies and Equipment

Through the project, indispensable equipment were provided to meet the demands created by training and better health services.

Statistics

Lack of accurate health data is one of the characteristics of most developing countries and The Gambia is not an exception. Through project efforts, vital statistics on MCH have been available for programme planning and evaluation.

Perhaps one of the most important achievements of the project, is the extent to which government, nongovernmental agencies and communities' level of health awareness has been increased especially in the last two years. This is not only apparent in the increase demand by communities for MCH services, but also by government's statement in the Five Year Development Plan, 'Tesito', in which MCH is a priority.

Problems

1. Transportation: The lack of adequate and suitable transportation, has in many ways hampered the progress of the MCH project. In a country where emphasis is placed on taking health care to the people using mobile units, there is a need to utilize reliable and suitable means of transportation to facilitate mobility. The vehicles shipped to The Gambia were unsuitable for The Gambia since they could not be maintained efficiently.
2. The lack of fulltime administrator in The Gambia caused delays in approval of orders for supplies and equipment. The system used to dispatch supplies and equipment to The Gambia in some instances was unreliable, supplies either took a long time to get to the country or were never received at all.

Recommendations

1. Fulltime project coordinator or administrator in country
2. Suitable transportation
3. Patience need to be exercised by donor agencies when programmes do not get implemented when they are planned to be. It must be remembered that host government/ministries have more than project to accommodate and more than one programme to implement.

Mrs. B.H. M'Boge
Senior Nursing Superintendent
MCH

TRAINING SEMINAR ON THE POLYVALENT NURSE MIDWIFE

TRAINING PROGRAM

Monday 6th, December, 1976

TIME	EVENT
8:45 a.m.	Opening Remarks by Dr. Peter N'Dow, Director of Medical Services
9:45 a.m. 10:45 a.m.	Pediatrics by: Dr. Paul Wilson
10:45 to 11 a.m.	Coffe Break
11 a.m.- 12 Noon	Continuing Pediatrics
12 Noon - 2 p.m.	Lunch
<u>AFTERNOON SESSION</u>	
2 p.m. - 3:15 p.m.	Continuing Pediatrics
3:15 - 3:30 p.m.	Coffee B.eak
3:30 - 5:00 p.m.	Continuing Pediatrics
<u>Tuesday 7th, December, 1976</u>	
9 a.m. - 10:45 a.m.	Gynecology Norma Brainard
10:45 - 11 a.m.	Coffee Break
11 a.m. - 12 Noon	Continuing Gynecology
12 noon - 2 p.m.	Lunch Break
<u>AFTERNOON SESSION</u>	
2 p.m. - 3:45	Continuing Gynecology
3:45 - 4 p.m.	Coffee Break
4 p.m. - 5 p.m.	Basic Laboratory Techniques Norma Brainard and Mr. Sanna

Thursday 9th December, 1976

<u>TIME</u>	<u>EVENT</u>
9 a.m. - 10:45 a.m.	Normal Delivery Christina Coker
10:45 - 11 a.m.	Coffee Break
11 a.m. - 12 Noon	Continuing Normal Delivery
12 Noon - 2 p.m.	Lunch Break
<u>AFTERNOON SESSION</u>	
2 p.m. - 3:34 p.m.	Obstetrics Dr. Sammy Palmer
3:45 to 4 p.m.	Coffee Break
4 p.m. - 5 p.m.	Continuing Obstetrics
7 p.m. Onwards	Social Evening

Thursday, 9th, December, 1976

9 a.m. - 10:45 a.m.	Nutrition Margaret Granger
10:45 - 11 a.m.	Coffee Break
11 a.m. - 12 Noon	Continuing Nutrition - The preschool child Gertrude Eastwood
12 Noon - 2 p.m.	Lunch Break
<u>AFTERNOON SESSION</u>	
2 p.m. - 3:45 p.m.	Family Spacing Bertha M'Boge
3:45 - 4 p.m.	Coffee Break
4 p.m. - 5 p.m.	Continuing Family Spacing

Friday 10th, December, 1976

9 a.m. - 10:45 a.m.	Health Education Mr. Williams
10:45 - 11 a.m.	Coffee Break
11 a.m. - 12 Noon	Continuing Health Education
12 Noon - 2 p.m.	Lunch Break

Friday 10th, December, 1976 (con't.)

TIME	EVENT
<u>AFTERNOON SESSION</u>	
2:00 p.m. - 3:45 p.m.	Family Welfare Beulah Joel
3:45 - 4:00 p.m.	Coffee Break
4:00 p.m. - 5:00 p.m.	Continuing Family Welfare
<u>Saturday 11th, December, 1976</u>	
9 a.m. 10:45 a.m.	Evaluation
10:45 - 11:00 a.m.	Coffee Break
11: a.m. - 11:45 a.m.	Continuing evaluation
12:00 Noon	Closing Session and Certification by Mr. Commissioner LRD

LIST OF PARTICIPANTS TO THE POLYVALENT NURSE MIDWIFE TRAINING PROGRAM

Sister Aneta Davies	-	Nursing Sister, Brikama
Sister Shyngle	-	Nursing Sister, Labour Ward, RVH
Nurse Midwife Fatou N'Jie	-	Nurse Midwife, Kerewan
Nurse Midwife Emma Jagne	-	Nurse Midwife, Kuntaur
Mrs. Adama Daboe	-	Gambia Family Planning Association
Midwife Mrs. Isha Batchilly	-	Nurse Midwife, MK, Health Center
Ms. Olga Roberts	-	Midwifery Tutor, Gambia School of Nursing
Sister Manly Rollings	-	Nursing Sister, MK Health Center
Miss Mitchell Sarr	-	Tutor, School for Community Health Nurses, MK
Nurse Midwife Abi Khan	-	Nurse Midwife, MK Health Center

FACULTY

Dr. Paul E. Wilson	-	Medical Director, MCH programs, UCSC
Dr. Sammy Palmer	-	Physician, Gambia Family Planning Assoc.
Ms. Norma Brainard	-	UCSC/MCH Project Technician
Ms. Beulah Joel	-	UCSC/MCH Project Technician
Sister Bertha M'Boge	-	MCH Project
Sister Mina Coker	-	Tutor in Charge, School for Community Health Nurses, Mansa Konko
Mr. Pap John Williams	-	Health Educator School for Public Health
Mrs. Gertrude Eastwood	-	Nutritionist, Catholic Relief Services
Ms. Magret Granger	-	Nutritionist

NUTRITION

INFECTION

REPRODUCTION

FAMILY HEALTH

ORGANIZATION AND ADMINISTRATION OF HEALTH DELIVERY SERVICES

PERINATAL AND CHILD HEALTH

HEALTH EDUCATION

PRE AND POSTNATAL MAT. CARE

PREV. AND SOCIAL TEDS

FAMILY PLANNING

Diagnosis
Treatment
Prevention

Nutrition
Food available
Food Preparation
Preventive
Therapeutic
Sanitation
Epidemiology
Immunization
School Health
Community Health

Maternal Nutrition
Treat Infection
Personal Hygiene
Home visits - Pre and
Post Natal
Pre and Post Natal
Attitudes

Well Baby Care - R
Growth-Development
Nutrition
Immunizations
Family Dynamics
Home Visits

Reprod. Physiology
Fertility Regul.
Contraceptive Tech.

Common diseases of family
members, children
members Health

Of health and reproduction

Health and Communication
Father's involvement in
all education and

THE POLYVALENT NURSE MIDWIFE

This is a new approach to the work of the nurse midwife -- to be undertaken in nurses' and midwives' schools of experience, those outside the walls of the official teaching institutions -- that is to say a development in the hospital, and also in the centers of health, the dispensaries, and the homes of the patients.

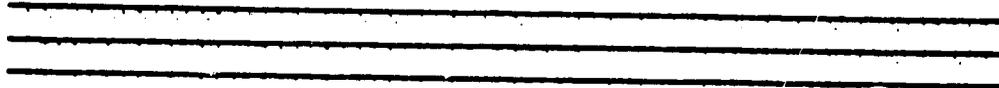
The objectives of the nurse midwife with a view to family health care and community health care in a primitive setting (rural) are:

1. She must be polyvalent because of:
 - a. The enormity of unsatisfied needs
 - b. Insufficient nos. of doctors (in small villages and rural zones)
 - c. Frequently asked to supply medical care for which they are totally unprepared.
2. For the effective function of the system there must be communication and acceptance, among all health workers. The nurse, nurse midwife, physician, etc. are all equal members of the team -- and team work depends on communication and acceptance. The supervision scale is intended to be a constructive control of colleagues, not a punitive type of policy inspection.

FAMILY HEALTH PRIORITIES

1. Nutrition and malnutrition
2. Prevention and treatment of communicable diseases
3. Reproduction -- prenatal care, labor and post natal care, family spacing and sterility problems
4. Hygiene -- personal, family and community
5. Pediatrics -- growth and development to 5 years care of current diseases and complaints, and prevention (use of vaccines).

Fig. 1f



LOGICAL FRAMEWORK FOR INTEGRATED TEACHING

1. The community where the family lives
2. The family -- a social unit
3. Conception and sterility
4. Pregnancy, labor, and birth
5. Breast feeding and weaning
6. Physical, mental and social growth and development
-----birth to puberty-----
7. Puberty, maturation, and marriage
8. Illnesses and accidents affecting family health
9. Family spacing -- concepts, methodology, techniques
10. Interactions between health worker and community

Fig. 2f

REQUIREMENTS FOR HEALTHY GROWTH AND DEVELOPMENT

1. Good nutrition
2. Prevention vs infection -- vaccinations early and continue
3. Care of Pregnancy -- pre and post natal, nutrition, anti-tetanus immunization for mother
4. Family spacing

Fig. 3f

FAMILY HEALTH SERVICES IN DEVELOPING COUNTRIES

Four Basic Points

1. Health services differ greatly from those in developed industrialized countries
2. Influence of poverty is greater than that of a hot climate
3. To give family health care is of the highest importance
4. A collection of knowledge permits a definition of the best way to attack the problems of family health and health care in developing countries.

Fig. 4f

FAMILY HEALTH SERVICES

1. Influencing factors
 - a. Located near the community and easily reached
 - b. Regular care with increasing quality and quantity
 - c. Permanence and continuity
2. Clinics or health units:

- a. Modest facilities
- b. Least costly
- c. Simply equipped
- d. Staffed with community and auxiliary personnel

Fig. 5f

ADDITIONAL REQUIREMENTS FOR FAMILY HEALTH SERVICES

1. Person to person relationship and service
2. Continuity and permanence -- same place, same time, same worker
3. Adaptation to local needs and conditions: medical and nonmedical services with a view to promoting a better "quality of life" for all the population

Fig. 6f

THE POLYVALENT NURSE MIDWIFE

1. Information and advice
2. Sterility -- perform preliminary study
3. Knowledge of contraceptive methods
indications and contraindications
4. Masculin contraceptives
5. Oral contraceptives -- prescription, etc.
6. I.U.D. -- choice, insertion, etc.
7. Sterilization -- information, education Male
Female
8. Periodic examination and followup of women using contraceptives
9. Rhythm method -- know it and its unreliability

Fig. sf 4

REGULAR INFANT CARE
AND
TREATMENT OF CHILDHOOD ILLNESSES

1. Periodic checkups to 5 years -- regular
 - a. nutrition
 - b. prevention and treatment of malnutrition
 - c. immunizations
 - d. advise and teach personal, infant, family hygiene
 - e. treatment of current infections
2. Growth and Development -- normal
3. Family spacing and child health -- not a demographic question
but simply one of well-being belonging to the family group

Fig. sf5

INTRODUCTION

GENERAL - high % children in population with high incidence of disease-morbidity and mortality.

Emphasis on child care

Tropical considerations - nutrition, sanitation, treatment and prevention, special disease problems.

Staffing - health personnel

DEFINITION

Care of the child from birth to maturity

SCOPE:

History

Physical examination and assessment

Growth and development

Nutrition and feeding

Common Infectious Diseases:

Diagnosis

Management

Treatment

Prevention

Sanitation

Personal Hygiene

Immunization

OBJECTIVES

To prepare the Polyvalent Nurse midwife to accept the high priority of pediatric care, to competently perform history, physical examination, to teach and advocate prevention, to diagnosis, treat and manage illness, to recognize the indications for referral for "special" care (high risk, etc.).

GYNECOLOGY

INTRODUCTION

OBJECTIVES

CONTENT:

1. History taking
2. Breast examination
3. Abnormalities of nipples and breast tissue
4. Cancer of breast
 - 4.1. Diagnosis
 - 4.2. High Risk factors
 - 4.3. Other factors
 - 4.4. History
 - 4.5. Differential points in diagnosis of breast cancer
5. Review of Anatomy of Pelvic Organs
6. Abnormal conditions found in each part of external genitals :
7. Technique of inserting vaginal speculum
8. Abnormalities found in cervix and vaginal wall
9. Procedure for doing bimanual examination
10. Abnormalities found on bimanual examination
11. Causes of abnormal uterine bleeding
12. Recto vaginal examination
13. Medical management of patients with trichomonad
Monilia H. Vaginalis Vaginitis
14. Health education in gyn problems
15. Rehabilitation of pubococcygeus muscle
16. Laboratory procedures in gyn.
17. Classification of pap smears

TRAINING SEMINAR ON THE POLYVALENT NURSE MIDWIFE

FAMILY SPACING OUTLINE

Introductions

FAMILIES AT HIGH RISK

COUNSELING

STERILITY

PRIMARY INFERTILITY

SECONDARY INFERTILITY

RELATIONSHIP BETWEEN FAMILY SPACING AND MIDWIFERY

CONTRACEPTIVE TECHNIQUES

CONTRACEPTIVE METHODS

1. Chemical and mechanical methods
 - Diaphragms and caps
 - Condoms
 - Intra Uterine - cervical devices
2. Hormonal contraceptives
 - Oral contraceptives
 - a. Combined pills
 - b. Sequential pills
 - c. Progesterone only preparations
 - d. Injectable Depo Provera

RHYTHM METHOD

Calculating the safe period

- a. Callenda Method
- b. Temperature chart method

STERILIZATION

- a. Male vasectomy
- b. Female

PERIODIC EXAMINATION AND FOLLOWUP

- a. Breast exam
- b. Vaginal exam

TREATMENT OF MANAGEMENT AND FOLLOWUP OF VAGINITIS

- a. Trichomonal vaginitis
- b. Monilial vaginitis

FOLLOWUP OF WOMEN WITH IUCD

FOLLOWUP OF WOMEN ON ORAL CONTRACEPTIVES AND INJECTABLE DEPO PROVERA

Hand outs

1. Assessment of high risk prenatal patients in a rural health center.
2. Family spacing methods available in the Gambia
3. Family spacing record forms
4. Breast and pelvic exam procedure

Films Family Planning Counseling

Film Strips Family Spacing

Video Tape. Female Sterilization.

Memo: RESOLUTIONS FROM THE SEMINAR FOR POLYVALENT NURSE MIDWIVES
CONDUCTED DECEMBER 6TH TO DECEMBER 11th, 1976 AT MANSA KONKO

To: Dr. P.J. N'Dow
 Director of Medical Services

From: Participants of the Seminar

Date: 13th December, 1976.

1. Be it resolved that Seminars of this nature be organised periodically, so as to help nurse midwives, dresser dispensers, health inspectors, leprosy inspectors, school teachers and all connected with the care of patients and health of the population to function satisfactorily. It is being suggested that the next seminar be conducted in March.
2. Be it resolved that in connection with such seminars, there should be an exchange of views with our counterparts in other countries such as Benin at least once a year.
3. Be it resolved that in view of the necessity for Gambian nurses to be really polyvalent, a council should be set up to look into all matters pertaining to nursing.
4. Be it further resolved that nurses and all those connected with health teaching be given some incentives, such as scholarships and an opportunity upgrade their careers.
5. In view of the need to keep records for statistical purposes, be it resolved that there should be a unified record keeping system throughout the country.
6. In view of the very important role of the traditional birth attendants in the rural areas, and in view of the necessity to help them improve on their methods, be it resolved that the Red Cross Society should undertake to supply them with sterile packs containing blades, cord-powder and ligatures, as well as dressings. UNICEF and other international organizations should be asked to assist.
7. Be it further resolved that a member of this gathering be assigned to witness a TBA at work and write a paper on the findings, and publish such a document as soon as possible. It was recommended that Sister Gabor be assigned this responsibility.
8. Be it resolved that various members of the community should be involved in community health affairs, and it is suggested that Sister Rollings help organise this program.
9. Be it resolved that knowledge, attitude, practice and study be done on a selected number of TBA's who have been trained previously, and a comparative study be done on a selected number who have never been trained.
10. Be it resolved that a curriculum be developed according to the learning needs, and training begin as soon as possible.
11. Be it resolved that the curriculum for such courses be planned by a joint committee early next year, at a meeting to be held in Mansa Konko with

- 2 -

12. Be it resolved that in view of the indiscriminate dispensing and sale of dangerous drugs, poisons and contraceptives, considerations should be made concerning their control
13. Be it resolved that a school health programme be established in the near future.
14. Be it resolved that the over-all NCH Training programme be reviewed in two years.

From: Paul Wilson

-54-

Memo: Mansa Konko - TOT Seminar - The Polyvalent Nurse Midwife

Date: 10th December, 1976

1. The Project team arrived in Mansa Konko Sunday afternoon (Dec.5) and installed themselves in the Rest House, and at Beulah's. Most participants arrived that evening or early Monday morning. The weather's been delightful - cool and dry - no need for airconditioning. The school provides a most comfortable setting for such a meeting.
2. Dr. N'Dow, the Local Commissioner and the Local Chief arrived at 8.30 a.m. for the opening of the sessions. Dr. N'Dow addressed the group briefly and to the point on the subject of the seminar, the importance of the polyvalent nurse midwife, the MCH family health approach, and the commitment of the Ministry backed by the government, to emphasize MCH family health in the 10 year health development plan for the Gambia. It was sincere and brief, ^{non}rambling presentation. We were all much impressed. His arrival on time (he left Banjul at 6 a.m.) and his thoughtful comments indicated to me a respect for the project team and an appreciation for the work in progress and that which is planned.
3. The daily sessions have been lively with active participation of all participants. Much of this has been due to the thoughtful preparation of the chairpersons. Dr. Palmer and Ms. Granger were particularly impressive. Unfortunately I must leave this afternoon so I shall miss the final evaluation tomorrow morning and the presentation of certificates by the Commissioner. However it will be under the capable direction of Marion assisted by Beulah and Norma.
4. Wednesday night, 8 December, there was a sheep barbecue with music, singing and dancing - and there was overwhelming enthusiastic participation (see pictures). Again the Commissioner and Chief attended.
5. Some conclusions:
 - a. The conference indicated the value of bringing these trainers together, for review, exchange of ideas, and stimulus to agree on, improve, and maintain standards.
 - b. The emphasis on training and commitment was accepted and it was agreed that it must be passed on to all members of the health team.
 - c. There was unanimous agreement on the need to have a health advocate ~~and~~ at the village level who will be frequently in contact with the Community Health Nurse (our students), the midwife and the health center. It was also concluded that the TBA might be the one to work through.
 - d. The project team will have to trek regularly to the MCH sites.
 - e. Other points should emerge from the evaluation.
6. Addenda:
 - a. We need some life sized genie models (at least two) such as we introduced in Cotonou.

P R O J E C T I O N

The Continuation of University of California, Santa
Cruz (UCSC/MCH) Technical
Assistance during
the year ending December,
31st, 1979

The Government of the Gambia/Ministry
of Health (GOG/MOH)

and

The University of California, Santa
Cruz, Maternal and Child Health
Project
(UCSC/MCH)
(USAID)

1. Narrative Summary
2. University of California Staff
Capabilities
Input
3. Host Government
4. Schedule - Time Plan
5. Report of meeting with Dr. Samba and Mrs M'Boge

Submitted by:
Paul E. Wilson
UCSC Medical Director/Coordinator

I. NARRATIVE SUMMARY

USAID has agreed to continue the UCSC/MCH technical assistance in the Gambia for the year, 1979. The UCSC/MCH project staff under the direction of the Gambian Ministry of Health (MOH), has worked in a counter-part role in:

1. Development of Mansa Konko as a health/training center
2. Curriculum Development
3. Training and Teaching in and out of country.
4. Replication of MCH and FP services - e.g. Kerevan, Kuntaur, the RVH FP clinic under the direction of Mrs M'Boge.
5. The development of an MCH section within the health structure to coordinate all MCH activities in the country.
6. Inservice seminars and review programs - TOT in 1974, the Polyvalent nurse midwife seminar in 1976, etc.
7. Pediatric Assessment Training - 2 cycles in 1978.
8. Providing training materials and equipment, limited medical instruments and supplies, contraceptives and transport vehicles
9. Standardization of records, immunizations, etc.

These and other related activities were part of the UCSC/MCH project's technical assistance program which terminated December, 31st, 1978. The USAID decision to continue UCSC/MCH technical assistance to the GOG/MOH is based on the latter's plan to train rural health personnel and to development of primary health care and the delivery of health services to the rural areas.

The UCSC/MCH staff is prepared to offer its assistance in areas determined by its capabilities - as requested and directed by the GOG/MOH. However, because of the limited time, certain conditions will have to be considered:

1. Number of UCSC staff in country - Gambian counterpart
2. A time plan to avoid unnecessary wasteful delays
3. In any training cycle, the number of trainees must be sufficient to utilize the trainers' time and efforts e.g. in a Pediatric Assessment cycle no fewer than 5 trainees are acceptable.

- 2 -

4. In any training cycle a Gambian counterpart is to be designated who will assume a training responsibility to continue similar training cycles after the UCSC team has departed.

The cooperation and support of the GOG/MCH has been an important contribution to the success of project activities and 1979 should continue this cooperative productive effort.

II. UC STAFF AND CAPABILITIES (and inputs)

1. Staff

- o 1 full time medical director/coordinator/trainer
- o 1 full time nurse/trainer (public health or equivalent background) with experience in health education, training, teaching and planning.
- o Consultants in specialized areas on request of GOG/MOH with UCSC approval

2. Certain material support for training (to be specifically defined) will continue.

3. Capabilities

After carefully reading the Primary Health Care paper UCSC staff could be productively involved in:

3.1. Curriculum development

- o Review of curriculum for Mansa Konko School
- o Curriculum for:
 - State enrolled nurses
 - Auxiliary Nurses
 - Medical Assistants program
 - Rural Health trainers and workers

- 3.2. Revision of Mansa Konko program - condense to 12 months, 2 intakes per year.

- 3 -

3.3. Training

- Pediatric Assessment
- TOT for rural health
- ?continuation of out-of country
Santa Cruz FNP training
- Out of country training at administrative level
- Preparation of training sites.

3.4. Other possibilities include

- Health Planning
- Review and evaluation of professional schools.

3.5. Transportation for trainers and housing in Banjul

3.6. Budget (to be forthcoming from UCSC)

III. HOST GOVERNMENT INPUTS

1. Office space for UCSC staff, Secretarial help.
2. Housing for UCSC staff if working outside of Banjul (e.g. at MK)
3. Early selection of trainees for training cycles, their separation from duty to attend training full time; adherence to a time plan schedule to avoid wasteful delays.
4. Provide trainees with necessary allowances for transport etc.
5. Assist (not financial) in country UCSC staff with problems associated with living in the Gambia.

IV. SCHEDULE

APRIL

1. Arrival of staff in country
2. Orientation - Housing etc
3. Meeting with Dr. Samba and Mrs M'Boge
4. Budgetary inputs of GOG and UCSC finalized.

- 4 -

- Necessary supplies and equipment (ordered in March)
will have been shipped by air freight
 - Names of trainees (minimum of 5) will be available, they will have
been notified.
5. Job Descriptions for state enrolled nurses, auxiliary nurses, medical
assistants will be available, preliminary curricula ideas
 6. Preliminary meetings of curriculum committees whose members will
already have been chosen (state enrolled nurses, auxiliary nurses,
medical assistants, in-service education). Assignments to committee
members.
 7. Committee reports review of job descriptions
 8. Finalize date for cycle 3 Pediatric Assessment - June 18 - July 13.

MAY

1. All arrangements for cycle 3 Pediatric Assessment completed
 - trainees notified of dates, detachment from routine assignments,
transportation and lodging allowances certified.
 - all training materials in country
 - school classroom and Logan Street Clinic arrangements completed.
2. Committee meetings:
Reports on job descriptions - discussion
Reports - preliminary on curricula
3. Classroom and clinic supplies in place

JUNE

1. Continue Committee meetings and assignments
2. Start cycle 3 Ped. Assessment June 18 (1st 2 weeks)

JULY

1. Final 2 weeks Ped. Ass. cycle 3
2. Continue curriculum studies
3. Finalize curricula - plan and project for September - December, 1979.

AUGUST

1. Reports of various curricula committees
2. Meetings with Dr. Samba and Mrs M'Boge re. 1
3. Review and Report work April - August 30th , 1979

September)
October) Dependent on work through July 15 - to be
November) planned and projected by
December) July 15.

- V. Report of meeting February 24, 1979 - Dr. Samba, Mrs M'Boge, Dr. Wilson present.

UCSC/MCH inputs were requested for the following:

1. Fed. Assess. cycle 3 - June 18 - July 13 4 weeks
 - 1.1. 5 trainees (6 if possible) :
 - Michelle Sarr
 - Taffa Sanyang
 - Sister Joiner
 - Sister Drammeh
 - Mrs Kah
 - 1.2. Banjul
 - School of Nursing classroom
 - Childrens Ward - RVH
 - Leman Street Clinic
2. Curriculum review for Mansa Konko School to include revision to 12 months program and increase intake 2 times yearly - 30 students per enrollment.
 - Faculty
 - Facility
 - Curriculum.

3. Curriculum preparation for
 - State enrolled nurses
 - Auxiliary nurses
 - Medical Assistants
 - In-service training programs.

4. Health Planning/advising

5. ?Professional School Evaluations - not a priority

6. Other areas might develop where UCSC expertise might provide valuable assistance. (e.g. Project Concern, an additional PA cycle etc.)

*a program in nutrition { education
growing indigenous foods (tie in with H.A.)
Nutrition centers (decentralized)*

VI. BUDGET

GOG and UCSC inputs currently in preparation - to be finalized by April 1st, 1979.

Doug has asked me to help prepare a preliminary paper re concentration of AID resources in the Health Sector. Since I've had a little extra time, and in the interest of public relations, I've agreed -

To: Dr. E.M. Samba, DMS

From: Dr. Paul Wilson, UCSC/MCH - Coordinator

Date: March 12, 1979

Proposal: Nutrition Rehabilitation Centers - Rural Locations
(NRC's)

Purpose: Treatment / Education / Prevention

GOAL: The goals are to affect a reduction in the incidence of malnutrition and related disorders, to help curb the vicious malnutrition-infection relationship. Secondly, an improvement of the health and wellbeing of the family ("the quality of life") will in turn affect productivity in rural enterprises - the human resource factor will be less limiting.

The Problem Background

- Population - 80-85% rural, life expectancy is 34 to 36 years
- Highest morbidity and mortality rates - particularly with most vulnerable group (mothers and children)
- Prevalence of malnutrition - contributing factors - e.g. season, rainfall, availability of foods, infection, ignorance, customs, superstitions, etc.
- Combination of foregoing factors adversely affects the ability to learn, to overcome superstition and fear, to accept change.
- There is no existing structure for a nationwide nutrition program functioning as an integral part of the health services of the Ministry of Health. At present an individual with severe malnutrition (marasmus, kwashiorkor, etc) needing institutional care must be sent to Banjul (usually a long debilitating journey) for care and treatment. Condition on arrival is not optimal, often complicated by infection - results are poor.
- There is no properly supervised nutrition program on the RVH Children's Ward.

The Project

There is a need for a supervised, nationwide, nutrition program, coordinated by the MOH, and effected, with trained personnel, through a decentralized structure - District Nutrition Rehabilitation Centers. These will be established as part of a district health centre with a separate

- 2 -

staff with training in nutrition - suggested locations are: 1. Brikama 2. Mansa Konko, 3. Bantang, 4. Basse 5. Kuntaur 6. Kaur, 7. Kerewan.

Objectives

- To treat malnutrition problems - keeping a low cost profile.
- To teach mothers (or a responsible member of the family) the common causes of malnutrition.
- To inform mothers about available (indigenous) foods, how to prepare and use them properly to prepare a diet for treatment and a good diet for regular family consumption.
- To teach how to prepare for seasonal variations in food supply - villare or compound garden.
- To provide and supervise on-going health education in the rural areas using the schools, community clubs, the church, etc. cooperating with traditional healers, etc.

THE NUTRITIONAL REHABILITATION CENTRE

- Residential Component - 10-12 beds for treatment of severe malnutrition require institutional care. To have facilities for parent to stay with child and receive instructions (see objectives)
- Day Care Clinic - for malnutrition problems that can be treated on an outpatient basis - risk registry, health education, followup.
- Coordination with rural health workers - Referral to Center by RHWs and back to RHWs from center to monitor home practices, assure regular visits to clinic.
- Health education - responsible for nutritional unit in district health education programs - in schools, cooperating with agricultural programs, etc., on going in-service education program for staff, local school teachers, agricultural workers, etc.
- The Staff - National trainers who will be highly trained (out-of-country) to return to train those selected to be the responsible officers at the NRC's. The national trainers will also have a supervisory role over center activities - evaluating consulting, and teaching.
- Details of junior staff must be worked out using graduates of the Mansa Konko School for CHNs, auxiliary nurses, etc.

COMMENT

The Gambia is a country with a large rural population - it has an agricultural economy subject to many influences, not the least of which is the human resource element. This rural sector is selected for growth and development, for increased productivity. Where to start?

Health is the key to rural development - "the improvement of the quality of life in rural areas, including health and nutrition" is a quote from a Gambian health paper. One, if not the most important problem is proper nutrition. The Nutrition Rehabilitation Centers in their rural settings provide the keys to health.

OFFICIAL OPENING AND GRADUATION OF THE SCHOOL FOR
COMMUNITY HEALTH NURSES MANSA KONKO

Mr. Chairman, Honourable Minister, distinguished guests, ladies and gentlemen:

For the first time in the history of The Gambia as far as the health sector is concerned, we are witnessing the realization of one of the main pillars of the Health delivery system, that of attempting to fulfill the health needs of the people at the grass roots.

Often Health care delivery systems in most African countries are fragmented. Although in The Gambia services are provided by a number of organizations, governmental, local authorities, like the Area Council, voluntary agencies and missions there is very little coordination between them, which makes program planning difficult. This often leads to duplication in some areas and complete absence in others.

The inherited division of services, into curative and preventative medicine, also exists and in The Gambia this division is reflected in the amount of money spent on providing hospital based services, and the preventive and promotive services.

The physical facilities available to the people are limited to the city and peri-urban towns or villages, and serve as referral centers for people in the rural areas. The health delivery system provides health centers, dispensaries and mobile health teams. The ratio of health facility to population varies from 1-10000 to 1-20000. The physical facilities therefore do not cover a vast area. There is a shortage of supplies like drugs and dressings, shortage of transportation, especially for the transportation of patients to referral centers. The shortage of trained manpower is an obvious problem in The Gambia, which is even more acute in the rural areas. The trained personnel available are concentrated in Banjul and posting to the rural area is often regarded as punishment.

The financial resources available for development are limited, while our communities tend to depend entirely on government to provide their basic health services and other needs. However, communities are beginning to show signs of self reliance. It is only this week that we heard of the completion of a feeder road to serve the village and dispensary at Salikene in the North Bank Division. To me this is the most realistic move towards community self reliance and national development.

One of the objectives of the National Health Plan is to provide a comprehensive and integrated health delivery system for the entire population in The Gambia. However, the primary consideration will always be the extent to which the actual basic services can be made available to the people. Emphasis will therefore be on guaranteeing the maintenance of existing health services with the long-term objective of improving them both in quantity and quality.

Chapter 18 of the five-year development plan deals with the health sector government's plan for the recruitment of staff, and their training is outlined. Thus, in an attempt to increase the emphasis on maternal and child health services within the national network, and to meet the goals and objectives of the Maternal and Child Health Program, the training of Community Health Nurses was commenced in May, 1976 in Mansa Konko. The eighteen months training course is designed to equip students of the school to function effectively in the community or in health centers.

To extend health care to cover most of the rural areas, the training and extensive use of auxiliary health personnel is indispensable. More so if these health workers are recruited and trained in the rural areas and after training, return to the communities where they come from. Auxiliary health personnel are more economical to train and to employ, they are more capable in dealing with traditional beliefs. They can ascertain the communities' needs and thus relate them to their training and the available health services.

Presently, the health problems of rural Gambia cannot be overcome merely by building more health centers and training more health personnel. Staff that man health facilities must work as a team, staff must also provide the necessary guidance to communities so as to bring about positive change in health attitudes beliefs and practices.

In conclusion, I will say to you graduates of the school, that you must have a strong national will to tackle the health problems of this country realistically and within the limits of your training. There must be in you a dedication to duty and a sense of commitment to a cause.

In a nutshell, my message to you is go to the people, live with them, work with them and learn from them.

Mr. Chairman, Honourable Minister, ladies and gentlemen, thank you.

Keynote address by Mrs. Bertha M' Boge
Senior Nursing Superintendent
MCH Program

COMMUNITY HEALTH NURSE

JOB DESCRIPTION

January, 1978

QUALIFICATIONS:

Community Health Nurse, Successful completion of eighteen months training at the School for Community Health Nurses at Mansa Konko.

POSITION:

Responsible immediately to the Senior Nursing Superintendent, MCH Program. Responsible for direct supervision to the Nursing Superintendent in charge of the Health Center or her deputy. Works closely with other health personnel, such as Health Inspectors, Dresser Dispensers, Nurse Midwives, Auxiliary Nurses as part of a health team, to improve the standard of care given to mothers and children.

DUTIES AND RESPONSIBILITIES

1. To give effective health education to individuals and groups with emphasis on nutrition and health care of mothers and children.
2. To participate in child welfare clinics.
3. To supervise the growth, development and general health care of infants and children in the home and clinic and make appropriate referrals.
4. To give recommended immunizations to prenatals, infants and children.
5. To give medication under supervision of nursing sister and dresser dispenser.
6. To give basic nursing care to sick mothers and children.
7. To participate in Antenatal clinics.
8. To provide nursing care to women in labor. Conducts normal deliveries in the home and MCH Center and to give post partum care.
9. To provide immediate care to new borns.
10. To provide counseling concerning methods of family planning.
11. To assess the community and identify health problems and to make appropriate referrals.
12. To conduct emergency care when necessary.

13. To assist other team members in maintenance of supplies, equipment and general cleanliness of MCH Centers and Clinics.
14. To perform other duties which may be required from time to time.

This is to certify that the duties and responsibilities had the prior approval of the Director of Medical Services.

/s/ Dr. Peter N'Dow

-69-



Nutrition and Health Education Talks
Ministry of Health, Labour and Social
Welfare

CONTENTS

Health Talks. Notes to Staff

Nutrient List

Height and Weight Table

Food Taboos

Local Events Calendar

Nutrition and Health Education Lectures:—

Importance of Antenatal Care

Diet During Pregnancy

Physical Activity and Personal Hygiene During Pregnancy

Some General Advice for Pregnant Women Including Preparation for Home Delivery

Abnormal Signs During Pregnancy

Importance of The Infant Welfare Clinics

Explanation of Child's Health and Weight Chart

Breast Feeding is Best

From Birth to One Year

Weaning
Two Year Old Baby

Body-building Foods

Energy and Protective Foods

A Balanced Diet

Anaemia

Prevent Malnutrition

Feeding the Schoolchild

Immunizations

Diarrhoea and Dehydration

Measles

Home Accidents

Worms

Disposal of Dry Refuse

Ventilation and General Sanitation
Malaria
Recipes

HEALTH TALKS

Notes to Staff

The lectures in this booklet are only suggestions of the type of education we would like to be seen given to the mothers. The main points to be made in any of the lectures have been written out in a "question and answer" form. Therefore, once you are familiar with these main points, the lectures can be adapted to suit your own style of teaching. Remember however, that teaching should always take the form of a discussion rather than a lecture, and the audience should be involved in your discussion.

Always illustrate or demonstrate the point that you are trying to communicate to a group (suggestions of suitable visual aids are given for each lecture) and reforce your point at least three times during the lecture. Health education does not stop at the wall of the clinic compound, and you must take every opportunity to be not only seen practising what you preach, yourself but to actively encourage others to do so outside the clinic environment.

Take only a few minutes to give your lesson and be prepared before you begin. Speak out loud and clearly and be cheerful, and do make sure that your audience can see you and the posters etc. that you intend to use. Ask many questions of your audience and reward the right responses or answers with good approval, but do not laugh or ridicule wrong answers.

The order of talks listed in this booklet does not have to be followed strictly. If you know that there are cases of measles or diarrhoea etc. around, or if mothers are not bringing their children to clinic to complete their injection course, talk about those topics.

It is advisable to make a wall chart on which the date and the name of the talk given at the clinic can be written. When mothers come to a clinic several times it is useful to be able to find out what they have been taught on earlier visits. Can they remember what they have been taught a month or six months later? If they cannot remember anything, something must be wrong with the teaching. The only way to find out what a mother has been taught is to record it on a wall chart or on her own road-to-health chart.

THE THREE FOOD GROUPS

Group I PROVIDES ENERGY

Cereals	Starchy Root	Sugar	Oil & Fat
Rice	and Fruit	Sugar	Vegetable Oil
Guinea Corn	Cassava	Sweets	Dakh
Millet	Sweet potato	Syrup	Butter
Maize	Irish Potato	Honey	Margarine
Findi	Yam	Caramels	Lard
Wheat	Breadfruit		Palm/Kernel
	Plantain		
	Breadnut		

GROUP II PROVIDES BODY BUILDING SUBSTANCES

Meat	Fish	Eggs	Milk Products	Dry Legumes
Beef	Fresh	Chicken	Milk: Fresh	Peas
Goat	Dry	Duck	Powdered	Beans
Powl	Smoked			Peanut
Game	Tinned			Eggs
Pig	Shell—fish			Nutseu

GROUP III PROVIDES PROTECTING SUBSTANCES

Green Leafy	Red and Yellow	Fruits	Other Vegetables
Vegetables	Vegetables	Pawpaw	Sweetpot
All types of	Carrot	Maango	Tangerine
Spinach	Pumpkin	Orange	Monkey Bread
Parsley	Tomato	Mandarine	Pineapple
Neverdie	Shakpa (Sorrel)	Lemon	Avocado pear
Cabbage		Grapefruit	Fulcaba
Lettuce		Lime	Avocado
Lalo		Ditakh	Netteh
		Soursop	Cashew
		Banana	Guava
		Hill	Toil

Nutrient	English	Woloff	Mandinka	Availability
Vitamin A	Lettuce	Salat	Salato	November—May
	Garden egg	Batanseh	Batanso	All year
	Cabbage	Soupa Meh	Soupa meh	
	Leafy veg. (spinach)	Hopie wer-tah	Jambow	All year
	Bombab leaves	Lolo	Namo	May—September
	Carrot	Carrot	Carroto	December—March
	Pumpkin	Banga	Bambaro	October—January
	Palm Kernel	Nyul	Ten Kulo	All year
	Dittah	Deattah	Talo	October—January
	Tomato	Tamatch	Mentengo	October—June
	Sorrel (fresh)	Bissarp	Kucha	
	Mango	Mangorro	Duto	May—August
	Paw-Paw	Papakayor	Pakayo	all year
	Guava	Guiob	Guiabo	March—April
	Cashew	Cashew	Cashewo	May—August
	Orange	Sorrance	Sarranso	October—April
	Palm oil	Dutir	Tentulo, Tuhseh	All year
Bizer (Tomato)	Jahartu	Jaato	All year	
B-group of Vitamins	Liver	Ross	Jusso	All year
	Meat	Yappa	Subo	"
	Eggs	Nen	Susai Kilo	"
	Fish	Gen	Nyea	"
	Beans	Nieba	Sosso	"
	Groundnuts	Gerrteh	Tiyo	"
	Rice	Marlo	Marmo	"
	Corn	M'borba	Toobanyo	August—October
	Millet	Sunna	Sunno	
	Findi	Findi	Findo	
	Cashew nuts	Horhi cashew	cashew kolo	May—August
Vitamin C	Lettuce	Salat	Salato	November—May
	Green leaves	Hopie wer-tah	Jambow	All year
	Bombab leaves	Lolo	Namo	May—September
	Tomato	Tamatch	Mentengo	October—June
	Dittah	Deattah	Talo	October—January
	Mango	Mangorro	Duto	
	Paw-Paw	Papakayor	Pakayo	All year
Bombab	Buii	Sito	December—April.	
(Some examples only)				

Nutrient	English	Woloff	Mandinka	Availability
	Cashew	Cashew	Cashewo	May—August
	Orange	Sorrance	Sarrance	October—April
	Limes	Lemong	Lemono	All year
	Mandarin	Mandarin	Mandirino	September—December
	Potatoes (Sweet)	Pompitair (Potato)	Pompitair (Potato)	All year
	Soursop	Soursop	Soursop	December—January
	Avocado	Pier	Pier	August—November
	pear	Kanja	Kanjo	Dry - All year
	Okra	Linyong	Jarbo	All year
	Onion	Hopie		
	Green leaves	wertah	Jambow	All year
	Bombableaves	Buii/Lalo	Sito/Nambo	Oct—April/May
	Pumpkin	Banga	Bamboro	October—January
	Sorrel (dry)	Bissarp	Kucha	
	Dittah	Deentah	Talo	October—January
	Meat	Yappa	Subo	All year
	Fish	Gen	Nyaa	All year
	Eggs	Nen	Susai Kilo	All year
	Beans	Niebe	Sosso	All year
	Coco	Dugoup	Nyorr	All year
	Findi	Findi	Findo	
	Spinach			July—December
	Cashew nuts	Cashew	Cashewo	May—August
Iron				
	Bombableaves	Buii/Lalo	Sito/Nambo	Oct—April/May
	Pumpkin	Banga	Bamboro	October—January
	Sorrel (dry)	Bissarp	Kucha	
	Dittah	Deentah	Talo	October—January
	Meat	Yappa	Subo	All year
	Fish	Gen	Nyaa	All year
	Eggs	Nen	Susai Kilo	All year
	Beans	Niebe	Sosso	All year
	Coco	Dugoup	Nyorr	All year
	Findi	Findi	Findo	
	Spinach			July—December
	Cashew nuts	Cashew	Cashewo	May—August
Calcium				
	Fist—especially those with edible bones	Gen	Nyaa	All year
	Green leaves	Hopie		
	Spinach	wertah	Jambow	July—December
	Bombab leaves	Green	Jambow	
	Sorrel	Buii/Lalo	Sito/Nambo	
	Beans	Bissarp	Kucha	
	Groundnuts	Niebe	Sosso	All year
	Netetu	Genteh	Tiyo	All year
	Sour Milk	Netetu	Netetuo	All year
	Coco	Sowe	Non—no	All year
	Rice	Dugoup	Nyorr	All year
	Findi	Marlo	Marno	All year
	Okra—especially dried)	Findi	Findo	
		Kanja	Kanjo	

Year/Month	Weight (Kg)			Height (Cm)	
	Standard	80% Std.	60% Std.	Standard	80% s
0	3.4	2.7	2.0	50	40
1	4.3	3.4	2.5	55	43
2	5.0	4.0	2.9	58	46
3	5.7	4.5	3.4	60	48
4	6.3	5.0	3.8	62	49
5	6.9	5.5	4.2	64	51
6	7.4	5.9	4.5	66	53
7	8.0	6.3	4.9	68	54
8	8.4	6.7	5.1	69	55
9	8.9	7.1	5.3	71	56
10	9.3	7.4	5.5	72	58
11	9.6	7.7	5.8	73	59
1 12	9.9	7.9	6.0	75	60
15	10.6	8.5	6.4	78	62
1½ 18	11.3	9.0	6.8	81	65
21	11.9	9.6	7.2	84	67
2 24	12.4	9.9	7.5	87	70
27	12.9	10.5	7.8	90	72
2½ 30	13.5	10.8	8.1	92	73
33	14.0	11.2	8.4	94	75
3 36	14.5	11.6	8.7	96	77
3½ 42	15.5	12.4	9.3	100	80
4 48	16.5	13.2	9.9	103	83
4½ 54	17.4	14.0	10.5	107	85
5 60	18.4	14.7	11.0	109	87
6	21.0	16.8	12.6	116	93
7	21.0	16.8	12.6	116	93
7	23.5	18.8	14.1	123	98
8	26.0	20.8	15.6	128	102

TAKEN FROM: CHILD HEALTH-BALLDIN, HART, HUEGRESE VER!

(1975)

FOOD TABOOS

Over the page are listed some food taboos in this country which apply during pregnancy and lactation and during childhood usually upto the time of circumcision.

This list was compiled with the help of the final year students (1977) at the School of Public Health, Basjil.

The list is not meant to be comprehensive and no attempt has been made to evaluate the importance of the named taboos.

You will be well acquainted with the food taboos relating to your tribe, and those which are common in the area in which you work.

In teaching mothers, or other groups of people, about nutrition it is likely that you will mention a food or foods which is taboo. The use and value of these foods, especially protein foods, must be explained to the mothers. Try to use yourself and your family as an example in this education. "I fed my child eggs before he could talk and it hasn't affected his speech." etc. Failing that, you could always point out that you are working for the medical department and the better health of the nation and would not advise the mothers to feed their children foods which would physically harm them.

Please bear the topic of food taboos in mind, when you are reading through this booklet, and actually giving nutrition talks.

LOCAL EVENTS CALENDAR

Over the page is an L. E. C. This is designed to help us find out a child's age. When using the Road to Health Chart, it is necessary to know the month in which the child was born, as well as the year.

This calendar is intended as an example only, since separate calendars will be needed in different areas of the country to note the holidays, feasts, and important events of that region.

The example given is for one year only. Ideally the calendar is needed for at least five years, giving a month by month record of events in the area.

Here is an example of how the local events calendar over the page might be used.

A mother says that her child was born before Tobaski.

"Was it after Koresch?"

Mother says, "Yes." Koresch was at the end of September.

"Had the harvesting of groundnuts started?"

Mother says, "Yes." This shows that the child was born in October

"Had the threshing of groundnuts begun?"

Mother says, "No." This again shows that the child was born in October

Now we know that the child was born in October 1976.

For children aged 6 months to 24 months age may be calculated in the following way:—

Number of teeth erupted plus

This is a rough estimate of the child's age in months.

LOCAL EVENTS CALENDER

SEASON	ANNUAL EVENT	MONTH	EVENTS IN 1976
Dry	Preparation of farmland for groundnut crop Hoing of rice fields Harvesting of early mature mangoes	April	
	Preparation of farmland continues Harvesting of dry-season irrigated rice	May	
Wet	Planting of crops with early rains Preparation of seedbeds for swamp rice	June	
	Sowing of rice and groundnut crop	July	
	Sowing of beans, sweet potatoes etc. Transplanting of rice cuttings	August September	Beginning of Ramadan Ramadan continues Korosh
	Harvesting of maize and early millet		
	Harvesting of groundnuts, early maturing rice and cotton End of rains	October	
Dry	Harvesting of cereals and groundnuts continues	November	
	Threshing of groundnuts begins	November	
Dry	Completion of coos harvest Threshing of groundnuts continues Start of trading season	December	Tobaski/Christmas
Dry and Windy	Threshing and sale of groundnuts continues Land preparations for dry rice	January	1977 Mohamadan and Christian New Year
Harmatan	Farming as for January	February	Independence Day (18th)
	Pressing of groundnut and palm oil	March	Mohamad's Birthday
	Transplanting of dry season rice completed		
Dry	End of trading season preparation of farmland for groundnut crop etc.	April	General Elections (4th & 5th Easter.) Opening of New Yundum Airport by President 1974
	Farming as last year	May	May Day
Wet	First early rains	June	
	Preparation of farmland as last year	July	

Public Health Nurses and midwives. As a result, certain diseases such as heart, kidney disease, diabetes and pelvic anomalies and the peculiar disease in pregnancy PET (pre-eclampsia) can be detected and treated accordingly. I also mention where and when to obtain antenatal care in the Banjul area.

Banjul days of all prenatal patients - Saturdays 8 a. m.

Half Die Multips. - Mondays 8 a. m.

New Street Multips. - Wednesdays 8 a. m.

All Primips. - Thursdays 8 a. m.

I want to stress again that if any patient transfers to the Kombo or rural areas they must contact the midwives or nurses in the area at their earliest convenience and enquire when and where antenatal care can be obtained.

CONCLUSION

In conclusion, I thank you all very much for being patient and attentive during the last 20 minutes, also for the very invaluable contributions you have made. I hope you will impart this knowledge to your friends and relatives thus enabling them to enjoy the full benefits of antenatal care. Good bye.

TALK ON THE IMPORTANCE OF ANTENATAL CARE

VISUAL AIDS - Antenatal record cards, laboratory forms and T.T. injections.

AIM - To educate mothers on the importance of antenatal care.

SUB-OBJECTIVE - (a) To let mothers know the aims of antenatal care.

(b) To let mothers know the advantages of antenatal care.

(c) To let mothers know where and when antenatal care can be obtained.

INTRODUCTION

Good morning mothers, for the benefit of those who do not know me, my name is Mrs. Jolly N'Jic, the Public Health Nurse in your area. My talk this morning is on the importance of Antenatal Care. I will try to tell you what are the aims of antenatal care, what are the advantages of antenatal care and where and when antenatal care can be obtained.

Can anyone tell me what are the aims of antenatal care?

ANSWER: The aims of antenatal care are:—

1. To prepare the mother for labour, to find and treat any abnormal conditions likely to prevent her from doing so.
2. To produce a live, mature, healthy baby by a safe deliver in a healthy mother.
3. To have a mother strong enough to feed and care for her baby and to teach her how to do this successfully
4. To have a mother immunized against tetanus so that she passes this immunity to her baby so protecting it, until it is old enough to be immunized itself.

Can you tell me what are the advantages of antenatal care?

ANSWER: At the antenatal clinic, the mother is well looked after by highly skilled staff, e. g. the doctor, Public Health Nurse and Midwife. She enjoys the benefit of a regular examination by the midwife or Public Health Nurse and a physical examination by the doctor at least once during pregnancy. Certain tests are done such as haemoglobin to exclude anaemia, which is a common factor in pregnancy, urine and blood pressure to exclude heart and kidney diseases, also PET which is a peculiar disease in pregnancy.

The position and size of the foetus is determined through abdominal palpitation. Serious illnesses can be detected and treated. Mothers share the benefit of group teaching and individual advice so that they attend clinic regularly, have a normal delivery and learn how to care for the baby, the other children and herself. Mothers also benefit from the immunization given against tetanus; this will not only protect the baby at birth but also from neonatal tetanus. (Up to the age of six to nine months).

Do you know where and when to obtain antenatal care?

ANSWER: This is very important as some people do not know where to obtain antenatal care. In the Banjul area, this is obtained at the New Street Clinic. The various clinic days are as follows:

1. Booking for both Primips. and Multips. - Saturdays 8 a. m.
2. Half Day Multips. Clinic Days - Mondays 8 a. m.
3. New Street Multips. Clinic Days - Wednesdays 8 a. m.
4. All Primips. attend clinic on Thursday at 8 a. m. For the benefit of patients who might transfer to the Kozobos and provinces, I suggest they find out from the nurses in these areas where and when clinics are held. All divisional heads in the rural areas have health centres where antenatal clinics are held and in other areas the mobile units are used.

SUMMARY

To summarize, I have endeavoured to tell you that antenatal care aims at helping the mother to have a safe delivery, produce a full term healthy baby and also to ensure that the mother is immunized and is strong enough to feed and care for her baby. I also mentioned that at the antenatal clinic the mother enjoys advantages such as physical and laboratory examinations by trained and skilled personnel, e. g. doctors

DIET DURING PREGNANCY

VISUAL AIDS: Poster of Expectant Mothers Needs, or pictures of the food needed for a well-balanced diet.

GREETING: Goodmorning. Today we would like to talk to you about what to eat when you are pregnant.

For good health it is important that we eat a lot of different foods, such as fish, meat, rice, fruits and vegetables.

During pregnancy it is even more important to eat a good diet. This is because the mother is feeding both herself and the baby growing inside her. For the baby to grow and develop well, the mother must therefore eat more than a woman who is not pregnant.

NURSE: Either pin up the poster and explain the different foods, or pin up pictures of body-building, protective and energy foods.

NURSES: Some of the foods you mention will be considered by the women to be taboo during pregnancy. If you yourself have children and ate "forbidden foods" when you were pregnant, then reassure the women about these "harmful" foods using yourself and your children as an example.

Alternatively, explain to the women that you are a nurse. Would a nurse give advice to a pregnant woman that would harm the growth of her child in uterus or later life?

2. Another point to mention is that the eating of plenty of fruit and vegetables will help the women pass stool more easily. This is because these foods after digestion, help to make the stool bulkier and looser.

3. Explain to the women that although some of the foods you have mentioned may be expensive, there are many other foods they can choose from which are much cheaper — groundnuts, beans, fish, green leaves, etc.

4. A pregnant woman who has oedema of the ankles or face should avoid adding salt to her food, and should not eat salty, dried fish.

5. Finally, advise the women to bring their children to the health centre after the naming ceremony so that we can examine the baby to make sure it is in good health. Advise them to breast-feed only.

Any questions?

Thank them for listening.

PHYSICAL ACTIVITY DURING PREGNANCY AND PERSONAL HYGIENE

No visual aids are necessary.

GREETING: Good morning. Give name of lesson.

QUESTION: What kinds of work can be bad for you and the growing baby?

ANSWER: Taking and carrying very heavy loads, doing a lot of hard work on the farm, walking very long distances without resting and tiring yourself.

QUESTION: If you are doing hard work, what can happen to you and your baby?

ANSWER: Doing very hard work and lifting heavy loads can cause strain to her baby which could mean that the baby is born before time. This may result in sickness of the baby and the mother.

QUESTION: What kinds of physical activity are permissible?

ANSWER: You should not just sit down and do nothing though when you are pregnant. It is good to get some exercise, but you should not overwork your baby. Walking short distances and doing work around the home like sweeping, cooking and washing are all right.

QUESTION: Did you know that being dirty can cause you to have many illnesses?

NURSES: Listen to the answers from the women. If there are no answers, repeat that it can make them ill.

QUESTION: What are some of the things you can do for yourself and your family to keep you from being ill?

ANSWER: Take a bath every day with soap and clean water. Washing your hair and body helps to prevent lice from getting in your hair and sores from developing on your skin.

Wearing clean clothes also helps to prevent lice.

Clean your teeth with a brush or stick daily. It is important to look after your teeth. Decaying teeth are very unhealthy, and in very bad cases, the poisons from the bad teeth get into the blood and may affect the growing baby. Dental care is free during pregnancy, so come to the R.V.H. for a dental check.

Wash hands with soap and water before eating and after using the latrine. This will help to keep you from getting diarrhoea.

Wash dishes after cooking and eating and keep your kitchen and compound clean to avoid cockroaches, rats and flies. It will also help to prevent you from getting worms and diarrhoea.

Bury rubbish or take it to a dumping site so that flies and rats don't breed amongst the refuse.

Always use a latrine or bury faeces if no latrine is available to prevent you and your family from getting worms and diarrhoea.

Any questions?

Thank them for listening.

**INTENTIONALLY
LEFT BLANK**

ABNORMAL SIGNS DURING PREGNANCY

No visual aids are necessary.

GREETING: Goodmorning. Today we would like to talk to you about some things which may mean an extra visit to the clinic during your pregnancy.

QUESTION: Do you see your period when you are pregnant or have a watery or thick white discharge from your vagina?

If you bleed a small amount during your first four months of pregnancy, don't be too frightened but do come to the clinic to be checked.

If the bleeding is plenty or continues for a long time (five to six months) be certain to come at once to the clinic or go to the hospital.

If you notice a watery or thick white discharge from the vagina you should come to the clinic. Check each day to see if you are bleeding or having a discharge.

QUESTION: Do you have pain during intercourse or bleed after sex when pregnant?

If sex can cause you pain or make you bleed, something may be wrong inside you.

If you have these signs, do not waste time. It could cause you to loose your baby and to become sick yourself. Come to the clinic straight away.

QUESTION: Do you notice that your ankles or feet have begun to swell during pregnancy?

If you see that your feet and ankles swell or become puffy, come to the clinic. We will treat and advise you so that swelling goes down.

QUESTION: Do you feel very dizzy and tired, and have to rest often when pregnant?

If so, this could mean that your blood is not as good as it should be. During pregnancy you need good healthy blood to maintain your own strength and help the growth of the baby inside you.

Come to the clinic and we will examine you and help you restore the goodness to your blood.

So the signs to look for are: a period or vaginal discharge; pain or bleeding after sex; swelling of feet or ankles; dizziness. Any of these signs means an extra visit to clinic.

Any questions?

Thank them for listening.

IMPORTANCE OF CHILD WELFARE CLINIC

VISUAL AIDS: I.W.C. cards various immunizations, syringe, needle (for immunization), health posters depicting certain communicable diseases and locally available foodstuffs.

AIM: To educate mothers on the importance of Infant Welfare Clinic.

SUB-OBJECTIVE

1. To let mothers know the meaning of I.W.C.
2. To let mothers know what services are rendered at I.W.C.
3. To let mothers know where and when I.W.C. are held.

INTRODUCTION

Good morning. My talk this morning is on the importance of Infant Welfare Clinic. I will endeavour to tell you what I.W.C. means, what services are rendered at the I.W.C. and where and when I.W. Clinics are held.

Can anyone tell me what is a I.W.C.?

ANSWER: An Infant Welfare Clinic is a clinic held for children 0-5 years to cut down disease and deaths in this age group. Also to detect physical and mental disability for treatment and to prevent complications or serious disabilities.

Can anyone tell me what services are rendered at I.W.C.?

ANSWER: The services rendered at the I.W.C. are the following:—

1. **Weighing**—This is done to detect malnutrition as early as possible and also helps to inform us about the growth and development of the child.

2. **Physical Examination**—This is done at each clinical session in order to prevent disorders or poor growth due to faulty diet or mismanagement. Also to make an early diagnosis of any disorder to provide early treatment, and prevent it from becoming too serious or chronic. To detect any handicap early in order that the child may have treatment to help overcome it or treat it and also to provide social help if necessary, e.g. congenital defects, deafness, partially blind, paralysis, mental ill health or emotional disorders and motherless children.

3. **Counselling and Health Education**—This enables us to find out from the mothers about their babies and also to educate them on the proper care of their babies, their diet and to refer serious cases to the appropriate doctor.

4. **Immunization**—This is a process whereby vaccines are introduced into the child's body to protect him from certain communicable diseases e. g. measles, smallpox, T. B., diphtheria, whooping cough and tetanus. This is given either by an injection in the right or left upper arm or in the buttocks or by multiple puncture with needles depending on the type of vaccine.

SUMMARY

To sum up, I have tried to tell you that I. W. Clinics are held for children 0—5 years to detect and treat early defects, to determine the growth and development of the child, to give health education and immunization against certain communicable diseases e. g. measles, smallpox, diphtheria, whooping cough and tetanus. To teach mothers or foster parents the proper care of twins, premature babies, the motherless and malnourished children.

Questions and answers.

CONCLUSION

* Thank you very much for your utmost attention and support and also for the very interesting contributions. Now that you are fully aware about the importance of Infant Welfare Clinic, I am sure you will endeavour to encourage your wives, relatives and friends to bring their children to the Infant Welfare Clinic. Good bye.

THE WEIGHT CHART

VISUAL AID: Weight chart and/or poster of weight chart.

GREETING: Good morning. Today we are going to explain the child's health and weight chart to you.

Every child who attends this clinic, has a weight chart like this.

NURSES: Show a card, or pin up the poster.

When you bring your child to the clinic, before he sees Sister, he is weighed. The best way for us to check whether your child is making good progress is for us to check the weight regularly. A child who is growing well, should gain weight every month. Each month he should be heavier. We mark the weight of your child on his card with a dot like this.

These two black lines going across the chart mark the "Road to Good Health". If the weight dot is between these lines, your child is strong and healthy and he is on the "Road to Good Health". His monthly weight dot should always be on the "Road to Good Health," and he should be making steady progress up the chart like this.

NURSE: Demonstrate

And if your child's weight dots begin to fall below the line like this, then your child is becoming weak and we must make him strong again, by advising you what to feed him and how to look after him so that his weight increases and his weight dot is once again between the lines and on the "Road to Good Health."

On this card we will record his weight and medical treatment over his first five years. So when you come to this or any other medical centre take the chart with you. In this way we know what progress your child is making.

Any questions.

Thank them for listening.

To make sure the mothers have understood the significance of the chart, it is best to occasionally ask them to explain to you what the position of their child's weight dot on the chart means. This can be done after giving a talk, or if time permits, immediately after the baby is weighed and the chart marked with the new weight.

BREAST FEEDING IS BEST

VISUAL AIDS: A. Pictures of body building foods and some fruits and vegetables.

B. Picture of mother breast feeding her baby.

GREETINGS: Good morning. The sister will probably have asked you if you are just breast feeding your baby. Today we would like to tell you why breast milk is the best food for your baby.

WHY BREAST MILK IS BEST FOR THE BABY

It is always fresh

It is safe and free from infection

It is designed by nature of babies

It is easy for them to digest

It is the right temperature

It helps to protect the baby against some diseases like diarrhoea

It helps the baby receive love from his mother.

WHY BREAST MILK IS BEST FOR THE MOTHER

It costs nothing

It saves time as it is always ready

It helps the mother to express love for her baby

It helps the uterus to retract

FOR A GOOD BREAST FEEDING THE MOTHER SHOULD—

A. Have pulled out the nipples and massaged them during pregnancy so that they become firm for the baby's mouth to grip.

B. She should eat a good nutritious diet.

NURSES: Pin up pictures of meat, fish, groundnuts, beans, netelna, green leaves, eggs, and fruit.

C. She should drink plenty of liquid—water or boiled fresh milk.

Suckling helps to stimulate the milk production of the breast and is the best way to increase the milk flow.

Feed your child when he is hungry and ready for feeds.

Often the baby is just thirsty and not hungry, so give him small drinks of boiled cooled water. Feed him from a clean cup with a clean spoon. Feeding the baby from a bottle is very bad. It is very difficult to make sure a feeding bottle is clean. If it is not clean, the baby will get diarrhoea or other diseases from the dirt in the bottle. A cup and spoon can be easily cleaned.

Until your baby is four months old, all he needs is the breast milk and the cooled boiled water. Occasionally you can add a few drops of fresh orange or paw-paw juice to the boiled water. This will help his teeth and bones to develop properly.

When your baby is four months old, we will advise you again on feeding him.

Any questions?

Thank you for listening. Please breast feed only, until we advise you again.

NURSES

FAILURE OF BREAST FEEDING

CAUSE	ACTION
A. Caused by the Baby	
1. Prematurity	The milk should be expressed from the breast and fed by cup and spoon.
2. Infections e.g. pneumonia	
B. Caused by the Mother	
1. Engorgement of the breast	Disappears if the baby can still suck. Gentle massage of an area around nipple. May have to express milk.
2. Cracked nipples	Express milk. Feed with cup and spoon G.V. paint for cracks.
3. Mastitis and Abscess	Express milk gently. Feed as above. Let baby suckle from other breast. Bind the sick breast.
4. Inverted or flat nipples	Pull out the nipple to make it firm at least twice a day.
5. Worry or lack of confidence	Encouragement. Stimulate milk secretion by more suckling.
6. Wrong beliefs about bottle feeding.	Education of the mother.

FROM BIRTH TO ONE YEAR

VISUAL AIDS: Posters of "From Birth to One Year Needs" or pictures of various body building, energy and protective foods and a poster of a healthy baby.

NURSES: The posters showing the needs of a baby from birth to one year old are self explanatory and deal adequately with this topic. All the foods shown in the posters must be named, and explanation must be given where necessary on how to prepare and add these foods to a baby's pap e.g. pounded or scraped meat fish (see section on body building foods).

Alternatively, the "picture foods" may be used.

THE MAIN POINTS TO BE COVERED IN THIS LECTURE ARE—

- A. Breast milk is best.
- B. Put a newborn baby to his mother's breast as soon as possible.
- C. Start giving a child pap when he is four months old. Until then breast milk alone plus cool boiled water.
- D. Once the child likes the pap (may take up to a month) body building (protein) foods must be added.
- E. By the time a child is six months old he must be eating his pap with added protein three times a day.
- F. Start the baby on new foods before he has had his breast milk. This way he will be hungry and more likely to eat them and get used to them.

But once a child likes a food well, he should be given it after he has drunk all the milk he can from the breast. This is important because a child will not suck strongly if he is full of porridge, and the breast milk will get less.

G. At one year he should be eating a great variety of foods, as well as having his breast feeds. One or two large spoonfuls to every plate of pap e.g. meat, fish, eggs, groundnuts, beans, fruit and vegetables.

- H. He should be having three or preferably four meals a day.
- I. He should be fed from his own bowl with his own spoon.

These are the main points which you should try and convey to the mothers, pinning up the various "picture foods" where necessary to aid your explanation.

At the end of the talk, pin up a poster showing a healthy baby. Ask the mothers how their children can look like this baby. A series of questions can help you assess how successful the lecture has been.

FOR EXAMPLE:

- Q. What is the best food for a newborn baby?
A. Breast milk.
- Q. At what age should we give our children their first pap?
A. Four months.
- Q. What foods should be added to the pap?
A. Groundnuts, meat, milk, fish, beans, etc.
- Q. When should we feed a new food to a baby?
A. Before giving him the breast, so that he will be hungry and more likely to eat the food.
- Q. How often should he be fed?
A. Three or four times a day.
- Q. How much of these foods should we add to the pap?
A. One or two large spoonfuls at every meal.

Any questions?

Thank them for listening.

Please go home and "do"—don't go home and forget.

WEANING

This talk covers both the introduction of solid foods and the termination of breast feeding.

VISUAL AIDS: A Poster of 4—6 months old baby needs

B. Pictures of body building foods

GREETING: Good morning. Today we would like to talk to you about feeding your baby his first porridge. (coos pap).

The last time we talked to you about how to feed your child from birth to one year.

QUESTION: Can anyone tell the rest of the mothers what they learned about feeding their young babies the last time?

ANSWER/NURSES: The main point which we hope that the mothers will remember, is that they must start feeding coos pap when the baby is four months old. Praise and encourage them for remembering any of the main points made in the last talk.

QUESTION: Why should we start feeding coos pap to babies at four months?

ANSWER: Because at this age breast feeding alone is not enough by itself to make sure that the baby continues to grow big and strong. If he is not given other foods as well as breast milk at this age, he will fail to grow as well as before.

NURSES: Pin up poster of 4—6 months old baby needs.

Here we have a mother breast-feeding her child but she has also started to feed her baby pap, because her baby is now four months old.

Many mothers tell us that their babies do not like coos pap, or that they spit it out. So the mother stops feeding her baby the pap and just gives her baby the breast. This is a pity because the baby needs this food to help him grow big and strong.

We would like to give you some advice about feeding your baby his first coos.

1. If you have been giving your child small drinks of cooled boiled water from a clean spoon, as we advised you, the baby will be used to the feel of the spoon in his mouth. But he will not be used to the food now being fed to him on the spoon.

2. At the first, give only small amounts, (half a teaspoon) once a day let him suck it from the spoon.

3. Give it to him before the breast-feed, so he will be hungry and will want to try it.

4. Give him time to feel it, to taste it. He has never had food in his mouth before. He will be wondering what to do with it.

5. Make sure that the pap is warm. He is used to having warm breast milk. Cold coos pap would be even stranger to him.

6. Feeding your baby his first food is not a race. Take it very slowly, do not force him.

7. If he spits it out the first time, try again. A very small amount of pap on the spoon, given slowly and gently.

8. The quantity of pap can be increased as the child gets used to it, usually by half a teaspoon a day.

9. Always feed the pap before the breast. Why? Because otherwise the child will be full with breast milk and will not want to eat the pap.

10. Once he is eating the pap well, feed him after the breast.

Why? Because if he is full of porridge when he is put to the breast, he will not suck properly.

If he does not suck properly the supply of milk the breast produces will get less. This is bad because the child still needs all the breast milk he can get, even though he is having other foods.

D. As soon as he is eating his porridge well (after about one month) some other foods should be added to the pap, like we told you the last time.

QUESTION: Can anyone here tell us what foods are best to add to the pap.

ANSWER: Raw egg stirred into the hot coos pap; groundnut paste; skinned mashed beans; pounded greens; pounded dried fish; scraped or minced meat; fresh hoiled milk or dried skimmed milk.

NURSES: Get the mothers to pin up the picture of any of the food they name onto the cardboard.

E. The baby should be fed from a clean bowl with a clean spoon.

All foods added to the pap, should have been pounded, scraped or mashed or ground, because babies have no teeth and cannot chew. They can only swallow.

As the baby gets older he needs more and more of these foods to help him grow big and strong. He has only a small stomach, so feed small meals four times a day.

QUESTION: When should breast-feeding end?

ANSWER: A mother should breast-feed her child until it is 18 months or two years old. If she wants to go on longer she can.

Breast-feeding should end slowly. When the child is young he needs to be fed often. As he gets older (one year) he may be feeding from the breast only three or four times a day.

When a mother wants to wean her child off the breast completely, she should stop one breast feed (for example in the morning) and give the child some food instead.

After a week or so, she can stop another breast-feed, and give the child extra food.

She should continue in this way, until the child is completely weaned. It should take about a month.

A mother should not wake up one morning and say to herself, "Today I am going to wean my child." That is very wrong, both for her and her child. She will find that her breast become swollen with breast milk, and they will become uncomfortable and sore.

Her child will also miss the comfort of the breast, as well as his feeds.

Any questions?

Thank them for listening.

TWO YEAR OLD BABY

VISUAL AIDS: Poster of the Needs of a two year old baby.

GREETING: Good morning. Today we would like to talk to you about feeding toddlers.

QUESTION: Can anyone here tell the rest of us what she has learn in the previous talks we have given on feeding children?

ANSWER/NURSES: This will of course depend on the previous talks given. If this talk is given in the order listed at the front of this booklet, the following points should be raised:—

- (a) Breast milk is best. Breast feed up to at least 18 months.
- (b) Start giving a child cows pap when he is four months old.
- (c) At six months he should be eating plenty of porridge with added protein (body-building foods) three times a day.
- (d) Go on breast feeding as long as possible.
- (e) Stop breast-feeding slowly.
- (f) He should have his own plate, and a good share of the sauce.

Praise the mothers for remembering any of the main points. Ask them if they are practising what they have learned.

Pin up the poster.

B. By the time your child is two years old he will probably be weaned from the breast. As we've told you before, and some of you have just mentioned the fact the child should be eating his cows pap with added body-building foods well, by the time he is six months old.

At one year he is beginning to eat adult food and at two years he should be eating a wide variety of different foods, like the young child we can see in the poster.

NURSES: Name the different foods in the poster.

QUESTION: Why has the young child got his own special plate?

ANSWER: This is so he can get his share of food, especially his share of sauce. A young child eats slowly, and if he does not have his own special plate he may find that the rest of the family eat so fast that he does not get his share. If everyone in the family eats from the same bowl, eating may become a competition to see who can eat the fastest. The young child will lose this competition unless he is helped. He may find that the rest of the family have eaten all the sauce before he has had enough.

QUESTION: Why is the young child eating from a spoon?

ANSWER: Young children are bad at feeding themselves with their fingers and need to be fed with a spoon. At first they need to be helped, but later on they can learn to feed themselves.

Also, the food may be hot, and he will not be so good at holding his bowl of food in his fingers as are his brothers and sisters. When he is older he can eat with his fingers from the family bowl. At two years he is still too young.

QUESTION: How often should a young child be fed?

ANSWER: Three or four meals a day. Many families have only two meals, or even only one meal a day. This is not enough for the young child. He has only a small stomach. He needs feeding small amounts three or four times a day.

Any questions?

Thank them for listening.

Please go home and do. Don't go home and forget.

BODY—BUILDING FOODS

VISUAL AIDS. Picture foods of meat, fish, eggs, beans, groundnuts, green-leaves.

Poster of healthy baby.

Poster showing a baby with marasmus, kwashiorkor and a healthy baby.

or Prevent Malnutrition poster.

GREETING: Good morning. Today we would like to talk to you about feeding your young children.

A. All food is good for our children, but some foods are better than others in the way they help give the child a good strong body. They help build the body.

If a house is to withstand the rains it must be built well, or the roof will leak or the house may even be washed away.

If the body is to withstand disease and infection it must be built well, otherwise the body becomes ill easily and when disease comes, to the village, the weak bodies are always the first to become ill. They may even die.

This is why foods that build the body well are so important.

B. Foods that help build the body are: meat (cow, goat, chicken, pig) fish (fresh or dried) groundnuts, beans, green leaves, eggs, milk.

NURSES: Pin up the pictures of these different foods. Explain that meat and fish, must be pounded or scraped before they can be added to a young child's pap.

Beans must be soaked overnight to remove the hard skins. Then pounded.

Groundnuts, e. g. chewra gard.

Eggs—break the shell and pour the raw egg into the hot coos. Stir. The heat from the coos will cook the egg.

Green leaves—must not be cooked too long or they will lose their goodness.

Milk—fresh cow's milk must be boiled. Dried must be added to pap.

Once all the pictures have been pinned onto the cardboard, repeat again that these foods are those which help build the body. Feeding them to their children will help them grow big and strong. They must be given at every meal.

C. We have advised you that you should start feeding pap to your children when they reach four months.

Once they like the pap, you should start adding some of these different foods to the pap.

If you are already feeding your child rice, don't fill his bowl with rice and leave him with a small piece of meat from the sauce.

That is wrong.

Give him a good share of the meat or fish etc. as well as the rice.

NURSES: There are several ways in which this lecture can be concluded:—

(a) Using a poster which shows a child with marasmus, a child with kwashiorkor and a healthy baby, you can explain to the mothers, that the marasmic baby belongs to a mother who came to the clinic and heard the talk on body building foods. She went home and forgot all that she was taught at the clinic and fed her baby only small rice or pap.

The baby with kwashiorkor belongs to another woman who attended the clinic and heard the talk. She went home and only fed the body-building foods to her child once a week. She continued to fill his stomach with rice.

The healthy baby belongs to the mother who heard the talk understood it and remembered it. She gave her child a good portion of the meat, fish, beans etc. at every meal.

N.B. It is best, to ask the mothers which is the healthy baby and why, before any explanation is given.

(b) Using the Prevent Malnutrition poster:—

Ask the woman, which is the healthy baby and why. Ask them to name the different foods which should be fed to a child. Explain that the malnourished child only received empty plain pap, rice, fufu, maize, yams, etc.

(c) Pin up a poster of a healthy baby.

We want all babies in The Gambia to be like this. Ask the mother how they can make sure their babies will be strong and healthy. Get them to name the different foods, and ask them to pin the appropriate picture food that they name around the poster of the healthy baby.

Always give plenty of praise and encouragement to a mother who names a food.

Remind them of the importance of feeding these foods at every meal.

Any questions?

Thank them for listening

ENERGY AND PROTECTIVE FOODS

VISUAL AIDS: Pictures of appropriate foods.

GREETING: Good morning. Last time we talked to you about foods that you should feed your children, so that their bodies will grow well and strong.

A. QUESTION: Can any of the mothers here tell us the names of some of those foods.

ANSWER: Groundnuts, beans, eggs, fish, meat, milk, green leaves, netetou, egusi, etc.

NURSES: Congratulate and praise the mothers for remembering any of the foods.

B. Today we would like to talk to you about some other foods which you should feed to your children.

Protective Foods (Fruit and Vegetables)

As well as feeding your children foods that will help build his body, they also need plenty of fruit and vegetables. These foods help to protect your child against disease and they also help to build strong bones and teeth, blood muscles and skin.

In The Gambia we are very lucky because there are many different fruits we can eat such as baobab, orange, mango, guava, limes, paw-paw, bananas, grape-fruit.

NURSES: Pin up the pictures of these foods on the cardboard.

If your child is a toddler then he can eat the fruit without any help. It is best if your child can have a piece of fresh fruit every day.

If your child is only a small baby in arms, then occasionally you can squeeze a piece of fresh orange or paw-paw, and add the juice to the baby's drink of cooled boiled water. Doing this helps the baby's teeth and bones to develop properly.

Vegetables such as pumpkin, garden eggs, tomatoes, bitter tomatoes, green leaves (never-die, keren-keren, cassava leaves, salad, baobab leaves, etc.) okra, help to protect your child and give him good blood muscles and skin.

NURSES: Pin up pictures of these foods.

When you cook these foods, don't cook them too long, and put a lid over the cooking pot to help save the goodness.

C. ENERGY FOODS

Every day we feed our families foods such as rice, coos-coos, millet, maize, findi, potatoes (Irish and sweet), cassava, bread and butter or margarine. And we add oil to our cooking.

NURSES: Pin up pictures of these foods.

All these foods help satisfy our hunger and they give us strength to work. These foods give your child the energy he needs to run about and play. But it is wrong to fill a child's stomach only with these foods. If you just give your child plain rice or coos every day, then he will soon become ill. His body also needs the fruits and vegetables and the body-building foods we talked about last time.

So if you want a healthy child you must feed him lots of different foods.

This is why every time you bring your child to the clinic we talk to you about how to feed your children.

Medicine and tablets don't make a child grow strong and healthy. They only help him to recover from an illness.

Good food and care of your child can prevent your child from becoming ill.

Any questions?

Thank you for listening. Please go home and do. Don't go home and forget.

Tell your husband and friends what you have learned here today.

BALANCED DIET

VISUAL AIDS: A. Poster of A Balanced Diet.

B. Pictures of various body-building energy and protective foods.

GREETING: Good morning. Today we would like to talk to you about feeding your family, especially the young children of the family.

A. You have heard us talk before about food. We told you that food is good for the body, but there are some foods which are better than others for building the bodybones, muscles, hair, skin and blood.

QUESTION: Can anyone tell us some of the foods which are good for building the body?

ANSWER: Meat, chicken, fish (fresh and dried), peas and beans, groundnuts, sweetou, eggs, green leaves, milk.

NURSES: Get the mothers to pin up the pictures of the foods they name on to the cardboard. Praise them for remembering.

B. We also said that we need food to satisfy our hunger and give us strength to work. We talked about foods that give us energy.

QUESTION: Can anyone tell us some of the foods which supply our body with energy?

ANSWER: Coos, rice, findi, maize, cassava, potatoes, oil, bread, butter, etc.

NURSES: Again, ask the mothers to pin up the pictures of the foods they name. Praise them for remembering.

C. Finally, we talked about food which give protection against diseases and which help build strong bones, teeth, blood, muscles and skin.

QUESTION: Can anyone name any of the foods that help protect the body in this way?

ANSWER: Leafy vegetables, oranges, tomatoes, okra, bonobob, limes, guava, bananas, etc.

NURSES: Again, get the mothers to pin up the pictures of the food they name. Praise them.

D. You can see therefore, that we need food to grow, to satisfy our hunger and to work. To meet all these needs, we must eat many kinds of foods, as we have pinned on the cardboard. It is no good filling a child's stomach with rice or coos only. We must feed him with the body-building and protective foods as well so that his bones, teeth, muscles, blood and skin grow well and strong.

The body is like a house. If the house is built from weak materials, when the rains come, the house leaks badly and may be washed away: it is the same with your child—if you do not feed him properly, he will be weak, he will not grow well and when there are diseases in the village, like measles, the child will get the disease easily and he may die.

QUESTION: So how can we make sure children grow healthy and strong?

ANSWER: Feed him properly. Give him some body-building food, some energy food and some protective food at every meal.

NURSES: Pin up poster of A Balanced Diet.

This picture shows us what to do.

NURSES: Point and name the various foods to the mothers.

E. This is why foods like: are good for the growing child.

A. Domoda—Contains groundnuts, fish/meat, tomatoes, onions and rice.

B. Benechin—Contains fish/meat for body-building, tomatoes, pumpkin cabbage, etc. for protection against disease; rice and oil for energy.

C. Soupa—Contains meat/fish for body-building, kere-kere or okra for protection; rice and oil for energy.

D. Cherreh and Sauce—The child must have a good share of the sauce.

E. Bahal and Gerti—Groundnuts and fish and netetou; okra and bitter tomatoes; rice.

NURSES: These are only a few examples. You will know many more which are more appropriate to the area in which you work. Use your own examples, but explain in the same way, referring to the foods on the poster, or using the picture cards. Ask the mothers to give examples of their own.

So you see, a good food is a mixture of many foods. Remember this and do it and you will be feeding your children and other family members well.

Any questions?

NURSES: Thank the mothers for listening.

Tell them to go home and do, not to go home and forget!

ANAEMIA

VISUAL AIDS: Pictures of "iron containing" foods.

GREETING: Good morning. We have spoken many times about the importance of eating good food to keep the body healthy and to make sure that your children grow tall and strong.

Today we are going to talk about one special subject and that is healthy blood.

A. **QUESTION:** Why do we need healthy blood?

ANSWER: A person's health depends largely on the amount of blood in his body.

The blood is so important because it carries food and other substances through the body.

In order for the blood to be a healthy red colour, and for it to be able to perform its many tasks properly, you must eat plenty of foods which contain the necessary material to make good blood.

The material is called iron.

If you and your children do not eat enough of the foods which contain the blood-building material (iron), then the blood does not act as it should. You will get tired very easily, become very weak, and eventually become very ill.

A child who hasn't enough good blood has:

- (1) White gums instead of pink.
- (2) A pale tongue
- (3) The skin under the nails is pale
- (4) The linings of the eyes are white instead of pink.

NURSES: Go round some of the children and examine their eye linings for anaemia.

Make sure that the mothers understand what you are doing, and that they see for themselves whether their child is anaemic or not.

B. Therefore, in order to have good blood, he must eat foods containing the blood-building material (iron). Foods like: meat, fish, eggs, peas, and beans, newton, green leafy vegetables, groundnuts.

NURSES: Pin up the pictures of the foods on the cardboard;

Giving him these foods once a week is not enough. He must have two or more of these foods every day.

If a child has worms or is wounded or has malaria, he loses a lot of good blood. He therefore needs extra helpings of these blood-building foods.

Check your own eyes in a mirror, as well as those of your family like we have shown you, to make sure you have good blood. If the lining is white instead of red, then you need to eat more of these foods.

Any questions?

Thank you for listening. Please go home and do, go home and do, don't go home and forget.

PREVENT MALNUTRITION

VISUAL AIDS: (A) Poster "Prevent Malnutrition" or poster showing a baby with marasmus, kwashiorkor and a healthy baby.

(B) Pictures of body-building foods.

NURSES: Please note that it is important to know the local term for "malnutrition," and preferably for the words "kwashiorkor" and "marasmus."

GREETING: Good morning. Today we would like to talk to you about malnutrition.

QUESTION: Can anyone here tell us what the word malnutrition means?

ANSWER: It means that a person is not getting enough to eat.

QUESTION: How can your baby look when he is not getting enough to eat?

ANSWER: He can look dry and small with an "old" man's face, or his face can become swollen with peeling skin. His hair can fall out or be red. He can have a big belly. He might have diarrhoea. He will be unhappy, and probably cry a lot.

NURSE: Congratulate and praise the mothers for telling you any of the signs of malnutrition. Pin up the poster.

QUESTION: Which of the babies on the poster is the healthy baby?

NURSES: Ask one of the mothers to come up and point out the health baby. Thank her. Then explain that the other baby, or babies, depending on which poster you use, has malnutrition. Using the poster to help you, go over the signs of malnutrition once more.

QUESTION: Why is this baby healthy? (Point to the picture of the healthy baby).

ANSWER: Because he is getting enough food to eat.

QUESTION: Why have these babies got malnutrition?

ANSWER: Because they are not getting enough to eat.

QUESTION: What are the foods we have to feed our children in order to make sure that they remain healthy and grow big and strong? We talked about these foods before, and we called them the body-building foods. Can anyone remember what they are?

ANSWER: Fish, meat, milk, eggs, groundnuts, beans, netetou, peas, green leaves.

NURSES: Congratulate the women for remembering any of the above foods. Ask them to pin up the picture of the food they name, next to the picture of the healthy baby.

All these foods help build a child's body. You should feed some of these body-building foods with his rice or pap three times a day. If you only give these foods once or twice a week with his pap or rice, then your child will become like this. (point to the picture of a kwashiorkor baby).

If you only give him small rice or pap and no body-building foods at all he will become like this. (Point to the picture of a marasmic baby). He will starve.

Every mother wants a healthy baby. The only way to make sure that your baby grows big and strong is to feed him with some of these foods.

...
Any questions?

Thank them for listening.

FEEDING THE SCHOOLCHILD

Adapted from "Nutrition for Developing Countries" by King, Morley and Burgess.

Children of ten have to leave home for school very early in the morning, so it is not surprising that many don't always have breakfast before they go.

Tired and hungry children cannot concentrate on their lessons very well. Therefore children who are going to learn well must be well fed. A schoolchild needs breakfast before he goes to school, and also something to take with him to eat for lunch in the middle of the day.

Ask mothers to give their children food to take to school rather than money because children may buy fizzy drinks or ice which have no food value.

Some schools may provide a meal in the middle of the day, if so your child will need money for that, or he may be able to pay for his meal by taking along a bundle of firewood for the fire.

Listed below are some foods which a child can take to school.

FRESH FOODS: milk, tomato, orange, p-w-paw, banana, groundnuts, cashew nuts, etc.

PLAIN COOKED COLD FOODS: Akara, sweet potato, maize cob, (roasted or boiled), hard boiled egg, cooked cassava, roasted groundnuts, bread, etc.

COLD COOKED MEALS: Anything remaining from the previous night's meal could be suitable e. g. rice and groundnut soup.

The food should be well packed, so that it does not spoil before the lunch break. It can be packed in a clean tin, a large leaf, a clean plastic bag or in clean paper. Best of all to pack it in a billy-can or meal tin with a well fitting lid.

School children are still growing and need plenty of food. They need breakfast and a mid-day meal at school to help them concentrate on their lessons and give them enough energy for play.

IMMUNIZATIONS

No visual aids are necessary

GREETING: Good morning. Today we would like to talk to you about the injections your child will get at this clinic.

QUESTION: Why do we give young children injections?

ANSWER: There are now many substances which, when injected into the skin, will prevent a disease. These liquid substances are called vaccines.

QUESTION: Which diseases can we prevent our children from getting by bringing them to the clinic for their vaccinations (injections)?

ANSWER: Tuberculosis, measles, whooping cough, tetanus and diphtheria, and polio.

QUESTION: Why is it important to make sure our children have these vaccinations?

ANSWER: These vaccinations prevent children from getting these terrible diseases. Young children can easily catch these diseases and you have probably seen how seriously ill some children are when they catch them.

If a child is not in good health when he gets one of these diseases, it is worse for him. His body has no strength to fight the disease and he may suffer the effects for life or he may die.

QUESTION: At what age should we bring our children to the clinic for their injections?

ANSWER: The injection to prevent tuberculosis (BGG) is given as soon after birth as possible. This is the injection given with "the gun." Bring your child to the clinic after the naming ceremony and he will get his BGG vaccine.

After this comes three injections to prevent whooping cough, diphtheria and tetanus. These we start to give to a child at two months of age. He needs all three injections to protect him properly against these diseases. *At some time we'll give vaccine to prevent.*

Then when the child is a little older he can have an injection against measles.

It is not wise to give some of these preventative injections when a baby is sick.

If you bring your child to the clinic every month, whether or not your child is ill, you will be a wise mother. This way your baby will get all his injections and we can also check on your baby's progress and advise you.

Do not be afraid to have your children vaccinated—it can only do him good. You want the best for your child. Make sure that he is protected against these terrible diseases.

Any questions?

Thank them for listening.

DIARRHOEA AND DEHYDRATION

VISUAL AIDS: (A) Posters on Food Hygiene

(B) Clean cup and spoon

Bottles of boiled, cooled water

Bag of sugar, bag of salt

GREETING: Good morning. Give name of lesson.

QUESTION: Have any of your children had diarrhoea?

Do you know of any children who have died of diarrhoea?

Do you want your children to get diarrhoea less often and less seriously, and to be less likely to die when they do get it?

If you do the things I am going to show you this morning, your child will be in much less danger from diarrhoea.

A. QUESTION: Why do children get diarrhoea?

ANSWER: Diarrhoea is usually caused by a child eating germs. Germs live in dirt and get his body because he may have drunk dirty drinking water.

QUESTION: How can we make drinking water safe?

ANSWER: By boiling the water. This will kill the germs. The water must be boiled, not just heated. Once it has boiled, cover it and allow it to cool. The water must be covered whilst cooling, otherwise dust and dirt will get in it. This will put new germs into the water.

Once it has cooled, keep it in a clean stoppered flask or a large clean covered storage jar. Boil your drinking water every day.

B. A child may get diarrhoea because he has eaten food that has been touched by dirty hands, or because it has been on dirty ground, or because flies have been walking on it. Flies carry diarrhoea germs on their legs.

QUESTION: How can we make sure that our food is safe to eat?

ANSWER;NURSES: By washing hands after going to the toilet.

By washing our hands before preparing meals and before eating.

By burying rubbish so that flies can't breed in it.

By covering all food so that flies can't walk over the food, leaving the diarrhoea germs on their legs in the food.

Pin up the posters of Food Hygiene No. 1 and 2, and explain.

C. Diarrhoea is serious because much food and water are lost by a child in his stools.

So much water is lost that a child begins to get dry—like a fish being dried.

QUESTION: How can we stop a child from getting dry when he has diarrhoea?

ANSWER: By giving him drinks of clean boiled water, salt and sugar. This will put back into his body, what he has lost in his stools.

When water, salt and sugar are put back into the child, most children get better quickly.

As soon as your child has diarrhoea start to give him water, sugar and salt like this.

DEMONSTRATION

This is how to make the solution.

One cup of water (boiled and cooled) plus one teaspoonful of sugar plus a three-finger pinch of salt. A small amount of lime juice may be added.

NURSES: Ask the mothers if any of them have brought a child to the clinic because it has diarrhoea. Hand one mother the clean cup and spoon. Stress the cleanliness of the equipment.

Let her fill the cup with water. Again explain how to boil and cover the water until cool, and why this is done.

Hand her the bag of sugar and the bag of salt. Let her add to the water a spoonful of sugar and a three-finger pinch of salt.

Demonstrate to all the group a three-finger pinch.

Make her stir the solution and feed it to her child with spoon. An older child can drink from the cup. Stress to the group that this salt and sugar portion is the right amount. More salt or sugar than this will not help the child—in fact it may make him worse because he will be sick.

Tell them to feed slowly with a spoon, a little at a time. The child needs at least four big cups of solution a day.

Let another mother make up the solution.

D. A child needs at least four big cups of the solution a day. He needs his breast milk as well if he is still being breast-fed. Children who are weaned (either partially or fully) should not be given any food for a day, only the solution and some boiled milk. Then give them a little food the following day as well as the solution.

Bring your child to the clinic when he has diarrhoea and bring some of the solution in a clean bottle with you. This is important.

. . . You may have a long walk to the clinic and a long wait to see the doctor. You can be giving the solution to your child whilst you are waiting. You must give back the water, sugar and salt to the child's body when he has diarrhoea, otherwise his body will get too dry.

Any questions?

Thank you for listening. Please go home and do what we have told you here today. Your child will continue to get diarrhoea if you don't boil your drinking water and touch food with dirty hands and let flies crawl over the food.

Prevention is better than cure.

MEASLES

VISUAL AIDS: Pictures of foods.

GREETING: Good morning. Today we would like to talk to you about measles.

A. We are now giving measles vaccine (an injection to help protect your child against measles) at the clinic to all children over nine months who have not had this disease.

Most children get measles unless they have been vaccinated against it.

QUESTION: Have any of the children here had measles? Can anyone tell the rest of us what signs a mother can recognize that her child has measles?

ANSWER: Spots on the face and body (about the 4th day). Sore mouth and throat—child unable to suck or eat. Sore eyes. Fever, crying, restlessness, running, nose, cough, diarrhoea with or without blood.

B. If your child does get measles, how should you look after him at home?

ANSWER/NURSES: A typical answer from the mothers is that the child should be fed the "boabab solution" and that the child should not be washed. Some may say that the child's skin should be rubbed with "ashes."

There is a taboo that a child with measles should not be washed. This is very dangerous. The skin needs to be kept clean. This is important, to make the child comfortable and help him get better quickly. Bathe with warm water and soap using a clean piece of rag.

Pay particular attention to the back of the ears, neck under the arms and the groin. These are places where the child can get very hot. Washing his body cools him and helps reduce the fever.

After washing his body, dry it well with a clean rag and put clean clothes on.

The rag used for washing your child should be washed thoroughly and dried in the sun. Keep this rag only for the sick child.

Throw the water used to bathe the child down the latrine and wash the bowl out with soap and dry in the sun.

C. FEEDING THE CHILD

As well as the "boabab solution," you can give the child—

—coos pap and milk (the milk should have been boiled and left to cool)

—coos pap and egg (crack open a raw egg and stir egg into the pap)

—milk, mashed banana and small sugar

—pieces of fruit to suck such as ripe orange, paw-paw and mango.

—plenty of boiled cooled water.

If the child refuses to suck, express breast milk and feed with cup and spoon.

NURSES: Pin up pictures of these foods on the cardboard, and explain to the mothers how to take care of the child's mouth by washing it with cool boiled water and salt, to help reduce soreness.

As the child gets better, encourage him to eat as much good food as he can, especially beans, groundnuts, meat, eggs, fish and fruit.

D. You should not take a child with measles from compound to compound.

Why? Because this will spread the disease to other children. Keep him quietly at home.

Do not put anything into the child's eyes, unless you are given special ointment at the clinic.

You can bathe the eyes with boiled cooled water to which is added a little salt. Do this every morning and evening, and open the eyes wide so they can be washed properly.

Wipe the child's nose with clean rags, to prevent sores. Burn the rags in the fire.

Why? Because the disease measles, spreads from person to person through the secretions from the nose and throat of an infected person.

Doing all these things will help your child to recover quickly so that he will soon be strong again.

Any questions?

Thank them for listening. We hope that none of your children do get measles, but if they do, please follow our advice. Please bring him to the clinic so that we can examine him and remind you again of the advice we have given you today.

"HOME ACCIDENTS IN ALL AGE GROUPS AND THEIR PREVENTION"

VISUAL AIDS: Posters, film strips, live materials, e.g. knives, fork, pieces of broken bottles, empty tins, banana peels.

SUB—OBJECTIVES OR STEPS.

1. For the public to know what are accidents and why do they occur.
2. For the public to know some of the common accidents, their dangers how to treat them.
3. For the public to know how to prevent accidents in their homes.

GOOD MORNING, ladies and gentlemen. I can see a few familiar faces but for the benefit of those who do not know me, my name is.....
.....Today, my topic will be "Home accidents in all age groups and how to prevent them.

QUESTION: Can you tell me what are accidents?

ANSWER: Thank you. It appears that some of you are quite familiar with this topic, but for those of you who do not know what accidents are, I will now give you a definition. Accidents are events which are not planned and result in injury.

QUESTION: What are some of the common accidents and why do they occur?

ANSWER: Thank you. Some of the common accidents are falls, burns due to fire, scalds due to steaming foods or liquid, foreign bodies in the eyes, ears and nose poisoning due to drinking kerosene, cleaning fluids, liquid medicines and pills, cuts from cooking or gardening tools, old tins and broken bottles. Drowning due to falls into ponds, wells, water tanks and pit latrines.

Accidents occur because of lack of knowledge of the dangers of certain situations and articles, carelessness, the "it cannot happen to me attitude" (complacency), poor living conditions which involve overcrowding, poor lighting, cooking and heating utensils, untidiness, bad health which results in lack of physical and mental stability, emotional stress or extreme fatigue or tiredness. There are some groups of people who are more at risk from sustaining accidents than others. These are children from birth to six years, the handicapped for example, the crippled, blind or deaf, the elderly, pregnant women who have poor balance, girls from six to 15 years who have to take on working duties and boys from 15 years who are very active.

THE COMMON ACCIDENTS, THEIR DANGERS AND HOW TO TREAT SOME OF THEM

Falls are very common. Peelings of fowl for example banana, plantain or yam peels can cause broken bones and may be future disability or handicap. Greasy floors with holes, articles left carelessly around for example, toys, can cause accidents. Poor lighting on steps outside the house, damaged furniture, badly fitting shoes and old worn mats or carpets all cause falls.

When someone falls, he can sustain either broken bones or stretching of the ligament which is a band of tissue (a mass of cells or fibres) which connect one bone to another or twisting the joint which causes swelling. If you suspect that a bone is broken due to a fall, check the site to see if the bone has gone through the skin. If this is the case, cover any wound with a clean cloth. If not move the injured part as little as possible. Apply two sticks on either side and put a firm bandage to keep it static. Reassure the injured person by informing him to calm down and things will soon be sorted out, send someone to the nearest clinic for medical help or get a vehicle near by and transfer him to the nearest clinic or hospital. In the case of the stretching of the ligament apply cold wet cloth to reduce the swelling, then a firm bandage and rest the injured part.

Fire can be caused by different things, for example homemade lamps, candles, naked lights, unguarded fires, especially the charcoal stove that children can roll into or play with and sustain serious burns which might lead to deformity or death. Matches and cigarette ends not put out properly or people falling asleep while smoking can cause fire. The charcoal stove on the floor of the kitchen or on the grounds of the compound is a frequent cause of burns for children. Scalds due to the cooking pots and kettles, and containers of steaming food. Hot water in tins may cause bad scalds.

EMERGENCY TREATMENT Put out burning clothing by smothering the flames with a rug or coat. Calm the person. Do not remove the burnt clothing which sticks on the skin. Cover the burnt area with a freshly laundered cotton cloth and lie him flat with his head low. Do not apply anything hot and give nothing by mouth. Transfer him to the hospital or clinic as soon as possible.

FOREIGN BODIES. Children can get at coins, beads, needles and either swallow them or put them in their ears or nose, causing choking and infection of the nose and ear. Sometimes the only way to get these foreign bodies out is by operation.

Foreign bodies in the eyes and ears should be left alone and the person transferred to the nearest clinic or hospital as any interference might make the condition worse. If the foreign body in the nose is visible press one nostril and ask the person to blow out. If not, transfer the person to hospital immediately.

DROWNING: This can occur often in very small amounts of water baths, ponds, pit latrines, wells, watertanks are all possible sources of danger for a child. If they fall in and there is no one to rescue them.

NURSES: The following passage is an explanation of artificial respiration. Unless you are trained and are familiar with the technique and can demonstrate it to the audience, omit this section. It is no good advising a group of person on a subject with which you yourself are unfamiliar.

If you find any person in this condition, he is invariably not conscious.

1. Lie him on his tummy or stomach (abdomen). bend his arms and rest his forehead on his hands so as to keep the nose and mouth free there by allowing fluid to trickle out.

2. Kneel at the head, placing one knee near the head and the other foot by the elbows.

3. Place the hands over the shoulder blades, with the thumbs touching on the midline and the fingers spread out, the arms being kept straight.

4. Bend forward with arms straight applying light pressure, while counting one, two, three. This is breathing out.

5. Release pressure gradually and slide the hands to just above the elbows of the person. Count four.

6. Raise the arms and shoulders by bending backwards until you feel resistance and tension without lifting the chest off the ground, while counting five, six, seven. This is breathing in.

7. Lay the arms down and replace your hands on the patients back while counting eight.

8. Repeat (3) to (7) at the rate of nine times a minute.

9. When breathing is re-established, carry out arm raising and lowering (No. 6 and 7) alone, 12 times a minute. Arm raising one, two, three (breathing in) and arm lowering four, five six (breathing out).

Whilst doing this, send for medical assistance and transfer person to hospital as soon as possible.

POISONING: A poison is any substance which injures or kills when introduced into living things. i.e you or me or animals. Kerosene put into attractive bottles is a common source of poisoning as is also many household disinfectants like detol (an agent capable of destroying germs of disease). Cleaning fluids and brightly packaged insect sprays also attract children. These, when taken can cause irritation of the food and air passages, resulting in unconsciousness and infection, of the air passages. Medicines are also a common source of poisoning, liquid medicines and pills in bright colours attract children.

When someone has taken poison, take a quick look at the surroundings to make sure the cause if possible and send for medical assistance and state the type of poison taken if known. If the person is unconscious, check if he is breathing. If he is not, apply treatment as I explained for drowning to restore back his breathing. No attempt must be made to make him vomit until medical assistance is present as this might worsen the condition.

TOOLS AND SHARP INSTRUMENTS. Kitchen materials for cooking and gardening tools can have sharp edges and people may sustain a cut quite easily from them. Broken glass and rusty nails are constant dangers to all especially where people normally go barefoot and thereby get puncture wounds which if not treated might lead to tetanus (lockjaw) or a condition where there is rigidity of some or all the muscles. Guns and rifles can be left carelessly around by people whose occupation requires their use. e.g. hunters. These can cause serious gunshot wounds which can cause death.

If the foreign body is visible and easily taken out do so and apply a clean freshly laundered cloth before transferring to hospital. If the site is bleeding, apply a big pad of clean cotton cloth and a firm bandage. Convey all persons with puncture wounds to the nearest hospital or clinic and reassure them by keeping them calm.

HOW TO PREVENT ACCIDENTS IN YOUR HOME,

This is best done by giving health education to all members of the family by doing the following.

1. Avoid overcrowding and provide healthy and safe places to be in.
2. Mend all holes in floors and keep your house tidy.
3. Make sure all open lamps are not within reach of people, also provide good lighting in the house.
4. Build guards over fires and do not put hot articles within reach of people, especially children.
5. Keep all medicines, lotions and chemicals in a safe place away from children, preferably in a locked cupboard.
6. Make sure pit latrines, wells and water tanks are covered.
7. Do not give baby things like beads, coins and pins to play with keep these away.
8. Put away knives, instruments and sharp things where children cannot get them.
9. Provide safe playgrounds for your children.
10. Teach your children to recognize situations likely to cause accidents including road accidents.

SUMMARY

In summing up I have tried to explain what home accidents are and why do they occur, stressing that children, the handicapped, pregnant women and old people are more prone to accidents. Some of the common accidents like falls, fire, poisoning, drowning, foreign bodies in the nose, eyes and ears, can be given first aid or emergency treatment before taking victims to hospital. I mentioned that if the foreign body in the punctured wound is visible, and can be taken out so and then apply a clean cloth before transferring the person to the hospital. I also mentioned that in the case of burns, the burning clothing should be put out by smothering the flames with a rug or coat. Calm the person. Do not remove the burnt clothing that sticks on him. Cover the burnt clothing with a freshly laundered cotton cloth, lay him flat with his head low, do not apply anything hot and do not give him anything by mouth and transfer him to the nearest hospital. Accidents can be avoided by preventing overcrowding and providing healthy and safe places to live in.

Question Time

In conclusion, I thank you all for your utmost support and attention.

WORM INFESTATION

VISUAL AIDS: Milo, Milo Eggs, Fruits, Mintezol Tablets for Worms and a poster.

AIM: To educate mothers to know about worms and their complications.

SUB OBJECTIVES.

1. To let the mothers know about worms especially the commonest ones that infest their children.
2. To let them know how they enter the body and what to do to prevent them from entering in.
3. To let them know the symptoms and the complications that can arise and the means for treating them.

INTRODUCTION

Good morning mothers. This morning I am going to tell you about the commonest worms that can infest your children, the ways in which they can enter the body and how we can prevent them: the symptoms and the complications and how they can be treated.

QUESTION

Can any of you tell me what you know about worms?

ANSWER

They are tiny animals, small snakes.

Thank you. There are many kinds of worms that can infest man. They vary in size and shape and range in length from a fraction of an inch to as much as a yard. Most worms get into our body in the form of tiny eggs or baby worms (larvae) sometimes too small to be seen. As someone has said that they are tiny animals. They normally enter unnoticed through the skin or mouth. Once inside the body they grow by feeding on the nourishment thus depriving the body of its energy and nutrition. If this prolongs, the individual's health will be affected.

There are several kinds of worms that can infest man but, the commonest ones that effect children are the tape worm, round worm and hook worm.

TAPE WORMS. The name implies that the worm looks like a tape. They are made of segments which contain their eggs. When an infected person with tape worm passes stool, these segments are broken to release the eggs. If the stool is passed on grass and the grass is eaten up by cows and goats, the eggs enter into their flesh. If this flesh or meat is eaten by man, the eggs are transmitted to him. In human beings these eggs form lumps (cysts) which can be serious and dangerous to man.

HOOK WORMS are so called because they look like a hook. They normally lay their eggs in damp soil and when these eggs have hatched and become fully grown they enter the human body through the feet or buttocks of small children. For this reason you should not allow your children to go bare footed or to sit on the ground without wearing pants.

ROUND WORM (or Ascais) is the commonest worm that can affect our children. They are round in appearance. They normally spread when an infected person passes stool on the ground and the rain comes and these stools are washed down into nearby gardens where fruits and vegetables are growing. They may even be washed into streams or open wells. These fruits and vegetables, if eaten unwashed, or the water from the wells and streams is drunk without first boiling it to kill the germs and these worms, then the worms will enter our bodies when we eat the unwashed fruit or vegetables and when we drink the unboiled water.

QUESTION

Can anyone tell me what happens when our bodies become infected with worms?

ANSWER

Often worms cause abdominal pain and can seriously affect health.

Common symptoms are diarrhoea, colicky pains, loss of appetite and in serious cases anaemia, vomiting and convulsions.

QUESTION

Having mentioned the symptoms and complications and the different type of worms, can someone tell me how they can be treated?

ANSWER

Worm draft, aspirin. I will take my child to the hospital for the doctor to give me medicine.

Thanks. Some of you have some ideas. Worms can be treated with Mintazol tablets which are given according to body weight.

If untreated at the early stages, then the complications I have mentioned will arise. When such complications do occur, the child should be taken immediately to the nearest clinic or hospital where appropriate treatment will be given. If anaemia develops, the child should be given a nutritive diet containing substances such as proteins, minerals, vitamins, etc. Foodstuffs which contain these substances are meat, fish, milk, Milo, fruits, beans, and extra fluids if the child suffers from diarrhoea.

QUESTION

Can someone tell me what preventative measures to adopt to prevent these worms from infesting our children?

ANSWER

To wear shoes, clothes and pants; to wash our food before eating it.

Thank you. It appears that some of you have been attentive to what I have been saying. Anyway, I will now innumerate on the preventative measures to adopt.

1. You must teach your family to use proper latrines and not to defecate on the ground.
2. To wash all food especially fruits and vegetables before eating them.
3. To wash our hands before eating or handling food.
4. To boil all water before drinking.
5. Raw meat should be well cooked before eating it.
6. Children should be prevented from wading or playing in dirty water.
7. All wells should be properly built and covered with a lid.

SUMMARY

Well mothers, Today I have tried to tell you about worms, especially the commonest ones that affect your children, namely hookworm, tapeworm, and roundworm. I have also mentioned about the different ways in which they can enter the body in the form of tiny eggs or baby worms through the skin or mouth. The harm they cause when they enter our bodies, by stealing the nourishment and causing ill health. Also, I have mentioned some of the symptoms and complications and how they can be treated. Finally, I stressed how we can prevent them from entering our body by using proper latrines, washing of hands before and after food, boiling all drinking water to make it safe, and using some of the boiled/ cooked water to wash the edible skins of fruits, and to wash the vegetables.

Question time.

CONCLUSION

Well mothers, if you have no more questions to ask, I have to thank you very much for your contributions to make this talk an interesting one. Thank you and goodbye.

DISPOSAL OF DRY REFUSE

VISUAL AIDS: Posters, old buckets and baskets, empty cans, etc.

QUESTION: Good Morning! How are you all doing and the babies?

ANSWER: Good

This morning I am going to talk to you about disposal of dry refuse. We will consider:

1. What constitutes dry refuse
2. Some of the dangers of dry refuse
3. How to dispose of these in our homes
4. How to dispose of these on community level
5. Some of the results of proper disposal of dry refuse.

1. CONSTITUTES OF DRY REFUSE

QUESTION

Who can tell me some of the things she considers as dry refuse in her home?

Empty cans, broken bottles, rotten pieces of wood, dust, old rags, waste papers, fruit skins, vegetable peelings, leaves, old chipped household articles and so on.

2. SOME DANGERS OF DRY REFUSE

QUESTION

From your experience who can tell us some of the dangers these articles can cause?

ANSWER:

1. A child may step on the piece of broken bottle and get himself wounded.
2. A crawling child may pick any of these which may be poisonous and put it in his mouth and get himself poisoned.
3. The empty cans thrown anywhere in the house will collect rain water and eventually become breeding places for mosquitoes which will transmit the malaria parasites leading to malaria. This is a serious disease since it can lead to anaemia and convulsions in children.
4. The rotten refuse will lead to pollution of air.
5. As this refuse gets wet and rotten it becomes an ideal place for breeding of flies. These flies transmit bacteria leading to dysentery and gastro-enteritis.
6. The compound also becomes an eye sore-unsightly.

3. DISPOSAL OF DRY REFUSE IN THE HOMES

QUESTION

Who can demonstrate or tell us how this refuse is disposed of in our homes?

ANSWER

1. Sweeping
2. Keeping them in receptacles or dustbins
3. Sending them to the refuse dump.

We all sweep our homes everyday but most often the problem is how this rubbish is disposed of in the homes.

Sometimes, the bins for rubbish are old baskets, packing cases, etc. and these are placed in a corner of the compound uncovered. Often, these are too small, almost torn apart and are even scarcely emptied. The result is that dogs, goats, chickens and so on, come to eat there, may knock the bin over and the rubbish is scattered on the compound. As such, we need to have an old metal container, e.g. bucket with a fitting cover which can be made from board or old corrugated iron sheet. A sieve can be placed on top to keep it in position. This should be placed on a raised level at a corner in the house away from animals and even children. The contents are emptied whenever full and washed to keep it clean.

DISPOSAL OF DRY REFUSE ON COMMUNITY LEVEL

In rural areas, the area council will come and collect all refuse. The area council burn the refuse they collect, to prevent flies breeding and to prevent rats feeding and breeding amongst the refuse. As you know flies and rats spread disease.

QUESTION

What can we do if there is no organized collection?

ANSWER:

Dump and bury. This means that we dig a pit, about the diameter of a well and dump our rubbish into it. The pit shouldn't be too deep, or our children or cattle might fall into it. When the pit is full of rubbish we cover it over with a good layer of soil.

This is a very good method of disposing of our rubbish. Eventually the paper and waste food stuffs will become manure or compost that we can use on the crops.

QUESTION

Should we burn rubbish in our own compounds?

ANSWER

This is not wise. During the dry season there is a danger of widespread fire. Ask your area council or local public health inspector to help you organize disposal of rubbish in your community.

3. SOME RESULTS OF PROPER DISPOSAL OF DRY REFUSE

QUESTION

From the talk who can give me some of the good results of proper disposal of dry refuse?

ANSWER

1. Malaria and diseases carried by flies, vectors and rodents will be less.
2. Homes and the atmosphere will be less dirty and therefore healthier.
3. Healthy lives will be ensured and this will save money, unnecessary waste of time in hospital and loss of precious lives.

SUMMARY

In short, we have shown that dry refuse includes broken bottles, empty cans and vegetable peels. The need to dispose of them because our children can step on them or put them in their mouths and get themselves wounded or poisoned, and we as adults can suffer from malaria, dysentery etc. from mosquitoes and flies infestation. The need for proper covered receptacles on a raised platform in a corner of the compound which should be emptied whenever full. On community level with the help of the Health Inspector and the labourers, the dump and bury method can be used.

Question Time.

CONCLUSION

Thank you so much for the patience and the interest you have shown for this lecture. I hope you will not leave the knowledge you have acquired there but make good use of it. Anytime I come by I will come and see how you have put things into practice. Thank you.

A TALK ON VENTILATION AND GENERAL SANITATION

VISUAL AIDS: Posters depicting the effects of adequate ventilation and good sanitation.

INTRODUCTION

Good morning ladies and gentlemen. This morning, I will give a talk on the importance of good ventilation and general sanitation. The talk will take the form of discussion, so I will be grateful for your full participation and cooperation.

QUESTION

Can someone tell me what we mean by ventilation?

ANSWER

Ventilation is the free passage of air through a building. Good ventilation therefore, is very important and vital to healthy living. Every good house should be well ventilated to keep all its inmates healthy and free from disease. Air can have its germ contents increased by many people breathing in a room with little air movement. You are aware that when houses are erected, the windows and doors provided are to facilitate adequate circulation of air into the rooms. The windows should be large enough and must be situated opposite one another or at least to a door. The human being needs adequate fresh air daily.

As overcrowding and sleeping accommodations produce conditions favouring the spread of many different disease, we should try to prevent its occurrence. Overcrowding brings a considerable amount of stuffiness in your rooms and places of entertainment and causes stagnation of stale air. If you cannot avoid too many people sleeping in one room, you must try to provide adequate space between each individual. The maximum number of persons allowed to sleep in an adequate room is three. With the extended family system this is not practicable especially in our big towns and cities. If this is the case, please try to sleep near where there is adequate ventilation, preferably near a window.

You must try and keep doors and windows open during the day to facilitate easy access of fresh air and sunlight. These agents act as purifiers or disinfectants, thus preventing the rooms from accumulating germs.

QUESTION: What do we mean by sanitation?

ANSWER

Without cleanliness one cannot keep healthy. You must not only be personally clean but our towns, villages and compounds must also be kept clean. All work or effort done to keep a town, village and compound healthy is called sanitation. Unhealthy surroundings deter the promotion of healthy living. It is therefore necessary for proper disposal of your refuse, excreta and other waste products. You must try to collect and store refuse in well fitting receptacles, preferably in galvanized bins. All night-soil should be excreted by methods approved by the BCC and you should try to keep all latrines well covered and free from flies. Inadequate disposal of refuse and excreta favours the breeding of insects and provides shelter and food for rodents, diseases, as a result, you must prevent their very existence. You must keep your rooms and surroundings clean by sweeping them regularly and cleaning the floor of the rooms periodically with disinfectant, such as izal or detol. If the compound is bushy, some weeding will be necessary to cut down the grasses thus allowing free circulation of air. Marshes and swamps must also be avoided or drained. If not, mosquitoes will breed in them, bite you giving you malaria. As an added protection, you must try to sleep under mosquito nets and if possible have your windows mosquito proofed.

SUMMARY

This morning, I have tried to explain the importance of good ventilation and general sanitation, stressing that these are vital aspects to healthy living. You must always remember that good ventilation is the free passage of air through a building. As a result, you must try to keep all doors and windows open during the day to avoid the spread of diseases. You must avoid overcrowding, that is, too many people sleeping on one room as this causes stagnation of stale air. Please remember that without cleanliness one cannot keep healthy. We must not only be personally clean but our towns, villages and compounds must also be clean. You should therefore, try to dispose of your refuse, excreta and other waste products effectively in order to inhibit the growth of vectors and rodents who are carriers of disease. Always keep your surroundings clean by sweeping them regularly and cleaning the floors periodically with disinfectant, such as izal or detol. Avoid bushy areas, swamps and stagnant water as these breed mosquitoes which might bite you and cause malaria. As an added protection please try to sleep under a mosquito net and have your windows mosquito proofed. I have exhausted my words and will now welcome questions on any point that you are not too sure about.

QUESTION TIME

CONCLUSION

I thank you very much for your utmost attention and support, also for the very interesting contributions. Now that you are fully aware of the importance of good ventilation and general sanitation, I am sure you will pass this information onto your wives, husbands, relatives and friends all will also try to put all the information you have learnt into practice. Thank you and goodbye.

MALARIA

VISUAL AIDS: Picture of mosquito

Mosquito netting

Mosquito spray or coil

GREETING: Good morning, today I would like to talk to you about malaria.

QUESTION: What is malaria?

ANSWER: It is a sickness. We know it by firstly feeling cold and then becoming hot with fever so that the sick person sweats plenty. Often you get a bad headache and may feel dizzy.

You may have a stomach ache, diarrhoea, vomiting and pains in the arms legs and back.

QUESTION: How do you get malaria?

ANSWER: By being bitten by the malaria mosquito.

QUESTION: Do all mosquitoes carry malaria?

ANSWER: No. Only those mosquitoes with black and white spots on their wings (Anopheles) carry malaria. These mosquitoes make no sound when they fly and they stick their tail in the air when they bite.

QUESTION: What do we call mosquitoes which do not carry malaria?

ANSWER: We call them pest mosquitoes. They make a buzzing sound and may keep you awake at night. They do not carry malaria.

QUESTION: How does the malaria mosquito give a person malaria?

ANSWER: When the malaria mosquito bites a person he pushes through the skin from his mouth (proboscis) a tiny animal called a parasite. This tiny animal, which is much too small for a us to see, lives in the blood. It is this tiny animal or parasite which causes us to be sick with malaria.

QUESTION: How long does it take to feel sick after you have been bitten by a malaria mosquito.

ANSWER: Ten days

QUESTION: What can we do to help get rid of mosquitoes around our compound?

ANSWER: Mosquitoes and their eggs can be found in anything that can hold water. So you should turn upside down all buckets, drums, rainbarrels, pots, pans, tubs, etc. which are not being used.

So that water can't collect in empty cans and bottles, the cans should be flattened with a hammer or a stone, and then buried. Bottles should also be buried.

QUESTION: How can we stop mosquitoes from getting into our wells?

ANSWER: By covering the well with a tight cover so that a mosquito cannot fly in and lay eggs.

QUESTION: What else can we do to prevent mosquitoes breeding in the compound?

ANSWER: By burying all rubbish, especially rubbish that can hold water. Fill in any holes that hold water during the rains.

Mosquitoes and their eggs can be found in anything that can hold water.

QUESTION: What can we do to prevent mosquitoes getting into the house?

ANSWER: By putting screens at the windows and doors, so that the mosquitoes can't get in. By closing all doors and windows before nightfall and spraying all the rooms with a mosquito spray or lighting the mosquito coil.

RECIPES

Dishes suitable for weaning foods and toddlers.

1. PAP WITH EGG

Prepare pap (Uji) in the usual way. Whilst it is simmering in the pot, add a raw egg (without shell), stir vigorously. Cook for a few minutes. Remove the pap from the fire or stove. Feed the infant when cooler.

2. PAP WITH MILK

Add cup of fresh milk to the pap whilst it is simmering on the stove. Stir and serve when sufficiently cool.

For milk powder—mix one tablespoon of milk powder to each cup of flour. Prepare pap in the normal way.

3. COOS PAP WITH FISH

Prepare pap in usual way. Add two tablespoons of smoked and pounded boaga or other white fish. Simmer gently until clear. Serve without sugar.

4. PLAIN AKARA (toddlers)

Wash and soak one cup of beans overnight. Remove all skins. Add salt, pinch of ground peppers and small chopped onion. Pound until soft and creamy. Add a little water to give a dropping consistency.

Drop spoonfuls into hot oil. Fry until quite brown. Drain well.

5. COOS PAP WITH GROUNDNUTS

Prepare pap in the usual way, using two cups of coos flour. When cooked, add one cup of groundnut powder and stir in well.

Add sugar to taste.

This recipe is a variation on chewra gerti, which is also a very nutritious dish for children and adults alike.

6. COOS PAP WITH GREEN LEAVES

Prepare pap in the usual way. Add boiled crushed green leaves e. g. cassava bobab, never-die etc.

Do not boil the leaves for more than a few minutes, or all the goodness will soak into the water. Make sure the pot is covered whilst the leaves are cooking.

N. B. The vegetable cooking water, should be used to thin out a very thick pap for example, or incorporated into stews, etc.

The above recipes can be made with rice porridge if preferred.

Children will be healthier and stronger if fed mixed foods instead of a plain pap made from either coos or rice.

A GOOD FOOD IS A MIXED FOOD

If a food is mixed it is almost certain to contain some body-building (protein) foods, some energy giving foods and some protective foods. That is why A GOOD FOOD IS A MIXED FOOD is a very useful thing to try and teach the mothers, because a mixed food is likely to make a balanced meal.

Other examples of good mixed foods are:

Benachin, Domoda, Soupa or Sorrel Soup, Niebe with palm oil sauce, Babal Cherreh—The sauce must contain good sized pieces of fish or meat, as well as the vegetables, etc. Nyankateng or Tiya-kere nyankatango, Chew.

NURSES: Show the mothers a can of spray and a mosquito coil.

QUESTION: Why should we use a mosquito net over our beds?

ANSWER: Even with all these precautions, there may be a few mosquitoes. A net over the bed at night will prevent the mosquito from biting. The net should be kept in good repair, otherwise the mosquito can bite through the holes and tears.

NURSES: Display mosquito netting.

QUESTION: What should we do if our children do get malaria?

ANSWER: When they have fever, give them a tepid sponge.

NURSES: Explain what is meant by tepid sponging.

If they have diarrhoea give them plenty to drink using the sugar, salt and water solution we learned about before.

NURSES: Ask the mothers how to make up the solution. Congratulate those mothers that can remember. If necessary, explain how to make up the solution.

Bring the child to the clinic for treatment.

Any questions?

Thank them for listening.

QUESTIONNAIRE
COMMUNITY HEALTH NURSES SURVEY
THE GAMBIA -- FEBRUARY, 1978

PLEASE DO NOT PUT YOUR NAME ON THIS QUESTIONNAIRE. WE WILL USE THE INFORMATION OBTAINED FOR HEALTH PLANNING AND TRAINING PURPOSES. AFTER THE INFORMATION HAS BEEN CORRELATED, THE PAPERS WILL BE DESTROYED. NO ONE EXCEPT THE UCSC/MCH PROJECT STAFF WILL SEE OR HANDLE THE QUESTIONNAIRES. THE GENERAL INFORMATION WILL BE SUMMARIZED AND USE FOR MCH PROGRAM PLANNING WITHIN THE MINISTRY OF HEALTH IN ORDER TO IMPROVE AND REVISE THE MANSA KONKO TRAINING PROGRAM.

THANK YOU FOR YOUR COOPERATION

1. BASIC EDUCATION (Check (✓) the highest level achieved)

- 1. Kindergarten
- 2. Primary
- 3. Junior Secondary
- 4. High School
- 5. 6th Form
- 6. Other

2. RELIGIOUS EDUCATION (Check highest number of years; for example, if exactly two years, check number 3)

- 0. None
- 1. Less than 1 year
- 2. 1 - 2 years
- 3. 2 - 3 years
- 4. 3 - 4 years
- 5. 4 - 5 years
- 6. 5 - 10 years
- 7. More than 10 years

3. IN WHAT VILLAGE WERE YOU BORN? Sutukung

4. TRIBAL GROUP (Check one only if you are Gambian or Senegalese)

- 1. Mandinka
- 2. Wolof
- 3. Jola
- 4. Fula
- 5. Other (explain)

5. LANGUAGE SPOKEN (Check all those you know well)

- 1. Mandinka
- 2. Wolof
- 3. Jola
- 4. Fula
- 5. Other (explain)

6. SEX (Check which)

- 1. Male
- 2. Female

7. AGE (Write in number of years)

_____ years

8. MARITAL STATUS (Check one)

- 1. Single
- 2. Married
- 3. Widowed
- 4. Divorced
- 5. Separated

9. RELIGION (Check one)

- 1. Catholic
- 2. Moslem
- 3. Pagan
- 4. Other (explain)

10. WITH WHOM DO YOU WORK DAILY IN YOUR PRESENT POSITION? (Check as many as apply)

- 1. With non-professionals (Auxiliary nurses, Area Council nurses, Orderlies, Health Labourers, Cooks)
- 2. With trained nurses
- 3. With one doctor or more than one doctor physically present
- 4. Alone

11. DO YOU EVER HAVE LANGUAGE PROBLEMS IN YOUR WORK (Check one)

- 0. No
- 1. Yes
- 2. Not applicable (student)

12. IN WHICH OF THE FOLLOWING AREAS WOULD YOU LIKE TO RECEIVE TRAINING? (Check all that apply)

- 1. Communicable diseases
- 2. Maternal Care
- 3. Infant Care
- 4. Nutrition
- 5. Family Planning
- 6. Infertility
- 7. Record Keeping
- 8. Management techniques
- 9. Other (explain)

13. HOW WAS YOUR PLACE OF ASSIGNMENT SELECTED? (Check one)

- 1. Government assignment
- 2. Personal choice
- 3. Home village
- 4. Other (explain)

14. LIST THE MOST USEFUL SKILLS AND IMPORTANT INFORMATION YOU LEARNED AT MAMSA KONKO

I was trained to be a community health nurse.

15. LIST THE MOST IMPORTANT INFORMATION YOU RECEIVED DURING YOUR STUDIES AT MAMSA KONKO.

The most important information I received was family planning.

16. WHAT WERE THE MOST VALUABLE FIELD EXPERIENCES THAT YOU HAD DURING YOUR TRAINING.

management techniques and maternal care

+ 3 -

17. WHAT CHANGES WOULD YOU SUGGEST IN THE CURRICULA?

It is too much for the teacher

18. WHAT CHANGES WOULD YOU SUGGEST FOR THE SCHOOL AT NANSA KONKO?

To be more than 18 months because the training is very complicated

19. WHAT OBSTACLES TO LEARNING DID YOU ENCOUNTER AT NANSA KONKO?

None

20. WHAT KINDS OF PROBLEMS HAVE YOU HAD WORKING WITH THE VILLAGERS?

To make them believe or practice something.

21. WHAT KIND OF PROBLEMS HAVE YOU HAD WORKING WITH OTHER HEALTH PERSONNEL SINCE YOU STARTED YOUR JOB.

No problems.

22. DESCRIBE WHAT YOU DO DURING A TYPICAL WORK WEEK.

Health teaching, maternal care and child care.

23. WHAT MAJOR HEALTH PROBLEMS HAVE YOU SEEN YOUR NEW JOB?

maternal and child care problems.

A. ARE YOU TRAINED TO HANDLE CASES BROUGHT TO YOUR ATTENTION? (Explain)

Yes because I am going to work in the community.

B. HOW DO YOU COORDINATE YOUR WORK WITH OTHER HEALTH PERSONNEL? WITH TRADITIONAL HEALERS? (Explain)

24. ARE YOU DOING ANY HEALTH EDUCATION ACTIVITIES IN YOUR JOB? (Explain)

Yes, to help them to improve on what they already know.

25. USE THIS SPACE FOR ANY OTHER COMMENTS YOU WOULD LIKE TO MAKE ABOUT YOUR T AT NANSA KONKO.

**CURRICULUM FOR MANSAKONKO
COMMUNITY NURSES' SCHOOL**

**Revision Completed:
September 1977**

TOPIC BASIC PRINCIPLES

OBJECTIVE	CONTENT	PRACTICAL SKILLS	TEACHING METHOD	NO OF HRS
<p>The student will have knowledge and understanding of:</p> <ol style="list-style-type: none"> 1. Vocational relationships 2. Optimum essentials for patients' environment 3. Basic nursing procedures 4. Special nursing care problems 5. Principles of administering selected medications 6. Characteristics and treatment of disease 7. Control of disease 	<p>Safety Handwashing Bedmaking Bed bath Temperature Pulse Respiration Blood pressure Dressings Catheterisation Enemas Injections Urine testing charting Admissions Discharges Bandaging</p>	<ol style="list-style-type: none"> 1. Preparing and maintaining an optimum environment 2. Recognising the role of the Community Health Nurse as a member of the health team 3. Administering selected medications 4. Selected nursing procedures 5. Assisting professional personnel in the nursing care of patients 6. Recognizing the characteristics of disease 	<ol style="list-style-type: none"> 1. Lecture 2. Demonstrations <ol style="list-style-type: none"> b. Returned demonstrations 3. Role playing 4. Filmtrips 	

**CURRICULUM FOR MANSAKONKO
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TOPIC	OBJECTIVE	CONTENT	PRACTICAL SKILLS	TEACHING METHOD
<u>Breast Feeding</u>	<p>The student will be able to:</p> <ol style="list-style-type: none"> 1. List the advantages of breast feeding. 2. Describe and teach methods of breastfeeding. 	<p>Advantages of breast feeding. Values of breast milk. Management of breast feeding Cleanliness, position, timing and frequency, signs and symptoms of over and under feeding. Methods of improving lactation.</p>	<p>Can express milk manually Supervise women to breast feed (especially Primps)</p>	<p>Demonstration Lecture, group discussions Slides available in the school</p>
<u>Infant and Child Feeding.</u>	<p>The student will be able to:</p> <ol style="list-style-type: none"> 1. Prepare pap 2. Describe required amounts and types of food necessary for proper growth and development. 3. Describe proper method of weaning. 4. Describe and how to identify and prevent common problems related to weaning. 	<p>Supplemental Feedings for Infant. Fed Baby: when to start what and why; initiation of new foods amount, frequency local tradition and taboos. Weaning age, method, diet psychological aspect common practices - giving child to granny, complications. Preparation of Foods for Infant Diet For the weaned child, ingredients, method of preparation, cost, food value, amount and frequency. Use of the adult diet for the child.</p>	<p>Demonstrate preparation of pap and other diets suitable for infants and young children.</p>	<p>Lecture, students will be asked to make research on the methods of weaning in the Gambia and group discussions carried out. Slides available in the School. Cooking demonstration</p>

OPIQ	OBJECTIVE	CONTENT	PRACTICAL SKILLS	HOW TAUGHT
<u>Artificial feeding</u>	<p>The student will be able to:</p> <ol style="list-style-type: none"> 1. List the disadvantages and dangers of artificial feeding instead of supplementing breastfeeding. 2. When necessary or inevitable describe and demonstrate to mothers the sterilisation and preparation of fresh or canned milk with cup and spoon. 	<p>Disadvantages and dangers of artificial feeding esp. bottles including availability and time. Cost, dangers and possible illness.</p> <p>Preparation of artificial feeds. Cleanliness, personal and utensils. Prevention of contamination.</p> <p>Methods of giving cup and spoon.</p> <p>Quantity and strength for age and weight.</p> <p>Values of fresh milk, canned, liquid and powdered milk, custard and other common substitutes.</p> <p>Milk production improvement in yield (vet assist)</p>	<p>Prepare milk foods from fresh and canned milk, Recognise G.I.T. disorders Teach methods of prevention of G.I.T. disorders related to feeding.</p>	<p>Lecture, group discussions. Cooking demonstrations. Practise in class and practical areas.</p>
<u>Adult diet</u>	<p>The student will be able to describe nutritional needs of the adult and elderly.</p>	<p>Nutritional needs of the average adult.</p> <p>Nutritional needs of the elderly - quantity and quality of food.</p>	<p>Able to prepare meals for adults and the elderly.</p>	<p>Lecture, calorie requirement of the elderly and adult. Film from National Library</p>
<u>Special nutritional needs of the school age child</u>	<ol style="list-style-type: none"> 1. Describe the nutritional needs of malnourished child. 2. List the considerations to be taken when feed an ill child. 3. Describe how a working mother can satisfactorily feed her family. 4. Describe the appropriate methods of feeding twins and orphans. 	<p>Feeding the malnourished child Cause of malnutrition, inadequate diet, infection, parasite, Socio-psycho.</p> <p>Signs and Symptoms of Malnourishment, types of food needed, amount and frequency for protein calorie deficiency</p> <p>How to feed a child with fever sore mouth, diarrhea, vomiting and no appetite.</p> <p>Preparation of meals for the family when the mother is working in offices or rice fields.</p>	<p>Feed ill children who are malnourished have a sore mouth and or no appetite.</p> <p>Discuss with mothers the feeding of a child with fever, sore mouth, diarrhea, no appetite. Give talks to working mothers.</p>	<p>Lecture, cooking demonstrations. Light and fluid diet for the sick child practise feeding cup and spoon and tube feeding in class with doll.</p>

NUTRITION

TOPIC	OBJECTIVE	CONTENT	PRACTICAL SKILL	HOW TAUGHT
<u>Introduction to Nutrition</u>	<p>The student will understand and be able to:</p> <ol style="list-style-type: none"> 1. Describe the meaning of nutrition. 2. Describe the relationship of nutrition to growth, development, illness, pregnancy, lactation and old age. 	<p><u>Definition of Nutrition</u> Nutritional assessment by examining - Height and weight - Skin, hair, eyes - Mental attitude</p> <p><u>Relationship of Nutrition to normal growth, development, illness, pregnancy, lactation and old age.</u></p> <p>Review of Illesha weight chart.</p>	<p>Able to recognise signs and symptoms of under and malnutrition in both children and adults.</p>	<p>Lecture on Nutrition, signs of good nutrition. Slides and cassettes available in the school. Class demonstration with children from health centre, practise weighing children in clinic measuring height and recording them. Classroom demonstration of Illesha weight chart, slides on Illesha weight charts.</p>
<u>Food and its Values</u>	<p>The student will be able to:</p> <ol style="list-style-type: none"> 1. List the local foods that build and repair the body, supply heat and energy, protect the body. 2. Describe and recognise the effect of lacking those foods. 3. Describe how and when local foods are produced and stored. 4. List local foods in main local languages. 	<p>Essential food groups their source and function in the body. Proteins, Carbohydrates and fats, vitamins and minerals, local foods which contains the above. Names of local foods in main local languages. Result of deficiencies of major food groups. Review food production, preservation, storage and prevention of wastage.</p>	<p>Plan and cultivate a garden with group.</p> <p>Make local covers protect food.</p> <p>Practise safety and sanitary precautions when preparing food.</p>	<p>Lecture on different food nutrients and their sources. Each student will be required to bring specimen of food-stuff available at the season. Cooking demonstration with emphasis on sanitary precautions when cooking. Charts and posters.</p>
<u>Feeding the Family.</u>	<p>The student will be able to</p> <ol style="list-style-type: none"> 1. Describe and prepare the common meals in the Gambia and their relationship to a balanced diet. 	<p>Review of a balanced diet The Gambian diet. Variation in the preparation Staples, local foods Customs and taboos Examining the customs as to their effects being beneficial importance. Nutritionally, and possibly</p>	<p>Interview a mother about family's diet.</p> <p>Prepare the common meals and local foods.</p>	<p>Lecture on balanced diet Cooking demonstration with local foods. Prepare meals at clinics and give talks on balanced diet. Prepare menu. History of diet.</p>

OBJECTIVE	CONTENT	PRACTICAL SKILLS	TEACHING METHOD
The student will be able to write objectives for nutrition education programs.	<p>Deciding on goal and objectives for a nutrition education program</p> <p><u>Community Diagnosis</u> Finding out about the food patterns, customs, taboos, and problems. If there is malnutrition is the cause known? What do the mothers believe is the cause? What do the health personnel believe is the cause?</p>	<p>Ability to give talks, demonstrate and lead discussion.</p> <p>Make appropriate visual aids out of local material.</p>	<p>Practical Presentation in class. Make posters. Give talks and lead discussions.</p>

OBJECTIVE	CONTENT	PRACTICAL SKILLS	TEACHING METHOD	HOURS
<p>The student will be able to list verbally and in writing, five points on each of specific areas listed below:</p> <ol style="list-style-type: none"> 1. The body as an integrated whole. 2. The body erect and in motion 3. Body covering 4. Metabolism of the body 5. Reproduction 6. Nervous System 7. Special senses 8. Medical terminology and nomenclature. 	<p>The body as an integrated whole The body erect and in motion Body covering Metabolism Reproduction Nervous system Special senses Medical terminology and nomenclature.</p>	<p>The student will be able to recognize normal body structure and functions, and apply principles of body mechanics for self and patients.</p>	<p>Lectures Slides Body structure and functions workbook. Daily oral quizzes Anatomical charts.</p>	
<p><u>ETHNOLOGY</u> The students will be able to state verbally and in writing, what constitutes society and culture .</p>	<p>A typical village setup Traditions Customs Taboos.</p>	<p>The community health nurse will have the ability to work within a given society, with the understanding of the culture and traditions of that society.</p>	<p>Lecture Discussions Visit to a nearby village.</p>	
<p><u>GENERAL HYGIENE</u> The student will be able to describe verbally and in writing, the WHO definition of health</p>	<p>WHO definition of Health</p>		<p>Lecture Posters showing contrast between a healthy and an unhealthy family</p>	
<p>The student will be able to list verbally and in writing the causes of illness.</p>	<ol style="list-style-type: none"> a. Bacterial and virus b. Hereditary disease c. Trauma (injury) d. Stress e. Congenital defect f. Environment. 	<p>Hygiene principles for self and patients.</p>	<p>Lecture and slides.</p>	
<p>The student will be able to describe verbally and in writing, what is necessary to keep the body healthy and functioning well.</p>	<p>The role of general body cleanliness, et: Bathing, eating, sleeping, resting, exercise, working for purpose, body elimination, (urine, stools, perspiration)</p>	<p>Developing and applying hygiene measures to self and patient.</p>	<p>Lecture and slides.</p>	

GENERAL CONCEPTS OF PUBLIC HEALTH

OBJECTIVE	CONTENT	PRACTICAL SKILLS	TEACHING METHOD	HOURS
<p>1. To make the student aware of the importance of the need for good community health and some of the factors which contribute to it.</p> <p>2. To familiarize the student with some of the state and local agencies which cooperate in public health programs.</p> <p>3. To develop an understanding of how disease is contacted and the means used for control and prevention.</p>	<ol style="list-style-type: none"> 1. Factors affecting community health:- <ul style="list-style-type: none"> - Social - Environmental - Economic - Governmental. 2. Transmission of diseases 3. Epidemic controls and immunizations. 4. Endemic diseases. 5. Uses of insecticides and disinfectants. 		<p>Lecture Slides Filmstrips Field trips.</p>	
<p>ENVIRONMENTAL HEALTH</p> <p>The student will be able to state orally or in writing, the factors necessary for:</p> <ol style="list-style-type: none"> 1. Safe water supplies 2. Two methods of refuse disposal 3. Two methods of sewage disposal 4. At least two methods of preserving food. 5. Good housing:- <ul style="list-style-type: none"> - Size and location of building; - Space, - Ventilation, - Distance from latrine etc. 	<ol style="list-style-type: none"> 1. Safe water supplies <ul style="list-style-type: none"> - Wells, standpipes, springs. 2. Refuse disposal <ul style="list-style-type: none"> - burial, and burning. 3. Sewage disposal <ul style="list-style-type: none"> - pit latrines - flush latrines 4. Food hygiene <ul style="list-style-type: none"> - salting - smoking - dehydration, 5. Building and Housing <ul style="list-style-type: none"> - Size and location - Space - Ventilation - Safety, etc. 	<ol style="list-style-type: none"> a. The knowledge acquired will enable the students to observe for deficiencies in these areas, for the referral to proper authorities for correction. b. It will enable them to give health talks to individuals and communities to improve living standards. c. It will enable them to demonstrate in certain areas like food preservation and general cleanliness. 	<p>Lecture Slides Film Strips Discussions Field trips.</p>	

3/ PT MEASURES

OBJECTIVE	CONTENT	PRACTICAL SKILLS	TEACHING METHOD	NOTES
<p>The student will be able to maintain a safe environment as evidenced by her work surroundings.</p>	<p>Care of equipment. Following instructions in use of Special equipment. the removal of safety hazards eg: spills, broken glass, etc.</p>		<p>Lecture Demonstration Quiz oral and written Role playing</p>	
<p>USING ETHICS The student will be able to state orally and in writing, the function and responsibility of the community health nurse to the community which she serves.</p>	<p>Job Description of Community Health Nurse. Roles of conduct.</p>		<p>Role Play Lecture Discussion</p>	
<p>The student will have knowledge and understanding of: 1 Vocational relationships 2 Optimum essentials for the patients environment. 3 Basic nursing procedures. 4 Special nursing care problems. 5 Principles of administering selected medications. 6 Characteristics and treatment of diseases. 7 Control of disease.</p>	<p>Safety Handwashing Bedmaking Bedbath Temperature Pulse Respiration Blood Pressure Dressings Catheterization Enemas Injections Urine Testing Charting Admissions Discharges Bandaging.</p>	<ol style="list-style-type: none"> 1. Preparing and maintaining an optimum environment. 2. Recognizing the role of the Community health nurse as a member of the health team. 3. Administering selected medications. 4. Selected nursing procedures. 5. Assisting professional personnel in the nursing care of patients. 6. Recognizing the Characteristics of Disease. 	<p>Lecture Demonstrations return demonstrations Role Playing Film Strips.</p>	

MIDWIFERY

	OBJECTIVE	CONTENT	PRACTICAL SKILL
Anatomy and Physiology	<p>The student will understand and be able to describe the pelvis and the pelvic organs.</p> <p>The student will be able to describe how fertilisation occurs.</p> <p>The student will be able to give a brief description of the growth of the fetus and skull.</p> <p>The student will be able to develop an understanding of the physical changes which occurs in pregnancy and diagnosis of pregnancy.</p>	<p>The female Pelvic The Pelvic organs Perineum, vulva, vagina</p> <p>The development of the fertilised ovum. Development of the fetus, placenta and umbilical cord.</p> <p>The fetal skull</p> <p>Pregnancy: changes in the uterus Signs and symptoms Physiological changes in the body.</p>	<p>The use of Charts.</p> <p>Use of the models in demonstration of</p> <ol style="list-style-type: none"> 1. Pelvis 2. Fetal skull.
Prenatal Care	<p>The student state the aims of prenatal care.</p> <p>The student will be able to plan and arrange care of the pregnant woman.</p> <p>The student will be able to identify high risk patient.</p> <p>The student will be able to carry out health education in clinic.</p>	<p>Prenatal Care Aims History taking Care of the pregnant woman. Examination made in antenatal clinics</p> <p>High risk women Diet in Pregnancy.</p>	<p>Take History Keep records Weight and record weight Measure and record height Test urine for albumin and sugar Take and record B/P and pulse rate Observe general appearance and record</p> <p>Check for oedema and varicose veins. Examination of the mouth, teeth and gums. Examination of the breast. Give Tetanus toxoid. Carryout health education talks in the clinic. Give advice to pregnant women about diet etc.</p>

TOPIC	OBJECTIVE	CONTENT	PRACTICAL SKILL
Pre-natal care	The student will be able to detect and describe significant abnormalities and know when to refer patient.	Terminology of the fetal <u>Position in utero</u> Lie Attitude Presenting part <u>Abdominal examination</u> Inspection Size of uterus Shape of uterus Fetal movements Skin changes Palpation Height of uterus Pelyic palpation Check blood level - HB Iron and folic Acid needs in pregnancy Danger signs in pregnancy.	Examination of the abdomen of the pregnant women Practice the following skill Look, feel listen and record findings.
Management of Normal Labour	<p>The student will understand and be able to describe the basic principles of normal labour.</p> <p>The student will be able to describe the signs of labour and to recognise signs and conditions she should call in aid for.</p> <p>The student will safely manage a normal delivery.</p> <p>The student will be able to describe management of and manage emergencies until the arrival of medical aid.</p>	<u>Principles of Management</u> 1. To understand and meet the woman's psychological needs. 2. To provide efficient bedside care 3. To refrain from unnecessary interference. 4. To cope with such emergencies as may arise. <u>Management of labour</u> Definition of labour The physiology of labour Signs of labour The first stage of labour The second stage of labour The third stage of labour. Mechanism of labour. Fetus in labour.	Observation. Keep records The doll and pelvis Filmstrips.

TOPIC

OBJECTIVE

CONTENT

PRACTICAL

Admission of the woman in labour.
 History of labour
 Uterine contraction
 Show
 Rupture of the membranes
 Sleep, rest, food and fluids.

Preparation of the woman in labour
 Cleanliness, Antisepsis and Asepsis during labour.
 The midwife, patient and environment
 Reassure the patient through explanation of procedures before performing them.
 Examination of the patient T.P.R., B/P
 Urine Analysis
 Abdominal examination
 Swabbing vulva
 Vaginal examination.

The care of the patient in the first Stage of labour
 Position of the patient in labour.
 Diet, sleep and rest.
 Attention to the bladder and bowel
 Give comfort and assistance.
 Observation and recording
 Maternal condition
 fetal distress
 Maternal distress
Management of the Second Stage
 signs of second stage
 duration of second stage
 position of patient
Delivery of the patient
 Delivery of the head
 Care of the cord around the neck
 Delivery of shoulders and body.

Admit patient in labour
 Take history and record keeping
 Time uterine contractions
 Observe: rupture of membranes, show colour and amount.

Wearing of mask, washing of hands - the use of soap and running water.
 Keeping the room clean, or labour ward, bed linen and gown clean.

Do vulva shaving
 Give enema
 Give bath to patient
 Take Temp, pulse respiration and B.P.
 Test urine for alb. sugar and acetone.
 Look, feel, listen and record fetal heart rate.

Wearing of gloves for V/E and delivery - record V/E
 Inspect vulva for discharges
 Varicose veins and oedema.

Make observation and keep records, changes in patient's condition, temp, B/P, pulse, fetal heart rate, contractions, strength, duration and interval.
 Intake and output
 Rupture of membranes, colour amount and odour.

Prepare patient for delivery
 explanation of procedure
 Prepare equipments and labour ward.
 Show the patient who to do
 Relaxation and breathing exercise in labour. Encouragement of patient to push.

Observe ten deliveries
 Deliver the body
 Examine perineum.

OBJECTIVE	CONTENT	PRACTICAL SKILL
	<p>Attention to the eyes</p> <p><u>Immediate care of the baby</u></p> <p>Clean the air passages.</p> <p>Tying and cutting of the cord</p> <p>Identifying the baby</p> <p>Care of the eyes</p> <p>Assessment of the baby's condition</p> <p>Resuscitation of the new born</p> <p><u>Management of the third stage</u></p> <p>Asopsis and anticopsis</p> <p>Position of the patient</p> <p>Signs of separation</p> <p>Deliver the placenta</p> <p>Maternal effort</p> <p>Using the fundus as a piston</p> <p>Amount of blood loss</p> <p>Giving of Ergometrine</p> <p>Examining the placenta, cord and membranes.</p> <p>Identifying women at risk for third stage and postpartum bleeding.</p> <p>Immediate post partum care.</p> <p>Check vital signs, check fundus</p> <p><u>The normal puerperium</u></p> <p>Recuperation</p> <p>Involution.</p> <p>Lochia, Daily care, Lactation</p> <p>Post natal examination</p> <p>Breast feeding</p> <p>Management of the puerperium</p> <p>Immediate care.</p>	<p>Do eye treatment</p> <p>Give immediate care to new born.</p> <p>Clear the airways</p> <p>Tie or clamp and cut the cord.</p> <p>The use of writs and tape</p> <p>Apgar score one minute and five minute after delivery.</p> <p>No artificial respiration when necessary</p> <p>Bathing of baby and daily cord dressing.</p> <p>Deliver the placenta - Basic principle No. 4 - Refrain from unnecessary interference.</p> <p>Give ergometrine</p> <p>Measure blood loss - estimate</p> <p>Examine placenta and membranes</p> <p>Control third stage bleeding.</p> <p>Give Nursing care to mother and baby one hour post partum</p> <p>Observation of Lochia, temperature.</p> <p>Pulse and blood pressure</p> <p>Do vulval swabbing and perineal care</p> <p>Measure height of fundus record and record keeping.</p> <p>Bathing the baby, cord care and weighing the baby.</p>

Topic	Objective	Content	Practical Skill
Abnormalities of Pregnancy.	The student will be able to 1. Detect and describe significant abnormalities during pregnancy. 2. Make appropriate referral of patient.	Causes and Signs of:- Abnormal growth of fundus, including hydrannios and p. polyhydramnios. Urinary tract infection Venereal disease - Blood test Hyperemesis gravidarum Anemia Preclampsia Danger signs during pregnancy, fever, bleeding, recognition and management.	necessary management of danger signs Gross examination of urine Observation, position, clear airways. When necessary management of danger signs.
Abnormalities of Labour and Delivery	Detect and describe significant abnormalities during labour and delivery. Describe emergency treatment of problems. Describe when to make an appropriate referral.	Detecting or noting signs of abnormal presentation & position. Multiple pregnancy and management of cord prolapse. Management of prolonged or obstructed labour. Rupture uterus. Management of Antepartum hemorrhage Complications of third stage; retained placenta, post partum hemorrhage shock, including management of these conditions.	Cutting an episiotomy When possible and necessary will provide emergency obstetrical care Proper position of the patient Knee chest position Transport Reassurance. I.M. ergometrine, elevate foot of bed, rub up contractions transport, reassurance.
Abnormalities of the post partum period	1. Detect and describe significant abnormalities during post partum period	Poor involution of the uterus Possible causes of fever Breast engorgement Infection of abscess Infection of the uterus, lochia. Puerperal pyrexia.	Check fundus daily Observation of lochia Express the breast The use of breast pump, nipple shield. Legal aspects - notifiable

OBJECTIVE	CONTENT	PRACTICAL SKILLS	HOW TAUGHT
<p>I.A. The student will be able to describe the normal growth and development of a child</p> <p>I.F. The student will be able to distinguish between normal and abnormal growth and development.</p>	<p>I.A. Review growth and development of the fetus</p> <p>Normal growth and development patterns, Age 0 - 5 years, including:</p> <p>General, plus weight and height</p> <p>Developmental milestones (sitting, standing, walking, and talking)</p> <p>Teething, bowel habits, sleep, and play</p> <p>Local beliefs concerning growth and development patterns. Classify those important for health, not important</p> <p>I.B. Factors affecting growth and development, e.g., infections, nutrition, local beliefs</p> <p>Abnormal growth and development pattern; when to refer and to whom</p> <p>Physical assessment age 0-5 years for growth and development</p>	<p>I.B. Physical examination of infant and child</p>	<p>I.A. Lecture Slides, Cassette Materials from MRC Classroom demonstration with child Discussion Charts</p> <p>I.B. Lecture Cassette, slides demonstration with model and child in class supervised practice in class, clinic</p>

CHILD HEALTH page 2

	OBJECTIVE	CONTENT	PRACTICAL SKILL	HOW TAUGHT
I.C. Growth and development	I.C. The student will be able to take and record a growth and developmental history.	I.C. Use of developmental history check list.	I.C. Complete developmental history check list.	Lecture Use of developmental history chart in class by each student Role playing Discussion
II.A. CARE OF THE CHILD	<p>II.A. The student will understand and be able to describe how to promote and maintain the care of the well child.</p> <p>II.B. Be able to participate in all activities of the infant and under five welfare clinic, including: taking history, physical examination, giving immunization and R., weighing, recording, counseling and be able to communicate effectively to the mothers.</p>	<p>II.A. Normal needs: sleep, elimination, play, stimulation, safety, (nutrition dealt with separately)</p> <p>Teeth care</p> <p>Skin care: Bathin, use of clean water, soaps, prevention of rashes.</p> <p>Local customs and beliefs which favor or disfavor health, i.e., scalp shaving, lifting by one arm onto back, etc.</p> <p>II.B. Registration: recording, taking health history</p> <p>physical examination by observation and touch recording: Head: Fontanelles, scalp rash, nitw, etc. Neck: rigid, flaccid</p>	<p>Bathe baby and toddler, cord care</p> <p>II.B. Register Patient Fill out records correctly</p> <p>physical inspection by observation and touch of infant, child</p> <p>Record information on Ilesha Weight Chart</p>	<p>Lecture Ilesha weight chart review Classroom discussion Slides and Cassettes Demonstration</p> <p>Lecture Demonstration in Class and practice by each student on records used in clinic. Physical examination: Assigned reading Isolation Visual Aids Demonstration with model, baby, child in clinic or clinic. Return supervised practice in classroom, clinic.</p>

OBJECTIVE	<u>COVID PROGRAM Page 5</u> COMMENT	PRACTICAL SKILLS	HOW TAUGHT
	<p>Eyes: discharge sight: follow finger Ears: discharge hearing: screen with rattle, etc. Nose: discharge Throat: examine with tongue blade, spoon for redness, pus, coating, enlarged tonsils Mouth: sores, coated tongue Teeth: Present, absent Skin: rash, infections, moist, dry Chest: retraction, respirations, (rapid, shallow, etc) cough, where it occurs in respiratory track Abdomen: hard, soft, distended Lymph: Glandular enlarge- ment Extremities: muscle tone, length, spine straight, extra digits, walk O.K. swollen G.U: Urinary meatus, Vagina, urinary tract, Testicles present.</p>	Give, explain and record immunization	Demonstration of preparation, of storage, transportation of of syringes and equipment, technique of administration of administration Return supervised demonstra- tions " " Handouts of immunization Schedules

CHILD HEALTH Page 4
CONCENT

OBJECTIV

PRACTICAL SKILLS

HOW TAUGHT

Cont.
of the
child

II.P. Cont.

II.B. Cont.
Medications: Supplement vitamins, iron. Why, How, much of the medication is given.

Weighing and Recording

Counselling, health, teaching and effective communication with mothers, includes:
bathing baby
feeding infant and toddler
clothing
cord care
skin care
accident prevention
demonstration & preparation of infant food & toddlers feed
immunization
growth and development

II.C. The student will be able to identify the high risk infant, child, by identifying signs & symptoms in the child and using information on the Ilesha weight chart.

II.C. High risk factors for infant, child, (include weanling child)

Review of the Ilesha weight chart

Care of High risk child: increase frequency of visits, health teaching of mother, referral

II.B. Cont.
Packeting of medications
Counseling mothers
Recording on Ilesha Weight Chart

Weighing infants, child.
Recording on Ilesha weight Chart

Giving Mother Classes

Teaching Mother on a one to one basis

II.C. Physical examination of child

Complete Ilesha weight chart

Teaching of mother

II.B. Cont,
Lecture
Demonstration of packeting
return demonstration
Role Playing

Lecture
Demonstration
Return Demonstration

Lecture
Discussion
Role Playing
Demonstration with model or baby
Return demonstration
Supervised practice

II.C. Lecture
Identification of child in clinic, supervised follow-through of high risk child's care including return clinic visit, home visit, demonstration of food preparation feeding, teaching mother
Recording on Ilesha Weight Chart.

TOPIC	OBJECTIVE	CHILD HEALTH Page 5 CONTENT	PRACTICAL SKILLS	HOW TAUGHT
CARE OF SICK CHILD	<p>III.A. Identify and Provide supportive care to the premature</p> <p>III.B. Identify and describe signs of common childhood diseases</p>	<p>III.A. Definition, characteristics of the premature infant.</p> <p>Maintaining proper temperature, feeding, prevention of infection bathing, handling and hazards for the infants in home and clinic</p> <p>Assessment of home for premature care</p> <p>Teaching family premature care in the home</p> <p>III.B. Elicit a proper history of common illnesses, cause, treatment and prevention of common diseases: Oral Thrush. URI: Upper Respiratory Infections, "croup" Diarrhea & dehydration Head Lice Malaria Anemia Worms and other Parasites Measles, Chicken Pox Mumps, Whooping Cough Tuberculosis Sudden Infant Death Tetanus</p> <p>Local customs & beliefs regarding common childhood diseases.</p>	<p>III.A. Physical examination, Record on Ilesha weight Chart Make incubator Manual expression of breast milk</p> <p>Home assessment</p> <p>Health teaching</p> <p>III.B. Take health history physical examination Record on Ilesha weight Chart</p>	<p>III.A. Lecture Demonstration Role Playing</p> <p>III.P. Lecture Discussion Slides and Cassettes Demonstration with Sick Child</p>

OBJECTIVES	CHILD HEALTH Page 7 CONCEPT	PRACTICAL SKILLS	HOW TAUGHT
<p>III.F. Teach and Counsel Parents and provide for follow-up care.</p>	<p>III.E. Local customs and beliefs regarding common childhood diseases.</p> <p>Principles of teaching care to parents</p> <p>When, how, and to whom to refer patients if necessary</p>	<p>III.E. Teaching and Counseling skills</p>	<p>III.E. lecture Demonstration Role Playing</p>

FAMILY PLANNING

TOPIC	OBJECTIVE	CONTENT	PRACTICAL SKILLS	TEACHING METHODS
Basic concepts of family planning and child spacing	The student will be able to 1. Describe the role of the family in their community 2. Describe the purposes and role of child spacing in family health.	Basic concepts of the family History of Family Planning - Global and The Gambia. Demographic Data- Population census (in the Gambia) birth and death rates, IMR & MMR. Family Planning as a public health function. Family life, especially maternal health. Cultural, religious, social psychological, political and economic aspects of family planning in the Gambia. Community Resources for family planning services.	- Assist with Examination - To do a string check - Teach patients about the methods of contraceptives - Teach self breast exams to patients.	Visual aids Graphs Lectures Role playing Debate Visual aids Slides Charts Movies Lecture Discussion Demonstration on patient 1. Interviewing 2 Physical examination Lecture discussion Demonstration of methods - using models and other visual aids. Films on methods or tapes and cassettes. Demonstrate breast examination. Film - Breast exam.
Reproduction anatomy and physiology	1. Describe the Anatomy and Physiology of the male and female reproduction system. 2. Describe the process of fertilisation.	-Reproductive system from birth to adult. - The anatomy and physiology - Psychological aspects - Menstruation - Sexuality - physiologic and psychological aspect. - Menopause.		
F. Services and modes of contraceptives.	1. Describe the following methods of contraceptives: IUD, hormonal, condoms Tubal ligation & Vasectomy and foams. 2. List the common side effects and contraindications. 3. Perform breast examination.	Interviewing in F.P First visit examinations - looking at the whole person. Subsequent examination. Description of the methods: Side effects, advantages, disadvantages and contraindications, complications. Breast examination - and self breast exam. Selection of a method to suit the family.		

FAMILY PLANNING BOARD.

TOPIC	OBJECTIVE	CONTENT	PRACTICAL SKILLS	TEACHING METHODS
		Discussion of traditional methods of family planning. Records and Statistics. Referrals Other community resources. Preparation and maintenance of supplies and equipment.		Demonstration - using records and reports. Lecture and Discussion
Motivation and Follow-up	Identify factors - cultural political, social, psychological and religious which may influence the acceptance	Factors affecting acceptance of F.P. cultural, social, psychological, political and religious Methods of overcoming barriers to acceptance. Follow-up care - need for medical supervision. The effect of health workers attitudes on patients. Reinforcement of communication skills	Counseling and motivation of patients for initial and follow-up family planning	Lectures Role Playing Discussion
Fertility	List the major factors influencing fertility and infertility in the male and female.	-Types of infertility -Examination of factors in the male: general health, history, seminal factors - quantity and motile. - Examination of factors in the female: General health, history, cervical, uterine, tubal, ovarian factors. - Factors in the partner relationship - Explaining procedures and results of examination to patients.		Lecture/Discussion
Pathology of the reproductive system.	Describe transmission, cause symptoms and treatment of trichomoniasis, candidiasis syphilis	Cause, transmission, treatment, signs and symptoms of - Trichomoniasis, candidiasis & non specific vaginitis. - Syphilis and gonorrhoea. Follow-up of syphilis and gonorrhoea patients-tracing contacts.	To give treatment for vaginal infections as proscribed	Films Tapes & cassettes Slides Use of Microscope for wet preps. Discussion, Lecture

FAMILY PLANNING COURSE.

TOPIC	OBJECTIVE	CONTENT	PRACTICAL SKILLS	TEACHING METHODS
Abortion	Identify social problems which cause woman to seek abortion	Description of abortion Hospital methods Local methods and complications Sequelae of frequent abortions Legal aspect.		Lecture Discussion

FAMILY SPACING	SKILL LIST		
1. Set up clinic			
1.1. Prepares supplies and equipment, sterile and unsterile			
1.2. Sorts out records			
1.3. Prepares scissors for cold sterilization			
1.4. Prepares injection tray for depo provera			
2. INTERVIEWING			
2.1. Asks pertinent questions			
2.2. Listens to patients response			
2.3. Responds to non-verbal response			
2.4. Demonstrates acceptance for feelings and belief			
2.5. Uses interpreters as appropriate			
2.6. Obtains pertinent history			
2.7. Demonstrates positive attitude			
3. PREPARES PATIENT BY			
3.1. Weighing			
3.2. Taking B.P.			
3.3. Teaches methods of contraception			
3.3.a. Oral contraceptives			
3.3.b. IUDS			
3.3.c. Condoms			
3.3.d. Foam			
3.3.e. Sterilization			
3.3.f. Traditional methods			
3.4. Explains procedure for physical examination			
4. ASSISTS IN PHYSICAL EXAMINATION			
4.1. Breast exam			
4.2. Teaches patient to examine her breast			
4.3. Abdominal examination			
4.4. Pelvic examination			
5. ASSISTS IN IUD INSERTION IF INDICATED			
6. MAKES APPOINTMENT FOR FOLLOWUP			
7. ASSIST IN MAKING REFERRALS IF NECESSARY			

8. DOES MOTIVATION OF PATIENTS, ESP. HIGH RISK PATIENTS		
8.1. Group discussions		
8.2. Questions and answers		
9. INFERTILITY PATIENT		
9.1. Counsel infertile client and husband		
9.2. Give reassurance		
9.3. Makes appointments for follow-up		
9.4. Makes referrals		
10. Vaginal infections and V.D.		
10.1. Counsels patients as to signs and symptoms cause, mode of transmission of		
10.1.a. Trichomoniasis		
10.1.b. Candidiasis		
10.1.c. Non specific vaginitis		
10.1.d. G.C.		
10.1.e. Syphilis		
10.2. Gives specific medications as prescribed		
10.3. Teaches patient how to use medication prescribed		
11. ABORTION		
11.1. Answers questions concerning abortion		
11.2. Gives advice concerning complications		
11.3. Makes referrals		
12. MAINTAINS CLINIC RECORDS, REPORTS		

CONTENT OF FIELD EXPERIENCE

	YES	NO	SATISFACTORY	UNSATISFACTORY
1. In the ward situation				
a. Care of the patient's environment, i.e. cleaning of lockers, sputum mugs, drinking cups, etc.				
b. Bed making				
c. Bed bathing				
d. TPR. P, No, Respiration, BP				
e. Tepid sponging				
f. Mouth care				
g. Enema				
h. Injections				
i. Admissions and Discharges				
j. i. Observe deliveries for the first time				
ii. Do deliveries on their own				
k. Care of the newborn baby				
l. Resuscitation, Care of the mouth and bath				
m. Feeding patients. serving food				
n. Surgical dressings				
o. Learning to remove stitches				
p. Serving of medicines				
2. Ancillary experience in the clinics:				
a. Weighing				
b. BP				
c. Urine testing				
d. Lectures				
e. Registration				
f. History				
g. Palpating				
h. Immunizations				
i. Home visits and follow-ups:-				
i. Check home environment				
ii. Check the mother's general condition				
iii. The breast, lochia, height of fundus etc.				
iv. Check baby:-				
the eyes for jaundice				
the cord				
the tongue for thrush				
v. Bath baby at first visit				
j. Charting				
k. Home visits				

**PROJECT PROPOSAL FOR PEDIATRIC NURSE
PRACTITIONER**

INTRODUCTION

For the past 7 years University of California Santa Cruz has worked with the Gambian Government in promoting the health of mothers and children through inservice training programs, on the job training of auxiliary staff, participant training abroad, and more recently through the training of Community Health Nurses.

The Gambian government is expanding and upgrading the maternal and child health centers located in various regions of the country. Nursing Sisters and Nurse Midwives are transferred from the hospital setting and assigned to MCH centers for a tour of one to two years. They are expected to give primary care and continuing supervision to mothers and children at the MCH centers with minimal and infrequent physician supervision or teaching.

Their educational preparation has been a hospital based 3 year nursing program with additional preparation in midwifery and pediatrics. Some have had special education programs in tropical medicine. However, the educational preparation has not included medical and diagnostic skills which are needed in order for the nurses to function in the extended role in the health centers, often without medical supervision. In the Gambia approximately 50% of the children die before the age of 5 years and the critical ages are 0 and 2 of age. The morbidity rate is also high. Health education programs are relatively few and reach only a very small proportion of the population.

The proposed project is to prepare the nurse midwives assigned to the identified MCH project centers to work in an expanded role in primary pediatric care. Emphasis will be placed on the identification, management including treatment and education, and evaluation of pediatric problems using available health resources for promoting family and child health.

It is believed that both quality and quantity of work will be improved through the use of the specially prepared pediatric nurse practitioner at the MCH centers.

General Objectives

To prepare the participant to work interdependently collaboratively with other health workers to give primary care and health supervision to infants and children through adolescence.

Behavioral objectives

1. To assess health status of the child by taking a health and developmental history and performing a complete physical examination, using Techniques of Observation, inspection auscultation, palpation and percussion and by using instruments such as stethoscope, otoscope, etc.
2. To evaluate family health, home and community conditions which affect the total care of the child.
3. To manage minor trauma and common childhood disease.
4. To assess normal growth and development and to recognize deviations from the normal.
5. To identify health problems of the child and to develop a plan of action to either treat the child in the health center or make referral to the appropriate resources.
6. To develop techniques for teaching and counseling and to provide relevant health instructions, and anticipatory guidance to families in reference to the care of the child at home, example, feeding, developmental crisis, common illnesses, and accidents.

- 2 -

7. To develop a comprehensive plan of care of continuing health supervision of the child and family, example immunizations, etc.
8. To elicit pertinent information and utilize standardized records and reports in care of the child.
9. To identify and use community resources available for the care of the child and family.
10. To perform simple laboratory procedures such as urinalysis, malaria smears, stools and HCTs and HDGs necessary for the diagnosis of the child's health status.

Description of Course

The curriculum is built on existing nursing knowledge and skills, and expands nursing by teaching participants to use diagnostic skills. It is a 12 week course which includes didactic and clinical teaching and discussions and case presentation. The first week will be an orientation and intensive classroom work devoted to history taking, and physical examinations. Students will practice on each other and gain skills in using diagnostic equipment. The other 11 weeks will be devoted to 4 hours clinical experience in the RVH or at New Street Clinic or other clinics or in the pediatric or discussions. Students will be expected to study independently using cassette tapes and visual aids, etc. and other available materials.

The emphasis of this course will be on preventive measures and health education as well as curative measures.

The course will be flexible. Individual needs of each participant will be taken into consideration.

The didactic phase will be taught by consultants from the Gambia and others provided by UCSC.

The clinical instructions will be given on the job at RVH outpatient clinic, pediatric wards, and New Street Clinic, Bakau and or other clinics Banjul by a pediatrician, and family or pediatric nurse practitioners.

Patient load and types of patients

The initial case load must be light enough to allow the practitioner time to develop her skills and efficiency and must be large enough to allow her to learn to set priorities. She will progress from the simple case to more complex cases if possible and examine both well and sick patients.

Qualification of Participants

State Registered and state certified midwives (nurse) employed by the government of the Gambia and designated nurse superintendents.

Length of Course - 3 months

Number of Participants - 8

Educational facilities

1. Classroom at RVH, Nursing School
2. Clinical - RVH and pediatric ward (out patients pediatrics are seen in pediatric ward)
 - New Street Clinic
 - Bakau Clinic
 - Other Banjul Clinics.

- 3 -

INPUTS BY UCSC

1. 3 Pediatricians preferably with experience in Africa
2. 1 Family practitioner (MCH project technician)
3. 1 Public Health Nurse Nansa Konko HCH project technician
4. Partial per diem for participants
5. Diagnostic equipment
6. Visual aids, books, etc. and other teaching equipment

Inputs by Gambian Government

- 1 MCH project nurse superintendent
1. Health Educator
 - 1 Social worker
 - 1 Nutritionist
- Space for didactic and clinical teaching
Per diem for participants.

CONTENT OF COURSE

1. Orientation
2. Role of pediatric nurse practitioner in primary care, re-orientation etc
3. Principles of interviewing and counseling and teaching
4. History taking
5. Principles of physical examination of infant and the child
 1. Observation of general health and nutritional status
 2. Skin, hair, nails
 3. Lymphatic system
 4. Neck, face, neck
 5. Eyes
 6. Ears
 7. Nose
 8. Mouth and throat
 9. Chest and Lungs
 10. Heart
 11. Abdomen
 12. Genitalia
 13. Skeletal system, spine and extremities
 14. Neurological examinations
6. Pediatric data base problem oriented, records, reports, statistics etc.
7. Human Growth and development and behavior - birth through adolescence.
 1. Developmental abnormalities
 2. Special needs of neonate, infant, toddler, pre school, school age child and adolescent.
8. Positive Health maintenance
 - A. Immunity and immunization, etc
 - B. Nutrition for various ages of growth and development in normal child and the sick child and family including cultural and social eating patterns.
 - C. Prevention and screening
 1. speech
 2. hearing
 3. vision
 4. dental
 5. development problems
 6. use of laboratory equipment for screening for
 1. anemia
 2. intestinal parasites
 3. urinalysis
 4. malaria.

- 4 -

- D. Preventive mental health.
- E. Anticipatory guidance, counseling, reference to child rearing, environment, etc.
- F. Principles of Health Education
 - Emphasis on Nutrition
 - Accident prevention, etc.
 - Environmental sanitation
 - Teaching of child care to parents and others.
- 9. Childhood health problems
 - A. General principles, assessment and management and approach to the
 - 1. Well child
 - 2. Acutely ill child
 - 3. Child with chronic illness
 - 4. Child with handicaps.
 - 5. *Drum fever child, Typhoid, etc.*
 - B. Common childhood infections, management, prevention and health education
 - 1. Viral
 - 2. Bacterial
 - C. Eye diseases
 - D. E.N.T.
 - E. Genital - urinary Tract diseases including prevention, treatment and health education.
 - F. Cardio vascular
 - G. Gastrointestinal
 - H. Respiratory tract diseases
 - I. Blood diseases
 - J. Common parasitic diseases.
 - K. Metabolic diseases.
 - L. Musculo skeletal disease
 - M. Trauma, accidents, surgical emergencies
 - N. Pediatric medical emergencies
 - O. Malnutrition and failure to thrive
 - P. Skin, Hair, Nail diseases
- 10. Social pediatrics
 - A. Family Dynamics unit of society
 - B. Family structure in the Gambia.
 - C. Relationship of child to family, culture, community
- 11. Community Health Resources.

EVALUATION

- 1. Didactic
 - a. Written tests
 - b. Verbal
 - c. Case presentations.

- 5 -

2. Clinical experience

- a. Observation of clinical work by clinical instructors
- b. Review of clinic records

3. On going evaluation

The practitioner should be reevaluated at the end of 3 months, 6 months and yearly.

SUGGESTION

A 1 day in-service training program should be given every month for first 3 months after completion of course and participant will be observed at regular intervals in clinical area.

CONTENT OF COURSE

- SUBJECT** 1. Role of Pediatric Nurse Practitioner in primary care, Re-orientation etc.

Course Description

In this course students will explore and discuss some issues involved in the extended role of the nurse in primary health care, role re-orientation, and interdisciplinary health team functioning.

Behavioral objectives

Participants should be able to:

1. Develop a co-professional role with M.D. and other members of the health team.
2. Identify factors, stresses, etc influencing interdisciplinary health team functioning role re-orientation, etc.
3. To discuss role of pediatric nurse practitioner and their relationship with other health care providers.
4. To identify the characteristics and components of primary care.
5. To recognize the implications of the P.N.P. as differentiated from Traditional nurses - patient relationships.

Content of Course

- 1.1. Role of P.N.P. in MCH centers and hospitals
- 1.2. Responsibilities of PNP in:
 - 1.2.a. relationship to patients and families
 - 1.2.b. communities
 - 1.2.c. primary care delivery system.
- 1.3. Nurse/MD relationships
- 1.4. Process of role change
- 1.5. Relationship of PNP to other level Practitioner ex. dresser dispensers, midwives, etc.
- 1.6. Primary health care systems in Gambia

HOUS.....

Method of Teaching.

1. Lecture
2. Discussion
3. Assigned reading

EVALUATION

1. Written test
2. Class participation

**Subject 2. Principles of Interviewing and counseling
(Review)**

Description of Course

This course provides increase knowledge and skills needed to effectively communicate with families through individual and group techniques.

Behavioral Objectives

Students should be able to:

1. Gain rapport with family members by showing personal interest and developing mutual understanding.
2. To elicit pertinent information for family and individual health history.
3. To identify family problems through gathering and analyzing of personal and technical information gained in interview.
4. To bring about changes in attitudes of family which positive affect health.

Hours.....

**Method of Teaching - Lecture
Discussion
Role playing**

Evaluation

1. Clinical practice
2. Class participation
3. Written test.
4. Observation

Subject 3. History Taking

Description of Course

The focus of this course is to teach the student to take a systematic health history on each patient and to record pertinent information in clear, concise manner. She will be taught the essentials of an initial health history and an interim history on sick and well child.

Behavioral Objectives

Student should be able to:

1. Elicit pertinent information concerning present illness with reference to onset, characteristics, etc, treatment.
2. Elicit pertinent family and social history, child's past history, etc.
3. Record information in clear, concise manner on child's record.

- 3 -

Content of Course

1. Chief complaint
2. Present illness
3. Past history
 - a. Prenatal
 - b. natal
 - c. Growth and development
 - d. Previous illness
 - e. Behavior and Habit
 - f. Immunisations
4. Family History
5. Social history
6. Review of systems.

Number of Hours taught.....

Method of teaching

1. Lecture
2. discussion
3. demonstrations - classroom and clinic
4. reading assignments
5. return demonstrations in clinic.

Evaluation.

1. Observation of practices
2. Review of patients records.
3. Test (written)

Subject 4. Principles of Physical Examination

Description of Course

The focus of this course is upon the use of inspection, auscultation, palpation, and percussion in performing physical examination on sick and well infants and children. The student will be taught to use medical diagnostic equipment such as otoscope, ophthalmoscope, percussion hammer, etc, in doing physical assessments on children.

Behavioral objectives

Students should be able to:

1. Perform a complete physical examination on infant or older child.
2. Recognize deviations from normal
3. Skillfully utilize medical diagnostic equipment in doing physical examinations.
4. State the child's physical problems as a result of the examination.

Content of Course

1. Observation of general health and nutritional status.
2. Skin, hair and nails
3. Lymphatic system
4. Head, face, neck
5. Eyes
6. Ears
7. Nose
8. Mouth and throat
9. Chest and lungs
10. Heart
11. Abdomen
12. Genitalia
13. Skeletal system: spine and extremities
14. Neurological examinations.

Number of Hours taught:.....

Method of Teaching:

1. demonstration
2. return demonstration
3. lecture
4. discussion
5. use of Bate's films
6. slides and cassettes
7. records

Evaluation:

- Written test
- Observation in clinic

Subject 5. Pediatric Data Base

This course will re-emphasize the importance of obtaining an accurate history and physical examination and recording the information clearly and concisely for purpose of statistical tabulations, reporting etc. Problem oriented records, reports statistics.

Behavioral objectives

1. Basic skills in process of collecting historical data from histories and physical examinations.
2. An understanding of problem oriented record system.
3. The ability to record a history and physical examination using problem oriented record system.
4. Basic skills in performing routine laboratory procedures.

Content of Course

1. Problem orientated record
2. Use of data base interview forms for history and physical
3. Procedure for doing urinalysis, malaria smears, Hct's, hemoglobins, stool specimens.

- 5 -

Hours taught.....

Method of teaching

1. reading assignments
2. Lectures
3. discussion
4. film
5. demonstration
6. practice with microscope and other lab. equipment.

Evaluation

1. Written test
2. Observation in practical setting.

Subject 6. Human Growth and Development

Description of Course

This course is a review of growth and development from birth through adolescence and will emphasize various physical and psychological needs of children at different stages of development. It will also focus upon education and anticipatory guidance needed at various stages of growth and development.

Behavioral objectives

- Students should be able to
1. Recognize deviations from normal in growth and development from birth through adolescence.
 2. To recognize the major developments.
Tasks are being achieved throughout life and know that the foundation for successful accomplishments are laid in childhood.
 3. Know the child's needs, physically, socially, psychologically, for various stages of development.
 4. To give Anticipatory guidance at each stage of growth and development.

Content

- A. Physical Growth - Birth through adolescence
- B. Psycho-social development
 1. Stages of development
 2. Concept of individuality
 3. Developmental abnormalities.
- C. Special needs of child from infancy through various stages of development
- D. Education and guidance of various stages of growth and development.

Number of hours taught.....

Method of Teaching

1. Lecture
2. discussions
3. slides
4. films
5. growth charts,

Evaluation

1. Tests (written)
2. Participation in class

Subject 7. Positive Health maintenance

Course Description

Emphasis is placed upon management of normal child health supervision including nutrition, immunizations, accident prevention, preventive mental health and health education of family, prevention and screening tests. It includes management of physical, psychological, social, cultural, nutritional, and behavioral stresses common in childhood years.

Behavioral Objectives

Student will be able to:

1. Define nutritional needs of infant and children during different stages of growth and development for normal and sick child.
2. State the basic principles of immunology, types of immunity.
3. State specific immunizations used in Gambia.
4. Demonstrate methods and techniques of administering all immunizations used in Gambia.
5. Use a microscope and hemoglobin and hematocrit equipment for performing urinalysis, hemoglobin, hematocrit, malaria smears, and stool specimens.
6. Perform vision, hearing, and dental screening procedures.
7. Provide anticipatory guidance to parents in reference to:
 - a. child rearing
 - b. environmental stimulation
 - c. behavior modification
 - d. early disorder detection
 - e. sex education.
8. Make a practical application of health education principles : teaching care to
 - a. individuals
 - b. families
 - c. groups.

Number of hours taught.....

Method of teaching

1. lecture
2. demonstration
3. discussion
4. return demonstration
5. film.

Evaluation:

Observation in clinic
written test.

Subject 8. Childhood health problems, Diagnosis , management.

Description of Course

The focus of this course is on diagnosis, management, education measures, and prevention of common illnesses in children, using available health resources in maintaining and promoting optimum mental and physical growth.

Behavioral Objectives

Students are prepared to:

1. Identify problems, establish priorities in diagnosis and management and make a plan for supervision, care, treatment and referral.
2. Identify ways in which age and different stages of development alter the signs and symptoms of disease and its management.
3. Use specific diagnostic equipment and therapeutic modalities in care of child, and know the limitations and benefits of each.
4. State the relationship of epidemiological factors and disease in childhood.
5. Discuss principles and methods of anticipatory guidance, health teaching and counseling for specific health problems.
6. Identify community resources needed to provide health and health related services to individuals and families.
7. Integrate knowledge of human behavior and principles of medical management in helping individuals and families cope with health problems.

Content of Course

1. General principles of assessment and management of

- A. Well child
1. activity
 2. diet
 3. play
 4. discipline

- B. Sick child
1. activity
 2. diet
 3. fluids and medication
 4. Significance of fever
 5. management of fever
 6. seizure disorders - febrile and others.

C. Child with Chronic disease

D. Handicapped child.

E. Premature Infant

F. Multiple Births

2. Common childhood infections, management, prevention, health education measures

A. Viral syndrome

1. Rubella
2. Rubella
3. Mumps
4. Roseola
5. Varicella
6. Polio
7. Others. Common in Africa

- 8 -

B. Bacterial Diseases

1. Staphylococcal
2. Pertussis
3. Streptococcal
4. Diphtheria
5. Tetanus.

8.3. Eye Diseases

A. Infections

1. Conjunctivitis, simple
2. Keratoconjunctivitis
3. Acute viral or microbial conjunctivitis
4. Trachoma
5. V.D.
6. Others

B. Trauma

1. Foreign body
2. Corneal abrasions
3. Others

C. Due to parasites

1. Onchocerciasis
2. Trypanosomiasis
3. Toxoplasmosis

D. Others

1. Glaucoma
2. Cataract
3. Strabismus
4. Acuity problems

8.4. Ear Diseases

A. Otitis, externa

B. Perforation tympanic membrane

C. Otitis media

1. Acute
2. Chronic
3. Serious

D. Hearing loss

E. Mastoiditis.

8.5. Nose

A. Epitaxis

B. Foreign body

C. Polyps

D. Allergic Rhinitis

8.6. Mouth and Throat

- A. Oral lesions
 - 1. Thrush
 - 2. Herpes gingivostomatitis
 - 3. Stomatitis.
- B. Caries, dental
- C. Gum diseases
- D. Pharyngitis Tonsillitis.
- E. Cleft Lip and Palate
- F. Others common in the Gambia.

8.7. Genital Urinary Tract diseases.

- A. Conditions affecting bladder and urethra
 - a.1. Cystitis
 - a.2. Urothrititis
 - a.3. Venereal Disease
 - a.4. Phinoses
- B. Undescended Testicles
- C. Hydrocoele
- D. Disease affecting kidney
 - d.1. Nephritis / nephroses
 - d.2. Acute glomerulonephritis
- E. Other problems
 - e.1. Enuresis
 - e.2. Urinary retention
- F. Problems of podiatric gynecology
 - f.1. Labial adhesions
 - f.2. Clitoral Hypertrophy
 - f.3. Circumcision
 - f.4. Breast enlargement
 - f.5. Vaginitis
 - f.6. Podiatric pelvic organ
 - f.7. Foreign bodies.

8.8. Cardio vascular diseases

- A. Rheumatic heart disease
- B. Congenital Heart disease
- C. Arrhythmias and Murmurs
- D. Valvular Diseases
- E. Others Common in the Gambia

8.9. Gastro intestinal Diseases.

- A. Acute Diarrheal diseases
- B. Malabsorption Syndromes
- C. Pyloric stenoses
- D. Colic
- E. Abdominal masses, hernias, etc.
- F. Constipation
- G. Gastroenteritis
- H. Bowel obstruction
- I. Disease of liver, spleen, etc.
- J. Emergencies
 - 1. Appendicitis,
 - 2. Dehydration due to diarrhoea and vomiting
- K. Others common in the Gambia.

8.10. Respiratory Tract Diseases

- A. Croup
- B. Pneumonia-broncho, lobar, viral,
- C. Upper Respiratory infections
- D. Asthma
- E. Bronchiolitis
- F. Bronchitis
- G. Foreign bodies
- H. Tuberculosis
- I. Atelectasis
- J. Emergencies
 - 1. Anaphylaxis
 - 2. pneumothorax
 - 3. Respiratory failure
- K. Others common in the Gambia.

8.11. Blood diseases

- A. Anaemias
 - 1. Iron deficiency
 - 2. Sickle cell
 - 3. Others
- B. Hemorrhagic disorders
- C. Others

8.12. Common Parasitic diseases

- A. Intestinal parasites
 - 1. Hookworm
 - 2. Ascaris
 - 3. Whip worms
 - 4. Others
- B. Malaria
- C. Schistosomiasis
- D. Filariases
- E. Others common in the Gambia

8.13. Endocrine Disorders

- A. Diabetes in childhood
- B. Thyroid diseases
- C. Neonatal hypocalcaemia
- D. Neonatal Hypoglycaemia
- E. Pituitary Dwarfism
- F. Others common in the Gambia

8.14. Neuro-muscular diseases

- A. Seizure disorders
- B. Hydrocephalus
- C. Spinal bifida
- D. Down's syndrome
- E. Cerebral Palsy
- F. Meningitis
- G. Others common in the Gambia.

8.15. Musculo Skeletal Disorders.

- A. Congenital deformities
- B. Trauma

8.16. Skin Diseases

- A. Leprosy
 - B. Scabies
 - C. Pediculosis
 - D. Warts
 - E. Impetigo
 - F. Staph
 - G. Strep.
 - H. Ringworm scalp, skin, nails, f
 - I. Molluscum
 - J. Eruptions
 - K. Pruritis
 - L. Molluscum contagiosum
 - M. Pemphigus
 - N. Allergic dermatitis
 - O. Ecthyma
 - P. Furuncles
 - Q. Anthrax
 - R. Onchocerciasis
 - S. Filarial scabies
 - T. Eczema
 - U. Leiner Nourious
 - V. Erythrodermia
 - W. Treponemiasis
 - X. Leishmaniasis
 - Y. Lashbich
 - Z. Chigger
- Others common in the Gambia.

8.17. Trauma, accidents, surgical emergencies

- A. Minor lacerations
- B. Minor burns
- C. Stings, bites
- D. Foreign bodies
- E. Soft tissue infections

8.18. Medical emergencies

- A. Ingestions
- B. Cardiac arrest
- C. Shock

8.19. Malnutrition and failure to thrive

- A. Causes of malnutrition
- B. Protein caloric, malnutrition
 - 1. kwashiorkor
 - 2. marasmus
- C. Vitamin deficiencies.

Number of Hours taught

Method of teaching

- | | |
|-------------------|-------------------------|
| 1. Lectures | 5. Demonstration |
| 2. Slides | 6. Discussions |
| 3. Movies | 7. Class presentation |
| 4. Cassette tapes | 8. Reading Assignments. |

- Evaluation: 1. Written test
2. Observation in clinic.

Subject 8. Social Pediatrics and Family Dynamics

This course focuses upon the dynamics of family functioning in the Gambia with emphasis upon cultural, societal, and individual beliefs and attitudes as they affect health problems.

Behavioral Objectives

Student will be able to:

1. Define various types of families in Gambia
2. State factors affecting health of family.
3. Make a home and family health assessment and identify factors affecting child's health.

Content of Course

1. Family as a unit of society
2. Family structure in Gambia
3. Relationship of child to family, culture and community.
4. Factors affecting health of family
5. Family health and home assessment.

Hours taught

- Method of teaching:
1. Lecture
 2. Discussion
 3. Reading assignment

Subject 10. Community Health Resources

This course aims to give the student increased knowledge in community patterns and resources available for total care and to help her coordinate with other health or allied health personnel in providing comprehensive care for the family.

Behavioral Objectives

Student should be able to:

1. relate individual and family health problems to the community by identifying emergency health problems and by working with local agencies and organizations concerned with health.

Content

1. Community functioning and resources
2. Community Diagnosis

No. of hours taught.....

- Method of teaching:
1. Lecture
 2. Discussion
 3. Written and reading assignments

Illustration: Use of Community resources in practice.

PEDIATRIC NURSE PRACTITIONER PROGRAM FOR
NURSE MIDWIVES

Logic Frame Work

Appendix A. Introduction

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Narrative summary	Objectively Verifiable indications	Means of verification	Important Assumptions
<p>Goals: The improvement of family and Child Health.</p>	<ol style="list-style-type: none"> 1. A reduction of infant/child family morbidity and mortality. 2. Increased family knowledge concerning care of sick child. 	<p>Use available government data project established health and data systems.</p>	<ol style="list-style-type: none"> 1. Gambian government is willing to provide time, money and effort for MCH. 2. Improved pediatric services will lead to reduced infant/child family morbidity and mortality and increased health education of family. 3. Pediatric services continue and be an important part of MCH.
<p>Purpose: Objective 1. General. prepare the participant to give primary care and health supervision to infants and children.</p>	<ol style="list-style-type: none"> 1. A minimum of 8-10 selected personnel prepared as pediatric practitioners. 	<ol style="list-style-type: none"> 1. Pediatric practitioner will be able to work interdependently at health centers to provide primary child health care. 	<ol style="list-style-type: none"> 1. Qualified trainees available 2. Time off and replacements for staff in training. 3. Posts will be chosen at MCH sites and nurse role will expand to permit full use of practitioner skills. 4. This will provide a motivation to upgrade all health centers services. 5. On going inservice education in pediatrics for all members of the health team will result.
<p>2. Behavioral 1. Assess health status by health history and physical examination</p>	<ol style="list-style-type: none"> 1. Increased numbers of charts with complete history and physical exam 	<ol style="list-style-type: none"> 1. Clinic health facility records <ol style="list-style-type: none"> a. attendants records b. follow-up c. evaluation. 	<ol style="list-style-type: none"> 1. Materials necessary for keeping records available. 2. Staff feels need to keep accurate records.
<p>2. Evaluate family health and home condition which affect total care of child.</p>	<ol style="list-style-type: none"> 2. Increased number of home visits 	<p>2</p>	<p>Staff time and transportation will be available.</p>
<p>3. Manage minor illnesses and trauma</p>	<ol style="list-style-type: none"> 3. Increased and improved care of minor illnesses and trauma 	<p>3.</p>	<p>Medical supplies and equipment will be available.</p>

Objectives	Objectively Verifiable Indications	Means of Verification	Important Assumptions
4. Assess normal growth and development and recognize deviations from normal.	Increased use of growth charts and developmental tools.	4. a. Growth records b. Follow-up c. Evaluation	4. a. growth records will be available b. parents will reserve records and have them available at each visit. c. parents will keep appointments
5. Identify health problems and develop plan for treatment or referral for sick children.	5. Plan for treatment will be recorded a. on child's record b. increased use of referral centers following identification of risks.	5. Nursing care and health supervision plan on clinic record. Followup Evaluation.	Staff will be trained and motivated to make nursing care supervision plans for each child
6. Develop techniques for teaching and counseling and give relevant health teaching.	6. Increased number of people receiving health education in groups and individually.	6. Follow-up Statistics Evaluation	Teaching aids and other facilities and equipment will be available. Staff will be motivated to do health education with each patient and in groups
7. Develop comprehensive plan for continuing health supervision for well child.	7. Each child will have plan of care for health supervision and will be seen at regularly scheduled for education and assessment.	7. a. Attendance records b. Followup c.	Parents will bring child for scheduled visits
8. Perform basic laboratory services (HCT, Hgb, Urinalysis, smears)	8. Malaria, smears, urinalysis, HCT Hgb will be performed when necessary to make a diagnosis and plan treatment.	8. Records and reports.	Facilities and equipment for basic lab. services will be provided. Transport will be provided for samples to be sent to AVH lab.
9. Assess and use community resources.	9. Increased coordination with other community resources or health related agencies.	9. Periodic conferences with community leaders, etc.	All community leaders are concerned with improvement of NCH services and will cooperate.
10. Elicit pertinent information and use standardized records and reports in the care of the family and child	10. a. increased use of standardized records and reports. b. more efficient statistical reporting to medical and health department.	10. Accurate monthly reports to medical and health dept., Evaluation.	Standardized records will be available on national basis. Staff will be motivated to send monthly statistics to medical and health dept., for tabulation.

Narrative Summary	Objectively verifiable indications	Means of verifications	Important assumptions
<p>A. 3 month training program for selected nurse midwives to develop adequate pediatric practitioner skills.</p>	<p>A.1. A system of physical examination and evaluation will be established</p> <p>2. Minimal physical and diagnostic skills will be developed.</p> <p>3. A standardized pharmacopoeia and treatment schedule will be developed</p>	<p>1. Clinic/Health centers records.</p> <p>2. Evaluation</p> <p>3. Use of standardized medical directives.</p>	<p>a. growth records will be available</p> <p>b. parents will preserve records and have them available at each visit</p> <p>c. parents will keep appointments</p>
<p>B. Training will be given to selected nurse midwives at RVH and MCH clinics.</p>	<p>B. 8-10 midwives will be trained in pediatric nurse practitioner skills.</p>	<p>B. 1. Followup and clinical supervision on pediatric ward, o.p.c. and MCH center.</p> <p>2. Use of clinic and development records for review of problems, plan of care etc.</p>	<p>Nursing administration will assign trained pediatric practitioner to areas where practitioner skills are needed.</p>
<p>C. Pediatric curriculum will be developed for training</p> <p>1. General orientation</p> <p>a. Assessment.</p> <p>2. a. <u>Preventive</u></p> <p>a. immunizations</p> <p>BCG</p> <p>Polio</p> <p>DPT</p> <p>Measles</p> <p>Others.</p>	<p>C. Avert learning to:</p> <p>a. History and physical examination</p> <p>b. Assessment of growth and development...</p> <p>c. Assessment of emotional and environmental factors.</p> <p>d. Use of diagnostic tools, stethoscope, Oscope, lab.</p> <p>C. 2.</p> <p>a. immunization schedule will be developed and taught.</p> <p>b. Immunization techniques will be taught.</p> <p>c. all members of health center team will have complete immunization histories.</p>	<p>C. Patients clinic charts</p> <p>2. Growth and development charts.</p> <p>3. Evaluation</p> <p>4. Lab reports.</p> <p>C.2. Immunizations</p> <p>a. records up to date</p> <p>b. decline in communicable diseases rates for which vaccines are available.</p> <p>c. personal health records with up to date immunizations.</p>	<p>Facilities and visual aids and other equipment will be available for teaching.</p> <p>C.2. a. Vaccines will be available at all MCH centers.</p> <p>b. a system for transport, delivery and maintenance of vaccines will be established.</p> <p>c. Records of immunization will be kept on each patient's chart.</p> <p>d. system of routine immunization schedule will be followed,</p> <p>e. supplies will be maintained at a constant level by maintaining inventory at regular intervals</p> <p>f. Proper equipment will be available.</p>

Narrative Summary	Objectively verifiable indications	Means of verification	Important assumptions.
666			<ul style="list-style-type: none"> G. qualified personnel will assist other personnel in use of proper techniques. h. Monthly statistics will be sent to medical and health office in Benjul for tabulation
<ul style="list-style-type: none"> b. Health Education <ul style="list-style-type: none"> 1. General 2. Nutrition 3. Environment c.3. Curative and management 	<p>General Health education, environmental and nutrition education will be done in groups and individually. Demonstrations in food preparation will be increased.</p> <p>Environmental sanitation will be demonstrated at the centers.</p> <p>C.3. Management of minor illnesses, trauma and recognition of referral situations</p>	<p>Statistics Observation of classes</p> <p>Observation of environmental sanitation at center.</p> <p>C.3. a. Health centers and hospital records indicating improvement of community health.</p>	<p>Staff will have time, equipment and motivation to conduct classes.</p> <p>3. a. Accurate diagnosis will be made. b. Records of diseases, treatment, deaths will be kept. c. Adequate treatment will be given d. Health Education will be increased.</p>
<ul style="list-style-type: none"> c.4. Social <ul style="list-style-type: none"> a. Individual b. Family c. Community 	<p>4.a. Family Home and community health assessment will be done and recorded on health record.</p>	<p>4. Evaluation of Health records. Follow up.</p>	<p>4. Family and social histories will be recorded on health records.</p>

FAMILY STUDY

Each student will study one selected family for the length of the training course. The family will be selected for study during the first two weeks of the program and the student will visit the family at least once every 2 weeks. A progress record will be kept on the family. A home assessment and family health assessment will be made at the initial visit. The study will focus on the needs of the infant or child but will be conducted within the framework of the family, and family needs will also be considered. Through this study the student will be able to experience a continuing relationship with the family, be able to assess the home, and immediate community, identify community resources which might be utilized in the care of the child and family.

Students will meet for scheduled conferences with their teachers to discuss the family.

Behavioral objectives

Student will be able to:

1. Identify environmental and home factors affecting the health of the child.
2. Identify cultural factors in the family and community which affect family attitudes about health.
3. Provide positive health teaching to families.
4. Identify strengths and weaknesses in the family which affect the family's ability to function and profit by family health teaching and supervision.

Clinical Experience

This part of the course is devoted to the practical application and further development of skills and knowledge in direct patient care. The student will have experience in examining well children and sick children. The student will gradually assume increasing responsibilities as she works under medical supervision in the clinical area. Additional teaching is provided or arranged by faculty if needed.

Patient Log

Each student will keep a daily log of patients she sees. This will include names of patients, age, sex, and clinic number and diagnosis. The log will be discussed weekly with instructor to determine if student is getting a variety of cases. Students will periodically select a case from this log for presentation.

PROGRAM RESUME

<u>Course Name</u>	<u>Hours Taught</u>
1. Orientation	
2. Role re-orientation	
3. Principles of Interviewing and counseling	
4. History Taking	
5. Principles of physical examination	
6. Pediatric data base, problem oriented records	
7. Human Growth and Development	
8. Positive Health maintenance	
9. Childhood Health problems	
10. Social Pediatrics, Family Dynamics.	
11. Community assessment, Resources, etc.	
 Clinical Practice.	

TEACHING MATERIALS NEEDED

A. BOOKS

1. Current Pediatrics and Treatment
Los Altos, California,
Lange Publishing Co.
2. Pediatric Priorities in Developing World
David Morley
Butterworth and Co. London
88 Kingsway WC2B 6AB
3. Guide to Physical Examination by Bates
J.B. Lippincott
Phil. Pa. (we already ordered 8 but they have not arrived)
4. Pediatric Physical Diagnosis for Nurses
Alexandar/Brown
McGraw Hill Book Co
N.Y., N.Y.
5. Problem oriented practice
John Bjorn
Harold Cross
Modern Hospital Press
McGraw Hiss Publishing Co.
Chicago, Ill.
6. Basic Pediatrics for Primary Health Care Provider - 9
Catherine De angelis
Little Brown & Co.,
Boston, Mass.
7. Health of the Community - 8
G. Fraser Brockington
J.A. Churenill, Ltd.,
104, Gloucester Place,
London, W.1.
8. Handbook of Pediatrics - 8
Henry Silver, Kerk, Bryn,
Lange Medical Publications
Los Altos, Calif.
9. Tropical diseases for Nurses
(don't know author or publisher) - 9
10. First Aid - 9
American Red Cross
11. Control of Communicable Disease in Man - 9
A.P.H.A. Publication
12. Children in the Tropics
By Jellife
Butterworth and Co.
13. Physiology of Medical Practice
By Guild, Warren, H.D. and Potter, Samuel
Med. Con. Press
14. Child Nutrition in in Developing Countries
Office of War on Hunger
USAID - US. Dept. State
Washington, D.C.

15. We need a basic book on Growth and Development (please advise)
16. Quick reference to pediatric Resuscitation
Author?
Publisher?

B. Film

1. Pediatric Physical Examination
J.B. Lippincott Co.
P.O. Box 777 HOC60
Phild., Pa., 15175

I would like to get the series of Bates film on Physical Examination on loan such as

- Exam of heart
- Exam of chest
- Neurological Exam
- Exam of head, neck, E.N.T.
- exam of abdomen
- Exam of Back and Extremities
- Exam of Eyes.

C. Cassette tapes needed.

Cassette Tapes on Heart sounds with text book:

Cassette tapes on lung sounds with textbook

D. Other materials needed

Reprints from American Journal of Nursing, Education Service, 10 Columbus, circle, N.Y.

"Programmed Instruction

Patient assessment:

Exam of Ear. AJN March 1975

Exam of Head and neck May, 1975

Exam of Abdomen September, 1974

Taking a patients history February, 1974

*There are others, but I don't know the name and Editions from which they came except neurological skeletal

E. Equipment

Complete set of diagnostic equipment for each student.

sphygmomanometer with child's and adult cuffs.

Stethoscope

Turning fork

Tape measurer

Rectal and oral thermometer with holder

Otoscope, ophthalmoscope, specula of different sizes.

Percussion hammer

Tongue blades

Cassette tape recorder and cassettes with extra batteries.

PROJECT PROPOSAL FOR PEDIATRIC NURSE 18
PRACTITIONER 2

INTRODUCTION

For the past 7 years University of California, Santa Cruz has worked with the Gambian Government in promoting the health of mothers and children through inservice training programs, on the job training of auxiliary staff, participant training abroad, and more recently through the training of Community Health Nurses.

The Gambian government is expanding and upgrading the maternal and child health centers located in various regions of the country. Nursing Sisters and Nurse Midwives are transferred from the hospital setting and assigned to MCH centers for a tour of one to two years. They are expected to give primary care and continuing supervision to mothers and children at the MCH centers with minimal and infrequent physical supervision or teaching.

Their educational preparation has been a hospital based 3 year nursing program with additional preparation in midwifery and pediatrics. Some have had special experiences in tropical nursing. However, the educational preparation has not included medical and diagnostic skills which are needed in order for the nurses to function in the extended role in the health center, often without medical supervision. In the Gambia approximately 50% of the children die before the age of 5 years and the critical ages are 0 to 2 of age. The morbidity rate is also high. Health education programs are relatively few and reach only a very small proportion of the population.

The proposed project is to prepare the nurse midwives assigned to the identified MCH project centers to work in an expanded role in primary pediatric care. Emphasis will be placed on the identification, management including treatment and education, and evaluation of pediatric problems using available health resources for promoting family and child health.

It is believed that both quality and quantity of work will be improved through the use of the specially prepared pediatric nurse practitioner at the MCH centers.

General Objectives

To prepare the participants to work interdependently collaboratively with other health workers to give primary care, physical assessment to children under five years of age.

Behavioral Objectives

Provide a four-week in-service program for nurse midwives so they can:

1. Assess health status of the child by taking a health and developmental history and performing a complete physical examination, using techniques of observation, inspection auscultation, palpation and percussion and by using instruments such as stethoscope, otoscope, etc.
2. Manage minor trauma and common childhood disease.
3. Assess normal growth and development and to recognize deviations from the normal.
4. Identify health problems of the child and to develop a plan of action to either treat the child in the health center or make referral to the appropriate resources.
5. Provide counseling and relevant health instructions, to families in reference to the care of the child at home.
6. Elicit pertinent information and utilize standardized records and reports in care of the child.

- 2 -

7. Can identify and use community resources available for the care of the child and family.

Description of Course

The curriculum is built on existing nursing knowledge and skills, and expands nursing by teaching participants to use diagnostic skills. It is a 4 week course which includes didactic and clinical teaching and discussions and case presentation.

The 4 week will consist of classroom sessions and practical on-the job training.

The emphasis of this course will be on physical assessment of children under 5 years of age.

The course will be flexible. Individual needs of each participant will be taken into consideration.

The instructions will be given at Basse Health Center, Bamsang Hospital, Mansa Konko Health Center and Banjul, New Street Clinic and outreach clinics of these four facilities.

Patient Load and Types of Patients

The initial case load must be light enough to allow the practitioner time to develop her skills and efficiency and must be large enough to allow her to learn to set priorities. She will progress from the simple case to more complex cases if possible and examine both well and sick patients.

Qualifications of Participants

State registered and State certified midwives (nurses) employed by the government of the Gambia at the four designated training sites.

Length of course - 1 month (4 cycles)

Number of Participants per cycle - maximum 4

Educational facilities

Training space at each of the 4 facilities.

INPUTS BY UCSC

1. ^{Training} Traubub₂ equipment and supplies.
2. 2 Pediatric training consultants
3. Lodging at Basse, Mansa Konko, Banjul.
4. Cook's Salary

INPUTS Gambian Government

Trainees time, salaries
Backup-time, salary/per diem
Vehicle, petrol
Driver-time, Salary/per diem
Bamsang Caravan
Training Space
Diagnostic equipment for center.

Content of Course

1. Orientation
2. Role of pediatric nurse practitioner in primary care, re-orientation etc
3. Principles of interviewing and counseling and teaching
4. History taking
5. Principles of physical examination of infant and the child
 1. Observation of general health and nutritional status
 2. Skin, hair
 3. Lymphatic system
 4. Head, face, neck
 5. Eyes
 6. Ears
 7. Nose
 8. Mouth
 9. Chest Lungs
 10. Heart
 11. Abdomen
 12. Genitalia
 13. Skeletal system, spine and extremities
 14. Neurological examinations
6. Pediatric data base problem oriented and records.
7. Growth and development 0 through 5 years.

Childhood Health Problems

- A. General principles, assessment and management and approach to the
 1. Well child
 2. Acutely ill child
 3. Child with chronic illness
 4. Child with handicaps.
 5. Premature child - twins etc.
- B. Common childhood infections, management, prevention and health education
 1. Viral
 2. Bacterial
- C. Eye diseases
- D. ENT
- E. Genital - urinary tract diseases including prevention, treatment and health education.
- F. Cardio vascular
- G. Gastrointestinal
- H. Respiratory tract diseases
- I. Blood diseases
- J. Common parasitic diseases
- K. Metabolic diseases
- L. Muscular skeletal disease
- M. Trauma, accidents, surgical emergencies
- N. Pediatric medical emergencies
- O. Malnutrition and failure to thrive
- P. Skin, Hair, Nail diseases.

Evaluation

Pre-post assessment

Clinical Experience

- a. Observation of clinical work by clinical instructors
- b. Review of clinic records

On going evaluation

The practitioner should be reevaluated at the end of 1 month following training.

7.

FINAL REPORT OF CYCLE I, THE GAMBIA
HEALTH PROGRAM PLANNING AND TRAINER DEVELOPMENT

This report has four sections:

- I. Summary
- II. Review of training session activities and materials
- III. Recommendations
- IV. Appendices:
 - A. Goals and objectives;
 - B. Revised design;
 - C. Initial response to request for training;
 - D. Questionnaire;
 - E. Response to questionnaire;
 - F. List of participants.

I. Summary

A. Sequence of Session.

Based upon a request from E. M. Samba, M.D., director of Medical Services, made through Dr. Paul Wilson and Ms. Pat Goodale Logan, M.S. in July, 1979, we began planning for a training program development workshop for mid-managers from several ministries concerned with Primary Health Care.

An initial document outlining what we understood the training needs to be and what we could offer in a 2-week course and a preliminary needs assessment questionnaire were sent to Dr. Samba via Dr. Paul Wilson (Appendices C and D). These documents formed the basis for discussion, agreement to hold the training, and gave us a written list of training needs upon our arrival in The Gambia.

Dr. Wilson had training program responsibilities for a MCH/NP cycle ending in Benin, and a MCH/NP cycle beginning in Senegal as well as the Health Program Planning and Trainer Development session in The Gambia. Dr. Samba was out of the country for most of the time prior to the session. As a result of these absences, Gary Leinen, who works for Project Concern, was given much of the responsibility by Dr. Samba and Dr. Wilson for making sure candidates were

selected and informed of the workshop. He also made arrangements for facilities and contacted support services.

During the preliminary planning in Santa Cruz, John Richey and James Williams developed a two-week design which was based on the teaching of basic planning skills, basic management principles and the use of training as a form of implementing program goals (see Appendix A for session goals and objectives).

The few days in The Gambia before training began were spent revising the Agenda based upon need for schedule changes and upon the information which was collected from the completed needs assessment questionnaires. Incidentally, 100% of the questionnaires were returned.

Immediate difficulties noticed by the trainers included discomfort from heat and humidity, high noise level in training room because of the need to operate a diesel generator, three too many participants, and a missing box of materials which included agendas, evaluation material, handouts on objectives and other training aids which could be replicated.

Training began on Sunday, October 7, with a brief reception sponsored by the U.S. Embassy. The evening session was long with much discussion on the part of participants about break times, the necessity for time away from training, displeasure with residency requirements, need for stipend to attend training.

Difficulties expressed by the participants stemmed from the fact that 1) several of them were informed that their attendance was required at the workshop just

a few days before the workshop began, 2) most of the participants had not attended a residential session before and did not understand the reasons and advantages of such a session, 3) several of them expected stipends to be paid to them while they were attending the workshop, and they were disappointed when they discovered that such payment was not forthcoming, and 4) many of them expected air-conditioned facilities.

Monday, October 8, was a little slow. Group issues were discussed and most were resolved by Dr. Wilson during discussions with a group-appointed committee.

Tuesday, October 9, moved into management content areas with group problems mostly resolved. Food service was still under discussion, but a participant committee talked to the kitchen staff and all went well thereafter.

Wednesday, October 10, - moving smoothly now. Richey and Williams confronted the group in a very mild manner last night, suggesting that individuals who did not find the training useful should choose to leave with no repercussions or hard feelings. The trainers heard no more complaints. The food improved and small management teams began work today with excellent results.

Thursday, October 11, and Friday, October 12, - group taking over responsibility by now for its own behavior. Small management and training groups doing well, and there are no problems concerning basic concepts. Participants have become tolerant of the informal discussion-based training style and workshop format and have become mildly enthusiastic. Richey and Williams have revised design until it was comfortable to both participants and trainers.

Design revisions (see Appendix B for revised design) were based primarily upon participants' stated needs for a regular schedule so that they could take care of unavoidable family concerns and work at their ministries. Usually, during residential sessions, break times and evening sessions are dependent upon work flow, enthusiasm of the group and other changeable factors.

Saturday, October 13, Sunday, October 14, - more participants showed up for Saturday and Sunday afternoon sessions than expected. The mornings were free, as was Friday afternoon. We had an amazing work session. It has been the experience of the trainers that weekend sessions are poorly attended and work is done more slowly than during the week. This weekend was an exception to that experience because everyone except two participants was on time for all sessions and the groups worked diligently on their various tasks. From Sunday afternoon through the end of the training the group worked past the scheduled break time for every session. The planning and budget charts as tools for planning and evaluating program work were a great success and obviously useful to participants.

Monday, October 15, - began emphasizing training as a method of program implementation. The group was moving very quickly through material and the trainers were giving brisk 10-15 minute introductions to exercises, and small groups divided into either management teams or training teams were doing tasks and making presentations.

Tuesday, October 16, Wednesday, October 17 - completed remainder of training section and began moving into detailed budget forms and charts. We now had management and training models to use as examples. We did not complete our objective of having completed plans by the end of the session,

but the concepts and tools for doing so are well in place.

Thursday, October 18 - budget presentations were excellent. Groups worked well together and the material showed several examples of innovative thinking and evidence of late night sessions. Evening session self-assessments as teachers and managers went very well. The self-tests were popular and provoked lively discussions.

Friday, October 19 - a bit confusing because Dr. Samba showed up one hour before the scheduled time for presentations. We simply had him give out the certificates and proceeded with evaluations. The final exam was a huge success.

B. Evaluation of training

The goals and objectives were a bit too ambitious considering the distance the trainers were from the offices represented at the session, the level of responsibility held by participants, and the length of the workshop.

General objectives 1 & 2 were accomplished, and about 50% of 3 & 4 were completed. One of the chief benefits of the training was the cross-ministerial communication which took place during exercises and especially during informal sessions. By listening to the conversations, the questions being asked and the alliances being made, the residential requirement was justified and its value was confirmed for the trainers.

Some of the teaching games and exercises seemed somewhat irrelevant in the context of Gambian culture, but, when asked, participants were able to articulate how each exercise could be changed to be useful in their own

situations. In the future, it would be useful for training designs to be reviewed by Gambians in order to reduce culturally irrelevant topics and exercises.

The design worked well. There were some areas which didn't seem important upon arrival in the Gambia, and they were dropped or abbreviated. Other areas needed some expanding, but there was too little time to do this properly and the original design was followed.

The participants who had received pediatric assessment training from Dr. and Mrs. Wilson came prepared to work hard. Many of the other participants expected a stipend to attend and looked forward to two weeks' vacation from work. General response from the participants was that they worked very hard; it was valuable to them on their jobs; and that the training workshop was completely different from other workshops they had attended.

We used a large number of handouts as background material, for reading assignments and for reference upon participants' return to work. Without exception, participants indicated their appreciation for this material, but also indicated that there was difficulty with vocabulary, and that there was too much material for the time allowed for reading and discussing.

Participants were very much involved in the work done during the session. However, no Gambian was involved in the planning or organization of the workshop. The trainers felt that much of the displeasure felt by participants during the first few days of the workshop could have been alleviated if Gambians had been involved at every stage of the workshop planning.

II. Review of staff, activities and materials

1. Materials: There were sufficient handouts even though there were more than 20 participants. The missing materials in the lost box, by chance, were chiefly those which were planned for use during the last part of the workshop. Most of them could be replicated and there was time to write substitutions. The chief disadvantage was that all evaluation forms and examples were in the box and all the handouts on training methods were in the box as well. These two items could not be duplicated.

There was no practical way of checking the effectiveness of the handouts. The trainers observed that most of the people did most of the assigned reading although the load was too heavy and not all the reading was completed. Generally, participants indicated they appreciated the handouts as reference material, but whatever good may result from their reading and subsequent use will remain unknown to us. Several participants did, however, complain that the lights were going off too early and that circumstance kept them from reading as much as they would have chosen to do.

Subject material from handouts which we did use in group discussions or assignments, seemed appropriate and well understood by most of the participants.

2. Staff: The two trainers worked quite well together. This was the first time Richey and Williams had worked as a team. It was also the first time this particular session was offered. They operated singly during many presentations, although they were comfortable allowing each other to participate in presentations and calling on one another for help, examples, other questions, and so forth. They are quite compatible from a training standpoint as their styles are quite similar, although Mr. Richey is slightly more formal and structured, and Mr. Williams a little looser and more group

oriented. Occasionally, trainers' language was a bit too technical and laced with jargon, and once or twice they had difficulty in giving clear instructions. Both trainers used the vehicle of newsprint effectively during sessions. Although decorative posters were not made, there did not appear to be any disadvantage at all to not having them.

3. Consultants: Dr. Wilson wasn't available at all times because of his trip to Dakar and general business in The Gambia. Because he wasn't staying at the hotel, and because he would be gone during the crucial middle days of the session, the trainers decided it would be best if he functioned as an administrator and problem solver. He was very tough in dealing with the problems which arose early in the training and, as a result, we had none later in the training. Dr. Phil Gowers, assistant to Dr. Samba, gave the initial Primary Health Care pitch and did a good job. Training staff both assumed that he would be a useful resource later in the training, but we simply ran out of time and could find no appropriate slot for him.

4. Participants: Out of the original list of 23, 22 showed up. Of those, one left early and another attended so infrequently that staff chose not to award him a certificate and suggested to him that he not show up on the last day. Of the remaining twenty, there were two or three for whom the workshop seemed useless because the workshop material was simply inappropriate for them on their jobs. They had neither training nor management responsibilities. The remaining participants seemed to benefit from the workshop and, as a group, moved as fast as any group of equivalent size and background that either trainer has worked with. The staff were of the same opinion that, if this group were representative of educated Gambians, they were a much underestimated lot. Staff were very impressed with the amount of work done, the skills

exhibited in working in groups, the hours spent working, the presentations made, and the use to which members of the group put the free time available during the residential model at the hotel.

Gary Leinen did as good a job as could be expected in helping choose candidates. A committee was formed from Ministry of Health staff, and recommendations were made to various department heads and to other ministries. They went over the 20-limit by 3, and the position of the participants in their own hierarchies was too low, with two exceptions, but that seemed to be a function of the supervisors who chose them. Ideally, the trainers should be in direct communication with the units involved and be able to answer questions regarding selection criteria.

Many of the participants expected a holiday and were not prepared to work. The two individuals who quit during the session were among that group. The remaining individuals quickly understood the style of this workshop and began working after the first few days.

The group had some settling-in problems of irregular attendance, too much beer being consumed during session hours, and malaria. Everything seemed to work itself out nicely in the group except the malaria attacks.

5. Structure: Dr. Wilson was great and supportive, and all administrative tasks got done on time. (When Dr. Wilson was out of town, Mrs. Wilson came by to check in so we were never out of communication.) Oumie Gaye did a good job but charged a lot for the secretarial services. The MCH office

apparently promised Dr. Wilson support but didn't follow through. The training staff felt participants should be advised to take notes and provide access to newsprint after sessions and only use turn-around duplication of "off the walls"* when we have control over the support staff and can regulate quality, quantity, time and be available to answer questions and edit. Even with the disadvantages, participants were impressed that things were, indeed, typed and returned, although after a review of the materials, staff doesn't believe the quality was worth the price.

6. Aids: Two easels, one at Bungalow Beach, one at Wadner Beach, both functional, and we only used the one in session. The other was kept at training staff rooms and used for making newsprint sheets prior to presentations and for individual sessions with participants.

7. Facility: Through no fault of theirs, the weather was atrocious. It was hot and humid. The rooms were airless, the training room had fans, but because of the diesel generator just outside a window it was impossible to hear across the circle. The generator was required because The Gambian Utility Company could not deliver power. We moved training to an air-conditioned dining room which was tolerable in terms of temperature but ridiculous because it was too small. Almost all group activity took place in the open air under roof section of the bar which was adjacent to the dining room. The whole arrangement was clumsy but everyone was tolerant and we had no major problems with the facilities.

The hotel staff was flexible and accommodating and seemed to have no difficulty adjusting to our changing rooms, changing menus and the like. An air conditioned training room is a necessity to sustain the hours of work we did.

*Materials produced in training, recorded on newsprint, posted on the walls during session. Later this material is typed, duplicated and given to participants as an alternative to individual note taking.

8. Accommodations: Rooms comfortable enough but weather intolerable during the first week and parts of the second.

9. Food & Refreshments: Food changed after Admyre Monday, a participant chosen by the group to be a spokesperson for menu adjustments, took charge and was very firm with the cooks. Trainers thought that the implied threats were unnecessary, but she appeared to have fun and the food then included more vegetables and salads for lunch and dinner, and eggs for breakfast. The group also wanted rice every other day for lunch and wanted their big meal at midday. All these changes happened right after requests were made.

10. Dates: Two weeks is about right. The work could not be done in less than two weeks and participants would have difficulty leaving work for longer than two weeks. A solid break in the middle of the session might be better than the three half days we scheduled. Off season in The Gambia means the hot season, and more consideration might be taken in dealing with the weather and how it might affect the outcome of training or the expectations of how much material can be covered within the two weeks.

11. Travel: We lost a box which was our fault. Otherwise, travel was uneventful; airplanes were off schedule by several hours on several occasions, but that situation is normal for international travel, it seems. Local travel posed no problems.

12. Promotion: Communications in The Gambia are such that the final invitation, and certainly the participants' expectations, were not closely related to the original information sent by Santa Cruz to Dr. Wilson. The explanation of the training style and format in the training session proposed was not specific

enough; our requirements were not spelled out; the needs assessment questionnaire was too general and non-directive.

13. Time: We overprogrammed and lost some time at the beginning dealing with group formation and group issues. We could have used a few more evening sessions to do specific applications of exercises or general work during the day. Timing during the day worked out fairly well. The group liked long breaks, but many of those were spent discussing relevant issues, so time didn't appear to be wasted.

The pace the last week was a little fast, and trainers did not do enough examination of what was learned and what could be applied. Trainers left several nice beginnings of arguments regarding cultural applicability of training and management methods because of time constraints. The pacing of exercises was faster than usual. Because of group response during this workshop trainers will be more inclined to give out instructions and let the group plunge ahead rather than deal with many little steps and details as they have been accustomed to do.

14. Methods: The process of forming management groups and training groups with an initial input, group work and reporting or discussion, worked well. Handouts were sometimes out of sequence. One or two sets of instructions were garbled. The evening work seemed to be tacked on somehow, and it was sometimes difficult to relate it to the day's activities. The final examination was the best idea we've had in ages. Generally speaking, the design worked well.

15. Energy/Attention: Breaks the group took were longer than the staff intended. Mornings could have begun 30 minutes earlier but then sessions may not have gone until noon. Break time after lunch was good because it allowed at least a symbolic siesta period. Evening sessions of 2 hours were

about right. Staff could have provided a few more games and intensive group activities right at the first. Staff was a little slow about getting down to the difficult working stage. Disruptions from alcohol consumption, wandering in and out by participants, were quickly dealt with by the group itself.

16. Climate: Second week particularly good. To improve general climate, move training to temperate zone. More information should have been provided directly to the participants from training staff. Getting acquainted exercise should have been brisker and explanation of 2 weeks could have been given in more detail, and expectations of trainees been more explicit. This training moved from a level one beginning through level two and ended up partially in level three. We approached it at level two and could have begun it with more force and direction. The timing of transferring control of workshop from trainers to participants would still have been all right.*

Training staff feel Gambians should have been included in organizing and planning the training; the organization was done by Americans; the hotel was Swedish; the trainers were American. If we really want to do counterpart training we must begin from the very start and demand participation from the outset. Climate would have differed substantially if Gambians had helped with initial organization, arrangements and planning of the workshop. With every request for training, we should arrange for at least one counterpart from the initial planning day onwards.

* Level one signifies directed training controlled by the trainers. Particularly appropriate for groups with no experience in training sessions. Level two represents shared control where both participants and trainers assume responsibility for workshop content and direction. Level three implies that participants are directing their own workshop and using the trainers as facilitators, guides and resources.

17. Group Observations: Group was slow getting started because participants didn't really understand all the ground rules. Once procedures for complaints such as "Where Are We" exercise began, the group vented lots of frustrations-- immediately private agendas emerged. Several men really believed they had been cheated and demanded actual cash for attending the workshop; everyone assumed that the hotel was cheating them; many people were unhappy with the food. The mild confrontation worked. After training staff suggested that those who did not find the training useful leave, all but one individual straightened out. Staff should have been more directive at the very beginning and allowed group to form after setting initial discipline and ground rules.

Process and content were balanced in favor of content and that was correct for this group--especially the second week where everyone had settled down to work. Some more process items could be sandwiched in to provide additional trainers' tools.

Leadership emerged according to local ministerial system and social hierarchies. Although the culture and group were male dominated, the women of high work and social status held their own and, as is usual, did better than the men in several of the exercises. The women of lower status were ignored or treated with kindness and support. The group took care of its own members and only had difficulty with the individuals who came and left the sessions at irregular intervals.

Generally, the group used a comfortable version of consensus decision making which involved lots of arguing and shouting. It was time consuming but

effective and staff worked on reducing the length of arguments but not the intensity of the discussions because they both noticed that excellent questions were being asked and a lot of opinions and relevant information were being passed back and forth among participants.

There was a lot of competition between groups and that worked to staff's advantage in the sense that groups worked hard and did good presentations. It worked against staff in the sense that individuals presenting work defended the product vigorously and were reluctant to make any additions or change, no matter how valid they might be.

III. A. Recommendations regarding training session:

1. Counterparts should be chosen prior to training as a condition of the contract and should be involved from planning stages through final report.
2. Cambians should be involved in the organization and logistical arrangements of the training session.
3. Participants should have access to preliminary workshop material at least a week in advance of the session.
4. Participants should be interviewed by trainers prior to workshop, if possible. If not, participants should discuss training with someone familiar with style and content.
5. Participants should understand that upon their return to work they should assume responsibilities for utilizing skills acquired during the workshop and be supported by their supervisor in doing so.
6. Provision for in-service follow-up and for echo* training should be made prior to training session.

Echo training is a term borrowed from the National Nutrition Council of the Philippines and describes concept of inservice training in which the content of training is standardized but the methods and length of training vary according to the level of participant within the ministry structure. The in-service trainers are selected from the level immediately above the group of participants. The training begins at the policy making level and proceeds, in echo fashion, all the way down the hierarchy until it reaches community level.

7. Support service should be directly under control of training staff.
8. Expectations and groundrules should be given to participants before workshop begins.
9. Criteria for selection of participants should be much more specific.
10. A solid weekend break would be better than several half days.
11. More time spent on management and adult education theory would be useful.
12. More emphasis should be placed on developing peer learning systems which can be managed internally by Gambians without external assistance from donor agencies.
13. Level of participants, with a few exceptions, should be higher up within the ministerial hierarchy than were sent to session.

B. Recommendations regarding further work in The Gambia.

UCSC, because of length of time in The Gambia and experience with health related training, could be used: 1) as training broker for Ministry of Health. Upon request and based on needs, UCSC could either perform required training or arrange for training from another institution and monitor work to insure quality; 2) to continue periodic cycles of training sessions already proven useful; (i.e. TOT, pediatric assessment, nurse practitioner), using counterparts in each instance to insure training can continue indefinitely; 3) to assist in developing a health manpower plan which would be integrated with long-range health planning and which would provide basis for job changes and additions, training and educational requirements, distribution of personnel, pay schedules, and long-range budgets and specific requests for assistance from donors; 4) to assist in developing a comprehensive, in-service continuing education plan for health professionals and para-professionals.

APPENDIX A

Health Program Planning and Training Development

Cycle I THE GAMBIA

GOALS AND GENERAL OBJECTIVES

By the end of the two week workshop,

1. Participants have a clear understanding of how Primary Health Care (PHC) concepts are applicable to the Gambia.
 - 1.1. Participants are able to explain PHC concepts to staff members in their offices.
 - 1.2. Participants are able to explain interministerial connections required to implement PHC activities to staff members.
2. Participants understand activities required of themselves and of their unit staff in order to implement PHC activities.
 - 2.1. Participants are able to explain their unit's responsibilities regarding PHC
 - 2.2. Participants are able to describe activities in detail with the expected results from the activities.
3. Participants have a general PHC training plan for their unit.
 - 3.1. Participants have a written training plan including staff assignments and budget allocations for short and long term commitments to PHC training from their unit.
 - 3.2. Participants are able to integrate PHC training plan into the general plans of their unit.
 - 3.3. Participants have outlined a monitoring and reporting procedure for PHC work.

4. Participants have a training plan or design for members of their staff who will implement PHC activities.
 - 4.1. Participants are able to implement in-service training projects and individual sessions.
 - 4.2. Participants understand the steps of a non-formal training process.
 - 4.3. Participants have an outline of how to institutionalize on-going, in-service continuing education for their unit staffs.

APPENDIX B

TRAINING DESIGN

Sunday Oct. 7 , 1979

TIME	CONTENT	METHOD	MATERIAL/RESOURCE
3 pm on	check - in	Hotel Staff handle, trainers available to help	welcome A.P. (soap?)
5:30 to 7	Reception	allow milling about; have patience, it only is going to happen once	charge d'affairs Paul Wilson
8:00	Dinner	eat together: casual conversation	2 extra fans
9:00	Workshop Goals & Agenda	move to round space last item on today's agenda notebooks/ pens passed out explain purpose of workshop go through history of request & response John & Jim discuss their backgrounds & specify how they may be used as resources hand out goals & obj. sheets (written before needs assessment) This is our general agenda - what you will be doing during the workshop: This is a tabulation of 1st needs assessment forms: doesn't quite match discussion Assignments for tonight: . read handouts . read sections of Almatta . text is for reference throughout workshop adjourn	easel paper tape pens agenda g & ob. h.o. text (Davis) Alma Ata W.A.W. h.o. Ground Rules h.o. <input checked="" type="checkbox"/> 4? N.P. <input checked="" type="checkbox"/> General Agenda n.p. notebooks/pens

TRAINING DESIGN
HPP & TD
Monday, Oct. 8, 1979

TIME	CONTENT	METHOD	MATERIAL/RESOURCE
8:00 a.m.	Breakfast	Too early - too late? 7:30 maybe? Hour or Half-hour for breakfast?	let him know tomorrow a.m
8:45 a.m.	Formal Opening	15 min. speech	Philip Gower
9:00	Where are we? Agenda obj./Assmp today	1. explanation of "where are we," general directions 2. any questions or comments, observations? (problems?) ID & build resources:	WAW handout (h.o.)John give night before
9:30	Introduction to workshop	1. resource building and identification (name of exercise) 2. short pitch on purpose of exercise (John) 3. directions: (Jim)	John Jim
	John & Jim	<ul style="list-style-type: none"> a. pick someone you don't know or don't work with b. interview partner for 15 minutes, answer questions, but don't be limited by questions c. switch d. introduce each other to group e. questions: family, community, title, organization, special education, interest & talents (what they bring to training/workshop, what they want from training/workshop) f. trainer records introductions on newspaper g. newspaper posted; changed as needed; coffee and look at ourselves 	to do: Instructions on newspaper questions on newspaper set up <u>two NP sheets</u>
11:00	Goals Objectives Agenda Review of tabulation	<ul style="list-style-type: none"> 1. Post goals; read and answer questions 2. Post objectives; read and answer questions 3. Goals and Objectives on trainees' <u>expectations</u>; compare with participant expectations 4. go over agenda: This is what we plan to do for the 2 weeks 5. logistical questions: overnight (which is group decision), meal times, breaks, smoking, others. 6. go over groundrules, change if necessary and commit 	goals on newspaper objectives on newspaper Agenda on newspaper logistical? for trainers <u>groundrules on n.p.</u> John tabulation chart groundrules h.o.
12:00	Lunch	Informal - trainers sit  and at various places, break, lunch	

TRAINING DESIGN
HPP&TD

Monday, Oct 8, 1979

TIME	CONTENT	METHOD	MATERIAL/RESOURCE
00	Group building exercise	Blind walk: 1. elaborate introduction (Jim) 2. Blindfold partner --whom you would like to know better... 3. walk for 10 minutes - no sitting 4. talk about experience (questions pertinent to group/as guides) bridge: organization built on trust, knowledge of strengths & weaknesses, cooperation	11 blindfolds questions on n.p. Paul
:00	Organizational 3:00 3:20	1. introduction to organizations (45 min) 2. break into groups by agency (MOH in 2 groups) 3. chart your organization from top down to yourself and on to those whom you directly supervise 4. each group report: describe chart and general responsibilities of each unit 5. brainstorm commonalities of organization (trainer record) 6. discussion of organizational theory	John n.p. and pens for each group
:30	Review learning process (Reflections)	1. 1. We learn by doing and then looking at what we did 2. What happened today? 3. What did you learn? ask questions 4. How does it relate to the objectives? and discuss 5. How can you apply it? 6. Discuss reflections concept 7. Letting Machinery show:	Questions on n.p. (Jim) reflections h.o. (after exercise)

TRAINING DESIGN
HPP&TD
Monday, Oct 8, 1979 (continued)

TIME	CONTENT	METHOD	MATERIAL/RESOURCE								
5:30	Adjourn Staff Mtg.	Journal answers to questions 2-5 above recorded in journal a. keep it daily b. use for planning c. personal reations (questions # 6) d. There is no sharing of this document e. Use it to evaluate this session break to think and incubate assign reading - informal vs. informal	notebooks & pens format copies of h.o. The pgs. re. mgnt.systems								
7:00	Supper	Alternatives: 1) games, 2) technical assistance, 3) Conversation 4) continue day's work Human Bingo									
8:30	Evening Activity	<table border="1" style="width: 100%; border-collapse: collapse; margin-bottom: 10px;"> <thead> <tr> <th style="width: 25%;">Name</th> <th style="width: 25%;">Title</th> <th style="width: 25%;">Org.</th> <th style="width: 25%;">Rm#</th> </tr> </thead> <tbody> <tr> <td style="height: 40px;"></td> <td></td> <td></td> <td></td> </tr> </tbody> </table> Name you want on certificate	Name	Title	Org.	Rm#					
Name	Title	Org.	Rm#								

TRAINING ● GN
 HPP&TD
 Tuesday, Oct. 9, 1979

TIME	CONTENT	METHOD	MATERIAL/RESOURCE
		<p><u>Stuff for Quinnie</u></p> <p>Edit newsprint for Quinnie</p> <p><u>ISSUES:</u></p> <p>"Where Are We" n.p. the reflections from yesterday .h.o."WAW" sheet explain exercise ask for learnings from yesterday</p> <p>Post whole session (G & O & Agenda)</p> <p>Agenda & daily times posted: contract clarification only. (behavior tends to ratify an agreement in principle - English structure & law indicates agreement)i.e. observed rules</p> <p>O.R. G&O assure agreement "Methods for Accomplishing Goals"</p> <p>2nd level presentation organization charts.</p> <p>n.p. Where Are We - Housekeeping</p>	<p>our process of decision making learnings?</p>
8:45	Agenda		
9:15	Presentation of org. charts		
10:45	Break	Alternative Org. Structures	
12:00	Lunch		
1:30	Management Systems		
4:00	Break		
4:30	Reflections		
5:00	Break		
6:30	dinner		
8:00	Group Activity	Scrambled squares (Rules on newsprint)	

TRAINING DESIGN
HPP&TD
Tuesday, Oct 9, 1979

-1-

TIME	CONTENT	METHOD	MATERIAL/RESOURCE
Evening		<p>Issues:</p> <ol style="list-style-type: none"> 1. Trainers having problem by losing ; time - less able to fulfill contract 2. People coming in & out; discussions of problems residence 3. serious vs. not serious learners. Is the training worth the inconvenience it causes? Its' ok not to be a participant, no trap 4. every experience can be a learning experience 5. Assumptions Objectives Time for decision making 6. We are: <ol style="list-style-type: none"> a) responsible for accomplishing learning obj. b) under as reasonable conditions as possible 7. Offer <ol style="list-style-type: none"> a) program as ontracted b) prob. solv. techniques 8-9 Observations: Example: <ol style="list-style-type: none"> a) look for behavior vs. rhetoric b) cultural differences 	

TIME	CONTENT	METHOD	MATERIAL/RESOURCE
8:00	Breakfast		
9:00	Where Are We	<u>Insights, questions, summary of progress to date</u> <u>review, scrambled, squares - groundrules</u>	need; Agenda n.p.
9:30	Management Systems	<ol style="list-style-type: none"> 1) nine dot exercise 2) Management as innovative process 3) discuss last night's reading 4) managing programs based on scarce resources 	<u>"where are we" sign n.p.</u>
11:00	5 Steps of Planning	<p>What steps do you need to take when setting up a training program? (steps and definitions)</p> <p>Using:</p> <ol style="list-style-type: none"> A. Questions (why do training, how do you start, etc) B. Davis definitions (circular process) 	John
	<u>Small Group Task</u>	<p>Make up groups - Divide into 5 groups</p> <p>Each group takes 1 component and brainstorms 2 questions - how to do brainstorming</p> <ol style="list-style-type: none"> 1. Why is it important? to do, to write, etc 2. How do you do it? (How would you accomplish it? What steps would you take to accomplish this component 	Definitions on n.p.
	more specific?	<p><u>Record on n.p. and report to large group</u></p> <p><u>Process: What did you learn from this exercise?</u></p> <p>Summary: This is a skeleton for this workshop (put information into format understood by everyone; use group's own information begin talking about each step)</p> <p>Letting Machinery Show (LMS):</p> <ul style="list-style-type: none"> Why we used small groups gives group responsibility less boring <p style="text-align: right;">Group already knows we put into format</p>	NP - Circle drawing
			coat hanger, list everythi exercise . no edit . no discussion Instructions on n.p. no solutions

-203-

TRAINING I EN
 HPP&TD
 Tuesday, Oct. 9, 1979

TIME	CONTENT	METHOD	MATERIAL/RESOURCE
4:30	Feedback Discussion	1. How can you use it? 2. Everyone understands <u>groundrules</u> and how we will feedback in this workshop	<u>feedback</u> h.o.
5:00	Reflections		
7:00	Staff Meeting		
8:30	Supper		
	Optional Evening Activity		Reeding Assignment

TRAINING DESIGN
HPP&TD
Wednesday, Oct. 10, 1979

TIME	CONTENT	METHOD	MATERIAL/RESOURCE
		<p>Where Are We:</p> <ol style="list-style-type: none"> 1. broken squares insights 2. any other learning insights issues 3. "housekeeping" <ol style="list-style-type: none"> a) groundrules (no closure of in & out...) John re: in&out b) schedule c) Short version of names you like for this session d) caps on pens. <p>Management Systems:</p> <p>Review yesterday</p> <p style="padding-left: 40px;">9 dot etc</p> <p style="padding-left: 80px;">review planning process</p> <p>A. 5 steps of planning:</p> <ol style="list-style-type: none"> 1) needs assessment (finding problems) 2) goals & objectives (defning what you want & what you are going to do) 3) Plan or design (how you are going to work) 4) Implementation (doing it) 5) Evaluation (what happened & how can work be improved) <p>Coat-hanger exercise</p> <p>B. 5 Groups:</p> <p style="padding-left: 40px;">count by 5's take 1 component brainstorm</p> <p style="padding-left: 80px;">why is it important? what steps would you take to complete this component step?</p> <p style="padding-left: 40px;">n.p. & report</p>	<p>need: Agenda n.p. W.A.W. poster</p> <p>Groundrules on n.p. schedule n.p.</p> <p>Plan n.p.</p> <p>instruction & ?'s or n.p.</p>

TRAINING DESIGN
HPP&TD
Wednesday, Oct. 10, 1979

TIME	CONTENT	METHOD	MATERIAL/RESOURCE
8:00	Breakfast		
9:00	Where Are We?	Insights, questions, summary of programs to date, any changes in agenda	Jim
9:30	Goals & Objectives	1) Review F.B. & objective writing 2) Write Objectives for PHC: revise yesterday's objective and add more 3) Present program objective by teams: a) write objective individually, then b) as teams 4) Present individual objective by individuals: i.e., those <u>not</u> relevant to teams 5) <u>team</u> presentations & 6) individual presentations	
12:00	Lunch		
1:00	Managing watch for comprehension indicators	1) functions of management Gantt Chart/decision making/planning 2) how functions vary 3) time frames for planning and coordinating 4) accuracy of information in plans (conceptual: new ideas)	207
3:00	Charts	1) explanation 2) example in session 3) work on own <u>example tonight</u> Gantt Chart of yesterday's objectives	<u>Sample charts on N.P.</u>
5:00	Reflection Staff Meeting		Jim
7:00	Supper		
8:30	Activities	2 Step exercise & others (shift leadership)	

TRAINING DESIGN

HPP&TD

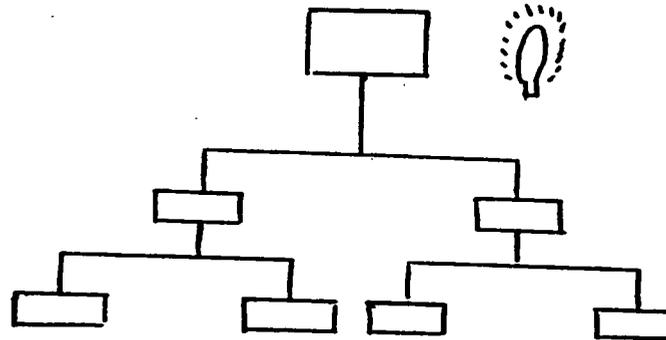
Thursday Oct, 11, 1979

TIME	CONTENT	METHOD	MATERIAL/RESOURCE
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Where Are We?

- 1) General
- 2) Reading - check
- 3) housekeeping

Needs Assessments



- 0. Need generated by idea
- 1. Need generated by external circumstances
- 2. Need generated by internal circumstances then rattified
- 3. Need gnerated by
- 4. Need generated by data

TRAINING  GN
HPP&TD
Thursday, Oct. 11, 1979

TIME	CONTENT	METHOD	MATERIAL/RESOURCE
8:00	Breakfast		
9:00	Where Are We?	Management_ Implementation=Training	
9:30	I. Plan for Training Ia. Needs Assessment	<p><u>TRAINER'S PLAN:</u> training staff as form of program implementation</p> <p>Discussion of Participants' Training Plan II assumption: everyone is going to do training - We have been talking training and planning. Break into 2 groups Let's talk your own program Present (our guidelines) <u>missing</u> Each participant spends <u>few minutes</u> answering following questions: individually</p> <ul style="list-style-type: none"> .Who is everyone you're thinking about training? .What does each group need to know? .Parameters (size, number, assumptions) .Any similar training needs among groups .Anyone need to have information sooner rather than later? .Any of these areas fit guidelines? .How long? .Participants let off work to attend? .How do you know participants need it? <p style="text-align: center;">Present general response. Trainer records this and group helps to narrow task Assignment guidelines:</p> <ul style="list-style-type: none"> .PHC related .can be repeated .for more than one person. .you have major responsibility <p>must be part of bigger program</p> <p><u>NEEDS ASSESSMENT</u></p> <p style="text-align: center;">2 concepts for doing Needs Assessment: Competency based Problem Analysis based</p>	<p>Point of breaking out</p> <p>guidelines h.o.</p> <p>needs assessment <u>sample forms</u> h.o.</p> <p>questions on n.p.</p> <p>training exercise</p> <p>directions</p> <p>possible: take general description&do two types of N.A.</p>
10:30			<p>Make up at least four mini-case problems</p>

TRAINING DESIGN
HPP&TD
Thursday, Oct. 11, 1979

TIME	CONTENT	METHOD	MATERIAL/RESOURCE
10:30	Needs Assessment	<p>-2 ways of looking at where you start -1st step of 5 components of training -Will concentrate this morning on Problem Analysis (Mager Chart)</p> <p><u>Explanation</u></p> <p>Example: MD + Medical Aide (look at situation and determine what you need to solve it) Here's the problem - what do we need to solve it? Any training needs in here? Any management problems?</p> <p>Mager chart</p> <ul style="list-style-type: none"> - How many are familiar with Robert Mager? - taken from <u>You Really Aughta Wanna</u> = helps separate training from non-training problems = rule of thumb - Is it skill deficiency? Training problem Is it personnel deficiency? Management problem = Go over chart (use examples) <p><u>EXERCISE (MINI-CASES)</u></p> <p>In addition to giving you the Mager tool, wanted to give you an opportunity to practice.</p> <p><u>INSTRUCTIONS:</u></p> <ul style="list-style-type: none"> - Break into 4 groups - Identify problems in each case -Label training and management problems -Record and report -Give idea of how you would proceed with training problems 	<p>ask for prob. from gip</p> <p>make up situation or ask group for one of their situations</p> <p><u>Mager's chart h.o.</u></p> <p><u>mini/cases or n.p./h.o.</u></p>

Note play
skip

TRAINING DESIGN
HPP&TD
Thursday, Oct. 11, 1979

TIME	CONTENT	METHOD	MATERIAL/RESOURCE
11:30	Reporting	<p><u>LARGE GROUP REPORTS BACK</u></p> <p><u>LARGE GROUP PROCESS</u></p> <ol style="list-style-type: none"> 1. What did you learn? 2. How can you apply it back home? (How did it help you work through problem?) 3. Anything happen in your group? Problem-solving? 4. IMS 	<p>Questions on N.P. point of clarification</p>
12:00	Lunch		
1:00	Needs Assessment cont'd	<p>-Introduction to Competency Model, 2nd method of Needs Assessment</p> <ol style="list-style-type: none"> 1. Methods blend in reality - you'll use parts of both competency and problem analysis methods 2. Both are common sense with jargon attached 3. We'll use two terms: <ul style="list-style-type: none"> * a. <u>Competency model</u>:description (list) of knowledge and skills needed to do a job ideally * b. <u>Performance standards</u>: steps of doing the job the best way: i.e., how skills and knowledge are used to do the job. <p><u>Competency Model Exercise "A"</u></p> <p>Individually: Go over competency sheet for trainer Cross out which doesn't apply Add other competencies Assess your own learning needs by identifying learning and non-learning needs</p> <p>Break into 2 groups</p> <ul style="list-style-type: none"> - Trainer records each participant's top 1 or 2 grp. or 3 <u>priority learning needs</u> - If you were a trainer with this information, how would you structure the training? <p>2 step exercise</p>	

TRAINING DESIGN

HPP&TD
Thursday, Oct. 11, 1979

TIME	CONTENT	METHOD	MATERIAL/RESOURCE
1:00 (cont'd)	Needs Assessment	Process: -What did you learn form this exercise? -How can you apply it? -Summary: $\frac{*Competency Model}{Actual Competencies} = Learning Needs$ $\frac{*Performance Standard}{Actual performance} = Learning Needs$	
3:00	Ib. Goals & Objectives	<u>GOALS & OBJECTIVES</u> - lecture -Definitions of goals and objectives (review) -Review guidelines for objectives, different terminology for each -Use 2 examples: Medical Aide doing BP } evaluate on criteria Counseling skills } for objectives -Differentiate between Program & Behavioral (training) Objectives Break into 2 groups Alone time: each participant, based on Needs Comp.Prob. Anal. Assessment, writes at least one goal and three objectives -Final outcome = results (what participants will be able to do) -Conditions=when it will be accomplished, under what circumstances -Criteria = to whose satisfaction/measurement/what standards -Use Illustrative Verb list Small group convenes and critiques G&O tasks (as many as time permits) -Group suggests: rewriting objectives } discuss cleaning up language, comparing to } against checklist, record on BP } criteria -Homework for tonight: finish G&O based on Needs Assessment -(refer to feedback guidelines)	Definitions h.o. Terminology h.o. Guidelines h.o. Illustrative verbs h.o. instruction N.P.

TRAINING SIGN
HPP&TD

Thursday, Oct. 11, 1979

TIME	CONTENT	METHOD	MATERIAL/RESOURCE
3:00 (cont.)	Ib. Goals & Objectives (continued)	Summarize G&O - Hierarchy of objectives-specific/general - Any questions? NA and G&O's -LMS	
5:00	Reflections & Adjournment Staff Meeting	-Assign Training Techniques for reading for tomorrow's discussion	Training techniques h.o. <u>Missing</u>

TRAINING DESIGN
HPP&TD
Friday, Oct. 12, 1979

TIME	CONTENT	METHOD	MATERIAL/RESOURCE
8:00	Breakfast		
8:45	Where Are We?	1. Evening exercise - Time pressure of last case	
9:15		<p><u>Objectives</u></p> <p>Another example of an objective Foot Thinning Prog, my examples</p> <ol style="list-style-type: none"> 1. Form groups - same as done for org. chart 2. write 1 program objective 3. Pick spokes person and report 4. re-write based upon critique 	
11:45	Reflections		
12:00	Break for Rest of Day	<ol style="list-style-type: none"> 1. Who took leadership 2. Was anyone silent 4. did anyone attempt to "organize" The group & resolve "conflict: what happened? 6. what could have been done to make the discussion more effective? 1.5 what happened 3. did anyone attempt to reach solution - what happened? 5. observations of group members' behavior 7. did anyone win or lose? 	

TRAINING DESIGN
HPP& TD
Saturday, Oct. 13, 1979

TIME	CONTENT	METHOD	MATERIAL/RESOURCE
12:00	Lunch		
1:00	Where Are We?		
1:30	Training Techniques	<p><u>TRAINING TECHNIQUES</u> - Brainstorm</p> <p>Introduction: definition of training technique</p> <ul style="list-style-type: none"> - divide into 2 groups -each person writes on NP: <ul style="list-style-type: none"> 1. name of exercise 2. general description (2-3 sentences) 3. purpose 4. best place it's used/works 5. cautions when using it - Put your name on NP - Each person reports to small group their training technique -List is typed and distributed to participants -Review reading from lastnight. <p>or: 1)define circumstances of planned training session, 2) outline most effective, unusual techniques how would you do it?</p>	<p>skipped, no materials-combined w. design writi not as varied but useful concept of 'non-lecture was no problem</p>
3:00	Ic. Training Design	<p><u>B R E A K</u></p> <p><u>TRAINING DESIGN</u> - lecturette</p> <p>Bridge: How do you decide which training technique to use? Go back to your objectives How to fit objectives into time frame Sample forms - use example from our design & objectives Flow/Sequence/Rhythm Bridging Design variables and checklists</p> <p><u>WRITE YOUR OWN DESIGN</u></p> <p>Write your own design Alone time. Be ready for presentation tomorrow</p>	<p>sample training design forms</p> <p>check list h.o. missing</p>
4:30 - 5:00	Reflection & Adjournment	<p>Optional evening activity: trainers help individuals with designs</p>	

Saturday Afternoon, Oct. 13, 1979

ISSUES:

1. Feedback vs. critique: discussion
behavior vs. content: look for consistencies
2. Ask for more time from the group
 - a. use evening sessions
 - b. combine sessions
3. Presentation & critique of objectives written in management and training small groups
4. differentiate between feedback about behavior and comments about the context of presentation
5. Ghant Chart: functions of management
6. assign reading: "training techniques"

Sunday Morning, Oct. 14, 1979

ISSUES:

1. housekeeping: one hour only for meals
go over ceremony with Paul
no guests at meals
2. continue functions of management
3. Use: Mager chart
trainer competency model
needs assessment form

Monday, Oct. 15, 1979

ISSUES:

1. Goals & Objectives presentations
 - training techniques
 - present samples of learning objectives
 - critique
 - discuss training techniques
 - brainstorm techniques available to teams

-select one which worked (critia on newsprint)

2. Training design or plan

-teams select objectives

-write a design for whole or part of session which will accomplish the objective

-present design

-critique design

-sample forms on newsprint

TRAINING ● GN
HPP&TD
Sunday, Oct. 14, 1979

TIME	CONTENT	METHOD	MATERIAL/RESOURCE
12:00	Lunch		
1:00	Where Are We?	<u>DESIGN CRITIQUE</u>	
1:30	Present Training Design	Break into small groups (whoever has not worked with someone they want to yet)	Option: present actual session
		Discuss piece of design (trainer records) Small groups discuss training designs, make criticism and suggestions re: time and pacing	
		<u>B R E A K</u>	
		<u>PRESENTATIONS</u>	
		Divide into 2 groups	
		Ask presenter what they want group to look for	
		Review instructions and observation points	Option: present in single large group
		<u>PROCESS PRESENTATIONS:</u> (in 2 groups)?	
		Generally: How did you feel giving and receiving feedback?	
		Hard to give it?	
		Hard to receive it?	
		How did you feel in your role?	
		Was it harder to do in front of your peers	
		Was it helpful?	
		OPTIONAL	
4:30	Reflections	<u>SMALL GROUP FACILITATION</u> - Lecturette (just like with presentations, spread this out over 2 sessions)	
8:00 pm	Id. Implementation	Bridge: Last session, as part of implementation component, discussed various roles (personalities) that emerge in groups. It was almost set up as impossible task because roles so extreme. One of the reasons in real life roles sometimes become problematic is that people get invested in a job, decision, or problem. Today want to concentrate on facilitating small group tasks	One evening's Exercise w. moderate success brought up cultural issues

TRAINING DESIGN
HPP&TD
Monday, Oct. 15, 1979

TIME	CONTENT	METHOD	MATERIAL/RESOURCE
1:00	Id. continued	<p>such as problem-solving or decision making to sharpen skills in this area in order to minimize unhelpful behaviors in groups =Play yourself in this exercise - no need to set up the impossible</p> <p>In large group: what are some techniques/ways to make decisions or solve problems in groups?</p> <p>Possibilities: Brainstorming Prioritizing Consensus decision making Pro-con or advantage/disadvantage list building Setting up criteria for solution Step by step method of solving problems</p> <ol style="list-style-type: none"> 1. Define Problem 2. Check for comprehension 3. Problem behind problem listed 4. Brainstorm solution 5. Which are new - or have been tried 6. Make decisions and contract <p><u>4 Phases of Small Groups</u></p> <p>Phase I - <u>Orientation</u> - beginning, new - anxious for things in common - learning re: one another - checking expectations, goals, acceptable rules of behavior</p> <p>Phase II <u>Exploration and Testing</u> -middle -less new, tentative -still exploring similarities, but also looking for differences -testing r or norms</p>	<p>small group problem h.o.</p> <p>Phases of Small Group N.P</p>

TRAINING  IGN
 HPP&TD
 Monday, Oct. 15, 1979

TIME	CONTENT	METHOD	MATERIAL/RESOURCE
1:00	Id. continued	Phase III - <u>Problem-Solving</u> - middle - familiar, OK - acceptance of similarities & differences - achievement of G&O's, expectations, tasks (WE WILL BE CONCENTRATING ON FACILITATING THIS PHASE OF A GROUP) Phase IV - <u>Ending</u> -end -familiar -accepting -summary + evaluation -application to future	

Facilitating Group Decision-Making

QUESTIONS:

1. If this group were given a million dalasis, how would you spend it?
2. What is the best method to get children to eat bitter tomatoes?
3. Decide whether there is sex after death
4. Build an agenda curr. review committee agenda for a meeting to discuss health education for children in public schools
5. Decide who to include on a rural health committee on fact finding
6. Develop a check-list of criteria for organizers of health conferences.

TRAINING DESIGN

HPP&TD

Monday, Oct. 15, 1979

TIME	CONTENT	METHOD	MATERIAL/RESOURCE
2:00	Group Facilitation (continued)	<p>Small Group Facilitation (cont'd)</p> <ul style="list-style-type: none"> - Break into small groups - Read problem and spend a few minutes thinking of how you would facilitate this decision - Round robin facilitation (start--stop action) <p><u>Stop Action Points</u></p> <ul style="list-style-type: none"> - Where is group going (what direction are you moving?) : - Any confusing points? - Any leaps in solving the problem? - What was effective in leading the group? <ul style="list-style-type: none"> - verbal - non-verbal - Other ways to do it? - Mood of group? (directionless? railroaded?) - Do people feel part of group or still individuals? - Any other feedback for facilitator? <p>LMS: Hard to make decision where to put this piece out of sequence re: evaluation; however, timing and flow better</p> <p><u>Instructions:</u> Many ways to make a group decision/solve problem Here are some possibilities</p> <ul style="list-style-type: none"> - brainstorming - prioritizing - consensus decision making - pro/cons or advantage/disadvantage list - setting criteria for solution to follow - step by step method of solving problems in groups <p><u>Break into assigned small groups</u> 10 minutes alone to come up with mini-plan for how you will facilitate the decision making process in this small group.</p> <p>In small groups, two roles: facilitator/leader participants</p>	<p>Problems from group: i.e., training or management</p> <p style="text-align: center;">+</p> <p>"silly" problems from trainers</p>

TRAINING DESIGN

HPP&TD

Monday A.M. Oct.15, 1979

TIME	CONTENT	METHOD	MATERIAL/RESOURCE
8:00	Breakfast		
9:00	Where Are We?	Problems, insights, observations, changes in schedule.	
9:30	Training Plans	<ol style="list-style-type: none"> 1) moving now from facilitating in-session training to managing training sessions (internal & external) 2) complete basic training design - put in training prob.contest 3) set up design tasks and activities in Gantt chart 4) critique 5) trainer illustrates an example of a line item budget and a program budget 	- graph paper
12:00	Lunch	<ol style="list-style-type: none"> 6) break into groups of 3 and write line item budget for at least one plan 7) present and critique (in 2 groups) 8) return to groups of 3 and write a program budget for at least one plan 9) present and critique (in 2 groups) 	
4:30	Reflections & Adjourn Staff Meeting		
7:00	Dinner		
8:30	Optional Evening Activity		

TRAINING DESIGN
HPP&TD

Tuesday, Oct. 16, 1979

TIME	CONTENT	METHOD	MATERIAL/RESOURCE
8:00	Breakfast		
9:00	Where Are We	Problems, insights, observations, changes in schedule	
9:30	Budgeting as an Evaluation Tool	<ol style="list-style-type: none"> 1) Budget variance analysis 2) compare actual budget to plan budget 3) go through examples from yesterday 4) set up situations when things don't go according to plan. 5) form same groups 6) analyze budget implications 7) report back and discuss questions 8) questions: <ol style="list-style-type: none"> a) dealing with variances as a supervisor b) assumptions on Theory X & Y c) how do you manage by objectives (discussion) d) objectives relating to performance 	Back on schedule as of today
12:00	Lunch		Theory X & Y test
4:30	Reflections & Adjourn		
	Staff Meeting		
7:00	Supper		
8:30	Optional evening activity		

TRAINING DESIGN
 HPP&TD
 Wednesday Oct. 17, 1979

TIME	CONTENT	METHOD	MATERIAL/RESOURCE				
	Ie. Evaluation (continued)	<p>- how are you going to evaluate your program? 1) take plan, budget, other material 2) chart plan:</p> <table style="width: 100%; border-collapse: collapse;"> <tr> <td style="border-right: 1px solid black; padding: 5px;"><u>Objective</u></td> <td style="border-right: 1px solid black; padding: 5px;"><u>Activity</u></td> <td style="border-right: 1px solid black; padding: 5px;"><u>Criteria</u></td> <td style="padding: 5px;"><u>Indicators</u></td> </tr> </table>	<u>Objective</u>	<u>Activity</u>	<u>Criteria</u>	<u>Indicators</u>	
<u>Objective</u>	<u>Activity</u>	<u>Criteria</u>	<u>Indicators</u>				

TRAINING DESIGN

HPP& TD

Wednesday, Oct. 17, 1979

TIME	CONTENT	METHOD	MATERIAL/RESOURCE
4:30	Reflections & Adjourn	<p><i>Evaluation (continued)</i></p> <ul style="list-style-type: none"> 3) <i>in groups: present plan, critique plan</i> 4) <i>Group critiques based on checklist</i> <ul style="list-style-type: none"> a) <i>does plan address questions on chart?</i> b) <i>is it reasonable, realistic, possible?</i> c) <i>when is evaluation to be done?</i> d) <i>will the evaluation give you the information you need?</i> e) <i>alternatives</i> f) <i>how are you going to evaluate to improve program?</i> <i>" " " " " " " " self?</i> 	

TRAINING DESIGN

HPP&TD

Thursday, Oct. 18, 1979

TIME	CONTENT	METHOD	MATERIAL/RESOURCE
8:00	Breakfast		
9:00	Where Are We		
9:30	Ie. Evaluation	<ol style="list-style-type: none"> 1) divide into two groups 2) review the session (week one and week two: 1 week for each group?) 3) using training design, agenda, goals and objectives, evaluation checklist 4) evaluate trainers using trainer checklist 5) select recorder and record comments 6) checklist: if you were going through this workshop again: <ul style="list-style-type: none"> . how would you change the design? . what was most useful, least useful? . what would you keep, change, eliminate, add (justify your choice) . were objectives met? . did we aim too high, too low? . were our expectations or assumptions accurate? . evaluate trainers: what helped what hindered 7) anything you want to say about workshop to trainers 	<p>training session checklist h.o. trainer checklist h.o.</p>
11:00	Report Back	<ul style="list-style-type: none"> - each group report to main group - review events and comments - add to evaluation sheets 	
12:00 or later	Graduation Luncheon	<ul style="list-style-type: none"> - arrange for presentation of certificates - speaker from MOH - distinguished guests - John Richey's plane departs at 4:30 	<p>Paul Wilson makes list and distributes invitations</p>

1) GOAL:

Every Participant can play w. a frisbee
Play = throw & catch

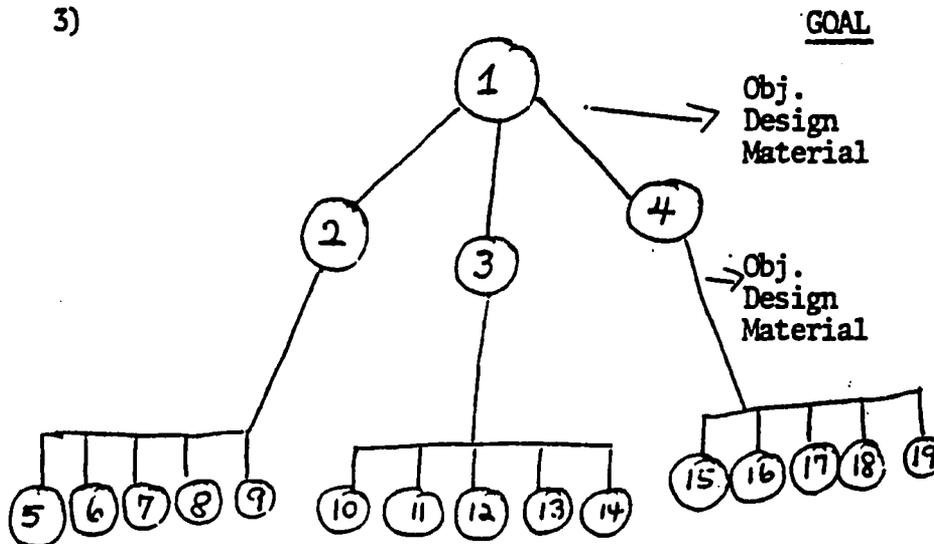
2) TOT OBJECTIVE ONE :

W/in 15 min: trainers (3)
have demonstrated correct
frisbee: 1) throwing techniques
by throwing frisbee to TOT trainer 3 x out
of 5 attempts so that trainer can catch the
thrown frisbee & 2) catching technique by
catching frisbee thrown by trainer 3 x out of
5 attempts. Distance thrown no less than 20 feet

TOT OBJECTIVE TWO:

W/in 30 min. after TOT at least 16 additional
people will have thrown & caught frisbees
according to TOT standards by having received
training from 3 TOT trainers

3)



TRAINING DESIGN
 Final Examination
 Thursday, Oct. 18, 1979

TIME	CONTENT	METHOD	MATERIAL/RESOURCE
10:30	Introduction	1) This is a frisbee 2) This is a snap throw 3) This is the plane theory	beach
10:32	Practice	Trainer throw to each team in	comfortable clothes
10:35	Demonstration	a) turn	frisbee (10)
10:40	Return	b) trn. throw to trainer in return	
10:45	Demonstration	c) trainer advises each individual	
10:45	Tutoring	outechnique	
10:45	Test	d) trainer conducts test by seeing if 3 out of 5 throws are successful w/ea. participant	

Training Program Development (TPD)
Leadership Training for Primary Health Care (PHC)
The Gambia

I. Assumed Needs

By the end of the training session, participants will have the following required or desired competencies:

1. Understanding of PHC.
 - 1.1. able to explain PHC concept to staff members in their office.
 - 1.2. able to explain own unit's responsibilities to PHC.
 - 1.3. able to explain interministerial connections vis a vis PHC.
2. Ability to plan PHC activities.
 - 2.1. understand unit's and staff members' responsibilities for implementing PHC activities.
 - 2.2. describe activities in detail with expected results from activities.
 - 2.3. write plan, both implementation and evaluation, including budget and staff assignments for short and long term commitments to PHC.
 - 2.4. integrate PHC plan w/regular unit plan.
3. Ability to implement inservice training sessions.
 - 3.1. understand steps of non-formal training process.
 - 3.2. develop specific plans with staff responsible for PHC activities.
 - 3.3. institutionalize ongoing, inservice education, i.e., continuing education for units.
4. Monitoring and reporting
 - 4.1. replication,
 - 4.2. allocation of resources,
 - 4.3. letting people know what you're doing.

II. Premise, Problems, General Objectives

Basic premises held by U.S. training staff are:

1. That PHC is a relatively new concept whose implementation is not widely understood.
2. The Gambian health system was adapted from the British system which was a curative, hospital, or clinic based system.

3. Implementation of PHC system will demand significant shifts in health practitioners' attitudes, types of care, budget allocations, and staff assignments.

Basic problems are:

1. PHC concept is not well understood by those who will be implementors.
2. How The Gambia will implement PHC system has not yet been specified.
3. Cooperation from other ministries with the Ministry of Health is necessary for implementation of PHC.
4. Health service delivery personnel and other ministry personnel require education and motivation in order to carry out development of PHC.
5. Substantial changes in present organizational structures and budgets are necessary before PHC can be effective.

General objectives of this training session are:

1. Participants can explain the concept of PHC to peers and supervised staff.
2. Participants can list activities required of themselves and their unit staff in order to implement PHC in The Gambia.
3. Participants have basic general PHC plan of implementation for their unit (plan will include staff assignments and budget allocations).
4. Participants have training design for at least one session for their own unit staff (session will be based on information and skills needed to implement their part of PHC system).

III. Resources

1. Materials needed at the training site:
 - 1.1. documentation regarding PHC (30) (Alma Alta Conference paper).
 - 1.2. newsprint (4 pads minimum).
 - 1.3. felt markers (2 boxes minimum) (mixed colors, no yellow).
 - 1.4. workshop textbook, meeting textbook. (30 ea.) (Davis)
 - 1.5. 30 of each of the following: pens, pencils, pads of paper, notebooks, attache cases.
 - 1.6. graph paper for planning (100 sheets minimum).

- 1.7. TPD workbooks (30).
- 1.8. Duplicating paper (mimeograph).
- 1.9. 3-hole punch or paper with holes to fit binders.

2. Staff

	NAME	ROLE	STYLE
2.1.	Jim Williams	Training Coordinator/TPD Trainer	low-key; technical orientation; produce training design; group facilitator.
2.2.	John Richey	Chief Trainer/Planning Specialist	intensive; very work oriented; budget and management specialist.
2.3.	Paul Wilson	Trainer/Medical Specialist	high key; program development orientation.
2.4.	E. M. Samba	Resource/Medical Specialist	intensive; PHC idea and concept development.
2.5.	Support Services	Typing and duplicating	one day turn around for materials.

3. 20 participants from several of the following organizations will be selected. Participants should have training responsibilities; be knowledgeable about PHC; be able to serve as a resource representing their own organization. Participants should answer needs assessment questions. Participants should be selected by sponsoring agency, MOH, and firm commitments should be requested.

- 3.1. School of Nursing and Midwifery.
- 3.2. School of Public Health.
- 3.3. School of Enrolled Nurse.
- 3.4. CHN School
- 3.5. Health Inspectors
- 3.6. Project Concern

- 3.7. Family Planning Association
 - 3.8. Pediatric Assessment Trainers
 - 3.9. Senior Nurse Midwife
 - 3.10. Agriculture Extension
 - 3.11. Adult Literacy Group
 - 3.12. Curriculum Development Center
 - 3.13. Social Welfare
 - 3.14. Red Cross
 - 3.15. Mission Clinics
 - 3.16. World Ecumenical Council (WEC)
 - 3.17. Catholic Relief Service (CRS)
 - 3.18. Rural Development Project
 - 3.19. Community Development
 - 3.20. Ministry of Economic Planning
 - 3.21. Ministry of Education
 - 3.22. Ministry of Agriculture
 - 3.23. Department of Hydromet
 - 3.24. Medical Research Center (MRC)
4. Facilities needed for intensive training include:
- 4.1. accommodations for staff and participants (room and board)
 - 4.2. training room large enough for 25 + people, away from sleeping rooms and dining area.
 - 4.3. space for small groups to work; separate rooms preferable.
 - 4.4. tables and chairs which can be easily moved.
 - 4.5. training area away from ministry offices.
5. Accommodations, food, refreshments.
- 5.1. African style cooking rather than European.
 - 5.2. coffee/tea breaks include some fruit.

- 5.3. record player or tape recorder with Baroque music. Useless unless of high quality.
 - 5.4. participants and trainers should make arrangements for residential session.
6. Dates.
- 6.1. Planning time: September 24-September 28 (U.S.).
 - 6.2. Planning time: October 3-October 7 (in country).
 - 6.3. Training session: October 8-October 19.
 - 6.4. Technical Assistance October 22-26.
 - 6.5. Travel time: October 1-2 to The Gambia
October 29-30 return to U.S.

IV Agenda TPD, Section One: Planning for Primary Health Care

MONDAY OCT 8	TUESDAY OCT 9	WEDNESDAY OCT 10	THURSDAY OCT 11	FRIDAY OCT
<ul style="list-style-type: none"> - Welcome and Introduction - Training session Overview - Informal training session climate setting - Expectations of participants and trainers 	<ul style="list-style-type: none"> - Where are we? - Management vs. Training Problems - Needs assessment - Defining scope of work to be done to implement PHC 	<ul style="list-style-type: none"> - Where are we? - Budgeting - Resource identification, development, allocation. 	<ul style="list-style-type: none"> - Where are we? - Supervision - Personnel Management - Problem solving 	<ul style="list-style-type: none"> - Where are we - Development of PHC plan
<ul style="list-style-type: none"> - What is PHC - Organizational structures relevant to PHC. - Individual PHC Plan to be developed - Individual Training Plan to be developed - optional evening sess 	<ul style="list-style-type: none"> - Organizational Planning - Roles - Responsibilities - Goals - Reflections optional evening session 	<ul style="list-style-type: none"> - Developing Work Plans and coinciding budgets - Reflections - optional evening sess 	<ul style="list-style-type: none"> - Evaluation - Budget as evaluation tool - Reflections optional evening session 	<ul style="list-style-type: none"> - Review of we - Adjustment o agenda - trainers available for consultation over week - Reflections - optional evening session

IV Agenda TPD, Section One: Planning for Primary Health Care

MONDAY OCT 15	TUESDAY OCT 16	WEDNESDAY OCT 17	THURSDAY OCT 18	FRIDAY OCT 19
<ul style="list-style-type: none"> - Where are we? - What is training - Training as Implementation Tool - Adults and effective Workshops 	<ul style="list-style-type: none"> - Where are we? - Goals & Objectives 	<ul style="list-style-type: none"> - Where are we? - Specifying activities, resources, type, style of training sessions 	<ul style="list-style-type: none"> - Where are we? - Evaluation of Training 	<ul style="list-style-type: none"> - Where are we? - Development of Training Plan
<ul style="list-style-type: none"> - Components of Training - Individual Training Plan - Needs Assessment - Reflection - Optional evening session 	<ul style="list-style-type: none"> - Learning Domains - Reflection - Optional evening session 	<ul style="list-style-type: none"> - Training Design - Training Techniques - Reflection - Optional evening session 	<ul style="list-style-type: none"> - Development of Training Plans - Reflection - Optional evening session 	<ul style="list-style-type: none"> - Review and Evaluation

V. Follow-up and Evaluation

Trainer will remain in The Gambia for one extra week to:

1. follow up training by providing technical assistance with individuals requesting such help in developing PHC implementation plans and in developing training session plans.
2. evaluate TPD by reviewing session with MOH, participants, funding agency staff; review facility, materials, etc.
3. write evaluation report of activity.

VI. Needs Assessment

The general plan preceeding this section was outlined based on correspondence from UCSC field staff and consultants. In order to design a useful training session, a preliminary needs assessment of participants themselves is often useful. Answers to the following questions will be helpful in designing the final detailed agenda for the session. Answers should be returned as soon as possible.

To be answered by each participant of the proposed training session:

1. What are the most important skills and information you, as a person responsible for PHC in your organization, require to perform your duties? Please list the five to ten most important items (skills and information).
2. What are the most important problems that you face as the person responsible for PHC implementation? Please list the five to ten most important problems.
3. Describe your job. What do you do?
4. What would help you do your job better?
5. What are the goals of your agency or office?
6. What specific topics would you like the session to cover?
7. Describe what you and your agency can do to build an effective PHC system.

8. If you are responsible for training in your office, describe the training activities for which you are responsible.
9. Whether or not you do training at present, describe the type of training you would like to see implemented in your agency.
10. Please describe any formal or informal training you have had in areas of a) medicine, b) management and/or c) primary health care.

Preliminary Needs Assessment for Workshop in Leadership Training for
Primary Health Care (PHC)

The workshop will be two weeks in length and has been planned to include two sections. The first part will emphasize Primary Health Care (PHC) concepts and the writing of plans to improve Primary Health Care delivery and educational services in The Gambia. The second part will focus on writing plans for training sessions for personnel who will be responsible for implementing PHC programs and activities.

In order to plan for training activities which will be useful and relevant to the participants, the training staff would greatly appreciate your answers to the following questions. Information thus received will be considered in planning the workshop, so an early return of the questionnaire would be helpful. Use reverse side if more space needed for responses.

Name: _____ Title: _____
Address: _____

1. What are the most important skills and information you, as a person responsible for PHC in your organization, require to perform your duties? Please list the five to ten most important items (skills and information).

2. What are the most important problems that you face as the person responsible for PHC implementation in your organization? Please list the five to ten most important problems.

3. Describe your job. What do you do?

4. What would help you do your job better?

5. What are the goals of your agency or office?

6. What specific topics would you like the proposed session to cover?

11. Please list any additional information or comments that you think would help make the workshop more useful to you.

APPENDIX "E"

Summary of Responses to Needs Assessment

Participant Name	No. 6	No. 8	No.9	No.11
1. Bah	1.PHC Status in Gambia 2.PHC "Approach" 3.PHC in other countries 4.how to get traditional healers involved	not resp. for training.	In-agency refresher in PH	no response
2. Browne	1.Immunization 2.Prevention 3.Treatment	response does not make safe	Maint.&repairing immunization guns refrigerators, freezers	how to get staff to cooperate
3. Cham	1.Supervision of PHC Staff 2.Measmt.of PHC Progr. Impact 3.Prog.Eval. 4.Progr. Implementation 5.Other PHC programs	N/A	1.Competency based training 2.Probl.oriented trng.	1. Poor learning 2. Case study method
4. Dampha	1.PHC within Gambia 2.Prog.Planning,control impenetation, role of tradition 3.Health Educ. 4.Econ.&Social disadvtg.	1.Manpower devlpmt. 2.role of traditional healers in practice	1.Manpower Devlpmt. 2.Role of tradit. healers & birth attendants	1.concern that topics will be limited by short session 2.emphasize family planning

Participant Name	No.6	No.8	No.9	No.11
5. Faatt	<ol style="list-style-type: none"> 1.Exposure to successful models in Gambia & elsewhere 2.why does health educ. fail 3.how to encourage innovations 4.Integration of services 	<ol style="list-style-type: none"> 1.Training Instructors to conduct workshops 2.QJT for staff 3.Training abroad for staff 	N/A	<ol style="list-style-type: none"> 1.encourage participation 2.discuss soc.-econ. barrier to family planning, poor diet etc 3.practical solutions
6. Gassama	<ol style="list-style-type: none"> 1.producation of visual aids 2.interaction with clients & agency staff 	1.use of new curriculum	N/A	N/A
7. Jawara, A	<ol style="list-style-type: none"> 1.Communication Skills group, dynamic adult learning theory 2.planning & design of training cause 	N/A	<ol style="list-style-type: none"> 1.Clinical issue Re: pregnancy & birth & young child 	<ol style="list-style-type: none"> 1. DMH interaction w. participants 2. Pannel discussions 3.Present paper re: group discussions
8. Jellow	<ol style="list-style-type: none"> 1.The PHC concept org. 2.Mgt. 3.Health Educ. 	N/A	<ol style="list-style-type: none"> 1.Prevent. Med. 2.Diagnosis & Treatment of diseases 	Management of Health Center
9. Jawara,K.	no response	no response	no response	no response
10. Kah	setting priorities in training motivating learning problem solving, planning & dev.trng. team approach to healthcare	<ol style="list-style-type: none"> 1.Curr.devlpmt. for nurses 2.teaching,evaluating & superv. nurses in clinical training 	<ol style="list-style-type: none"> 1.training aux.nurses 2.mgt.for nurses 	no response

-247-

Participant Name	No.6	No.8	No.9	No.11
11. Leineu	Did not complete questionnaire			
12. Marenah	1.Content Re: environmental sanitation etc PHC	no response	PHC & clinical cont.	1.Clinic Mgt.
13. M'Poai	Health Educ.	no response	1. Prevention 2. Health Educ. (Public) 3. relevance	no response
14. Admire Monday	a) Malnutrition b) causes of anemia	----	a) nutrition b)preventive med. c)when & where to seek medical aid d)importance of road to Health card.	----
15. K.L.N'Jie	a) PHC program b) creating village health committees c) upgrading health standards d) Funding latrines & wells	a) First Aid & treatment b) Day-care attendants c) village treatment workers	same as # 8	-----
16. Musa O. N'Jie	same as above			
17. Karamo Sanyang	-----	-----	a)formal training b)on the job trng.	a) participants give demonstrations & talks, followed by evaluation by colleagues

Participant Name	No.6	No.8	No.9	No.11
18. Sahon Sanyang	a) basic methods of teaching which would enhance work of rural community health workers	a) Public health b) Anatomy c) first aid d) elementary sociology	school is alright at present	None
19. Yandeh Sonko	a) well developed clinic b) well trained staff c) doing home visiting	a) public health nurses	a) nursing experience b) Sterile Instruments c) sterile delivery room d) "not home delivery"	a) training so we can train others
20. Adelaide Sosehe	a)Health Educ. b)behavioral change c)protection of the child d)prevention e)immunization f)nutrition g)government policy	a) in-service org. of courses, seminars, workshops	a) using personnel other than our own (Comm. & Health workers) b) practical training;eg. dev. simple technology for early disease detection.	a)innovative approaches to meet needs of young children b)mental health for children & families c)involvement of children in PHC
21. F.M. Gowe	a) improve env. health b) devel. facilities to control deseases common in nation	a) prevention of disease via immunization b) sanitation c) water d) MCH e) nutrition ed.	a) general health care for villagers b) environmental health visits c) MCH d)immunization e) health & nutrition f) statistical data g) follow-up of referred cases	a) carrying out PHC work b) knowledge to people c) nutrition program

Participant Name	No. 6	No. 8	No.9	No.11
22. Barboucar Touray	a) Planning of PHC program & activities b) mobilization of resources for PHC c) evaluation of PHC programs	a) Sociology b) research to comm. devel. assistant trainers	----	----

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SURVEY OF HEALTH PROFESSIONALS

THE GAMBIA, FEBRUARY - MARCH 1978

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TABLE OF CONTENTS

	<u>PAGE</u>
ACKNOWLEDGMENTS	
INTRODUCTION	1
TABLE 1.1 (NUMBER OF RESPONDENTS)	3
DEMOGRAPHIC RESPONDENT CHARACTERISTICS	4
EMPLOYMENT-RELATED RESPONDENT CHARACTERISTICS	6
TRAINING-RELATED RESPONDENT CHARACTERISTICS	7
ATTITUDES, PRACTICES AND EXPERIENCES RELATED TO HEALTH	9
ATTITUDES REGARDING DISCUSSION OF FAMILY PLANNING	14
KNOWLEDGE QUESTIONS	16
HEALTH PROFESSIONALS AND LANGUAGE PROBLEMS	18
COMMENTS REGARDING NON-QUANTITATIVE RESULTS OF QUESTIONNAIRE	19
DISCUSSION	21
TABLE 1 - BASIC EDUCATION	26
TABLE 2 - NATIONALITY	27
TABLE 3 - TRIBAL GROUP	28
TABLE 4 - SEX	29
TABLE 5 - AGE	30
TABLE 6 - MARITAL STATUS	31
TABLE 7 - RELIGION	32
TABLE 8 - KORANIC EDUCATION	33
TABLE 9.1 - SONS BORN	34
TABLE 9.2 - NATURAL	35
TABLE 9.3 - ADOPTED SONS	36
TABLE 9.4 - ADOPTED SONS LIVING	37
TABLE 9.5 - DAUGHTERS BORN	38
TABLE 9.6 - NATURAL DAUGHTERS LIVING	39
TABLE 9.7 - ADOPTED DAUGHTERS	40
TABLE 9.8 - ADOPTED DAUGHTERS LIVING	41
TABLE 10 - LANGUAGES	42
TABLE 11 - DIVISION OF EMPLOYMENT	43
TABLE 12 - JOB CATEGORY	44

TABLE OF CONTENTS

- 2 -

	<u>PAGE</u>
TABLE 13 - JOB LOCATION	45
TABLE 14 - TIME IN PRESENT POSITION	46
TABLE 15 - WORKING ASSOCIATES	47
TABLE 16 - LANGUAGE PROBLEMS	48
TABLE 17 - LOCATION OF HEALTH TRAINING	49
TABLE 18 - CURRENT TRAINING	50
TABLE 19 - POST GRADUATION TRAINING	51
TABLE 20 - INTEREST IN ADDITIONAL TRAINING	52
TABLE 21 - MOST COMMON ILLNESS - WOMEN	53
TABLE 22 - MOST COMMON ILLNESS - CHILDREN	54
TABLE 23 - INOCULATIONS	55
TABLE 24 - NUTRITION - VEGETABLES	56
TABLE 25 - NUTRITION - FRUIT	57
TABLE 26 - AVAILABILITY - MEAT, FISH, POULTRY	58
TABLE 27 - WHO NEEDS MEAT	59
TABLE 28 - COOKING VEGETABLES	60
TABLE 29 - INFANTS' DIET	61
TABLE 30 - INFANTS - WALKING	62
TABLE 31 - DENTAL CARE	63
TABLE 32 - DIARRHEA IN CHILDREN	64
TABLE 33 - CHILDREN'S ACCIDENTS	65
TABLE 34 - KWASHIORKOR/MARASMUS	66
TABLE 35 - BREASTFEEDING	67
TABLE 36.1 FAMILY SIZE - HUSBAND - BOYS	68
TABLE 36.2 FAMILY SIZE - HUSBAND - GIRLS	69
TABLE 36.3 FAMILY SIZE - WIFE - BOYS	70
TABLE 36.4 FAMILY SIZE - WIFE - GIRLS	71
TABLE 37 - BEST CHILD SPACING METHOD	72
TABLE 38 - INCIDENCE OF REQUESTS FOR FAMILY PLANNING	73
TABLE 39 - INCIDENCE OF REQUESTS REGARDING INFERTILITY	74
TABLE 40 - ABORTIONS	75

TABLE OF CONTENTS

- 3 -

	<u>PAGE</u>
TABLE 41 - DISCUSSING FAMILY PLANNING	76
TABLE 42 - RESPONSES TO KNOWLEDGE QUESTIONS	78
TABLE 43 - LANGUAGE PROBLEMS BY AGE	79
TABLE 44 - TRIBE BY LANGUAGES SPOKEN	80
TABLE 45 - LANGUAGE PROBLEMS BY TRIBE	81
TABLE 46 - LANGUAGE PROBLEMS BY LANGUAGE SPOKEN	82
TABLE 47 - LANGUAGE PROBLEMS BY DIVISION	83

SURVEY OF HEALTH PROFESSIONALS
THE GAMBIA, FEBRUARY - MARCH 1978

INTRODUCTION

This survey of health professionals employed by The Gambian Government was conducted by Dr. Harrison A. Stubbs for the University of California/Santa Cruz Maternal and Child Health project. The survey was conducted in February and March, 1978 in cooperation with the Ministry of Health of The Gambia. Among the objectives of this survey were the following:

1. To collect information on health-related attitudes and practices of health professionals employed by The Gambian Government.
2. To ascertain levels of general health knowledge among these professionals.
3. Establish baseline data for Gambian health personnel.
4. Stimulate thinking in various subject areas.
5. Elicit comments regarding perceived training needs.
6. Identify problems encountered by the professionals during health care delivery.

Prior to the inception of the data acquisition phase of this survey, the Ministry of Health distributed letters to all heads of staff at all health centers and hospitals in The Gambia. These letters announced the intention of the Ministry to conduct the survey and requested full cooperation from the health professionals. It was decided to contact and include in the survey as many formally educated Gambian government employed health professionals in the country as possible. The target population at this time was estimated to include 200 health professionals. Due to the time involved to reach remote dispensaries and sub-dispensaries it was decided not to attempt to include all of these individuals in the sample. However, individuals staffing these posts were included in the survey as frequently as possible. Ultimately, all of the health centers and both government hospitals of The Gambia were visited by Dr. Stubbs and all individuals contacted at these facilities were included in the survey.

It was deemed profitable to administer the survey questionnaire to large groups of health professionals in a supervised classroom setting as often as possible since it was believed that this strategy would encourage independent responses. However, it was often not feasible to adhere strictly to this protocol in the rural areas of the country due to the heavy patient load at some rural facilities or due to the participants being out "on trek." Some loss to follow-up occurred due to these circumstances even after revisits.

The survey instrument was developed with the cooperation of the MCH project team in The Gambia and Santa Cruz. The questionnaire was pretested in The Gambia and Santa Cruz and subsequently revised before being used for the actual survey.

The results of the attempts to include all appropriate health professionals in the survey are contained in Table I.1. The overt cooperation rate was near one hundred percent - there were only two actual refusals. The balance of the 48 individuals of the intended 207 of the target population were not included due to the following reasons:

1. 18 individuals were posted at locations (dispensaries and sub-dispensaries) too remote to be included in the survey. All 18 were either dresser-dispensers or public health inspectors.
2. Nurses were on maternal leave from their post. n = 5.
3. Nurses were currently being reassigned. n = 2.
4. Questionnaires were lost by respondents.
5. Individuals on-trek or on sick leave were unreachable after revisits.

The quantitative results of this survey are presented in Tables 1-47 of the appendix and all of these tables are discussed in the text of this report. Important results are recapitulated in the closing discussion and recommendations regarding program planning and implementation are suggested.

TABLE 1.1
 NUMBER OF RESPONDENTS AND PERCENT COVERAGE
 BY PROFESSIONAL TRAINING LEVEL AND DIVISION OF EMPLOYMENT^a

PROFESSIONAL TRAINING LEVEL	DIVISION													
	BANJUL		WESTERN		LOWER RIVER		NORTH BANK		McCARTHY ISLAND		UPPER RIVER		TOTAL	
	<u>n</u> ^d	<u>%</u>	<u>n</u>	<u>%</u>	<u>n</u>	<u>%</u>	<u>n</u>	<u>%</u>	<u>n</u>	<u>%</u>	<u>n</u>	<u>%</u>	<u>n</u>	<u>%</u>
Single Qualified Nurse ^c or Double Qualified Nurse	46	85.2	4	80.0	4	80.0	2	100.0	2	40.0	1	50.0	59	80.8
Dresser Dispenser ^b	26	86.7	3	42.9	2	66.7	3	50.0	6	50.0	1	50.0	41	68.3
Doctor	0	0.0	0		0		0		1	100.0	1	100.0	2	28.6
Student Auxiliary Nurse	22	100.0	0		0		0		0		0		22	100.0
Community Health Nurse	4	100.0	2	66.7	3	100.0	2	100.0	0		0		11	84.6
Public Health ^b Interpreter	17	81.0	2	40.0	0	0.0	1	100.0	1	100.0	1	50.0	22	68.8
TOTAL	115	85.2	11	55.0	9	69.2	8	72.7	10	52.6	4	57.1	157	75.9

^a Percent coverage is percent of potential respondents obtained

^b 18 Dresser-Dispensers and Public Health Inspectors were not included due to remoteness of post.

^c 2 refusals

^d Number obtained

DEMOGRAPHIC RESPONDENT CHARACTERISTICS

During the survey period completed questionnaires were obtained from 27 single-qualified nurses, 33 double-qualified nurses, 43 dresser-dispensers, 2 doctors, 22 student auxiliary nurses, 11 community health nurses (who had received their training at Mansa Konko), and 22 public health inspectors. This comprises more than three-quarters of all the Gambian government-employed health personnel assigned at the time of the survey.

Of the respondents comprising Table 1, 118, 76.1 percent, had completed at least high school as their basic educational preparation. All of the single and double-qualified nurses and 31 of the dresser-dispensers, 75.6 percent, had completed at least high school. A large proportion of the public health inspectors, 90.4 percent, stated that they had completed high school, but only 28.6 percent of the student auxiliary nurses and only one, 9.1 percent, of the community health nurses had completed high school.

Most of the health professionals, 144 or 91.7 percent, were Gambian by birth; and 11, 7.0 percent, stated that they were Gambian by Nationalization.² The cross categorization of professional training level by tribal group is provided in Table 3. Wollof was the largest tribal group cited by the respondents, 38.7 percent, and was followed by Mandinka, 20.7 percent. Thirteen of the respondents, 8.7 percent, were Diola and eight respondents, 5.3 percent, were Fula. The category of other tribes accounted for 26.7 percent of the respondents, and this group included 20 Aku, 8 Serer, and 3 Serahuli.³

Consistent with the categorization of health professionals existing in The Gambia, all of the nurses were female and all of the dresser-dispensers were male.⁴ Most of the student auxiliary nurses were female, 85.7 percent, and a similar proportion

² All numbered references are to the like-numbered Tables of Appendix I.

of the public health inspectors were male, 86.4 percent.

Overall, the participants in this survey are indeed relatively young. The median age for the entire group of respondents is less than 20 years of age. The majority, 88.5 percent, of the single qualified nurses were less than 20 years of age. The median ages for double-qualified nurses and dresser-dispensers were considerably higher, being 28.8 years and 30.0 years respectively.⁵ The data displayed in Table 6 is consistent with these age distributions. Nearly one-half, 55.3 percent, of the respondents were married. The double-qualified nurses and dresser-dispensers, both being relatively older groups, manifested the highest proportions of married individuals, 63.7 percent and 76.7 percent respectively.

The religious preference stated by a majority of all respondents, 61.6 percent, was Moslem and the remainder was nearly evenly divided between the Catholic, 17.6 percent, and Protestant, 18.2 percent, persuasions.⁷ Religious preference appears to be related to sex and/or age here since 76.7 percent of the dresser-dispensers (an older, male group) were Moslem and only twenty-six of the nurses (a younger, female group), 43.3 percent, were Moslem.

The participants in this survey were also asked to specify the extent of their Koranic education. Table 8 provides the results of this question, and it can be extrapolated from this data that the median number of years of Koranic education for dresser-dispensers was 9 years and was 5 years for public health inspectors. The median number of years of Koranic education for the 86 respondents was 6.3 years.

A total of 98 of the health professionals included in the survey reported having children (either natural or adopted), and the appendix Tables 9.1 - 8 provide the distributions of children by sex, natural or adopted status, vital status, and by professional training level of respondent. It can be extrapolated from this table that the average numbers of sons and daughters born is 1.94 and 1.63 respectively. There were a total of 28 adopted sons and 26 adopted daughters reported by the 98 health professionals with children.

Table 10 reveals that a majority of the health professionals, 77.1 percent, speak at least two other languages in addition to English. Not surprisingly, 49.0 percent responded that they speak both Mandinka and Wollof in addition to English. Relatively large proportions of the single-qualified nurses, 40.7 percent, and of the double-qualified nurses, 30.3 percent, reported speaking only Wollof in addition to English.

Employment-Related Respondent Characteristics

All health personnel included in this survey were asked several questions related to aspects of their current working situation and some interesting results are now presented.

The concentration of health personnel in the Banjul area is demonstrated by Table 11 where 72.6 percent of all respondents reported that they were currently assigned to the Banjul area. Due to the survey's high response rate for the country, the distribution of this table accurately reflects the actual distribution of health personnel in The Gambia. It appears from the distributions by professional training level portrayed in this table that the dresser-dispensers, double-qualified nurses and community health nurses are geographically more dispersed than the single-qualified nurses, student auxiliary nurses, or public health inspectors. (However, for the public health inspectors, this is perhaps an artifact of the data since public health inspectors in the field were usually the most elusive and difficult professionals to include in the survey).

Evidence that more highly trained personnel are more likely to hold positions of authority can be found in Table 12. None of the single-qualified nurses held supervisory positions, whereas exactly one-half of the double-qualified nurses were senior nursing superintendents, 20.0 percent; nursing superintendents, 26.7 percent; or principal nursing officers, 3.3 percent. All participants were also asked their present principal working location and the length of time in their present position. A majority of the respondents stated

that they spent the majority of their time working in a hospital, 56.2 percent; or in a rural health center or clinic, 26.0 percent.¹³ A large proportion of the single-qualified nurses, 85.2 percent, were hospital-based, whereas only 56.3 percent of the double-qualified nurses were hospital-based. More than one-third of the double-qualified nurses, 34.4 percent, reported spending most of their time working in a rural health center or clinic.

More than one-half of the respondents, 51.0 percent, reported having been in their present position more than two years.¹⁴ Twenty of the twenty-seven single-qualified nurses, 74.1 percent, had worked in their present position for at least two years and 57.6 percent of the double-qualified nurses had also worked in excess of two years at their present position.

Another means of characterizing the working environment of the health personnel is to ascertain the types of other personnel with whom an individual works daily. Responses elicited by question 18 have been categorized by professional training level and are contained in Table 15. Nearly one-half, 48.1 percent, of all participants reported working with non-professionals in their daily work, and 40.6 percent reported working with one or more doctors present. With the exception of the public health inspectors, very few of the health personnel included in this survey stated that they worked alone.

It has been noted that the population of The Gambia consists of several tribes, and it is therefore not surprising that professional health workers often encounter language problems in their work. Indeed, 68.2 percent of all of the respondents reported having language problems (other than English) in conducting their work.¹⁶ Further analysis and discussion of this finding is inappropriate here and is deferred until later in this report.

Training-Related Respondent Characteristics

The major location of health training was other than The Gambia for nine of the double-qualified nurses, 31.0 percent, but all of the single-qualified

nurses and community health nurses and most, 95.0 percent, of the student auxiliary nurses had received most of their health training in The Gambia.¹⁷ Overall, 89.4 percent of the health personnel reported having received most of their health training in The Gambia. At the time of this survey, 43.0 percent of the respondents stated that they were currently receiving training and this percentage was comprised of 9.7 percent at the School of Midwifery, 2.8 percent at the School of Public Health, 12.5 percent at the School of Nursing, and 12.5 percent at the Auxiliary Nurse Training School. Sixteen of the 27 single-qualified nurses, 59.2 percent, were then receiving training at either the School of Midwifery, 44.4 percent, or at the School of Nursing, 14.8 percent.

There is some concern that Question 21 of the survey questionnaire was misconstrued by a portion of the respondents. The intent of asking this particular question was to assess the extent of training in various subject areas which the health professionals had received after completion of their professional education. Table 19 then presents the frequency and percentage of individuals reporting having received training in the various subject areas since completion of professional education by professional training level.

An important area of interest for program implementation and health training planning is the assessment of the health professionals' perceived needs of and desire for additional training in various health areas. Table 20 reveals that the areas of additional training most important to all the health professionals were infant care, nutrition, and maternal care. The areas of least interest include record keeping, mental health, and infertility. Over one-half of all the single-qualified nurses expressed a desire for additional training in infant care and maternal care. The double-qualified nurses, however, were most interested in receiving training in teaching methods and

maternal care, both 45.5 percent, and family planning, 36.4 percent. Community health nurses were generally desirous of receiving additional training in all subject areas, but were particularly interested in maternal and infant care, nutrition, and communicable disease. Environmental sanitation, 54.5 percent, and communicable disease, 45.5 percent, were the subject areas of most interest for additional training to the public health inspectors. With the exception of the community health nurses, there was a lack of interest in receiving training in the areas of record keeping, mental health and infertility.

Attitudes, Practices and Experiences Related to Health

There is little or no hard data on incidence rates of various diseases for The Gambia country-wide and it is therefore informative to examine responses to three disease-related questions asked of the health professionals. Tables 21 and 22 contain the results of two questions designed to ascertain the most serious illness among women and the most common illness among children in the respondents' area of assignment. Malaria and maternal depletion were perceived as the most serious illness among women by 43.9 percent and 40.9 percent of all respondents.²¹ The various types of health professionals were somewhat divided on this question in that 72.0 percent of the single-qualified nurses and 62.1 percent of the double-qualified nurses believed malaria to be the most serious illness among women, whereas 45.7 percent of the dresser-dispensers, 62.5 percent of the community health nurses, and 76.5 percent of the public health inspectors stated that they believed maternal depletion to be the most serious illness among women.

A large proportion of the health professionals failed to respond to Question 28 which asks for the most common illness among children in their area of assignment. Fifty respondents, 31.3 percent of all the survey respondents failed to answer this question. Of all those responding, exactly one-half

stated that gastroenteritis was the most common childhood illness.²² Malaria was cited the most common illness by 29.1 percent of all respondents. With the exception of the public health inspectors, the various types of health professionals were unanimous in their recognition of gastroenteritis as the most common illness among children in that for each category of health professional, gastroenteritis was the most frequently cited illness.

There were 98 health professionals who stated that they had children, and this group was asked what diseases for which their children were currently inoculated. The tabulated responses to this question are presented by professional training level in Table 23. A more extensive discussion of this table is deferred at this point.

Questions 42 and 46-49 of the survey questionnaire relate directly to nutritional practices and attitudes and the results of these questions are summarized in Tables 24-8. A green leafy vegetable was stated to be included in the diet at least almost every day by 91.9 percent of the respondents, and 26.4 percent of the respondents reported including a green leafy vegetable in their diet daily.²⁴ Similarly, 25.8 of the health professionals reported including fresh fruit or fresh fruit juice in their diet daily, and 82.8 percent of those responding stated that fruit in some form was included in their diet almost every day or more often.²⁵

The protein sources of meat, fish, or poultry were stated to be available in the respondents' area of assignment for at least ten months of the year by nearly three-quarters, 74.3 percent, of the respondents.²⁶ Five respondents, 3.7 percent, stated that meat, fish, or poultry was not available and nineteen respondents, 14.0 percent, reported that meat, fish, or poultry were available for less than three months of the year. A related question was designed

to ascertain the health professionals' attitudes toward who has the greatest need for meat if the amount of meat is limited. The possible responses included a pregnant woman, nursing mother, two-year-old son, two-year-old daughter, or working father. There was general agreement among the respondents, 84.0 percent, that pregnant women have the greatest need in this circumstance. Sixteen of the respondents, 11.1 percent, believed that a nursing mother's needs are greatest in the given circumstance.²⁷

Table 28 displays the results of Question 49 which asks how vegetables are cooked by the respondent or spouse of the respondent. Among all the respondents, it was stated by 57.4 percent that vegetables were cooked a short time and this percent is composed of 26.5 percent who stated that they cooked their vegetables at low heat for a short time and 30.9 percent who stated that they cooked their vegetables at high heat for a short time. Ninety-five of the respondents stated that they employed low heat for a long time in cooking their vegetables, and twenty-three individuals, 16.9 percent, reported cooking their vegetables for a long time at high heat.

Many of the survey questions are categorizable as related to attitudes and practices related to maternal and child health. Questions 35-7 of the questionnaire concern the respondents' beliefs as to at what age an infant should begin: eating solid food, walking, and using a chewstick (toothbrush). Of all respondents, 32.4 percent stated that an infant should receive solid food at or before three months of age, 59.2 stated at or before five months, 77.5 stated at or before eight months of age and 94.7 percent of the respondents stated that solid food should be added to an infant's diet at or before one year of age.²⁹ A majority of the respondents, 53.6 percent, reported that infants begin walking by ten months, and 81.5 percent of the respondents agreed that infants should begin walking by or before one year of age.³⁰ Chewing sticks are often used as substitutes for toothbrushes, and Table 31

presents the results concerning the age at which children should be instructed to use chewing sticks or toothbrushes. A substantial proportion of the respondents, 40.6 percent, expressed the belief that children should be taught to use a chewing stick or toothbrush at two years of age, and 66.5 percent of the respondents stated that infants should be taught at or before three years of age to use a chewing stick.

It has been observed that the results of this survey indicate that that gastroenteritis is the most common cause of childhood illness in The Gambia, and Question 38 of the questionnaire elicited the respondents' opinions as to what a mother should do if her child has diarrhea. The tabulated results are presented in Table 32 and it can be seen that 72.5 percent of all the health professionals correctly responded that treatment for diarrhea should include giving liquids with salt and sugar. Sixteen of the respondents, 10.1 percent, stated that they would prescribe a traditional medication for the mother to give her child for diarrhea.

Prior to the survey there existed an impression that burns were a frequent cause of childhood accidents in The Gambia. This impression has been substantiated by both informal talks with the health professionals and by the data compiled in Table 33. Approximately eighty percent of the respondents cited burns as the most common cause of childhood accidents in the country. This result is consistent across all the categories of the health professionals with the exception of the public health inspectors - eight of whom, 44.4 percent, cited falls as the most common cause of accidents to children.

The respondents' observed incidence of Frank Kwashiorkor and/or marasmus over the past year is revealed in Table 34. Twenty-seven of the respondents, nearly one-fifth, reported seeing no cases in the past year and sixty of the respondents, 44.1 percent, reported seeing only one or two cases over the past year. Eleven or more cases of Frank Kwashiorkor and/or marasmus were observed by 23 respondents, 16.9 percent, and 14 of these 23 respondents, 10.3 percent

of all the respondents, reported observing twenty or more cases of these nutritional disorders during the past year.

Those respondents with children were asked how many months their most recent child has breastfed before weaning, and the resulting data is displayed in Table 35. The median number of months a child was breastfed is 18.1 months. The most recent children were breastfed for less than one year by 36.9 percent of the respondents and for more than 21 months by 10.3 percent of the respondents.

The striking feature of Tables 36.1-2 is that in both instances 98 of the respondents, 61.2 percent, stated that they did not know how many boys or girls the husband of a young newly married Gambian couple would want to have. Also, fourteen respondents, 8.8 percent, stated that they believed that the husband of the couple would not have a number in mind. A similar result can be found in Table 36.3-4 with the exception that 92 of the respondents, 57.5 percent, stated that they did not know how many boys (or girls) the wife of the couple would want and sixteen respondents, 10.0 percent, stated that the wife would not have a number in mind.

Most of the respondents, 71.0 percent, stated that they believed that the best child spacing method for Gambian couples was either the intrauterine device, 47.8 percent, or the contraceptive pill, 23.2 percent.³⁷ All health professionals were also asked to state how frequently they encountered Gambian patients requesting help with the child spacing or family planning services or help with infertility. Roughly three-quarters of those interviewed responded to each of these questions and their responses are cross classified by professional training level and presented in Tables 38-9. Nearly half of these respondents, 49.6 percent, reported encountering child spacing or family planning requests from Gambian clients at least weekly over the previous year; 21.8 percent reported requests at least monthly but not as frequently as weekly, and fifteen

respondents, 12.6 percent, reported never having had requests of this type in the past year.³⁸ Quite similar relative frequencies were reported for help with infertility where 44.1 percent of the respondents reported monthly requests.³⁹ Only thirteen respondents, 11.7 percent, reported no requests for help with infertility during the past year.

Another indicator of the need for child spacing or family planning services in The Gambia is provided by the responses to Question 60 of the questionnaire. This question has been included to ascertain the health professionals' frequency of contacts with patients having non-professionally induced abortions. Only 68.1 percent of the survey participants responded to this question (approximately one-half of both the dresser-dispensers and public health inspectors failed to respond), but of the group responding, 36.7 percent report contacts at least monthly during the past year with patients having non-professionally-induced abortions.⁴⁰ This group included eighteen individuals, 16.5 percent, who stated that they had encountered patients as frequently as weekly over the past year. Many of the respondents, 42.2 percent, reported never having had patients of this type but knowing of patients having non-professionally-induced abortions during the past year. Only seven respondents, 6.4 percent, reported both no patients and no knowledge of patients with non-professional abortions.

Attitudes Regarding Discussion of Family Planning with
Patients for Various Circumstances

All of the health professionals included in this survey were asked to state whether they agreed, disagreed, or were undecided as to whether a professional health worker should discuss family planning in twelve circumstances.⁴¹ Agreement that professional health workers should discuss family planning exceeded 70 percent in three of the 12 circumstances, viz.:

1. routinely with all post-partum patients regardless of marital status
2. with community groups
3. with men as often as possible.

Also, agreement at this level was approached for circumstance 2, 69.4 percent, which states that a professional health worker should discuss family planning routinely with all post-partum patients regardless of age.

Ambivalence among the respondents as to whether a professional health worker should discuss family planning exceeded 30 percent in the following five circumstances:

"I think that a professional health worker should:

1. assess and inquire about family planning status and needs in almost every patient contact. (34.4 percent undecided)
2. discuss family planning with all mothers in the pre-school or under-fives clinic. (30.0 percent undecided)
3. discuss only those family planning methods that do not conflict with his (the health worker's) own personal beliefs. (35.6 percent undecided)
4. discuss family planning only when he thinks that child spacing does not conflict with the patient's personal beliefs. (31.3 percent undecided)
5. discuss family planning with any patient regardless of age." (33.3 percent undecided)

The data also suggest that there was a group of respondents who had no opinion as to discussion of family planning regardless of the circumstance since the minimum percent of respondents undecided for all circumstances was 20.6 percent.

Only a small proportion of the respondents reported that a professional health worker should consider his/her own personal beliefs (26.2 percent) or the patient's own personal beliefs (25.1 percent) in deciding whether or not to discuss family planning. Finally, only twenty of the professional health workers included in the survey, 12.5 percent, stated that family planning should never be discussed.

Knowledge Questions

Nearly one-third of the questions contained in the survey questionnaire (17 of the 61 questions) required specific knowledge on various areas of health. The knowledge questions can be categorized as relating to communicable disease, nutrition, maternal and child health, or family planning and will be discussed in this order. Furthermore, although the results of the knowledge questions are presented in Table 42 by professional training level, there will be no attempt to compare performance among these groups to evaluate overall performance for all questions. For those readers interested in the performance level of specific professional groups, this information is provided in Table 42.

There were three questions on the survey questionnaire in the area of communicable disease which required the respondent to select one appropriate response from five alternatives. Question 24 requires recognition of which pair of five pairs of diseases are both water-borne and the highest percent of correct responses for all knowledge questions, 82.5 percent, was achieved for this question. Approximately three-quarters of all of the respondents, 73.1 percent, were aware that there is an inoculation available to prevent diphtheria. However, a smaller proportion of the health professionals, 61.9 percent, were able to correctly identify which group of three diseases from a list of five triplets were protected against by an injection of triple antigen vaccine.

Questions 41, 43-5 of the survey questionnaire are related to nutrition. More than one-half of all of the respondents, 56.3 percent, were aware that the most important nutritional effect of polishing rice is that important vitamins are removed. A slightly smaller percentage of the respondents, 52.5 percent, correctly selected the pair of foods fish and ground nuts as the best sources of protein from a list of five pairs of foods such as rice and corn, or beef and green vegetables. When asked what 2-4-year-old children should be fed, 26.3

percent of the health professionals responded "The same food as eaten by the rest of the family." A majority of the respondents, 55.0 percent, stated that children of this age should receive a diet with additional beef and fish.

The most difficult of the knowledge questions asked during the survey was clearly Question 43 which required the respondent to identify which pair of foods from a list of five pairs are both good sources of Vitamin A. Only 8.8 percent of all the respondents correctly selected the pair mangoes and red peppers when provided alternatives such as oranges and millet or peanuts and green leafy vegetables. Many of the respondents, 45.6 percent, incorrectly selected mangoes and oranges as both good sources of Vitamin A.

The remaining ten knowledge questions to be discussed relate to the areas of maternal and child health or family planning. Less than forty percent of all the health professionals knew that the specific purpose of an Ilesha chart is to provide a record for the recording of growth rates of children under five years of age. However, nearly three-quarters of the professionals were aware that a mother should continue to give her child liquids with salt and sugar as a treatment for diarrhea.

Slightly in excess of one-half of all the health professionals correctly answered Questions 31, 51, and 55 . These questions are related to intercourse during the period of lactation - (51.9 percent of the respondents were aware that intercourse has no effect on lactation), the location of fertilization (fifty-five percent were aware that the egg is fertilized in the Fallopian tubes), and evaluation of the infertile couple where 55.0 percent correctly responded that the first step in evaluation of the infertile couple should be to obtain the couple's medical history. Less than one-half of the respondents, 44.4 percent, were able to identify the probable most frequent cause of a couple's infertility as infection of the woman's Fallopian tubes or the man's vas deferens.

Less than one-quarter of the health professionals included in the survey correctly answered questions related to the length of time the human ovum is available to be fertilized (only 16.3 percent correctly responded four days), the "safe period" of a woman with a regular 28-day cycle (23.1 percent responded correctly that the "safe period" consisted of the last ten days of one cycle and the first seven days of the next cycle), or what diagnostic test all women seeking counseling for infertility or assistance with child spacing should have (where 23.8 percent of all the respondents correctly stated that the correct diagnostic test is a breast examination).

Health Professionals and Language Problems

It has been noted that nearly seventy percent of all the health professionals experienced language difficulties in their work and that the female nurses, i.e. single-qualified, double-qualified, and student auxiliary, were more likely to experience language problems than the other types of professionals. We now examine and discuss other factors which are perhaps related to the occurrence of language problems during work. Table 43 suggests that respondents in the age group 20-29 years and 40-49 years are much more likely to have language problems in their work than individuals in the age groups 30-35 years and 50+ years. However, this result may be spurious and due to some other factor such as tribal group or the number of languages spoken.

When an individual's reported tribal group is cross classified with the languages which that individual can speak well enough to use in work, Table 44 is generated. It is perhaps instructive to notice in this table that eighteen of the 58 health professionals of the Wollof tribe, 31.0 percent, speak only Wollof and that ten of the forty professionals from other tribal groups, 25 percent, speak only Wollof in addition to English and languages other than Mandinka, Fula, and Diola. On the other hand, only two of thirty Mandinka, 6.7 percent,

speaking only Mandinka in addition to English and all of the Diola and Fula are multilingual in the sense it has been defined here. In fact, most of the Diola, 83.3 percent, and also most of the Fula, 85.4 percent, speak at least Mandinka and Wollof in addition to their own tribal language. Recognizing this fact one must conclude that the high percent of Diola health professionals, 90.9 percent, who reported language problems in their work must encounter problems with patients speaking languages other than Mandinka, Wollof, and Fula.⁴⁵ The data of this table also demonstrate that the Wollof and other tribal groups' health professionals reported speaking Wollof but not Mandinka, Fula, or Diola. A striking number of these individuals, 26 or 86.7 percent, reported having language problems in their work.⁴⁶ It can be seen in this data that in excess of two-thirds of the two groups of individuals who spoke Mandinka, Wollof, and Fula or Mandinka, Wollof, and Diola reported having language problems in their work. Finally, Table 47 presents the incidence of language problems by division of employment. A high proportion of the health professionals employed in the McCarthy Island division, 87.5 percent, reported language problems. Relative incidence of language problems was also high in Banjul, 60.7 percent, and the Lower River Division, 75.0 percent.

Comments Regarding Non-Quantitative Results of the Questionnaire

The final question, Question 62, was open-ended and asked each respondent to make additional comments regarding training they would like to receive. The following table summarizes the comments of the 61 individuals who responded.

RESPONSE TO Q. # 62

"ARE THERE ANY SKILLS IN WHICH
YOU WOULD LIKE TO RECEIVE TRAINING ?"

<u>SKILLS</u>	<u>RESPONSES</u>
ANAESTHESIOLOGY	1
CHILD SPACING	3
COMMUNICABLE DISEASES	5
INNOCULATIONS	12
MANAGEMENT TECHNIQUES	4
MATERNAL CHILD HEALTH	7
NUTRITION	4
PHARMACOLOGY	5
PREMATURE NURSING	1
PUBLIC HEALTH	8
PUBLIC SPEAKING	19
RECORD KEEPING	4
TEACHING METHODS	4
THEATER TECHNIQUES	3

*SPECIAL DEMANDS FOR IMPROVEMENT OF RURAL HOSPITAL FACILITIES WERE MADE
IN THE FOLLOWING AREAS:

1. TRANSPORT
2. DRUG SUPPLIES
3. WATER SUPPLY
4. TOOLS
5. COMMUNICATION

TABLE 1

Q1. BASIC EDUCATION COMPLETED BY PROFESSIONAL TRAINING LEVEL^a

PROFESSIONAL TRAINING LEVEL	EDUCATION COMPLETED					TOTAL
	PRIMARY	JUNIOR SECONDARY	HIGH SCHOOL	6TH FORM	OTHER	
SINGLE QUALIFIED NURSE	0 0	0 0	26 96.3	0 0	1 3.7	27 100.0
DOUBLE QUALIFIED NURSE	0 0	0 0	29 90.6	2 6.3	1 3.1	32 100.0
DRESSER-DISPENSER	3 7.3	7 17.1	30 73.2	0 0	1 2.4	41 100.0
DOCTOR	0 0	0 0	0 0	0 0	2 100.0	2 100.0
STUDENT AUXILIARY NURSE	3 14.3	12 57.1	6 28.6	0 0	0 0	21 100.0
COMMUNITY HEALTH NURSE	0 0	10 90.9	1 9.1	0 0	0 0	11 100.0
PUBLIC HEALTH INSPECTOR	1 4.8	1 4.8	14 66.7	0 0	5 23.8	21 100.0
TOTAL	7 4.5	30 19.4	106 68.3	2 1.3	10 6.5	155 100.0

^aCells of table include frequency and row percent

TABLE 2

0_5 NATIONALITY BY PROFESSIONAL TRAINING LEVEL^a

PROFESSIONAL TRAINING LEVEL	NATIONALITY			TOTAL
	GAMBIAN BY BIRTH	GAMBIAN BY NATIONALIZATION	OTHER	
SINGLE QUALIFIED NURSE	25 92.6	1 3.7	1 3.7	27 100.0
DOUBLE QUALIFIED NURSE	29 87.9	3 9.1	1 3.0	33 100.0
DRESSER-DISPENSER	40 97.6	1 2.4	0 0	41 100.0
DOCTOR	2 100.0	0 0	0 0	2 100.0
STUDENT AUXILIARY NURSE	19 90.5	2 9.5	0 0	21 100.0
COMMUNITY HEALTH NURSE	8 72.7	3 27.3	0 0	11 100.0
PUBLIC HEALTH INSPECTOR	21 95.5	1 4.5	0 0	22 100.0
TOTAL	144 91.7	11 7.0	2 1.3	157 100.0

^a Cells of table include frequency and row percent

TABLE 3
Q6. TRIBAL GROUP
BY PROFESSIONAL TRIBAL LEVEL ^a

PROFESSIONAL TRAINING LEVEL	TRIBE					TOTAL
	MANDINKA	WOLLOF	JOLA	FULA	OTHER ^b	
SINGLE QUALIFIED NURSE	1 4.0	12 48.0	1 4.0	0 0	11 44.0	25 100.0
DOUBLE QUALIFIED NURSE	3 10.0	11 36.7	4 13.3	1 3.3	11 36.7	30 100.0
DRESSER-DISPENSER	12 30.8	19 48.7	1 2.6	2 5.1	5 12.6	39 100.0
DOCTOR	1 50.0	1 50.0	0 0	0 0	0 0	2 100.0
STUDENT AUXILIARY NURSE	3 14.3	7 33.3	3 14.3	0 0	8 38.1	21 100.0
COMMUNITY HEALTH NURSE	3 27.3	1 9.1	2 18.2	1 9.1	4 36.4	11 100.0
PUBLIC HEALTH INSPECTOR	8 36.4	7 31.8	2 9.1	4 18.2	1 4.5	22 100.0
TOTAL	31 20.7	58 38.7	13 8.7	8 5.3	40 2.0	150 100.0

^aCells of table include frequency and row percent

^bOther includes 20 Aku, 8 Serer, 3 Serahuli, 2 Bambara
2 Mangago, 1 Makai, 1 Ghanaian, 1 Lebanese, 1 English, 1 unstated

TABLE 4

Q8. SEX BY PROFESSIONAL TRAINING LEVEL

PROFESSIONAL TRAINING LEVEL	MALE	FEMALE	TOTAL
SINGLE QUALIFIED NURSE	0 0	27 100.0	27 100.0
DOUBLE QUALIFIED NURSE	0	33 100.0	33 100.0
DRESSER-DISPENSER	43 100.0	0 0	43 100.0
DOCTOR	2 100.0	0 0	2 100.0
STUDENT AUXILIARY NURSE	3 14.3	18 85.7	21 100.0
COMMUNITY HEALTH NURSE	3 27.3	8 72.7	11 100.0
PUBLIC HEALTH INSPECTOR	19 86.4	3 13.6	22 100.0
TOTAL	70 44.0	89 56.0	159 100.0

^aCells of table include frequency and row percent

TABLE 5

0.9 AGE BY PROFESSIONAL TRAINING LEVEL

PROFESSIONAL TRAINING LEVEL	AGE IN YEARS					TOTAL
	20 YRS.	20-29	30-39	40-49	50-59	
SINGLE QUALIFIED NURSE	23 88.5	1 3.8	0 0	2 7.7	0 0	26 100.0
DOUBLE QUALIFIED NURSE	11 37.9	4 13.8	12 41.4	2 6.9	0 0	29 100.0
DRESSER-DISPENSER	9 23.7	10 26.3	11 28.9	7 18.4	1 2.6	38 100.0
DOCTOR	0 0	2 100.0	0 0	0 0	0 0	2 100.0
STUDENT AUXILIARY NURSE	11 57.9	7 36.8	1 5.3	0 0	0 0	19 100.0
COMMUNITY HEALTH NURSE	11 100.0	0 0	0 0	0 0	0 0	11 100.0
PUBLIC HEALTH INSPECTOR	12 54.5	5 22.7	0 0	5 22.7	0 0	22 100.0
TOTAL	77 52.4	29 19.7	24 16.3	16 10.9	1 0.7	147 100.0

^aCells of table include frequency and row percent

TABLE 6

Q10. MARITAL STATUS BY PROFESSIONAL TRAINING LEVEL

PROFESSIONAL TRAINING LEVEL	STATUS			TOTAL
	SINGLE	MARRIED	WIDOWED	
SINGLE QUALIFIED NURSE	20 74.1	6 22.2	1 3.7	27 100.0
DOUBLE QUALIFIED NURSE	11 33.3	21 63.7	1 3.0	33 100.0
DRESSER-DISPENSER	10 23.3	33 76.7	0 0	43 100.0
DOCTOR	0 0	2 100.0	0 0	2 100.0
STUDENT AUXILIARY NURSE	10 47.6	10 47.6	1 4.8	21 100.0
COMMUNITY HEALTH NURSE	7 63.6	4 36.4	0 0	11 100.0
PUBLIC HEALTH INSPECTOR	10 45.5	12 54.5	0 0	22 100.0
TOTAL	68 42.8	88 55.3	3 1.9	159 100.0

^aCells of table include frequency and row percent

TABLE 7

Q11. RELIGION BY PROFESSIONAL TRAINING LEVEL^a

PROFESSIONAL TRAINING LEVEL	RELIGION				TOTAL
	CATHOLIC	MOSLEM	PROTESTANT	OTHER	
SINGLE QUALIFIED NURSE	7 25.9	13 48.1	7 25.9	0 0	27 100.0
DOUBLE QUALIFIED NURSE	6 18.2	13 39.4	14 42.4	0 0	33 100.0
DRESSER-DISPENSER	4 9.3	33 76.7	3 7	3 7	43 100.0
DOCTOR	0 0	2 100.0	0 0	0 0	2 100.0
STUDENT AUXILIARY NURSE	6 28.6	11 52.4	4 19.0	0 0	21 100.0
COMMUNITY HEALTH NURSE	2 18.2	8 72.7	0 0	1 9.1	11 100.0
PUBLIC HEALTH INSPECTOR	3 13.6	18 81.8	1 4.5	0 0	22 100.0
TOTAL	28 17.6	98 61.6	29 18.2	4 2.5	159 100.0

^aCells of table include frequency and row percent

TABLE 8

Q2. YEARS OF KORANIC EDUCATION COMPLETED BY PROFESSIONAL TRAINING LEVEL^a

PROFESSIONAL TRAINING LEVEL	YEARS COMPLETED							TOTAL
	1 YR.	1-2 YRS. ^b	2-3 YRS.	3-4 YRS.	4-5 YRS.	5-10 YRS.	10 YRS.	
SINGLE QUALIFIED NURSE	1 10.0	0 0	1 10.0	2 20.0	3 30.0	2 20.0	1 10.0	10 100.0
DOUBLE QUALIFIED NURSE	2 18.2	0 0	2 18.2	2 18.2	0 0	3 27.2	2 18.2	11 100.0
DRESSER-DISPENSER	1 3.3	2 6.7	1 3.3	1 3.3	2 6.7	18 60.0	5 16.7	30 100.0
DOCTOR	0 0	0 0	0 0	0 0	0 0	1 100.0	0 1	1 100.0
STUDENT AUXILIARY NURSE	1 11.1	2 22.2	1 11.1	2 22.2	2 22.2	0 0	1 11.1	9 100.0
COMMUNITY HEALTH NURSE	0 0	0 0	1 14.3	1 14.3	0 0	2 28.6	3 42.8	7 100.0
PUBLIC HEALTH INSPECTOR	0 0	1 5.5	2 11.1	2 11.1	4 22.2	4 22.2	5 27.8	18 100.0
TOTAL	5 5.8	5 5.8	8 9.3	10 11.6	11 12.8	30 34.9	17 19.8	86 100.0

^aCells of table include frequency and row percent

^bMore than one but less than two years, etc.

TABLE 9.1

Q12. NUMBER OF SONS BORN BY PROFESSIONAL TRAINING LEVEL^a

PROFESSIONAL TRAINING LEVEL	NUMBER								TOTAL
	0	1	2	3	4	5	6	7	
SINGLE QUALIFIED NURSE	21 77.8	5 18.5	1 3.7	0 0	0 0	0 0	0 0	0 0	27 100.0
DOUBLE QUALIFIED NURSE	13 39.4	11 36.4	6 12.1	8 6.1	1 0	0 6.1	0 0	0 0	33 100.0
DRESSER-DISPENSER	15 34.9	11 25.6	6 14.0	8 18.6	1 2.3	0 0	0 0	2 4.7	100.
DOCTOR	0 0	2 10.0	0 0	0 0	0 0	0 0	0 0	0 0	2 100.0
STUDENT AUXILIARY NURSE	10 45.5	8 36.4	3 13.6	1 4.5	0 0	0 0	0 0	0 0	22 100.0
COMMUNITY HEALTH NURSE	9 81.8	2 18.2	0 0	0 0	0 0	0 0	0 0	0 0	11 100.0
PUBLIC HEALTH INSPECTOR	13 59.1	6 27.3	1 4.5	1 4.5	1 4.5	0 0	0 0	0 0	22 100.0
TOTAL	81 50.6	46 28.8	15 9.4	12 7.5	2 1.2	2 1.2	0 0.	2 1.2	160 100.0

TABLE 9.2

Q12. NUMBER OF NATURAL SONS LIVING BY PROFESSIONAL TRAINING LEVEL^a

PROFESSIONAL TRAINING LEVEL	NUMBER									TOTAL
	0	1	2	3	4	5	6	7		
SINGLE QUALIFIED NURSE	21 77.8	5 18.5	1 3.7	0 0	0 0	0 0	0 0	0 0	0 0	27 100.0
DOUBLE QUALIFIED NURSE	13 39.4	14 42.3	2 6.1	2 6.1	0 0	2 6.1	0 0	0 0	0 0	33 100.0
DRESSER-DISPENSER	19 44.2	9 20.9	6 14.0	6 14.0	1 2.3	0 0	1 2.3	1 2.3	1 2.3	43 100.0
DOCTOR	0 0	2 100.0	0 0	0 0	0 0	0 0	0 0	0 0	0 0	2 100.0
STUDENT AUXILIARY NURSE	13 59.1	7 31.9	1 4.5	1 4.5	0 0	0 0	0 0	0 0	0 0	22 100.0
COMMUNITY HEALTH NURSE	9 8.18	2 18.2	0 0	0 0	0 0	0 0	0 0	0 0	0 0	11 100.0
PUBLIC HEALTH INSPECTOR	14 63.7	6 27.3	0 0	2 9.0	0 0	0 0	0 0	0 0	0 0	22 100.0
TOTAL	89 55.6	45 28.2	10 6.3	11 6.9	1 0.6	2 1.2	1 0.6	1 0.6	1 0.6	160 100.0

^aCells of this table include frequency and row percent

TABLE 9.3

Q12. NUMBER OF ADOPTED SONS BY PROFESSIONAL TRAINING LEVEL

PROFESSIONAL TRAINING LEVEL	NUMBER					TOTAL
	0	1	2	3	4	
SINGLE QUALIFIED NURSE	26 96.3	1 3.7	0 0	0 0	0 0	27 100.0
DOUBLE QUALIFIED NURSE	28 84.8	4 12.1	0 0	0 0	1 3.0	33 100.0
DRESSER-DISPENSER	33 76.7	6 14.0	4 9.3	0 0	0 0	43 100.0
DOCTOR	2 100.0	0 0	0 0	0 0	0 0	2 100.0
STUDENT AUXILIARY NURSE	21 95.5	1 4.5	0 0	0 0	0 0	22 100.0
COMMUNITY HEALTH NURSE	11 100.0	0 0	0 0	0 0	0 0	11 100.0
PUBLIC HEALTH NURSE	20 90.9	1 4.5	0 0	1 4.5	0 0	22 100.0
TOTAL	141 88.1	13 8.1	4 2.5	1 0.6	1 0.6	160 100.0

^aCells of table include frequency and row percent

TABLE 9.4

Q12. NUMBER OF ADOPTED SONS LIVING BY PROFESSIONAL TRAINING LEVEL

PROFESSIONAL TRAINING LEVEL	NUMBER				TOTAL
	0	1	2	3	
SINGLE QUALIFIED NURSE	26 96.3	1 3.7	0 0	0 0	27 100.0
DOUBLE QUALIFIED NURSE	28 84.8	4 12.2	0 0	1 3.0	33 100.0
DRESSER-BISPENSER	34 79.0	6 14.0	3 7.0	0 0	43 100.0
DOCTOR	2 100.0	0 0	0 0	0 0	2 100.0
STUDENT AUXILIARY NURSE	20 90.9	1 4.5	1 4.5	0 0	22 100.0
COMMUNITY HEALTH NURSE	11 100.0	0 0	0 0	0 0	11 100.0
PUBLIC HEALTH INSPECTOR	20 91.0	1 4.5	0 0	1 4.5	22 100.0
TOTAL	141 88.1	13 8.1	4 2.5	2 1.3	160 100.0

^aCells of table include frequency and row percent

TABLE 9.5

Q12. NUMBER OF DAUGHTERS BORN BY PROFESSIONAL TRAINING LEVEL

PROFESSIONAL TRAINING LEVEL	NUMBER								TOTAL
	0	1	2	3	4	5	6	7	
SINGLE QUALIFIED NURSE	22 81.5	3 11.1	1 3.7	0 0	1 3.7	0 0	0 0	0 0	27 100.0
DOUBLE QUALIFIED NURSE	17 51.5	10 30.3	5 15.2	0 0	1 3.0	0 0	0 0	0 0	33 100.0
DRESSER-DISPENSER	15 34.9	8 18.6	4 9.3	9 20.9	4 9.3	2 4.7	0 0	1 2.3	43 100.0
DOCTOR	1 50.0	1 50.0	0 0	0 0	0 0	0 0	0 0	0 0	2 100.0
STUDENT AUXILIARY NURSE	15 68.2	3 13.6	3 13.6	1 4.5	0 0	0 0	0 0	0 0	22 100.0
COMMUNITY HEALTH NURSE	11 100.0	0 0	0 0	0 0	0 0	0 0	0 0	0 0	11 100.0
PUBLIC HEALTH INSPECTOR	12 54.5	0 0	0 0	3 13.6	6 27.3	0 0	1 4.5	0 0	22 100.0
TOTAL	93 58.1	25 15.6	13 8.1	13 8.1	12 7.5	2 1.2	1 0.6	1 0.6	160 100.0

-292-

^a Cells of table in frequency and row percent

TABLE 9.6

Q12. NUMBER OF NATURAL DAUGHTERS LIVING BY PROFESSIONAL TRAINING LEVEL

PROFESSIONAL TRAINING LEVEL	NUMBER								TOTAL
	0	1	2	3	4	5	6	7	
SINGLE QUALIFIED NURSE	22 81.5	3 11.1	1 3.7	0 0	1 3.7	0 0	0 0	0 0	27 100.0
DOUBLE QUALIFIED NURSE	15 45.5	13 39.4	4 12.1	0 0	1 3.0	0 0	0 0	0 0	33 100.0
DRESSER-DISPENSER	15 34.9	8 18.6	6 14.0	8 18.6	4 2.3	1 0	0 0	1 2.3	43
DOCTOR	1 50.0	1 50.0	0 0	0 0	0 0	0 0	0 0	0 10	2 100.0
STUDENT AUXILIARY NURSE	15 68.3	3 13.6	3 13.6	1 4.5	0 0	0 0	0 0	0 0	22 100.0
COMMUNITY HEALTH NURSE	11 100.0	0 0	0 0	0 0	0 0	0 0	0 0	0 0	11 100.0
PUBLIC HEALTH INSPECTOR	13 59.1	0 0	0 0	3 13.6	5 22.8	0 0	1 4.5	0 0	22 100.0
TOTAL	92 57.5	28 17.5	14 8.8	12 7.5	11 6.9	1 0.6	1 0.6	1 0.6	160 100.0

^aCells of table include frequency and row percent

TABLE 9.7

Q12. NUMBER OF DAUGHTERS ADOPTED BY PROFESSIONAL TRAINING LEVEL

PROFESSIONAL TRAINING LEVEL	NUMBER					TOTAL
	0	1	2	4	5	
SINGLE QUALIFIED NURSE	26 96.3	1 3.7	0 0	0 0	0 0	27 100.0
DOUBLE QUALIFIED NURSE	28 84.8	2 6.1	3 9.1	0 0	0 0	33 100.0
DRESSER-DISPENSER	38 88.4	4 9.3	0 0	0 0	1 2.3	43 100.0
DOCTOR	2 100.0	0 0	0 0	0 0	0 0	2 100.0
STUDENT AUXILIARY NURSE	20 90.9	2 9.1	0 0	0 0	0 0	22 100.0
COMMUNITY HEALTH NURSE	11 100.0	0 0	0 0	0 0	0 0	11 100.0
PUBLIC HEALTH INSPECTOR	20 90.9	0 0	1 4.5	1 4.5	0 0	22 100.0
TOTAL	145 90.6	9 5.6	4 2.5	1 0.6	1 0.6	160 100.0

^aCells of table include frequency and row percent

TABLE 9.8

Q12, NUMBER OF ADOPTED DAUGHTERS LIVING^a

PROFESSIONAL TRAINING LEVEL	NUMBER					TOTAL
	0	1	2	3	4	
SINGLE QUALIFIED NURSE	26 96.3	1 3.7	0 0	0 0	0 0	27 100.0
DOUBLE QUALIFIED NURSE	28 84.8	2 6.1	3 9.1	0 0	0 0	33 100.0
DRESSER-DISPENSER	38 88.4	4 9.3	0 0	1 0	2 2.3	43 100.0
DOCTOR	2 100.0	0 0	0 0	0 0	0 0	2 100.0
STUDENT AUXILIARY NURSE	20 90.9	2 9.0	0 0	0 0	0 0	22 100.0
COMMUNITY HEALTH NURSE	11 100.0	0 0	0 0	0 0	0 0	11 100.0
PUBLIC HEALTH INSPECTOR	20 90.9	0 0	1 4.5	0 0	1 4.5	22 100.0
TOTAL	145 90.6	9 5.0	4 2.5	1 0.6	1 0.6	160 100.0

^aCells of table include frequency and row percent

TABLE 10
Q7. LANGUAGES SPOKEN BY PROFESSIONAL TRAINING LEVEL^{a,b}

PROFESSIONAL TRAINING LEVEL	LANGUAGES								TOTAL
	MANDINKA	WOLLOF	AKU/ CREOLE	MANDINKA/ WOLLOF	WOLLOF/ JOLA	MANDINKA WOLLOF/ JOLA	MANDINKA WOLLOF/ FULA	MANDINKA/ WOLLOF/ JOLA/ FULA	
SINGLE QUALIFIED NURSE	0 0	11 40.7	1 3.7	11 40.7	0 0	1 3.7	1 3.7	2 7.4	27 100.0
DOUBLE QUALIFIED NURSE	0 0	10 30.3	1 3.0	11 33.3	0 0	5 15.2	6 18.2	0 0	33 100.0
DRESSER-DISPENSER	0 0	4 9.3	1 2.3	23 53.5	0 0	0 0	12 27.9	3 7.6	43 100.0
DOCTOR	0 0	0 0	0 0	0 0	0 0	0 0	2 100.0	0 0	2 100.0
STUDENT AUXILIARY NURSE	1 5.0	4 20.0	0 0	13 65.0	1 5.0	1 5.0	0 0	0 0	20 100.0
COMMUNITY HEALTH NURSE	0 0	0 0	0 0	7 63.6	1 9.1	1 9.1	1 9.1	1 9.1	11 100.0
PUBLIC HEALTH INSPECTOR	1 4.8	2 9.5	0 0	12 57.1	1 4.8	2 9.5	3 14.3	0 0	21 100.0
TOTAL	2 1.3	31 19.7	3 1.9	77 49.0	3 1.9	10 6.4	25 15.9	6 3.8	157 100.0

^aCells of table include frequency and row percent

^bExcluding English

TABLE 11
Q13. DIVISION OF EMPLOYMENT BY PROFESSIONAL TRAINING LEVEL^a

PROFESSIONAL TRAINING LEVEL	DIVISION							TOTAL
	BANJUL	WESTERN DIVISION	LOWER RIVER	NORTH BANK	McCARTHY ISLAND DIVISION	UPPER RIVER DIVISION	NOT CURRENTLY EMPLOYED/ ASSIGNED	
SINGLE QUALIFIED NURSE	24 92.3	0 0	1 3.8	1 3.8	0 0	0 0	0 0	26 100.0
DOUBLE QUALIFIED NURSE	22 66.7	4 12.1	3 9.1	1 3.0	2 6.1	1 3.0	0 0	33 100.0
DRESSER-DISPENSER	26 60.5	3 7.0	2 4.6	3 7.0	6 14.0	1 2.3	2 4.7	43 100.0
DOCTOR	0 0	0 0	0 0	0 0	1 50.0	1 50.0	0 0	2 100.0
STUDENT AUXILIARY NURSES	22 100.0	0 0	0 0	0 0	0 0	0 0	0 0	22 100.0
COMMUNITY HEALTH NURSES	4 36.4	2 18.2	3 27.2	2 18.2	0 0	0 0	0 0	11 100.0
PUBLIC HEALTH INSPECTOR	17 77.3	2 9.1	0 0	1 4.5	1 4.5	1 4.5	0 0	22 100.0
TOTAL	115 72.3	11 6.9	9 5.6	8 5.0	10 6.3	4 2.5	2 1.3	159 100.0

^aCells of table include frequency and row percent.

TABLE 12

Q14. JOB CATEGORY BY PROFESSIONAL TRAINING LEVEL^a

PROFESSIONAL TRAINING LEVEL	CATEGORY								TOTAL
	STAFF NURSE NURSE-MIDWIFE NURSING OFFICER	SENIOR NURSING SUPER.	NURSING SUPER.	PRINCIPAL NURSING OFFICER	DOCTOR OR MEDICAL OFFICER	STUDENT	COMMUNITY HEALTH NURSE	OTHER ^b	
SINGLE QUALIFIED NURSE	26 96.3	0 0	0 0	0 0	0 0	1 3.7	0 0	0 0	27 100.0
DOUBLE QUALIFIED NURSE	12 40.0	6 20.0	8 26.7	1 3.3	0 0	0 0	0 0	3 10.0	30 100.0
DRESSER- DISPENSER	27 62.8	4 9.3	3 7.0	0 0	0 0	1 2.3	0 0	8 18.6	43 100.0
DOCTOR	0 0	0 0	0 0	0 0	2 100.0	0 0	0 0	0 0	2 100.0
STUDENT AUXILIARY NURSE	0 0	0 0	0 0	0 0	0 0	4 19.0	0 0	17 81.0	21 100.0
COMMUNITY HEALTH NURSE	0 0	0 0	0 0	0 0	0 0	0 0	11 100.0	0 0	11 100.0
PUBLIC HEALTH INSPECTOR	0 0	1 5.0	0 0	0 0	0 0	0 0	0 0	19 95.0	20 100.0
TOTAL	65 42.2	11 7.1	11 7.1	1 0.6	2 1.3	6 3.9	11 7.1	47 30.5	154 100.0

-298-

^aCells of table include frequency and row percent

^bIncludes auxiliary nurse students, public health inspectors, and unspecified categories.

TABLE 13

Q15. PRINCIPAL WORKING LOCATION BY PROFESSIONAL TRAINING LEVEL ^a

PROFESSIONAL TRAINING LEVEL	LOCATION					TOTAL
	HOSPITAL	RURAL HEALTH CENTER OR CLINIC	DISPENSARY	TRAINING CENTER OR SCHOOL	OTHER	
SINGLE QUALIFIED	23 85.2	2 7.4	1 3.7	1 3.7	0 0	27 100.0
DOUBLE QUALIFIED NURSE	18 56.3	11 34.4	0 0	2 6.3	1 3.1	32 100.0
DRESSER- DISPENSER	29 72.5	9 22.5	1 2.5	1 2.5	0 0	40 100.0
DOCTOR	1 50.0	1 50.0	0 0	0 0	0 0	2 100.0
STUDENT AUXILIARY NURSE	10 76.9	1 7.7	0 0	2 15.4	0 0	13 100.0
COMMUNITY HEALTH NURSE	0 0	11 100.0	0 0	0 0	0 0	11 100.0
PUBLIC HEALTH INSPECTOR	1 4.8	3 14.3	1 4.8	0 0	16 76.2	21 100.0
TOTAL	82 56.2	38 26.0	3 2.1	6 4.1	17 11.6	146 100.0

^a Cells of table include frequency and row percent

TABLE 14

Q17. TIME IN PRESENT POSITION BY PROFESSIONAL TRAINING LEVEL^a

PROFESSIONAL TRAINING LEVEL	NUMBER OF MONTHS					TOTAL
	< 3 MOS.	3-6 MOS. ^b	6-12 MOS.	12-24 MOS.	>24 MOS.	
SINGLE QUALIFIED NURSE	1 3.7	0 0	4 14.8	2 7.4	20 74.1	27 100.0
DOUBLE QUALIFIED NURSE	4 12.1	1 3.0	3 9.1	6 18.2	19 57.6	33 100.0
DRESSER-DISPENSER	4 10.8	3 8.1	7 18.9	5 13.5	18 48.7	37 100.0
DOCTOR	0 0	0 0	0 0	1 50.0	1 50.0	20 100.0
STUDENT AUXILIARY NURSE	0 0	2 10.0	11 55.0	1 5.0	6 30.0	20 100.0
COMMUNITY HEALTH NURSE	11 100.0	0 0	0 0	0 0	0 0	11 100.0
PUBLIC HEALTH INSPECTOR	0 0	4 19.0	3 14.3	1 4.8	13 61.9	21 100.0
TOTAL	20 13.3	10 6.6	28 18.5	16 10.6	77 51.0	151 100.0

^a Cells of table include frequency and row percent

^b 3 or more but less than 6 months, etc.

TABLE 15

Q 18 FREQUENCY AND PERCENT RESPONDING AFFIRMATIVELY TO
 "WITH WHOM DO YOU WORK DAILY IN YOUR PRESENT
 POSITION?" BY PROFESSIONAL TRAINING LEVEL

PROFESSIONAL TRAINING LEVEL	RESPONSE				n
	WITH NON-PROFESSIONALS (e.g. WARD ATTENDANTS, HEALTH AIDS)	WITH TRAINER NURSES	WITH ONE DOCTOR OR MORE PRESENT	ALONE	
SINGLE QUALIFIED NURSE	13 48.1	14 51.9	10 37.0	0 0.0	27
DOUBLE QUALIFIED NURSE	21 63.6	23 69.7	17 51.5	2 6.1	33
DRESSER-DISPENSER	24 55.8	23 53.5	24 55.8	7 16.3	43
DOCTOR	1 50.0	1 50.1	1 50.1	0 0.0	2
STUDENT AUXILIARY NURSE	9 40.9	16 72.7	11 50.0	0 0.0	22
COMMUNITY HEALTH NURSE	6 54.5	6 54.5	1 9.1	0 0.0	11
PUBLIC HEALTH INSPECTOR	3 13.6	1 4.5	0 0.0	10 45.5	22
TOTAL	77 48.1	84 52.5	65 40.6	19 11.9	160

TABLE 16
 Q19. PRESENCE OF LANGUAGE PROBLEMS IN WORK BY PROFESSIONAL TRAINING LEVEL ^a

PROFESSIONAL TRAINING LEVEL	PROBLEMS ?		TOTAL
	NO	YES	
SINGLE QUALIFIED NURSE	6 23.1	20 76.9	26 100.0
DOUBLE QUALIFIED NURSE	6 18.2	27 81.8	33 100.0
DRESSER-DISPENSERS	13 34.2	25 65.8	38 100.0
DOCTOR	2 100.0	0 0	2 100.0
STUDENT AUXILIARY NURSE	4 21.1	15 78.9	19 100.0
COMMUNITY HEALTH NURSE	3 27.3	8 72.7	11 100.0
PUBLIC HEALTH INSPECTOR	14 63.6	8 36.4	22 100.0
TOTAL	48 31.8	103 68.2	151 100.0

^aCells of table include frequency and row percent

TABLE 17

Q20. MAJOR LOCATION OF HEALTH TRAINING BY PROFESSIONAL TRAINING LEVEL ^a

PROFESSIONAL TRAINING LEVEL	LOCATION				TOTAL
	THE GAMBIA	SENEGAL	U.K. OR IRELAND	OTHER	
SINGLE QUALIFIED NURSE	27 100.0	0 0	0 0	0 0	27 100.0
DOUBLE QUALIFIED NURSE	20 69.0	0 0	8 27.6	1 3.4	29 100.0
DRESSER-DISPENSER	39 97.5	0 0	1 2.5	0 0	40 100.0
DOCTOR	0 0	0 0	0 0	2 100	2 100.0
STUDENT AUXILIARY NURSE	19 95.0	0 0	0 0	1 5.0	20 100.0
COMMUNITY HEALTH NURSE	11 100.0	0 0	0 0	0 0	11 100.0
PUBLIC HEALTH INSPECTOR	18 85.7	1 4.8	2 9.5	0 0	21 100.0
TOTAL	134 89.4	1 0.7	11 7.3	4 2.7	150 100.0

^aCells of table include frequency and row percent

TABLE 18
Q4. TYPE OF CURRENT TRAINING BY PROFESSIONAL TRAINING LEVEL^a

PROFESSIONAL TRAINING LEVEL	TYPE					TOTAL
	NONE	SCHOOL OF MIDWIFERY	SCHOOL OF PUB. HEALTH	SCHOOL OF NURSING	ADX. NURSE TRAIN. SCH.	
SINGLE QUALIFIED NURSE	11 40.8	12 44.4	0 0	4 14.8	0 0	27 100.0
DOUBLE QUALIFIED NURSE	22 75.9	2 6.9	0 0	5 17.2	0 0	29 100.0
DRESSER-DISPENSER	32 86.5	0 0	0 0	5 13.5	0 0	37 100.0
DOCTOR	2 100.0	0 0	0 0	0 0	0 0	2 100.0
STUDENT AUXILIARY NURSE	0 0	0 0	0 0	4 18.2	18 81.8	22 100.0
COMMUNITY HEALTH NURSE	11 100.0	0 0	0 0	0 0	0 0	11 100.0
PUBLIC HEALTH INSPECTOR	12 75.0	0 0	4 25.0	0 0	0 0	16 100.0
TOTAL	82 57.0	14 9.7	4 2.8	18 12.5	18 12.5	144 100.0

^aCells of table include frequency and row percent

TABLE 19

Q21. FREQUENCY AND ROW PERCENT OF RESPONDENTS REPORTING HAVING RECEIVED TRAINING IN VARIOUS SUBJECT AREAS SINCE COMPLETION OF PROFESSIONAL EDUCATION BY PROFESSIONAL TRAINING LEVEL^a

PROFESSIONAL TRAINING LEVEL	SUBJECT AREA											
	COMMUNICABLE DISEASE	MATERNAL CARE	INFANT CARE	NUTRITION	FAMILY PLANNING	INFERTILITY	RECORD KEEPING	MANAGEMENT TECHNIQUES	ENVIRON. SANITATION	MENTAL HEALTH	TEACH. METHODS	
SINGLE QUALIFIED NURSE	12 44.4	17 63.0	18 66.7	15 55.6	13 48.1	3 11.1	5 18.5	2 7.4	11 40.7	5 18.5	9 33.3	2
DOUBLE QUALIFIED NURSE	8 24.2	16 48.5	13 39.4	11 33.3	14 42.4	5 15.2	3 9.1	1 3.0	5 15.2	4 12.1	6 18.2	3
DRESSER-DISPENSER	14 32.6	6 14.0	10 23.3	10 23.3	3 7.0	2 4.7	7 16.3	8 18.6	6 14.0	9 20.9	5 11.6	4
DOCTOR	0 0	0 0	0 0	0 0	0 0	0 0	0 0	0 0	0 0	0 0	0 0	
STUDENT AUXILIARY NURSE	3 13.6	4 18.2	6 27.3	5 22.7	1 4.5	0 0.0	0 0.0	1 4.5	3 13.6	1 4.5	4 18.2	2
COMMUNITY HEALTH NURSE	9 81.8	11 100.0	11 100.0	11 100.0	11 100.0	1 9.1	5 45.5	5 45.5	7 63.6	1 9.1	6 54.5	1
PUBLIC HEALTH INSPECTOR	8 36.4	2 9.1	1 4.5	7 31.8	2 9.1	2 9.1	3 13.6	0 0.0	10 45.5	2 9.1	4 18.2	2
TOTAL	54 33.7	56 35.0	59 36.9	59 36.9	44 27.5	13 8.1	23 14.4	17 10.6	42 26.2	22 13.7	34 21.2	16

^aCells of table include frequency and row percent

TABLE 20
 Q 22 FREQUENCY AND ROW PERCENT OF RESPONDENTS EXPRESSING INTEREST IN RECEIVING
 ADDITIONAL TRAINING IN VARIOUS SUBJECT AREAS BY PROFESSIONAL
 TRAINING LEVEL^a

PROFESSIONAL TRAINING LEVEL	SUBJECT AREA											n
	COMMUNIC. DISEASE	MATERNAL CARE	INFANT CARE	NUTRITION	FAMILY PLANNING	INFERT-ILITY	RECORD KEEPING	MANAGEMENT TECHNIQUES	ENVIRON. SANITATION	MENTAL HEALTH	TEACHING METHODS	
SINGLE QUALIFIED NURSE	4 14.8	14 51.9	15 55.6	11 40.7	7 25.9	2 7.4	0 0.0	3 11.1	9 33.3	6 22.2	8 29.6	27
DOUBLE QUALIFIED NURSE	5 15.2	15 45.5	10 30.3	11 33.3	12 36.4	8 24.2	4 12.1	8 24.2	6 18.2	2 6.1	15 45.5	33
DRESSER-DISPENSER	14 32.6	4 9.3	7 16.3	8 18.6	2 4.7	3 7.0	12 27.9	16 37.2	6 14.0	9 20.9	6 14.3	43
DOCTOR	1 50.0	0 0	0 0	0 0	0 0	0 0	0 0	0 0	1 50.0	0 0	0 0	2
STUDENT AUXILIARY NURSE	6 27.3	10 45.5	13 59.1	10 45.5	9 40.9	2 9.1	1 4.5	3 13.6	5 22.7	3 13.6	2 9.1	22
COMMUNITY HEALTH NURSE	10 90.9	10 90.9	10 90.9	10 90.9	8 72.7	8 72.7	9 81.8	7 63.6	8 72.7	6 54.5	7 63.6	11
PUBLIC HEALTH INSPECTOR	10 45.5	4 18.2	5 22.7	9 40.9	5 22.7	1 4.5	3 13.6	4 18.2	12 54.5	1 4.5	5 22.7	22
TOTAL	50 31.3	57 35.6	60 37.5	59 36.9	43 26.9	24 15.0	29 18.1	41 25.6	47 29.4	27 16.9	43 27.0	160

^a Cells of table include frequency and row percent

TABLE 21

Q34. REPORTED MOST COMMON SERIOUS ILLNESS AMONG WOMEN IN
RESPONDENTS' AREA OF EMPLOYMENT BY PROFESSIONAL TRAINING LEVEL

PROFESSIONAL TRAINING LEVEL	ILLNESS						TOTAL
	TETANUS	MALARIA	TYPHOID FEVER	PARASITES (EXCLUDING SHISTOSOMIASIS)	MATERNAL DEPLETION	OTHER	
SINGLE QUALIFIED NURSE	0 0	18 72.0	0 4.0	1 0	3 12.0	3 12.0	25 100.0
DOUBLE QUALIFIED NURSE	0 0	18 62.1	0 0	0 0	10 34.5	1 3.4	29 100.0
DRESSER- DISPENSER	1 2.9	11 31.4	0 0	4 11.4	16 45.7	3 8.6	35 100.0
DOCTOR	0 0	2 100	0 0	0 0	0 0	0 0	2 100.0
STUDENT AUXILIARY NURSE	5 31.3	4 25.0	0 0	0 0	7 43.8	0 0	16 100.0
COMMUNITY HEALTH NURSE	0 0	2 25.0	0 0	0 0	5 62.5	1 12.5	8 100.0
PUBLIC HEALTH INSPECTOR	0 0	3 17.6	0 0	0 0	13 76.5	1 5.9	17 100.0
TOTAL	6 4.5	58 43.9	1 0.8	4 3.0	54 40.9	9 6.8	132 100.0

-307-

^aCells of table include frequency and row percent

TABLE 22

Q28. REPORTED MOST COMMON ILLNESS AMONG CHILDREN
IN RESPONDENTS' AREA OF EMPLOYMENT BY PROFESSIONAL TRAINING LEVEL^a

PROFESSIONAL TRAINING LEVEL	ILLNESS					TOTAL
	GASTRO-ENTERITIS	MALARIA	MALNUTRITION	MEASLES	OTHER	
SINGLE QUALIFIED NURSE	7 41.2	7 41.2	0 0	3 17.6	0 0	17 100.0
DOUBLE QUALIFIED NURSE	15 62.5	6 25.0	3 12.5	0 0	0 0	24 100.0
DRESSER-DISPENSER	14 50.0	11 39.2	1 3.6	1 3.6	1 3.6	28 100.0
DOCTOR	1 50.0	0 0	0 0	1 50.0	0 0	2 100.0
STUDENT AUXILIARY NURSE	7 46.7	3 20.0	4 26.7	1 6.6	0 0	15 100.0
COMMUNITY HEALTH NURSE	6 75.0	0 0	2 25.0	0 0	0 0	8 100.0
PUBLIC HEALTH INSPECTOR	5 31.3	5 31.3	0 0	6 37.5	0 0	16 100.0
TOTAL	55 50.0	32 29.1	10 9.1	12 10.9	1 0.8	110 100.0

^aCells of table include frequency and row percent

TABLE 23

Q 27. FREQUENCY AND PERCENT RESPONDING THAT THEIR CHILDREN WERE CURRENTLY INOCULATED AGAINST VARIOUS DISEASES BY PROFESSIONAL TRAINING LEVEL ^a

PROFESSIONAL TRAINING LEVEL	DISEASE							NUMBER WITH CHILDREN
	TUBERCULOSIS	POLIO	SMALLPOX	MEASLES	DIPHTHERIA	YELLOW FEVER	CHOLERA	
SINGLE QUALIFIED NURSE	5 62.5	2 25.0	2 25.0	5 62.5	6 75.0	1 12.5	2 25.0	8
DOUBLE QUALIFIED NURSE	22 75.9	12 41.4	18 62.1	23 79.3	20 69.0	8 27.6	13 44.8	29
DRESSER-DISPENSER	10 31.3	5 15.6	21 65.6	23 71.9	16 50.0	5 15.6	15 46.9	32
DOCTORS	1 50.0	2 100.0	2 100.0	2 100.0	1 50.0	1 50.0	1 50.9	2
STUDENT AUXILIARY NURSE	8 53.3	3 20.0	7 46.7	8 53.3	7 46.7	2 13.3	8 53.3	15
COMMUNITY HEALTH NURSE	1 50.0	1 50.0	1 50.0	2 100.0	1 50.0	1 50.0	1 50.0	2
PUBLIC HEALTH INSPECTOR	5 50.0	5 50.0	8 80.0	9 90.0	7 70.0	2 20.0	6 60.0	10
TOTAL	52 53.1	30 30.6	59 60.2	72 73.5	52 53.1	20 20.4	46 46.9	98 100.0

^a Cells of table include frequency and percent responding affirmatively

TABLE 24

Q 47. INCLUSION OF A GREEN LEAFY OR YELLOW VEGETABLE IN THE DIET OF RESPONDENTS BY PROFESSIONAL TRAINING LEVEL^a

PROFESSIONAL TRAINING LEVEL	RESPONSE			TOTAL
	NO	YES, ALMOST EVERY DAY	YES, EVERY DAY	
SINGLE QUALIFIED NURSE	2 7.7	16 61.5	8 30.8	26 100.0
DOUBLE QUALIFIED NURSE	1 3.0	20 60.6	12 36.4	33 100.0
DRESSER-DISPENSER	0 0	28 77.8	8 22.2	36 100.0
DOCTOR	1 50.0	0 0	1 50.0	2 100.0
STUDENT AUXILIARY NURSE	2 10.0	12 60.0	6 30.0	20 100.0
COMMUNITY HEALTH NURSE	0 0	7 63.6	4 36.4	11 100.0
PUBLIC HEALTH INSPECTOR	6 30.0	14 70.0	0 0	20 100.0
TOTAL	12 8.1	97 65.5	39 26.4	148 100.0

^aCells of table include frequency and row percent

TABLE 25

Q 48. INCLUSION OF FRESH FRUIT OR FRESH FRUIT JUICE IN THE DIET OF THE RESPONDENTS BY PROFESSIONAL TRAINING LEVEL ^a

PROFESSIONAL TRAINING LEVEL	RESPONSE			TOTAL
	NO	YES, ALMOST EVERY DAY	YES, EVERY DAY	
SINGLE QUALIFIED NURSE	2 7.7	17 65.4	7 26.9	26 100.0
DOUBLE QUALIFIED NURSE	5 15.2	16 48.5	12 36.3	33 100.0
DRESSER-DISPENSER	7 18.4	23 60.5	8 21.0	38 100.0
DOCTOR	1 50.0	0 0	1 50.0	2 100.0
STUDENT AUXILIARY NURSE	2 10.0	12 60.0	6 30.0	20 100.0
COMMUNITY HEALTH NURSE	0 0	8 72.7	3 27.3	11 100.0
PUBLIC HEALTH INSPECTOR	9 42.9	10 47.6	2 9.5	21 100.0
TOTAL	26 17.2	86 57.0	39 25.8	151 100.0

^aCells of table include frequency and row percent

TABLE 20

Q 46 NUMBER OF MONTHS OF THE YEAR THAT MEAT, FISH OR POULTRY IS AVAILABLE TO RESPONDENT'S AREA OF EMPLOYMENT BY PROFESSIONAL TRAINING LEVEL^a

PROFESSIONAL TRAINING LEVEL	RESPONSE					TOTAL
	NOT AVAILABLE	1-3 MONTHS	4-6 MONTHS	7-9 MONTHS	10-12 MONTHS	
SINGLE QUALIFIED NURSE	1 4.2	4 16.7	1 4.2	1 4.2	17 70.8	24 100.0
DOUBLE QUALIFIED NURSE	1 3.3	5 16.7	2 6.7	0 0	22 73.3	30 100.0
DRESSER-DISPENSER	1 2.9	3 8.8	1 2.9	1 2.9	28 82.4	34 100.0
DOCTOR	0 0	0 0	0 0	0 0	2 100.0	2
STUDENT AUXILIARY NURSE	0 0	2 11.8	1 5.9	1 5.9	13 76.5	17
COMMUNITY HEALTH NURSE	1 9.1	3 27.3	0 0	0 0	7 63.6	11
PUBLIC HEALTH INSPECTOR	1 5.6	2 11.1	2 11.1	1 5.6	12 66.7	18
TOTAL	5 3.7	19 14.0	7 5.1	4 2.9	101 74.3	136 100.0

^aCells of table include frequency and row percent

TABLE 27

RESPONSES TO Q 42 "IF THE AMOUNT OF MEAT IS LIMITED,
WHO HAS THE GREATEST NEED FOR WHAT IS AVAILABLE?"
BY PROFESSIONAL TRAINING LEVEL ^a

PROFESSIONAL TRAINING LEVEL	RESPONSE					TOTAL
	PREGNANT WOMAN	NURSING MOTHER	2-YR OLD SON	2-YR OLD DAUGHTER	WORKING FATHER	
SINGLE QUALIFIED NURSE	22 84.6	3 11.5	0 0	0 0	1 3.8	26 100.0
DOUBLE QUALIFIED NURSE	27 84.4	4 12.5	1 3.1	0 0	0 0	32 100.0
DRESSER-DISPENSER	32 88.9	3 8.3	1 2.8	0 0	0 0	36 100.0
DOCTOR	1 100.0	0 0	0 0	0 0	0 0	1 100.0
STUDENT AUXILIARY NURSE	19 90.5	0 0	1 4.8	0 0	1 4.8	21 100.0
COMMUNITY HEALTH NURSE	10 90.9	1 9.1	0 0	0 0	0 0	11 100.0
PUBLIC HEALTH INSPECTOR	10 58.8	5 29.4	2 11.8	0 0	0 0	17 100.0
TOTAL	121 84.0	16 11.1	5 3.5	0 0	2 1.4	144 100.0

^aCells of table include frequency and row percent

TABLE 28

Q 49. RESPONSE TO "HOW DO YOU OR YOUR SPOUSE COOK YOUR VEGETABLES?"
BY PROFESSIONAL TRAINING LEVEL^a

PROFESSIONAL TRAINING LEVEL	RESPONSE				TOTAL
	LOW HEAT SHORT TIME	LOW HEAT LONG TIME	HIGH HEAT SHORT TIME	HIGH HEAT LONG TIME	
SINGLE QUALIFIED NURSE	7 26.9	10 38.5	7 26.9	2 7.7	26 100.0
DOUBLE QUALIFIED NURSE	12 38.7	3 9.7	12 38.7	4 12.9	31 100.0
DRESSER-DISPENSER	6 18.2	15 45.5	8 24.2	3 9.1	32 100.0
DOCTOR	1 50.0	0 0	1 50.0	0 0	2 100.0
STUDENT AUXILIARY NURSE	5 25.0	3 15.0	8 40.0	4 20.0	20 100.0
COMMUNITY HEALTH NURSE	2 18.2	2 18.2	3 27.3	4 36.4	11 100.0
PUBLIC HEALTH INSPECTOR	3 21.4	2 14.3	3 21.4	6 42.9	14 100.0
TOTAL	36 26.5	35 25.7	42 30.9	23 16.9	136 100.0

^aCells of table include frequency and row percent

TABLE 29
 Q35. AGE AT WHICH SOLID FOOD SHOULD BE ADDED TO AN INFANT'S DIET
 BY PROFESSIONAL TRAINING LEVEL.

PROFESSIONAL TRAINING LEVEL	AGE							TOTAL
	AT 2 WKS	AT 3 MOS	AT 5 MOS	AT 8 MOS	AT 1 YR	AT 2 YRS	OTHER	
SINGLE QUALIFIED NURSE	0 0	12 46.2	11 42.3	2 7.7	0 0	0 0	1 3.8	26 100.0
DOUBLE QUALIFIED NURSE	1 3.0	15 45.5	8 24.2	3 9.1	5 15.2	1 3.0	0 0	33 100.0
DRESSER-DISPENSER	0 0	4 11.8	5 14.7	12 35.3	11 32.4	2 5.9	0 0	34 100.0
DOCTOR	0 0	0 0	1 50.0	1 50.0	0 0	0 0	0 0	2 100.0
STUDENT AUXILIARY NURSE	0 0	8 42.1	4 21.1	3 15.8	2 10.5	2 10.5	0 0	19 100.0
COMMUNITY HEALTH NURSE	0 0	3 30.0	3 30.0	1 10.0	2 20.0	0 0	1 10.0	10 100.0
PUBLIC HEALTH INSPECTOR	0 0	3 16.7	6 33.3	4 22.2	3 16.7	1 5.6	1 5.6	18 100.0
TOTAL	1 0.7	45 31.7	38 26.8	26 18.3	23 16.2	6 4.2	3 2.1	142 100.0

-315-

^aCells of table include frequency and row percent

TABLE 30

Q 36 RESPONSE TO "AT WHAT AGE DO INFANTS BEGIN WALKING?"
BY PROFESSIONAL TRAINING LEVEL^a

PROFESSIONAL TRAINING LEVEL	RESPONSE						TOTAL
	BY 8 MOS.	BY 10 MOS.	BY 12 MOS.	BY 14 MOS.	BY 16 MOS.	OVER 16 MOS.	
SINGLE QUALIFIED NURSE	6 25.0	10 41.7	8 33.3	0 0	0 0	0 0	24 100.0
DOUBLE QUALIFIED NURSE	3 9.7	17 54.8	8 25.8	2 6.5	1 3.2	0 0	31 100.0
DRESSER-DISPENSER	2 5.6	16 44.4	7 19.4	6 16.7	4 11.1	1 2.8	36 100.0
DOCTOR	0 0	1 50.0	1 50.0	0 0	0 0	0 0	2 100.0
STUDENT AUXILIARY NURSE	5 26.3	6 31.6	6 31.6	1 5.3	1 5.3	0 0	19 100.0
COMMUNITY HEALTH NURSE	1 9.1	4 36.4	5 45.5	1 9.1	0 0	0 0	11 100.0
PUBLIC HEALTH INSPECTOR	1 5.9	3 17.6	4 23.5	4 23.5	2 11.8	3 17.6	17 100.0
TOTAL	18 12.9	57 40.7	39 27.9	14 10.0	8 5.7	4 2.9	140 100.0

^aCells of table include frequency and row percent

TABLE 31

Q 37 RESPONSE TO "AT WHAT AGE SHOULD CHILDREN BE TAUGHT TO USE A "CHEWING STICK" (TOOTHBRUSH)?" BY PROFESSIONAL TRAINING LEVEL^a

PROFESSIONAL TRAINING LEVEL	AGE						TOTAL
	AT 2 YRS.	AT 3 YRS.	AT 4 YRS.	AT 5 YRS.	AT 6 YRS.	AT 7 OR MORE YRS.	
SINGLE QUALIFIED NURSE	17 68.0	4 16.0	4 16.0	0 0	0 0	0 0	25 100.0
DOUBLE QUALIFIED NURSE	19 57.6	10 30.3	1 3.0	1 3.0	0 0	2 6.1	33 100.0
DRESSER-DISPENSER	7 20.0	9 25.7	9 25.7	4 11.4	3 8.6	3 8.6	35 100.0
DOCTOR	1 50.0	0 0	1 50.0	0 0	0 0	0 0	2 100.0
STUDENT AUXILIARY NURSE	5 26.3	6 31.6	3 15.8	3 15.8	1 5.3	1 5.3	19 100.0
COMMUNITY HEALTH NURSE	4 36.4	3 27.3	1 9.1	1 9.1	1 9.1	1 9.1	11 100.0
PUBLIC HEALTH INSPECTOR	5 27.8	5 27.8	3 16.7	3 16.7	1 5.6	1 5.6	18 100.0
TOTAL	58 40.6	37 25.9	22 15.4	12 8.4	6 4.2	8 5.6	143 100.0

^aCells of table include frequency and row percent

TABLE 32

Q 38. WHAT SHOULD A MOTHER DO IF HER CHILD HAS DIARRHEA?
 FREQUENCY AND PERCENT RESPONDING AFFIRMATIVELY BY
 PROFESSIONAL TRAINING LEVEL^a

ACTION	PROFESSIONAL TRAINING LEVEL							TOTAL
	SQN	DQN	DD	DOCTORS	SAN	CHN	PHI	
1. CONTINUE FEEDING THE CHILD SOLID FOOD	2 7.4	1 3.0	3 7.0	0 0.0	0 0.0	3 27.3	2 9.1	11 6.9
2. CONTINUE GIVING THE CHILD LIQUIDS	12 44.4	14 42.4	8 18.6	1 50.0	8 36.4	4 36.4	4 18.2	51 31.9
3. GIVE THE CHILD LIQUIDS WITH SALT AND SUGAR	20 74.1	26 78.8	30 69.8	1 50.0	17 77.3	9 81.8	13 59.1	116 72.5
4. PRESCRIBE A TRADITIONAL MEDICATION	2 7.4	2 6.1	8 19.0	0 0.0	1 4.5	1 9.1	2 9.1	16 10.1
n	27	33	43	2	22	11	22	160

- 318 -

^a Cells of table include frequency and column percent

TABLE 33

Q39. MOST COMMON CAUSE OF CHILDHOOD ACCIDENTS IN THE GAMBIA
BY PROFESSIONAL TRAINING LEVEL ^a

PROFESSIONAL TRAINING LEVEL	CAUSE					TOTAL
	BURNS	FALLS	POISONING FROM UNMARKED CONTAINERS	DROWNING	SNAKE BITES	
SINGLE QUALIFIED NURSE	22 84.6	2 7.7	1 3.8	0 0.0	1 3.8	26 100.0
DOUBLE QUALIFIED NURSE	27 87.1	3 9.7	1 3.2	0 0.0	0 0	31 100.0
DRESSER- DISPENSER	27 77.2	6 17.1	1 2.9	0 0.0	1 2.9	35 100.0
DOCTOR	1 50.0	1 50.0	0 0	0 0	0 0	2 100.0
STUDENT AUXILIARY NURSE	15 83.3	2 11.1	1 5.6	0 0.0	0 0	18 100.0
COMMUNITY HEALTH NURSE	9 90.0	1 10.0	0 0.0	0 0.0	0 0	10 100.0
PUBLIC HEALTH INSPECTOR	9 50.0	8 44.4	1 5.6	0 0.0	0 0	18 100.0
TOTAL	110 78.6	23 16.4	5 3.6	0 0.0	2 1.4	140 100.0

^a Cells of table include frequency and row percent

TABLE 34

Q 40. OBSERVED INCIDENCE OF FRANK KWASHIORKOR AND/OR MARASMUS IN THE PAST YEAR BY PROFESSIONAL TRAINING LEVEL^a

PROFESSIONAL TRAINING LEVEL	INCIDENCE					TOTAL
	NONE	1-2 CASES	3-10 CASES	11-19 CASES	20+ CASES	
SINGLE QUALIFIED NURSE	7 30.4	9 39.1	3 13.0	1 4.3	3 13.0	23 100.0
DOUBLE QUALIFIED NURSE	5 16.1	13 41.9	9 29.0	3 9.7	1 3.2	31 100.0
DRESSER-DISPENSER	11 30.6	16 44.4	3 8.3	3 8.3	3 8.3	36 100.0
DOCTOR	0 0	0 0	2 100.0	0 0	0 0	2 100.0
STUDENT AUXILIARY NURSE	1 5.6	12 66.7	4 22.2	1 5.6	0 0	18 100.0
COMMUNITY HEALTH NURSE	0 0	4 36.4	3 27.3	1 9.1	3 27.3	11 100.0
PUBLIC HEALTH INSPECTOR	3 20.0	6 40.0	2 13.3	0 0	4 26.7	15 100.0
TOTAL	27 19.9	60 44.1	26 19.1	9 6.6	14 10.3	136 100.0

^aCells of table include frequency and row percent

TABLE 35
 Q30. NUMBER OF MONTHS MOST RECENT CHILD WAS BREASTFED BY PROFESSIONAL TRAINING LEVEL^f

PROFESSIONAL TRAINING LEVEL	NUMBER OF MONTHS								n
	6 MOS.	6-9	9-12	12-15	15-18	18-21	21-24	24+	
SINGLE QUALIFIED NURSE	2 0.0	2 20.0	1 10.0	1 10.0	0 0.0	6 60.0	0 0.6	0 0.0	10
DOUBLE QUALIFIED NURSE	2 9.0	5 22.7	3 13.6	2 9.0	1 4.5	7 31.8	1 4.5	1 4.5	22
DRESSER-DISPENSER	0 0.0	1 5.9	2 11.8	4 23.5	0	7 41.2	0 0.0	3 17.6	17
DOCTOR	1 50.0	1 50.0	0 0	0 0	0 0	0 0	0 0	0 0	2
STUDENT AUXILIARY NURSE	0 0.0	1 8.3	6 50.0	0 0.0	0 0.0	3 24.0	0 0.0	2 16.7	12
COMMUNITY HEALTH NURSE	0 0.0	0 0.0	0 0.0	0 0.0	0 0.0	1 100.0	0 0.0	0 0.0	1
PUBLIC HEALTH INSPECTOR	0 0	0 0	0 0	0 0	0 0	4 100.0	0 0	0 0	4
TOTAL	3 4.5	10 14.8	12 17.6	7 10.32	1 1.5	28 41.1	1 1.5	6 8.8	68
CUMULATIVE PERCENT	4.5	19.3	36.9	47.1	48.7	89.7	91.2	100.0	

^aCells of table include frequency and row percent

^bMore than 6 months but less than 9 months

TABLE 36.1

Q32-3. NUMBER OF BOYS THE HUSBAND OF A YOUNG NEWLY MARRIED GAMBIAN COUPLE WOULD WANT AS PERCEIVED BY RESPONDENT BY PROFESSIONAL TRAINING LEVEL^a

PROFESSIONAL TRAINING LEVEL	RESPONSE						HUSBAND WOULDN'T HAVE A # IN MIND	DON'T KNOW	TOTAL
	1	2	3	4	5	6			
SINGLE QUALIFIED NURSE	0 0	3 11.1	2 7.4	2 7.4	0 0	1 3.7	2 7.4	17 63.0	27 100.0
DOUBLE QUALIFIED NURSE	0 0	5 15.2	8 24.2	3 9.1	0 0	0 0	2 6.1	15 45.5	33 100.0
DRESSER-DISPENSER	1 2.3	5 11.6	3 7.0	0 0	1 2.3	0 0	4 9.3	29 67.4	43 100.0
DOCTOR	0 0	0 0	1 50.0	0 0	0 0	0 0	1 50.0	0 0	2 100.0
STUDENT AUXILIARY NURSE	0 0	1 4.5	0 0	1 4.5	0 0	0 0	1 4.5	19 86.4	22 100.0
COMMUNITY HEALTH NURSE	0 0	1 9.1	1 9.1	1 9.1	0 0	0 0	1 9.1	7 63.6	11 100.0
PUBLIC HEALTH INSPECTOR	0 0	3 13.6	2 9.1	1 4.5	1 4.5	1 4.5	3 13.6	11 50.0	22 100.0
TOTAL	1 0.6	18 11.2	17 10.6	8 5.0	2 1.2	2 1.2	14 8.8	98 61.2	160 100.0

^aCells of table include frequency and row percent

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TABLE 36.3

Q32-3 NUMBER OF BOYS THE WIFE OF A YOUNG NEWLY MARRIED GAMBIAN COUPLE WOULD WANT AS PERCEIVED BY RESPONDENT BY PROFESSIONAL TRAINING LEVEL^a

PROFESSIONAL TRAINING LEVEL	RESPONSE							TOTAL
	1	2	3	4	6	WIFE WOULDN'T HAVE # IN MIND	DON'T KNOW	
SINGLE QUALIFIED NURSE	1 3.7	6 22.2	3 11.1	0 0	0 0	3 11.1	14 51.9	27 100.0
DOUBLE QUALIFIED NURSE	1 3.0	15 45.5	1 3.0	1 3.0	0 0	3 9.1	12 36.4	33 100.0
DRESSER-DISPENSER	3 7.0	3 7.0	1 2.3	1 2.3	0 0	4 9.3	31 72.1	43 100.0
DOCTOR	1 50.0	0 0	0 0	0 0	0 0	1 50.0	0 0	2 100.0
STUDENT AUXILIARY NURSE	0 0	4 18.2	2 9.1	1 4.5	0 0	1 4.5	14 63.6	22 100.0
COMMUNITY HEALTH NURSE	0 0	2 18.2	0 0	0 0	0 0	0 0	9 81.8	11 100.0
PUBLIC HEALTH INSPECTOR	1 4.5	3 13.6	1 4.5	0 0	1 4.5	4 18.2	12 54.5	22 100.0
TOTAL	7 4.4	33 20.6	8 5.0	3 1.9	1 0.6	16 10.0	92 57.5	160 100.0

^a Cells of table include frequency and percentage

TABLE 36.4

Q32-3 NUMBER OF GIRLS THE WIFE OF A YOUNG NEWLY MARRIED GAMBIAN
COUPLE WOULD WANT AS PERCEIVED BY RESPONDENT BY PROFESSIONAL^a
TRAINING LEVEL

PROFESSIONAL TRAINING LEVEL	RESPONSE							TOTAL
	1	2	3	4	6	WIFE WOULDN'T HAVE # IN MIND	DON'T KNOW	
SINGLE QUALIFIED NURSE	1 3.7	6 22.2	3 11.1	0 0	0 0	3 11.1	14 51.9	27 100.0
DOUBLE QUALIFIED NURSE	1 3.0	15 45.5	1 3.0	0 0	1 3.0	3 9.1	12 36.4	33 100.0
DRESSER- DISPENSER	1 2.3	3 7.0	4 9.3	0 0	0 0	4 9.3	31 72.1	43 100.0
DOCTOR	0 0	0 0	1 50.0	0 0	0 0	1 50.0	0 0	2 100.0
STUDENT AUXILIARY NURSE	2 9.1	3 13.6	2 9.1	0 0	0 0	1 4.5	14 63.6	22 100.0
COMMUNITY HEALTH NURSE	0 0	1 9.1	1 9.1	0 0	0 0	0 0	9 81.8	11 100.0
PUBLIC HEALTH INSPECTOR	1 4.5	2 9.1	1 4.5	1 4.5	1 4.5	4 18.2	12 54.5	22 100.0
TOTAL	6 3.7	30 18.8	13 8.1	1 0.6	2 1.2	16 10.0	92 57.5	160 100.0

^aCells of table include frequency and row percent

TABLE 37

Q52. RESPONSE TO "WHICH CHILD-SPACING METHOD DO YOU THINK
WOULD BE BEST FOR MOST GAMBIAN COUPLES?"
BY PROFESSIONAL TRAINING LEVEL ^a

PROFESSIONAL TRAINING LEVEL	METHOD							TOTAL
	CONDOM	PROGESTERONE INJECTION	DIAPHRAGM	IUD	PILL	RHYTHM	WITHDRAWAL	
SINGLE QUALIFIED NURSE	4 15.4	2 7.7	0 0	14 53.8	5 19.2	0 0	1 3.8	26 100.0
DOUBLE QUALIFIED NURSE	2 6.1	4 12.1	1 3.0	20 60.6	5 15.2	1 3.0	0 0	33 100.0
DRESSER- DISPENSER	8 28.6	0 0	3 10.7	8 28.6	9 32.1	0 0	0 0	28 100.0
DOCTOR	0 0	0 0	0 0	2 100.0	0 0	0 0	0 0	2 100.0
STUDENT AUXILIARY NURSE	2 10.0	0 0	0 0	15 75.0	3 15.0	0 0	0 0	20 100.0
COMMUNITY HEALTH NURSE	2 18.2	1 9.1	0 0	1 9.1	6 54.5	1 9.1	0 0	11 100.0
PUBLIC HEALTH INSPECTOR	2 11.1	2 11.1	0 0	6 33.3	4 22.2	1 5.6	3 16.7	18 100.0
TOTAL	20 14.5	9 6.5	4 2.9	66 47.8	32 23.2	3 2.2	4 2.9	138 100.0

^aCells of table include frequency and row percent

TABLE 38

Q59. INCIDENCE OF GAMBIAN PATIENTS REQUESTING CHILD SPACING OR FAMILY PLANNING SERVICES DURING PAST YEAR BY PROFESSIONAL TRAINING LEVEL^a

PROFESSIONAL TRAINING LEVEL	RESPONSE				TOTAL
	ONCE OR MORE EACH WEEK	ONCE OR TWICE EACH MONTH	ONCE OR TWICE EACH YEAR	NEVER	
SINGLE QUALIFIED NURSE	11 55.0	3 15.0	4 20.0	2 10.0	20 100.0
DOUBLE QUALIFIED NURSE	15 46.9	13 40.6	4 12.5	0 0	32 100.0
DRESSER-DISPENSER	11 39.3	4 14.3	7 25.0	6 1.4	28 100.0
DOCTOR	1 50.0	1 50.0	0 0	0 0	2 100.0
STUDENT AUXILIARY NURSE	14 73.7	1 5.3	2 10.5	2 10.5	19 100.0
COMMUNITY HEALTH NURSE	5 62.5	1 12.5	1 12.5	1 12.5	8 100.0
PUBLIC HEALTH INSPECTOR	2 20.0	3 30.0	1 10.0	4 40.0	10 100.0
TOTAL	59 49.6	26 21.8	19 16.0	15 12.6	119 100.0

^aCells of table include frequency and row percent

TABLE 39

Q 57 INCIDENCE OF GAMBIAN PATIENTS REQUESTING HELP WITH INFERTILITY DURING PAST YEAR BY PROFESSIONAL TRAINING LEVEL^a

PROFESSIONAL TRAINING LEVEL	RESPONSE				TOTAL
	ONCE OR MORE EACH WEEK	ONCE OR TWICE EACH MONTH	ONCE OR TWICE EACH YEAR	NEVER	
SINGLE QUALIFIED NURSE	5 22.7	7 31.8	6 27.3	4 18.2	22 100.0
DOUBLE QUALIFIED NURSE	16 48.5	10 30.3	6 18.2	1 3.0	33 100.0
DRESSER-DISPENSER	10 40.0	4 16.0	6 24.0	5 20.0	25 100.0
DOCTOR	2 100.0	0 0	0 0	0 0	2 100.0
STUDENT AUXILIARY NURSE	10 62.5	4 25.0	1 6.3	1 6.3	16 100.0
COMMUNITY HEALTH NURSE	3 42.9	2 28.6	1 14.3	1 14.3	7 100.0
PUBLIC HEALTH INSPECTOR	3 50.0	1 16.7	1 16.7	1 16.7	6 100.0
TOTAL	49 44.1	28 25.2	21 18.9	13 11.7	111 100.0

^a Cells of table include frequency and row percent

Q60. CONTACTS WITH GAMBIAN PATIENTS WHO HAVE HAD NON-PROFESSIONAL INDUCED ABORTIONS DURING PAST YEAR BY PROFESSIONAL TRAINING LEVEL ^a

PROFESSIONAL TRAINING LEVEL	RESPONSE					TOTAL
	ONCE OR MORE EACH WEEK	ONCE OR TWICE EACH MONTH	ONCE OR TWICE EACH YR.	NEVER AS PATIENTS BUT HAVE KNOWLEDGE OF SOME	NEVER AS PATIENTS AND HAVE HEARD OF NONE	
SINGLE QUALIFIED NURSE	5 22.7	6 27.3	2 9.1	8 36.4	1 4.5	22 100.0
DOUBLE QUALIFIED NURSE	3 10.7	4 14.3	6 21.4	15 53.6	0 0	28 100.0
DRESSER-DISPENSER	4 16.7	4 16.7	2 8.3	10 41.7	4 16.7	24 100.0
DOCTOR	0 0	0 0	2 100.0	0 0	0 0	2 100.0
STUDENT AUXILIARY NURSE	5 35.7	4 28.6	2 14.3	3 21.4	0 0	14 100.0
COMMUNITY HEALTH NURSE	1 11.1	2 22.2	1 11.1	4 44.4	1 11.1	9 100.0
PUBLIC HEALTH INSPECTOR	0 0	1 10.0	2 20.0	6 60.0	1 10.0	10 100.0
TOTAL	18 16.5	21 19.3	17 15.6	46 42.2	7 6.4	109 100.0

^aCells of table include frequency and row percent

TABLE 41

Q 61 PERCENT AGREEING WITH DISCUSSION OF FAMILY PLANNING UNDER VARIOUS CIRCUMSTANCES BY PROFESSIONAL TRAINING LEVEL ^a

Q 61 () ACTION	PROFESSIONAL TRAINING LEVEL							TOTAL PERCENT UNDECIDED	TOTAL
	SNQ	DQN	DD	DOCTORS	SAN	CHN	PHI		
(1) ROUTINELY WITH PATIENTS REGARDLESS OF AGE OR MARITAL STATUS	70.4	66.7	55.8	50.0	59.1	72.7	63.0	26.2	63.1
(2) ROUTINELY WITH ALL PP REGARDLESS OF AGE	81.5	81.8	55.8	50.0	59.1	90.9	63.0	24.4	69.4
(3) ROUTINELY WITH ALL PP REGARDLESS OF MARITAL STATUS	81.5	84.8	53.5	100.0	63.6	100.0	63.0	23.1	71.2
(4) ASSESS AND INQUIRE	51.9	72.7	37.2	100.0	59.1	72.7	50.0	34.4	55.0
(5) WITH ALL MOTHERS IN PRE-SCHOOL OR UNDER-FIVES CLINIC	63.0	63.6	44.2	0.0	68.2	90.9	68.2	30.0	60.0
(6) WITH COMMUNITY GROUPS	85.2	84.8	62.8	100.0	63.6	100.0	77.3	20.6	76.3
(7) WITH MEN AS OFTEN AS POSSIBLE	81.5	78.8	55.8	100.0	72.7	81.8	77.3	20.6	72.5
(8) ONLY WHEN NO CONFLICT W/ HEALTH WORKER'S BELIEFS	33.3	9.1	25.6	50.0	36.4	45.5	22.7	35.6	26.2
(9) ONLY WHEN NO CONFLICT W/PP'S BELIEFS	33.3	24.2	23.3	50.0	36.4	18.2	13.6	31.3	25.1

TABLE 41 - continued

Q 61 PERCENT AGREEING WITH DISCUSSION OF FAMILY PLANNING UNDER VARIOUS CIRCUMSTANCES BY PROFESSIONAL TRAINING LEVEL ^a

Q 61 () ACTION	PROFESSIONAL TRAINING LEVEL							TOTAL PERCENT UNDECIDED	TOTAL
	SON	DON	DD	DOCTORS	SAN	CHN	PHI		
(10) ANY PATIENT REGARD- LESS OF AGE	29.6	48.5	14.0	50.0	27.3	72.7	36.4	33.1	33.1
(11) ANY PATIENT REGARD- LESS OF MARITAL STATUS	37.0	60.6	34.9	100.0	36.4	72.7	68.2	28.1	48.7
(12) NEVER DISCUSS FP	3.7	18.2	14.0	0.0	27.3	9.1	0.0	24.4	12.5

^aSee Q 61 of questionnaire

TABLE 42
PERCENT OF RESPONDENTS ANSWERING VARIOUS KNOWLEDGE QUESTIONS CORRECTLY
BY PROFESSIONAL TRAINING LEVEL

Q.#	SUBJECT	PROFESSIONAL TRAINING LEVEL							TOTAL
		SINGLE QUALIFIED NURSE	DOUBLE QUALIFIED NURSE	DRESSER DISPENSER	DOCTOR	STUDENT AUXILIARY NURSE	COMMUNITY HEALTH NURSE	PUBLIC HEALTH INSPECTOR	
23.	ILESIA CHARTS (2)	55.6	48.5	14.0	50.0	54.5	72.7	22.7	39.4
24	WATER-BORNE DISEASE (3)	96.3	84.3	76.7	100.0	81.8	72.7	77.3	82.5
25.	DIPHTHERIA INOCULATION (4)	85.2	87.9	72.1	100.0	45.5	63.6	68.2	73.1
26.	TRIPLE ANTIGEN VACCINE (4)	55.6	72.7	55.8	100.0	59.1	72.7	72.7	73.1
29.	SAFE CHILDBEARING AGE (3)	77.8	75.8	67.4	50.0	50.0	81.8	54.5	67.5
31.	MOTHER'S MILK (1)	66.7	54.5	30.2	50.0	63.6	90.9	40.9	51.9
38.3	DIARRHEA TREATMENT	74.1	78.8	69.8	50.0	77.3	81.8	59.1	72.5
41.	BEST PROTEIN SOURCE (3)	59.2	72.7	37.2	50.0	36.4	63.6	54.5	52.5
43.	SOURCES OF VITAMIN A (3)	11.1	9.1	4.7	0.0	4.5	18.2	13.6	8.8
44.	PROCESSING RICE (2)	66.7	45.5	48.8	100.0	54.5	54.5	72.7	56.3
45,	2-4 YR. OLD CHILDREN (1)	33.3	24.2	14.0	50.0	13.6	81.8	27.3	26.3
50.	TIME OVUM AVAILABLE (3)	11.1	9.1	18.6	50.0	18.2	18.2	45.5	16.3
51.	LOCATION OF FERTILIZATION (2)	59.3	69.7	34.9	100.0	72.7	63.6	40.9	55.0
53.	"SAFE PERIOD" (2)	25.9	33.3	16.3	50.0	22.7	36.4	9.1	23.1
54.	PROB. INFERT. CAUSE (4)	63.0	36.4	46.5	100.0	36.4	27.3	40.9	44.4
55.	INFERTILE COUPLE (2)	70.4	60.6	48.8	100.0	40.9	81.8	36.4	55.0
56.	EVERY WOMAN (4)	25.9	42.4	23.3	50.0	13.6	9.1	9.1	23.3
		27.0	33.0	43.3	2.0	22.0	11.0	22.0	160.0

TABLE 43

Q19. RESPONSE TO "DO YOU EVER HAVE LANGUAGE PROBLEMS (OTHER THAN ENGLISH) IN YOUR WORK?" BY AGE^a

AGE	RESPONSE		TOTAL
	NO	YES	
20-29	17 22.4	59 77.6	76 100.0
30-39	15 53.6	13 46.4	28 100.0
40-49	4 18.2	18 81.8	22 100.0
50+	8 61.5	5 38.5	13 100.0
TOTAL	44 31.7	95 68.3	139 100.0

^aCells of table include frequency and row percent

TABLE 44

Q6. TRIBE BY LANGUAGES SPOKEN ^a

TRIBE	LANGUAGES SPOKEN									TOTAL
	MANDINKA	WOLLOF	MANDINKA/ WOLLOF	WOLLOF/ DIOLA	WOLLOF/ FULA	MANDINKA/ WOLLOF/DIOLA	MANDINKA/ WOLLOF/FULA	MANDINKA/ WOLLOF/ FULA/DIOLA	OTHER	
MANDINKA	2 6.7	0 0	19 63.3	0 0	0 0	1 3.3	7 23.3	1 3.3	0 0	30 100.0
WOLLOF	0 0	18 31.0	27 46.6	1 1.7	0 0	1 1.7	9 15.5	2 3.4	0 0	58 100.0
DIOLA	0 0	0 0	0 0	2 16.7	0 0	8 66.7	0 0	2 16.6	0 0	12 100.0
FULA	0 0	0 0	0 0	0 0	1 14.3	0 0	6 85.4	0 0	0 0	7 100.0
OTHER	0 0	10 25.0	22 55.0	0 0	0 0	2 5.0	2 5.0	2 5.0	2 5.0	40 100.0
TOTAL	2 1.4	28 19.0	68 46.2	3 2.0	1 0.7	12 8.2	25 17.0	6 4.0	2 1.4	147 100.0

^aCells of table include frequency and row percent

-334-

TABLE 43

Q19. RESPONSE TO "DO YOU EVER
HAVE LANGUAGE PROBLEMS (OTHER THAN ENGLISH)
IN YOUR WORK?" BY TRIBE^a

TRIBE	RESPONSE		TOTAL
	NO	YES	
MANDINKA	13 44.8	16 55.2	29 100.0
WOLLOF	19 33.9	37 66.1	56 100.0
DIOLA	1 9.1	10 90.9	11 100.0
FULA	4 57.1	3 42.9	7 100.0
OTHER	8 20.0	32 80.0	40 100.0
TOTAL	45 31.5	98 68.5	143 100.0

^aCells of table include frequency and row percent

TABLE 46

Q19. RESPONSE TO "DO YOU EVER HAVE LANGUAGE PROBLEMS (OTHER THAN ENGLISH) IN YOUR WORK?" BY LANGUAGES SPOKEN

LANGUAGES SPOKEN	RESPONSE		TOTAL
	NO	YES	
MANDINKA	1 50.0	1 50.0	2 100.0
WOLLOF	4 13.3	26 86.7	30 100.0
MANDINKA/ WOLLOF	26 35.6	47 64.4	73 100.0
WOLLOF/FULA	0 0	3 100.0	3 100.0
MANDINKA/ WOLLOF/DIOLA	3 30.0	7 70.0	10 100.0
MANDINKA/ WOLLOF/FULA	8 33.3	16 66.7	24 100.0
MANDINKA/WOLLOF/ FULA/DIOLA	5 100.0	0 0	5 100.0
OTHER	0 0	2 100.0	2 100.0
TOTAL	47 31.5	102 68.5	149 100.0

^aCells of table include frequency and row percent

TABLE 47

Q19. RESPONSE TO "DO YOU EVER HAVE LANGUAGE PROBLEMS (OTHER THAN ENGLISH) IN YOUR WORK?" BY DIVISION OF EMPLOYMENT^a

DIVISION	RESPONSE		TOTAL
	NO	YES	
BANJUL	33 30.3	76 69.7	109.0 100.0
WESTERN	5 50.0	5 50.0	10.0 100.0
LOWER RIVER	2 25.0	6 75.0	8 100.0
NORTH BANK	3 37.5	5 62.5	8 100.0
MCCARTHY ISLAND	1 12.5	7 87.5	8 100.0
UPPER RIVER	3 100.0	0 0	3 100.0
TOTAL	47 32.7	99 67.3	146 100.0

^aCells of table include frequency and row percent

DISCUSSION

Process:

A few words concerning the process used in collecting the data for this survey should be of interest to the reader. Before proceeding, it should be noted that, to our knowledge, this is the first survey conducted under the auspices of The Gambian Government to collect data regarding the attitudes and practices of health professionals in the Country.

This survey benefited from the continuity of having Dr. Harrison A. Stubbs, a biostatistician, present from the beginning of the survey through the final analysis and reporting stages.

Local Gambian input was assured by having Ministry officials review the first draft of the survey and make changes, additions and deletions. In this respect, the input of Dr. Peter N'Dow, The Gambian Director of Medical Services (DMS) and of Mrs. Bertha M'Boge, Coordinator of Maternal and Child Health, were especially important. The DMS further assisted the survey by writing a letter of introduction for Dr. Stubbs which was used during the data collection phase to insure cooperation of respondents. (See Attachment A.)

A review of some of the pitfalls which were avoided through planning efforts are of interest:

- The survey was conducted in February and March to avoid the rainy season when transportation in rural Gambia is extremely difficult. Dr. Stubbs encountered no weather-related obstacles in gathering data. Transportation in the rainy season can easily present insurmountable problems.
- Visits to health facilities were timed so that they would not conflict with clinic days. This allowed time for Dr. Stubbs to explain the

survey and insure that the health professionals at the facilities would complete the survey.

- A schedule was developed in advance which permitted revisits to certain rural facilities. This was done to insure as complete coverage as possible from the rural areas.
- Sufficient time was planned in the administration of the survey to allow Dr. Stubbs to develop a rapport with the respondents. Respondents on the whole were made to feel at ease about the survey and were extremely cooperative in completing the questionnaires.
- A signed letter of introduction from Dr. N'Dow was always presented to the director of each health facility before interviews or questionnaires were administered.
- All questionnaires were printed in advance of the survey and sufficient copies were hand-carried to The Gambia by Dr. Stubbs. This avoided printing delays in The Gambia.
- Reliable transportation was provided by the Ministry of Health and the Ministry driver, Mr. Bakary Demba, was completely familiar with all the health facility locations. No time was lost taking the wrong roads or missing ferry crossings.
- The Ministry supplied a complete list of health professionals, including assignment locations, which helped achieve a 76% response rate.

Content:

After completing this survey we believe that the six major objectives of the survey stated in the introduction of this report were satisfactorily achieved. In addition, there are several interesting survey results that deserve highlighting:

1. Although most of our project work has been done in the Banjul area and the Lower River Division, it was interesting to be informed both verbally and in writing, of the concerns of rural health workers. There was a commonly voiced complaint, especially in the North Bank, McCarthy Island and Upper River Divisions, that logistical support needs were not being met. Transportation was usually the main complaint, but medicines and lack of health personnel were also mentioned repeatedly.

2. The base line data collected in the survey reveals that most of the health professionals are young (with about 50% being under the age of 20 years). This is attributable in part to the Ministry of Health's effort to develop a corps of auxiliary health workers to serve in rural Gambia. Programs such as the Community Health Nurses School in Mansa Konko are providing young Gambians with training, and jobs, in the health field.

3. Not surprising are the survey results that indicate a language problem in dealing with patients is common. Language was noted as a problem by 68.2% of the respondents especially in the Banjul area and McCarthy Island Division. The need for a common universal language whether it be Wollof, Mandinka, English or whatever is apparent in The Gambia as it is in most West Africa countries. The survey indicated that even multi-lingual health workers have difficulties communicating with patients.

4. As suspected, many of the Gambia's well-trained nursing personnel are frequently assigned to rural health work. (34.4% of the double-qualified nurses indicated they spent most of their time working in rural health centers or rural clinics.) The Ministry employs a rotation scheme which encourages assignment of nurse/midwives to rural areas. However, the single qualified nurses spend little time in rural assignments. These nurses are generally

hospital-based in Banjul but might represent a group who could be trained for rural service.

5. An important fact noted in the base-line data was that 89.4% of the health personnel reported having received most of their health training in The Gambia. This is extremely important in considering assistance to The Gambia in manpower training. The fact that The Gambia is making the effort to train its own health workers through the Schools of Public Health, Nursing, Midwifery and Community Health Nursing, suggests that improvement should come through improved curricula, teaching methods, training facilities, and student recruitment drives, and local retraining of health personnel.

6. Nursing respondents listed their training needs in the order of:

- a. Infant Care
- b. Nutrition
- c. Maternal Care
- d. Family Planning

The thrust of future training programs should seriously consider this priority list.

7. It is interesting to note the low interest in training in record-keeping, mental health, and treatment of infertility problems.

8. Malaria and maternal depletion were cited as the major health hazards to mothers and gastroenteritis the most common childhood illness.

9. Burns were considered the most common cause of childhood accidents. This is mainly due to cooking fires on the ground where children can easily fall into the fire. Dresser/dispensers confirmed this supposition through discussions with Dr. Stubbs.

10. Breast feeding was reported as common practice by the health professionals having children. The length of breast feeding was usually over a year which is an encouraging practice in light of growing international concern over the introduction of bottle feeding in less developed countries. The health professionals should provide an excellent role model for their patients.

11. The importance of making family planning information and services available in The Gambia is underscored by the following questionnaire responses:

- a. 87% of the respondents said they received requests for family planning information. Most of the 13% who did not were dresser/dispensers or public health inspectors who would not normally be asked about family planning.
- b. The health professionals in general support the idea of providing family planning information. Seventy-percent of the professionals said family planning information should be given to community groups and to all postpartum mothers.
- c. Fifty percent of the respondents said they get family planning requests at least weekly.
- d. There was a large number of respondents who reported non-professional abortions in their service areas.

12. The survey only did a sample in knowledge of various technical areas. The sample of nutrition-related questions revealed a low technical knowledge but good practical knowledge. The question of best sources for Vitamin A, for example, was missed by 92% of the respondents. Reproduction was another area where additional training is required.

13. To end this discussion on a positive note, health professionals indicated that their children have a high level of protection against communicable diseases. This practice of inoculations should also be promoted among the general population:

QUESTIONNAIRE

SURVEY OF HEALTH PROFESSIONALS

THE GAMBIA -- FEBRUARY 1978

PLEASE DO NOT PUT YOUR NAME ON THIS QUESTIONNAIRE. WE WILL USE THE INFORMATION OBTAINED FOR HEALTH PLANNING AND TRAINING PURPOSES. AFTER THE INFORMATION HAS BEEN CORRELATED, THE PAPERS WILL BE DESTROYED. NO ONE EXCEPT THE UCSC/MCH PROJECT STAFF WILL SEE OR HANDLE THE QUESTIONNAIRES. THE GENERAL INFORMATION WILL BE SUMMARIZED AND USED FOR MCH PROGRAM PLANNING WITHIN THE MINISTRY OF HEALTH.

THANK YOU FOR YOUR COOPERATION.

Col. #

1. BASIC EDUCATION (Check (✓) the highest level achieved)	4
<input type="checkbox"/> 1. Kindergarten	
<input type="checkbox"/> 2. Primary (6-11 years)	
<input type="checkbox"/> 3. Junior Secondary	
<input type="checkbox"/> 4. High School	
<input type="checkbox"/> 5. 6th Form	
<input type="checkbox"/> 6. Other (specify) _____	
2. KORANIC EDUCATION (Check highest number of years; for example, if exactly two years, check number 3)	5
<input type="checkbox"/> 0. None	
<input type="checkbox"/> 1. Less than 1 year	
<input type="checkbox"/> 2. 1 or more but less than 2 years	
<input type="checkbox"/> 3. 2 or more but less than 3 years	
<input type="checkbox"/> 4. 3 or more but less than 4 years	
<input type="checkbox"/> 5. 4 or more but less than 5 years	
<input type="checkbox"/> 6. 5 or more but less than 10 years	
<input type="checkbox"/> 7. More than 10 years	
3. PROFESSIONAL TRAINING LEVEL (Check highest level achieved)	6
<input type="checkbox"/> 0. Single qualified nurse, single qualified midwife, enrolled nurse	
<input type="checkbox"/> 1. Double qualified nurse-midwife	
<input type="checkbox"/> 2. Public Health Nurse	
<input type="checkbox"/> 3. Sister tutor	
<input type="checkbox"/> 4. Other nursing specialty (specify) _____	
<input type="checkbox"/> 5. Doctor in general practice	
<input type="checkbox"/> 6. Doctor with specialty training	
<input type="checkbox"/> 7. Community health nurse	
<input type="checkbox"/> 8. Other (specify) _____	
4. TRAINING CURRENTLY RECEIVED (Check type)	7
<input type="checkbox"/> 0. Not receiving training now	
<input type="checkbox"/> 1. School of Midwifery	
<input type="checkbox"/> 2. School of Public Health	
<input type="checkbox"/> 3. School of Nursing	
<input type="checkbox"/> 4. Community Health Nurse trainee (Mansa Konko)	
<input type="checkbox"/> 5. Other (specify) _____	

5. NATIONALITY (Check one)

- 1. Gambian by birth
- 2. Gambian by nationalization
- 3. Senegalese
- 4. Other African
- 5. European
- 6. Other (specify) _____

6. TRIBAL GROUP (Check one only if you are Gambian or Senegalese)

- 1. Mandinka
- 2. Wollof
- 3. Jola
- 4. Fula
- 5. Serahuli
- 6. Other (specify) _____

7. LANGUAGE SPOKEN (Check all those you can speak well enough to use in your work)

- 1. Mandinka
- 2. Wollof
- 4. Jola
- 8. Fula
- 66. Other (specify) _____

8. SEX (Check which)

- 1. Male
- 2. Female

9. AGE (Write in number of years)

_____ years

10. MARITAL STATUS (Check one)

- 1. Single
- 2. Married
- 3. Widowed
- 4. Divorced
- 5. Separated

11. RELIGION (Check one)

- 1. Catholic
- 2. Moslem
- 3. Protestant
- 4. Other (specify) _____

NUMBER OF CHILDREN (State number in space provided. If you have no children born or living, put "0" in all spaces)

- | | |
|---|--|
| <input type="checkbox"/> 1. Sons born | <input type="checkbox"/> 6. Daughters living but not adopted |
| <input type="checkbox"/> 2. Sons living but not adopted | <input type="checkbox"/> 7. Daughters adopted |
| <input type="checkbox"/> 3. Sons adopted | <input type="checkbox"/> 8. Adopted daughters living |
| <input type="checkbox"/> 4. Adopted _____ living | |
| <input type="checkbox"/> 5. Daughter _____ | |

6
 9
 10
 12
 13
 15
 16
 17
 18
 19
 20
 21
 22

13. IN WHICH DIVISION ARE YOU CURRENTLY EMPLOYED? (Check one)

25

- 1. Banjul
- 2. Western division
- 3. Lower River
- 4. North Bank
- 5. McCarthy Island division
- 6. Upper River division
- 7. Not currently employed

14. WHAT POST DO YOU HOLD NOW? (Job category)

26

- 0. Staff nurse, nurse-midwife, or nursing officer
- 1. Senior Nursing Superintendent
- 2. Nursing Superintendent
- 3. Public Health Nurse, Tutor
- 4. Principle Nursing Officer
- 5. Doctor or medical officer
- 6. Student
- 7. Community Health Nurse
- 8. Other (specify) _____

15. IN WHAT LOCATION DO YOU SPEND MOST OF YOUR TIME WORKING?

27

- 1. Hospital
- 2. Rural Health Center or clinic
- 3. ~~Training~~ DISPENSARY
- 4. Training Center or school
- 5. Other (specify) _____

16. WHO PAYS YOUR SALARY OR SPONSORS YOU? (Check one)

28

- 1. Government or outside donor to the government
- 2. Mission or outside doner to the mission
- 3. GFPA
- 4. Other (specify) _____

17. HOW LONG HAVE YOU WORKED IN YOUR PRESENT POSITION (THIS JOB AND THIS SETTING)

29

- 1. Less than 3 months
- 2. 3 months up to 6 months
- 3. 6 months up to 1 year
- 4. 1 year up to 2 years
- 5. More than 2 years

18. WITH WHOM DO YOU WORK DAILY IN YOUR PRESENT POSITION? (Check as many as apply)

30

- 0. Not applicable (student)
- 1. With non-professionals (ward attendants, scrubbers, health aids)
- 2. With trainer nurses
- 3. With one doctor or more than one doctor physically present
- 4. Alone

31
32
33
34

19. DO YOU EVER HAVE LANGUAGE PROBLEMS (OTHER THAN ENGLISH) IN YOUR WORK? (Check one)

35

- 0. No
- 1. Yes

WHERE DID YOU RECEIVE MOST OF YOUR HEALTH TRAINING? (Check one only)

- 1. In The Gambia
- 2. In Senegal
- 3. In some other country in Africa
- 4. In the United Kingdom or Ireland
- 5. In the United States
- 6. Other (specify) _____

21. IN WHICH OF THE FOLLOWING SUBJECTS HAVE YOU RECEIVED TRAINING SINCE COMPLETING YOUR PROFESSIONAL EDUCATION? (Check all that apply)

- 0. Not applicable (student)
- 1. Communicable disease
- 2. Maternal care
- 3. Infant Care
- 4. Nutrition
- 5. Family planning
- 6. Infertility
- 7. Record keeping
- 8. Management techniques
- 9. Environmental sanitation
- 10. Mental health
- 11. Teaching methods
- 12. Other (specify) _____

22. IN WHICH OF THE FOLLOWING AREAS WOULD YOU LIKE TO RECEIVE TRAINING? (Check all that apply) _____

- 0. Not applicable (student)
- 1. Communicable diseases
- 2. Maternal care
- 3. Infant care
- 4. Nutrition
- 5. Family planning
- 6. Infertility
- 7. Record keeping
- 8. Management techniques
- 9. Environmental sanitation
- 10. Mental health
- 11. Teaching methods
- 12. Other (specify) _____

23. FOR WHAT PURPOSE ARE ILESHA CHARTS USED? (Check one)

- 1. For recording Inoculations received by mothers
- 2. For recording growth rates of children less than 5 years old
- 3. For recording weight gain of expectant mothers
- 4. For recording incidence of infectious diseases
- 5. For recording growth rates of children 6 months to 10 years old

24. WHICH OF THE FOLLOWING DISEASES CAN PEOPLE GET BY DRINKING WATER? (Check one)

- 1. Measles and cholera
- 2. Pneumonia and typhoid fever
- 3. Cholera and typhoid fever
- 4. Cholera and leprosy
- 5. Typhoid fever and smallpox

25. AN INOCULATION IS AVAILABLE FOR ONE OF THE FOLLOWING DISEASES. (Check one)

AN INJECTION OF TRIPLE ANTIGEN VACCINE PROTECTS AGAINST WHICH OF THE FOLLOWING DISEASES? (Check one)

- 1. Tetanus, Diphtheria, polio
- 2. Diphtheria, malaria, pertussis
- 3. Malaria, polio, tetanus
- 4. Pertussis, diphtheria, tetanus
- 5. Polio, pertussis, cholera

27. HAVE YOUR CHILDREN HAD INOCULATIONS WHICH CURRENTLY PROTECT THEM AGAINST THE FOLLOWING DISEASES? (Check all that apply)

- 0. TB
- 1. Polio
- 2. Smallpox
- 3. Measles
- 4. Diphtheria
- 5. Yellow fever
- 6. Cholera
- 7. Not applicable (no children)
- 8. Other inoculations (specify) _____

28. WHICH OF THE FOLLOWING IS THE MOST COMMON ILLNESS AMONG CHILDREN IN THE AREA IN WHICH YOU ARE WORKING? (Check one)

- 0. Not applicable (student)
- 1. Gastroenteritis (diarrhea and vomiting)
- 2. Malaria
- 3. Polio
- 4. Malnutrition
- 5. Measles
- 6. Other (explain) _____

29. FROM A PHYSIOLOGICAL POINT OF VIEW, WHICH IS THE SAFEST AGE FOR WOMEN TO BEAR CHILDREN (Check one)

- 1. Between the ages of 15 and 45 years
- 2. Between the ages of 30 and 40 years
- 3. Between the ages of 20 and 30 years
- 4. Between the ages of 15 and 25 years

30. FOR HOW LONG WAS YOUR LAST CHILD BREASTFED? (Give number of months if known)

- _____ months
- 77. Child died before weaning
- 88. Not applicable (no children)
- 99. I don't know (or cannot recall)

31. DOES INTERCOURSE DURING THE PERIOD OF TIME WHEN A MOTHER IS BREASTFEEDING AFFECT THE MOTHER'S MILK? (Check one)

- 1. No
- 2. Yes, any time
- 3. Yes, but only during first six months after delivery
- 4. I don't know

32. IF A YOUNG GAMBLAN COUPLE YOU KNEW WERE GETTING MARRIED. HOW MANY CHILDREN DO YOU THINK THE HUSBAND WOULD WANT? (State how many).

- boys
- girls
- 88. Husband would not have a number in mind
- 99. I don't know

33. HOW MANY DO YOU THINK THE WIFE WOULD WANT? (State how many)

- boys
- girls
- 88. Wife would not have a number in mind
- 99. I don't know

34. WHICH IS THE SINGLE MOST COMMON SERIOUS ILLNESS AMONG WOMEN IN THE AREA IN WHICH YOU ARE WORKING? (Check one)

- 1. Tetanus
- 2. Malaria
- 3. Typhoid fever
- 4. Schistosomiasis
- 5. Parasites (excluding schistosomiasis)
- 6. Maternal depletion
- 7. Other (specify) _____

35. AT WHAT AGE SHOULD SOLID FOOD BE ADDED TO AN INFANT'S DIET? (Check one)

- 1. At 2 weeks
- 2. At 3 months
- 3. At 5 months
- 4. At 8 months
- 5. At 1 year
- 6. At 2 years
- 7. Other (specify) _____

36. AT WHAT AGE DO INFANTS BEGIN WALKING? (Check one)

- 1. By 8 months
- 2. By 10 months
- 3. By 12 months
- 4. By 14 months
- 5. By 16 months
- 6. Over 16 months

37. AT WHAT AGE SHOULD CHILDREN BE TAUGHT TO USE A "CHEWING STICK" (TOOTHBRUSH)? (Check one)

- 1. At 2 years
- 2. At 3 years
- 3. At 4 years
- 4. At 5 years
- 5. At 6 years
- 6. At 7 or more years

WHAT SHOULD A MOTHER DO IF HER CHILD HAS DIARRHEA? (Check all that apply)

- 1. Continue feeding the child solid food
- 2. Continue giving the child liquids
- 3. Give the child liquids with salt and sugar
- 4. Prescribe a traditional medication (specify) _____

39. IN YOUR EXPERIENCE, WHICH OF THE FOLLOWING IS THE MOST COMMON CAUSE OF CHILDHOOD ACCIDENTS IN THE GAMBIA? (Check one)

- 1. Burns
- 2. Falls
- 3. Poisoning from drinking fluids from unmarked containers
- 4. Drowning
- 5. Snake bites
- 6. Other (specify) _____

40. HAVE YOU SEEN ANY FRANK KWASHIORKOR AND/OR MARASMUS CASES THIS PAST YEAR? (Check one)

- 0. Not applicable (student)
- 1. No, none at all this past year
- 2. Yes, 1 or 2 cases this past year
- 3. Yes, 3 to 10 cases this past year
- 4. Yes, more than 10 but less than 20 this past year
- 5. Yes, more than 20 cases this past year

WHICH OF THE FOLLOWING FOODS ARE THE BEST SOURCE OF PROTEIN? (Check one)

- 1. Mangoes, ground nuts
- 2. Mother's milk, cassava
- 3. Fish, ground nuts
- 4. Rice, corn
- 5. Beef, green vegetables

42. IF THE AMOUNT OF MEAT IS LIMITED, WHO HAS THE GREATEST NEED FOR WHAT IS AVAILABLE? (Check one)

- 1. Pregnant woman
- 2. Nursing mother
- 3. 2-year-old son
- 4. 2-year-old daughter
- 5. Working father

43. WHICH OF THE FOLLOWING FOODS ARE BOTH GOOD SOURCES OF VITAMIN A? (Check one)

- 1. Peanuts, green leafy vegetables
- 2. Mangoes, oranges
- 3. Mangoes, red peppers
- 4. Green leafy vegetables, millet
- 5. Oranges, millet

IN TERMS OF NUTRITION, WHAT IS THE MOST IMPORTANT EFFECT OF PROCESSING (POLISHING) RICE? (Check one)

- 1. Easier to digest
- 2. Removes important vitamins

45. WHAT SHOULD 2-4 YEAR OLD CHILDREN BE FED? (Check One)

- 1. Same food as eaten by the rest of the family
- 2. A diet with additional green leafy vegetables
- 3. Mostly cereals which are easy to digest
- 4. A diet with additional beef and fish

46. FOR HOW MANY MONTHS OF THE YEAR IS MEAT, FISH OR POULTRY AVAILABLE IN YOUR AREA AS PART OF YOUR DIET? (Check lowest; for example, if 3-1/2 months, check number 1)

- 0. Not available
- 1. 1 - 3 months
- 2. 4 - 6 months
- 3. 7 - 9 months
- 4. 10 - 12 months

47. DO YOU INCLUDE A GREEN LEAFY VEGETABLE OR A YELLOW VEGETABLE IN YOUR DIET EVERY DAY? (Check one)

- 0. No
- 1. Yes, almost every day
- 2. Yes, every day

48. DO YOU INCLUDE FRESH FRUIT OR FRESH FRUIT JUICE IN YOUR DIET EVERY DAY? (Check one)

- 0. No
- 1. Yes, almost every day
- 2. Yes, every day

49. HOW DO YOU OR YOUR SPOUSE COOK YOUR VEGETABLES? (Check one)

- 1. Low heat, short time
- 2. Low heat, long time
- 3. High heat, short time
- 4. High heat, long time

50. DURING EACH CYCLE, THE OVUM IS AVAILABLE TO BE FERTILIZED FOR APPROXIMATELY HOW MANY DAYS? (Check one)

- 1. 10 days
- 2. 1 day
- 3. 4 days
- 4. 8 days

51. WHERE DOES FERTILIZATION USUALLY TAKE PLACE? (Check one)

- 1. In the cervix
- 2. In the fallopian tube
- 3. In the uterine cavity
- 4. In the ovary

- | | | |
|-----|---|----------|
| 52. | WHICH CHILD SPACING METHOD DO YOU THINK WOULD BE BEST FOR MOST GAMBIAN COUPLES? (Check one) | Cc
27 |
| | <input type="checkbox"/> 1. Condom | |
| | <input type="checkbox"/> 2. Progesterone injections (Depo Provera) | |
| | <input type="checkbox"/> 3. Diaphragm | |
| | <input type="checkbox"/> 4. IUCD | |
| | <input type="checkbox"/> 5. Pill | |
| | <input type="checkbox"/> 6. Rhythm | |
| | <input type="checkbox"/> 7. Withdrawal (coitus interruptus) | |
| 53. | WHEN IS THE SO-CALLED "SAFE PERIOD" FOR A WOMAN WHO HAS A REGULAR 28-DAY MENSTRUAL CYCLE? (Check one) | 28 |
| | <input type="checkbox"/> 1. The second and third weeks of a 4-week cycle | |
| | <input type="checkbox"/> 2. The last 10 days of one cycle and the first 7 days of the next | |
| | <input type="checkbox"/> 3. The week of menstruation | |
| | <input type="checkbox"/> 4. Roughly the week just before and the week just after her menstrual flow | |
| 54. | WHAT IS THE <u>PROBABLE</u> MOST FREQUENT CAUSE OF INFERTILITY? (Check one) | 29 |
| | <input type="checkbox"/> 1. Psychological | |
| | <input type="checkbox"/> 2. Failure of ovulation | |
| | <input type="checkbox"/> 3. Failure of spermatogenesis | |
| | <input type="checkbox"/> 4. Infection of the fallopian tubes or vas deferens | |
| 55. | IN EVALUATION OF THE INFERTILE COUPLE, THE FIRST STEP IS TO OBTAIN WHICH OF THE FOLLOWING? (Check one) | 30 |
| | <input type="checkbox"/> 1. A sperm count | |
| | <input type="checkbox"/> 2. The couple's medical history | |
| | <input type="checkbox"/> 3. An endometrial biopsy | |
| | <input type="checkbox"/> 4. An hysterosalpingogram | |
| 56. | WHICH OF THE FOLLOWING WOULD EVERY WOMAN HAVE WHO SEEKS EITHER COUNSELING FOR INFERTILITY OR ASSISTANCE WITH CHILD SPACING? (Check one) | 31 |
| | <input type="checkbox"/> 1. An electrocardiogram | |
| | <input type="checkbox"/> 2. A chest X-ray | |
| | <input type="checkbox"/> 3. A blood clotting time | |
| | <input type="checkbox"/> 4. A breast examination | |
| 57. | DURING THE PAST YEAR, HOW OFTEN HAVE YOU HAD GAMBIAN PATIENTS REQUEST HELP WITH PROBLEMS OF INFERTILITY? (Check one) | 32 |
| | <input type="checkbox"/> 0. Not applicable (student) | |
| | <input type="checkbox"/> 1. Frequently (once a week or more often) | |
| | <input type="checkbox"/> 2. Occasionally (once or twice a month) | |
| | <input type="checkbox"/> 3. Rarely (once or twice a year or less) | |
| | <input type="checkbox"/> 4. Never | |
| 58. | HAVE YOU RECEIVED CERTIFICATION AS AN MCH/FP NURSE PRACTITIONER? (Check one) | 35 |
| | <input type="checkbox"/> 0. No | |
| | <input type="checkbox"/> 1. Yes | |

59. DURING THE PAST YEAR, HOW OFTEN HAVE YOU HAD GAMBIAN PATIENTS REQUEST CHILD SPACING OR FAMILY PLANNING SERVICES? (Check one)

- 0. Not applicable (student)
- 1. Frequently (once a week or more often)
- 2. Occasionally (once or twice a month)
- 3. Rarely (once or twice a year or less)
- 4. Never

60. DURING THE PAST YEAR, HOW OFTEN HAVE YOU HAD GAMBIAN PATIENTS WHO HAVE HAD NON-PROFESSIONAL INDUCED ABORTIONS? (Check one)

- 0. Not applicable (student)
- 1. Frequently (once a week or more often)
- 2. Occasionally (once or twice a month)
- 3. Rarely (once or twice a year or less)
- 4. Never had them as patients, but have heard of them
- 5. Never had them as patients and never heard of them

61. INDICATE WHETHER YOU AGREE OR DISAGREE BY CHECKING "YES" OR "NO" OR "UNDECIDED" IN FRONT OF EACH OF THE FOLLOWING COMPLETIONS TO THIS STATEMENT:

I THINK THAT A PROFESSIONAL HEALTH WORKER SHOULD:

- 0. No (1) discuss Family Planning routinely with patients regardless of age or marital status.
- 1. Yes
- 2. Undecided

- 0. No (2) discuss Family Planning routinely with all post-partum patients regardless of age.
- 1. Yes
- 2. Undecided

- 0. No (3) discuss Family Planning routinely with all post-partum patients regardless of marital status.
- 1. Yes
- 3. Undecided

- 0. No (4) assess and inquire about Family Planning status and needs in almost every patient contact.
- 1. Yes
- 2. Undecided

- 0. No (5) discuss Family Planning with all mothers in the Pre-School or Under-Fives clinic.
- 1. Yes
- 2. Undecided

- 0. No (6) discuss Family Planning with community groups.
- 1. Yes
- 2. Undecided

- 0. No (7) discuss Family Planning with men as often as possible.
- 1. Yes
- 2. Undecided

- 0. No
- 1. Yes
- 2. Undecided

(8) discuss only those Family Planning methods that do not conflict with his (the health worker's) own personal beliefs.

Cc
45

- 0. No
- 1. Yes
- 2. Undecided

(9) discuss Family Planning only when he thinks that child spacing does not conflict with the patient's personal beliefs.

45

- 0. No
- 1. Yes
- 2. Undecided

(10) discuss Family Planning with any patient regardless of age.

45

- 0. No
- 1. Yes
- 2. Undecided

(11) discuss Family Planning with any patient regardless of marital status.

46

- 0. No
- 1. Yes
- 3. Undecided

(12) never give Family Planning information.

46

62. AS A FINAL QUESTION, WE WOULD LIKE TO KNOW IF THERE ARE ANY SKILLS YOU LACK AND IN WHICH YOU WOULD LIKE TO RECEIVE TRAINING? (For example: giving inoculations or speaking to groups of people.)

QUESTIONNAIRE
COMMUNITY HEALTH NURSES SURVEY
THE GAMBIA -- FEBRUARY, 1978

PLEASE DO NOT PUT YOUR NAME ON THIS QUESTIONNAIRE. WE WILL USE THE INFORMATION OBTAINED FOR HEALTH PLANNING AND TRAINING PURPOSES. AFTER THE INFORMATION HAS BEEN CORRELATED, THE PAPERS WILL BE DESTROYED. NO ONE EXCEPT THE UCSC/MCH PROJECT STAFF WILL SEE OR HANDLE THE QUESTIONNAIRES. THE GENERAL INFORMATION WILL BE SUMMARIZED AND USED FOR MCH PROGRAM PLANNING WITHIN THE MINISTRY OF HEALTH IN ORDER TO IMPROVE AND REVISE THE MANSA KONKO TRAINING PROGRAM.

THANK YOU FOR YOUR COOPERATION.

1. BASIC EDUCATION (Check (✓) the highest level achieved)

- 1. Kindergarten
- 2. Primary
- 3. Junior Secondary
- 4. High School
- 5. 6th Form
- 6. Other _____

2. RELIGIOUS EDUCATION (check highest number of years; for example, if exactly two years, check number 3)

- 0. None
- 1. Less than 1 year
- 2. 1 - 2 years
- 3. 2 - 3 years
- 4. 3 - 4 years
- 5. 4 - 5 years
- 6. 5 - 10 years
- 7. More than 10 years

3. IN WHAT VILLAGE WERE YOU BORN? _____

4. TRIBAL GROUP (check one only if you are Gambian or Senegalese)

- 1. Mandinka
- 2. Wollof
- 3. Jola
- 4. Fula
- 5. Other (explain) _____

5. LANGUAGE SPOKEN (Check all those you know well)

- 1. Mandinka
- 2. Wollof
- 3. Jola
- 4. Fula
- 5. Other (explain) _____

6. SEX (Check which)
- 1. Male
 - 2. Female
7. AGE (Write in number of years)
- _____ years
8. MARITAL STATUS (Check one)
- 1. Single
 - 2. Married
 - 3. Widowed
 - 4. Divorced
 - 5. Separated
9. RELIGION (Check one)
- 1. Catholic
 - 2. Moslem
 - 3. Pagan
 - 4. Other (explain) _____
10. WITH WHOM DO YOU WORK DAILY IN YOUR PRESENT POSITION? (Check as many as apply)
- 1. With non-professionals (Auxiliary nurses, Area Council Nurses, Orderlies, Health Laborers, Cooks)
 - 2. With trained nurses
 - 3. With one doctor or more than one doctor physically present
 - 4. Alone
11. DO YOU EVER HAVE LANGUAGE PROBLEMS IN YOUR WORK (Check one)
- 0. No
 - 1. Yes
 - 2. Not applicable (student) _____
12. IN WHICH OF THE FOLLOWING AREAS WOULD YOU LIKE TO RECEIVE TRAINING? (Check all that apply)
- 1. Communicable diseases
 - 2. Maternal Care
 - 3. Infant Care
 - 4. Nutrition
 - 5. Family Planning
 - 6. Infertility
 - 7. Record Keeping
 - 8. Management techniques
 - 9. Other (explain) _____

13. HOW WAS YOUR PLACE OF ASSIGNMENT SELECTED? (Check one)
- 1. Government assignment
 - 2. Personal choice
 - 3. Home village
 - 4. Other (explain) _____
14. LIST THE MOST USEFUL SKILLS AND IMPORTANT INFORMATION YOU LEARNED AT MANSА KONKO
15. LIST THE LEAST IMPORTANT INFORMATION YOU RECEIVED DURING YOUR STUDIES AT MANSА KONKO.
16. WHAT WERE THE MOST VALUABLE FIELD EXPERIENCES THAT YOU HAD DURING YOUR TRAINING?
17. WHAT CHANGES WOULD YOU SUGGEST IN THE CURRICULA?
18. WHAT CHANGES WOULD YOU SUGGEST FOR THE SCHOOL AT MANSА KONKO?
19. WHAT OBSTACLES TO LEARNING DID YOU ENCOUNTER AT MANSА KONKO?
20. WHAT KINDS OF PROBLEMS HAVE YOU HAD WORKING WITH THE VILLAGERS?
21. WHAT KIND OF PROBLEMS HAVE YOU HAD WORKING WITH OTHER HEALTH PERSONNEL SINCE YOU STARTED YOUR JOB?
22. DESCRIBE WHAT YOU DO DURING A TYPICAL WORK WEEK.

23. WHAT MAJOR HEALTH PROBLEMS HAVE YOU SEEN ON YOUR NEW JOB?

A. ARE YOU TRAINED TO HANDLE CASES BROUGHT TO YOUR ATTENTION? (Explain)

B. HOW DO YOU COORDINATE YOUR WORK WITH OTHER HEALTH PERSONNEL?
WITH TRADITIONAL HEALERS? (Explain)

24. ARE YOU DOING ANY HEALTH EDUCATION ACTIVITIES IN YOUR JOB? (Explain)

25. USE THIS SPACE FOR ANY OTHER COMMENTS YOU WOULD LIKE TO MAKE ABOUT
YOUR TRAINING AT MANSA KONKO.

Interviewer _____

Date _____

MOTHERS

Name of Village _____

Village No. _____

Name _____

Household No. _____

Individual No. _____

NO.

1. Age _____

Verified by Historical Calendar _____

Estimated by Subject _____

Certificate _____

Other _____

2. Place of Birth

Village _____ Home _____

Country _____ Clinic _____

Who did the Delivery _____

3. Tribe _____

4. Languages	Speak	Read	Write	5. Schooling	No. of Years	Where
Mandinka				Primary		
Jahanka				Secondary		
Wollof				Koranic		
Serahuli				Other		
Jola				None at all		
Fula						
English						
French						
Other						

NO.	CODE
6.	Religion _____
7.	Marital Status: Married _____ No. of Times _____ Divorced _____ No. of Times _____ Separated _____ No. of Times _____ Widowed _____ No. of Times _____ Single _____ Current Status _____
8.	Wife of _____ Does your husband have other wives? Yes _____ No _____ How many? _____
9.	What is the cause of Pregnancy? When a woman has never been pregnant, what can she do to become pregnant? What can a woman do if she does not wish to become pregnant?
0.	Have you ever used anything to keep from becoming pregnant? Yes _____ No _____ What? _____ Did your husband know? Yes _____ No _____ What was his reaction?
.1.	Are there people who know how to cause abortions? Yes _____ No _____ Male _____ Female _____ Friend _____ Relative _____ What do they use? _____ Have you ever used one of them? (Methods) Yes _____ No _____

NO

13. Are there any Special Foods:

Children:	You Should Eat	You Should Not Eat	Considerations For:
Before weaning.....			
After weaning.....			
Girls:			
Before Adolescence.....			
After Adolescence			
Boys:			
Before Circumcision....			
After Circumcision.....			
Women:			
Menstrating.....			
Pregnant.....			
Post Partum			
Lactating.....			
Menopausal.....			
Men - Expectant Father.....			

No.				CODE
14.	What Sickness Have You Had?			
	Disease	Yes	Treatment	
			Where	By Whom?
	Malaria			
	Diarrhea			
	Worms			
	Tuberculosis			
	Fractures			
	Measles			
	Smallpox			
	Gonorrhoea			
	Syphilis			
	Other			
What kind of health record do you have for yourself or your family?				
6.	What immunizations have you had?			
	Type	Date of Last	By (Clinic or Campaign)	
	Smallpox			
	Cholera			
	Tetanus			
	Measles			
	Diphtheria			
	Whooping Cough			
	Polio			
Was the Polio series completed? Yes ___ No ___				
Was the Tetanus series completed? Yes ___ No ___				

NO.	Type of foods used?	How is it obtained?	How is it Prepared?	Who eats?						
17.										
18.	At what age do you wean your children?			<table border="1"><thead><tr><th>Months</th><th>Years</th></tr></thead><tbody><tr><td></td><td></td></tr><tr><td></td><td></td></tr></tbody></table>	Months	Years				
Months	Years									
What foods do you give the weanling? FOODS										
18.	At what age do you introduce solid foods?			<table border="1"><thead><tr><th>Months</th><th>Years</th></tr></thead><tbody><tr><td></td><td></td></tr></tbody></table>	Months	Years				
Months	Years									
What foods?										

Head of Compound

ED00 .0W

Name of Village	Number of Times	Date
Village Number	Interviewer
Name	Household No.
	Individual No.
NO.	

1. Age	Verified by Historical Calendars	Yes	No
	Estimated by Subject	Yes	No
	Birth Certificate	Yes	No
2. Place of Birth			
Village			
Country			
Home			
Clinic			

3. Tribe	Who did the delivery?	Number of years	Schooling

4. Languages	Speak	Read	Write	Other
Mandinka				None at all
Jabanka				Farmer
Wollof				Fisherman
Serahuli				Trader
Fula				Teacher
Jola				Teacher
English				Divi Govind (Gard)
French				Livestock Guard
OTHER				Herdsman
				Woodcutter

5. Religion	Type of Dwelling	Number of rooms
	Cement Bricks	

NO.	ONE RESPONSE ONLY		CODE
6.	Marital Status	Number of Times	Current Status
	Married.....		
	Divorced.....		
	Separated.....		
	Widowed.....		
	Single.....		
Present Number of Wives _____			

7.	Number of Children	Number Living
	By wife Number 1 _____	_____
	By wife Number 2 _____	_____
	By wife Number 3 _____	_____
	By wife Number 4 _____	_____
	Total _____	Total _____

8.	Schooling	Number of years	Where
	Primary.....		
	Secondary.....		
	Koranic School.....		
	Other.....		
	None at All.....		

9.	Occupation	How much time is spent on each (Approx.)
	Farmer	
	Fisherman	
	Trader	
	Teacher	
	Craftsman	
	Civil Servant (Grade)	
	Livestock Owner	
	Herdsman	
	Woodcutter	

10.	Type of Dwelling		
	Cement Bricks _____	Mud Bricks _____	Krinting _____
	Number of rooms _____		

NO.

CODE

11. Number of persons in this Compound _____
Number of Family Units _____ Number in Each Unit
Number of Wives of Head of Compound
Relationship to Head of Compound
Number of Married Males..... _____
Number of never married males... _____
Number of Married Females..... _____
Number of never Married fem.... _____
Number of widowed women..... _____
Number of divorced women..... _____
Number of children besides yours
under 18.... _____
Number of your children under 18... _____
How many of these are your wives children by a previous husband _____
Total in Compound _____

12. How Do You Store Water in Your Compound? _____

13. Where do you get your water? _____

14. Do You Boil The Water Before You Drink It? Yes _____ No _____

15. How do you dispose of trash and garbage?
Burning _____ Burying _____ Throwing outside Compound _____
Throwing away from Compound _____ Village Dump _____ No Disposal _____

16. How do you dispose of human waste? (Adult)
Latrine _____ Burying _____ Behind the house _____
In the bush from the house (Communal) _____ Individual _____
Toilet (W.C.) _____ Is human waste used as fertilizer? _____

17. Where do small children defecate?
Latrine _____ Behind the house _____
Away in the bush _____ In the compound _____ Toilet (W.C.) _____
In a potty _____ Where is this disposed of? _____

NO.

18. What animals are in the Compound? Where are they kept?

Animals	Kraal	Loose
Cattle.....		
Bullocks.....		
Sheep.....		
Goats.....		
Horses.....		
Donkeys.....		
Fowls.....		
Ducks.....		
Turkeys.....		
Geese.....		
Dogs.....		
Cats.....		
Other.....		

19. When your people are sick you take them to:

Health Center _____ Hospital _____ Pharmacy _____
Marabout _____ Herbalist _____

20. What are the common illnesses in your family?

21. What are the common illnesses in this area?

22. Were you ever seriously ill? Yes _____ No _____ What? _____

How was it treated?

What sickness have your compound's children had?

How were they treated?

NO.		CODE
23.	Were you vaccinated? What other type of injection was given? Were others in your family vaccinated? What other type of injection was given?	
24.	What can a couple who has no children do in order for the woman to become pregnant?	
25.	When a couple wish to delay getting pregnant, what can they do?	
26.	Are there people who know how to cause abortions? Yes _____ No _____ Male _____ Female _____ Friend _____ Relative _____ What do they use? _____	

NARRATIVE SUMMARY PEDIATRIC ASSESSMENT CYCLE IV

Pediatric Assessment, Cycle IV, was given in Banjul, The Gambia, for 4 weeks from November 5 to 30, 1979. This was the final cycle given with the assistance of the University of California, Santa Cruz. The course was developed and presented in response to the Gambian Government's original request for such a training session based on the knowledge of a 50% plus child mortality rate in the under 5 age group. UCSC was asked for assistance in upgrading the pediatric treatment skills of the health professionals responsible for the provision and supervision of health care and health education for these children and their families. The upgrading of skills is necessary because the dress dispensers and nurse midwives receive their basic nursing education (which includes 4 weeks of pediatric experience) in a hospital based general nursing program. They do not receive the additional skills necessary to prepare them to operate in a primary health care role, which is their service responsibility upon graduation, either in their basic program or in the post-graduate dresser/dispenser and nurse-midwifery courses.

Cycle IV had 3 specific training goals.

Training Goal I: As in Cycles I - III, trainees were prepared to work in a primary health care role, independently, interdependently, and dependently, caring for the ages from birth through 5 years of age. They learned to take a health and developmental history, perform a physical examination, make an assessment, provide appropriate medical treatment, health education, and to evaluate and refer those patients requiring more specialized care. The emphasis was on preventive rather than curative care (although treatment for common injuries and illnesses was included in the course). A core component throughout the 4 weeks was the development of communication skills and the preparation and giving of health education talks.

Training Goal II: 3 of the trainees were chosen because of their leadership roles in nursing and health in The Gambia. An additional goal for this group was to assist them in identifying ways in which they could transfer and apply the newly learned content to their specific teaching and supervisory roles.

Training Goal III: A third goal of Cycle IV was the "training of trainers". Dr. Karamo Sanyang and Nurse-midwife Sister Admyre Monday, Gambians, and Ms. Suzie Hendricks, B.S., R.N., P.N.P. The Gambians were designated to be trainers by the Gambian Government and attended Cycle III as trainees in June/July 1979. A U.S. educated Pediatric Nurse Practitioner, Ms. Hendrick's fortuitous arrival in The Gambia prompted UCSC to suggest to the MOH that they engage Ms Hendricks as a back-up co-ordinator/trainer until the Gambians are firmly established in their roles. The two Gambian trainer-trainees were freed from their service posts to attend a two week "Training of Trainers" seminar held in The Gambia by UCSC August 8-19, 1979. Immediately following the "T.O.T." they and Ms. Hendricks worked for 2 weeks with the UCSC trainer in preparing the class schedule and lesson plans for Cycle IV. The original training goal was to have the 3 trainer-trainees plan and carry out all the training with the UCSC trainer assisting them in developing class content and teaching skills. This was not possible as one of the trainer-trainees had a family illness and death which necessitated her missing part of the Cycle. The UCSC trainer had to assume a direct training role during her absence and utilized this experience to provide role modeling for the trainees.

An evaluation of the course content, clinical practice and teaching

methods was requested from the trainees. (see attached) Trainees were requested to evaluate coursework on a scale of "too little, enough, or too much". One trainee checked "too little" on nearly all categories; he felt the amount of time for the amount of material covered was inadequate. His clinical practice reflected his difficulty with the course and an additional week of clinical practice under the supervision of a trainer was arranged. This proved to be helpful to him and his skills improved to an acceptable level at the end of this time. The two trainees checking "Too little" on categories were both dresser dispensers as was true in Cycle III; this may be because their background includes less pediatrics. However, since they have all mastered the content and met the course objectives changing the course as given is not justified. They can increase their pediatric knowledge by on-going study of the texts given in the course. One respondent checked "Too much" on all items; she interpreted "Too much" to mean if "enough" is good, "too much" is even better. Five trainees found all coursework relevant, one failed to respond. On a 3 point forced choice scale of "Poor, Good, Very Good", trainees found teaching methods "Very Good" with a few responses in the "Good" column. As before, trainees would like to have a longer course with more clinical practice but thought the course adequate as planned. Several trainees also requested experience in a rural clinic. This would be a worthwhile experience but if the course continues to be held in Banjul, the amount of time required for travel and the logistics of arranging transportation, and space in outlying clinics in the time available for the course make this unrealistic. As the clinical problems are the same, it would only be valuable for analyzing problems of organization and management. It has been suggested an optional Saturday field trip trek might be offered in the next cycle. The opinion shared by all trainees is that this course is extremely valuable to them in their work and should be taken by all Dresser Dispensers and Nurse Midwives.

The 9 participants for Cycle IV were:

Trainer Trainees:

Sister Admyre Monday	Nursing Sister, Pediatric Outpatient Dept., Royal Victoria Hospital, Banjul
Dr. Karamo Sanyang	Physician, Pediatric Outpatient Dept., Royal Victoria Hospital, Banjul
Ms. Suzie Hendricks	Pediatric Nurse Practitioner

Trainees:

Mrs. A. Joiner	Tutor, State Enrolled Nurses Program, Royal Victoria Hospital, Banjul
Mrs. J. Cham-Kinteh	Senior Nurse Superintendent, Nursing Sister in Charge, Pediatric Unit, Royal Victoria Hospital, Banjul
D/D Musa Marenah	Student Medical Assistant; one of two presently attending a medical assistant training program of 1 year duration which will prepare him to be a Health Center Supervisor. This is a new category of Health Personnel in The Gambia.
Miss J. Deen	Nurse Midwife; posted to Kerewan Health Center upon completion of course.

D/D Musa Fatty

Senior Staff Nurse; to return to post at Gunjur Dispensary upon completion of course

Mrs. Y. Sonko

Midwife; posted to Essau Dispensary upon completion of course.

Instructor:

Norma Whitlock Wilson, R.N., PN.P., M.S. Educational Consultant on short term contract with UCSC

Assistance given by the Gambian Government:

Classroom and clinical teaching facilities
Educational Materials
Transportation and meal allowance for trainees
Trainees
Secretarial Assistance

Assistance by the Gambian Red Cross

Blackboards

Assistance by the Gambian School for Nursing and Midwifery

TALC teaching slides

Assistance given by HCSC

Support of Instructor

Textbooks: Morley, David, Paediatric Priorities in the Developing World
Jeliffe, D.B., Child Health in the Tropics
Chinn, Child Health Maintenance
Wilson, Wilson, Pediatric Assessment in a Tropical Setting.
(Syllabus developed by Instructors)

Examination Equipment: Stethoscope, otoscope, percussion hammer, measuring tape, pen light

Teaching Equipment: Slide Projector, Tape Recorder and Cassette, Chalk writing materials, note books, newsprint, etc.

Site:

Banjul, The Gambia

Classroom: "flats" over Leman Street Clinic

Clinical Sites: Special Care Nursery, Maternity, Pediatric Inpatient Wards, Pediatric Outpatient Dept., Royal Victoria Hospital; Leman Street under 5's clinic.

Pediatric Assessment was developed to provide training to nurse/midwives and dresser/dispensers being posted to rural health centers and dispensaries. By the end of Cycle IV the trainees had met the course objectives and had beginning skill competence in the skills of pediatric assessment, (including the use of the otoscope and stethoscope) treatment, health maintenance, prevention of illness, and health education. It is thought that through this training, the provided health services will improve and have a positive effect on the mortality and morbidity rate in the under 5 age group.

The overall goal of providing trained health personnel to the rural areas

is being met. It is to the credit of the Gambian Government that of the 23 trainees completing the Pediatric Assessment program, personnel assignments have been made so that:

13 post-trainees are posted to rural health centers, dispensaries and/or are in charge of mobile trek teams responsible for holding the under-5 clinics.

1 post-trainee has left The Gambia; prior to leaving she served for 8 months as nursing sister in charge of a trek team providing under-5 clinics to a rural area.

Additionally:

Addit-

5 post-trainees are teaching or supervising health personnel involved in giving direct health care to the under-5 age group.

2 post-trainees, upon completing the medical assistant program in early 1980 will be posted as health center supervisors responsible for providing health services to the under-5 age group in the health center, dispensaries, sub-dispensaries and by the mobile trek teams in their region.

2 post-trainees will have dual roles, i.e., the physician and the nursing sister at the Pediatric Outpatient Department at the Royal Victoria Hospital and trainers for continuing pediatric assessment cycles.

A second goal was to develop two Gambian trainers to assume the trainee roles upon the departure of USCS from The Gambia. Again the MOH has displayed its commitment to this program by designating 2 Gambian staff as trainers and assigned them to work with UCSC staff to prepare for this role. To assume the trainer role, 4 aspects of that role must be considered: the co-ordinator/planner, master of course content, practitioner, and teacher. The physician trainee had 2 years teaching experience at the high school level prior to attending medical school, as a physician already had physical diagnostic skills and was acquainted with much of the course content. Therefore the transition to the trainer role was relatively quickly and successfully made by him. However, the nurse/midwife who demonstrates abilities as a co-ordinator/planner, which are congruent with her previous role, had to learn new content, master diagnostic and treatment skills which extend that role, and as she had no teaching experience, learn the teacher's role as well. Because of time deadlines, due to UCSC'S departure, she was asked to do this within a 3 month period of time. She has shown high motivation, hard work, and made considerable strides in moving towards competence in her new role as practitioner-trainer. However, should it be possible for the U.S. educated pediatric nurse practitioner to continue with the program as a back-up coordinator/trainer until the trainers' roles are completely mastered and established it will be of great assistance to The Gambia and ensure this programs continued success.

THE REPUBLIC  OF THE GAMBIA

Ref..... STA/8^C.....

Medical & Health Department,
Banjul.

-372-

26th October, 1979

Dear Paul,

PAEDIATRIC ASSESSMENT

This is just a short note to say how grateful we are to you for organizing these series of Paediatric Courses.

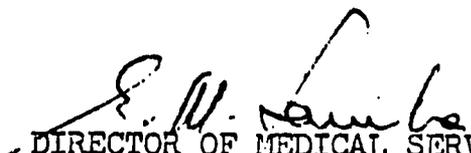
I visit up country fairly frequently and I am always very proud of those of my staff who have taken part in these Courses. Indeed, now, I can tell, as soon as I enter a Health Station, whether the officer has had a Paediatric Assessment experience.

Some time ago, I visited Diabugu and found over 120 mothers and babies in the waiting shed. The M C H team was not there. I asked Mr Haffner, the Dresser Dispenser, for Sister, the Midwife, etc. His reply made My day - "On Tuesday: I do the mothers and children". He was very keen and enthusiastic. I examined his records and observed him in action. He was doing a very good job.

I had a similar experience in Bajakunda (Joe N'jie) and Farafene (Isaac Camara) and many other places. The formal training of these officers does not include the type of thing they learn in the Paediatric Assessment. Children and Mothers form more than 50% of the Clinic Attendance. I need hardly add that they are the most vulnerable group in the society.

We are particularly grateful that you have identified Dr Sanyang and Mrs Admyre Monday as future trainers.

My only regret is that we did not start this exercise much earlier.


DIRECTOR OF MEDICAL SERVICES.

Dr. Paul Wilson,
University of California
Santa Cruz
Medical Headquarters,
Banjul.

cc. Per. Sec., Min of Health
Secretary, R. V. H
Chief Nursing Officer
Principal Nursing Officer

UNIVERSITY OF CALIFORNIA EXTENSION — Santa Cruz
Maternal and Child Health Project



Bamul, The Gambia
West Africa

TO: E. SAMBA, M.D.
DIRECTOR OF MEDICAL SERVICES
MINISTRY OF HEALTH
THE GAMBIA

FROM: NORMA W. WILSON, R.N., M.S. — UCSC TRAINER
PAUL E. WILSON, M.D. * MED CAL DIRECTOR/TRAINER UCSC

DATE: DECEMBER 15, 1979

PEDIATRIC ASSESSMENT TRAINING

1978--1979

A REPORT

Review
Summary
Recommendations
Closing Statement

Copies: Sister Clara MacMason, Sister Bertha m'Boge, Dr. Philip Gowers, University of California Santa Cruz, Sister Annie Lusack, USAID (anj:)

Pediatric Assessment Training 1973-1979 - The J.M.B.A

I. Review

In 1977 at the conclusion of a one week workshop on the "Polyvalent Nurse Midwife" a request was formulated by the attending group and forwarded to the DMS requesting Pediatric Assessment Training. This was based on the expressed need to upgrade the pediatric diagnostic and treatment skills of the health professionals responsible for the provision of care (preventive and curative) to the under 5 age group which comprises a large percentage of the work load of any health unit. The nurses and dresser dispensers receive their basic nursing education in a hospital based program which does not include training in the additional skills necessary to perform effectively in a rural setting. Frequently, as the only health officer present, they are expected to address the medical problems of the under 5 age group with assurance and skill.

At the request of the Director of Medical Services the MCH unit of the ministry of health, with the assistance of the UCSC resident staff, designed a 4 week curriculum for training nurses, nurse midwives, and dresser dispensers in pediatric assessment knowledge and skills. It has 2 components, (1) theory and course content in a classroom setting and (2) practical experience under supervision in the Lemau street clinic (infant welfare clinic) and on the RVD childrens' ward (diagnosis and treatment of sick children). The cycles are supervised by 2 pediatric specialists, one pediatrician and one pediatric nurse practitioner (these latter 2 are UCSC staffs Training team). Four cycles have been given: Cycle 1--April/May 1978, Cycle 2--July/August/1978, Cycle 3--June/July 1979 and Cycle 4--November 1979.

The value of maintaining a continuous ongoing program in Pediatric Assessment was soon recognized. An on the job evaluation of graduates of the program (Cycle 1) demonstrated the value of the use of their new knowledge and skills---they commented that for the first time they knew what they observed, knew what to look for, and how to respond with the proper treatment and preventive advice. This was evident again on examining the work of graduates of Cycle 2.

When planning for Cycle 3 the UCSC trainers recommended that two of the candidates chosen for this third cycle be identified as trainers for future cycles after

the departure of the UCSC staff team. These two Gambians were given special instruction before cycle 4 (preparation of materials, calendar, and lesson plans and division of teaching assignments), and they were responsible for the training in cycle 4 with UCSC trainer backup. All future cycles planned by the MOH will have their own Gambian training team--one physician and one nurse midwife. These two were also trainees in a TOT (training of trainers seminar) given by the UCSC in Banjul, before assuming their roles as trainers.

The fortuitous presence of Ms. Susie Hendricks in the Gambia at the present time and for the next 2 years, prompted the UCSC trainers to invite her to attend cycle 4 as an additional backup source, to give her the opportunity to become familiar with the course curriculum, teaching methodology, etc. UCSC then suggested to the DMS that he seek funding to support her in this backup role for a period of time that the Gambian trainers needed to gain the experience and confidence necessary for effective performance.

II. Summary

23 members of the health personnel successfully completed Pediatric Assessment Training: 1 physician, 12 nurse midwives, and 10 dresser dispensers:

- 13 - posted to rural health centers and dispensaries or are in charge of mobile trek teams responsible for under 5 and infant welfare clinics in a rural area.
- 1 - nursing sister in charge of a trek team for rural areas; served for 8 months before leaving the Gambia.
- 5 - teaching or supervising health personnel involved in giving direct health care to the under 5 group.
- 2 - will complete additional training and be posted as health superintendents and part of their regional responsibility will be supervising under 5 clinics.
- 2 - have dual roles - as the physician and nursing sister in the pediatric OPD of The RVH and as the two Gambian trainers to continue the Pediatric Assessment training programs.

This has been a successful program. Visitors to the "outposts" of health where post-trainees are working can readily see how added knowledge and new skills have been put to use. There is an attitude of increased responsibility, motivation, and commitment; a desire to remain in a rural post where the need for their services is the greatest.

III. Recommendations

1. Identify a third Gambian to be trained as a trainer-- to develop some depth and flexibility in the program.
2. Seek and identify a source of support for Ms. Henricks so that she can be a trainer/backup for such time as is necessary.
3. Integrate the course material and practical clinical experience into the curricula of the Schools of Nursing and Midwifery.
4. Trainees should have a lesser dispenser, general nursing ^{general nursing} plus midwifery background. They should be selected from those who are to be "posted out" to the rural areas.
Nursing personnel trained before the start of the school of nursing program (who have had less preparation than the previously mentioned group) who are working in infant welfare clinics should not be considered for Pediatric Assessment training. A special short program should be designed for them stressing observation skills, when to refer for detailed examination, the uses and value of the "word to health care", determination of the at risk child, basic nutrition, immunisation, and health education skills. This might be a 2 week program eliminating the more specialized concepts of Pediatric Assessment requiring some knowledge of anatomy and physiology.
5. Good work should be rewarded - e.g. promotion and letters of commendation (for the record).
6. Sufficient copies of the syllabus should be printed in advance to save time and money. Recommendations from the nurses and dispensers working the rural areas should be accepted and reviewed and made a part of the daily handout sheets which are developed in class to augment the syllabus.
7. Ongoing periodic evaluation and supervision of the work in the rural areas - find out "what's going on," listen to and help with problems, make suggestions.
8. For review and updating of knowledge and techniques it is recommended to have three 1 day "workshops" per year for the pediatric assessment personnel - to meet and discuss ideas, help with mutual problems, etc.
9. Develop a supply system for drugs, training and health education materials for the "outposts" of health.
10. Other ministries should be invited to encourage their "field" representatives to work with the health personnel in the field on collaborative projects (e.g. agriculture, health education - community gardens

and health projects in the schools).

IV. Closing Statement

The UCSC team greatly appreciates the assistance of the MOH in developing this program. Overcoming initial difficulties and misunderstandings, the cooperative and integrated endeavor of the DMS, the Senior Nursing Officer, the Matron, and the UVI administration have helped make Pediatric Assessment training an outstanding model for similar types of training in other areas of medicine, and an example of the importance of understanding and cooperation.

It has been a privilege to work with the MOH in the development of this program. It is also a pleasure and a great source of satisfaction to the members of the UCSC training staff to observe the fruitful production resulting from the effort, and to contemplate the future impact the program will have in bringing primary health care, and ultimately better health, to the rural communities.

NORMA W. WILSON, D.N.:N.S.

Paul E. Wilson, M.D.

SUMMARY

CONSULTATION IN THE GAMBIA

May 24 - July 14, 1979

Submitted to USIC by

Pat Goodale Logan, B.S., M.P.H.

MISSING PAGE

NO. 379

The enclosed summary of activities present general and specific conclusions and recommendations resulting from discussions and observations during the period between May 7th and July 2nd in the Gambia, West Africa. Specific requests to USAID from the Ministry of Health, Medical and Health Services, under Dr. Lamin, were submitted previously following his appointed committee's discussions on the issue(s). A UOI at this time should generate collective interest in health and broadly related areas and assist in progress of the government's concept of "Primary Health Care". This technique, along with continued technical assistance, had a substantial impact in promoting the government's many faceted program in which is today a strong program in the Ministry of Health.

CONCLUSIONS

1. A successful demonstration project in one district may not have direct application in another district.
2. The process of change required in one district may not apply to another district.
3. Little or no overnight accommodation in rural Gambia severely limits outside input for any sustained period of time.
4. Lack of common language, amenities and remuneration (to those providing shelter) are obstacles in present living accommodation for Community Health Nurses at Mansakongko.
5. The role of CHN's in Primary Health Care was only beginning to be talked about. Their role in primary health care needs strengthening.

RATIONALE

1. Language and other cultural disparity between districts, with the exception of religion, which appears to be a unifying factor in all rural areas of the country
2. Appearance of small successful demonstration projects throughout the country with little or no carry-over nationally.
3. Everyone (country nationals and expatriates alike) go "on trek," which means return to Banjul or to one's station as quickly as possible.
4. Complaints of time consumed in these arrangements by both faculty and students of up to two hours worth of energy per person per day.
5. The role of rural traditional medicine and traditional midwifery is an acceptable concept to the Director of Med. Services and a reality in the country. Linking this indigenous manpower with CHN's in a PHC "system" remains a task of the future.

RECOMMENDATIONS

1. Multiple target areas should be defined at the onset and coordinated with existing country-wide expansion programs (i.e., Rural Dev. Project).
2. District based outside input is strongly recommended in short term continuing education and training programs.
3. "Floating" classroom/ accommodation by boat on wheels? Intensive use of radio communication? Written communication, i.e., Senelar, science curriculum in schools, adult literacy?
4. At least 2 hrs. per week should be set aside for students and faculty to discuss these problems collectively if it is to be a positive part of their total learning experience.
5. (a) Inclusion of Sister Coker and Dresser-Dispenser Tutor at Mansakongko in planning for PHC or TOT follow-up.
(b) Major curriculum revision is indicated and is in progress. Sister Coker had just returned from PHW training abroad and needs to "settle in."

CONCLUSIONS

6. (a) Planning for health of the nation appeared to be a major area of concern in the minds of everyone (country nationals, expatriates and advisors alike); however, preparation in the planning process which would bring these efforts in communication with each other and with the communities involved was totally absent.

(b) Primary Health Care is at present being presented as an entirely new concept. In reality, many on-going programs have important roles to play.

RATIONALE

6. Major concerned parties:
(a) President's Office, Nat'l. Health and Nutrition Council (Dr. Oldfield on Council).
(b) Ministry of Economic Dev. Planning, Rural Development Project, Phase II.

(1) World Bank - has a health component, to be decided upon by Sept. 31, 1979 if MH will cooperate.
(ii) Health Economist on staff (WHO).

(c) Ministry of Education
(i) Curriculum Dev. Center, has been unsuccessful in acquiring someone to dependably represent the Min. of Health for health ed. input.

(ii) The Gambia's First Education Project World Bank. Has a health component with potential impact on definition and preparation of health manpower.
(iii) School of Public Health and School of Nursing, transferred admin. to MOE July 1, 1979.

(d) Ministry of Health-Med./Health Services. Planning activities currently in the pipeline or in operation are:

(i) Primary Health Care - WHO version with The Gambia as a focal point in Africa.
(ii) Primary Health Care - Project Concern in initial phase.
(iii) MCH Project, Coord. Committee have a plan for TBA training and PCV input.
(iv) Community Health Nurse Training

RECOMMENDATIONS

6. Strongly recommend a series of TOT's to bring concerned parties together with the hope that Dr. Samba will find ways to make district based Tot's a reality.

CONCLUSIONS

7. Several Proposals are in the pipeline which combine improved health practices (public health) with other facets of development such as Agric./Educ., etc. The bottleneck appeared to be lack of inter-ministerial cooperation, and/or lack of informed participants.

RATIONALE

Center. Curriculum revision in progress does not reflect role with Primary Health Care volunteers.

(v) ODM Proposal for a Health Planner.

(vi) UCSC Pediatrics Assessment Training with TOT orientation.

(e) Peace Corps - Nutrition/health ed. emphasis, coordinated through MCH office.

(f) SENELAR - Publication of Dept. of Agric., Extension Aid Unit, brings attention to rural health as it relates to agriculture and "primary health care" is receiving a great deal of interest and attention.

(Cyril Eyre, expatriot, editor with 8 yrs. in rural Gambia).

(g) Adult Literacy Group - Bachary Sidibe, Director. Grass roots organization which utilizes the Gambian life-style for community meetings to teach literacy in English. Would welcome health-based content for teaching adults.

7. The outstanding example here is the World Bank, Rural Development Project Phase II, which may not be funded if the Min. of Health refuses to participate. Deadline for a decision on this is set for Sept.

RECOMMENDATIONS

7. This decision (or lack of decision) appears to have strong internal political overtures and will need internal solutions.

CONCLUSIONS

8. (a) The MCH Office is the "hub" around which many public health activities center, i.e., expansion of MCH Centers, nutrition extension work, etc. There is a severe deficit in the ability of the office to gather relevant statistics and use them for projecting and monitoring new MCH services in the rural areas. An understudy to the coordinator is theoretically on the books for the 1980 budget and the present coordinator wants and needs further preparation in Public Health Administration.

(b) Absence of any trained Public Health Nurses in the rural districts appears to be a severe obstacle that under current policy is not likely to change. It is possible that PHNS may not be economically possible nor required under a new PHC system, but no one has said that.

9. The addition of a dresser-dispenser to the tutor staff at Mamsakongko is relevant since this level of personnel is likely to be the highest level of trained health manpower widely available to community health nurses serving in rural areas.

RATIONALE

8. (a) Sr. M'Boge has several connections offering her an MPH in P.H. administration. She has not made a decision to go—yet. Lack of credibility in Public Health Nursing is an internal problem which negates much further development in her current post.

(b) Out of 5 nurses who achieved PHN training abroad in the past 3 years, only one has returned to work as a PHN (Sister Coker, tutor at MK). Others refused rural posting.

9. A combination of trained males and females in rural posts will be even more important if traditional health volunteers are developed as part of PHC.

RECOMMENDATIONS

8. (a) I recommend this level of training for Sr. M'Boge but a redescription of the job she will return to. Her current position should acquire a PHN with additional training.

(b) Health manpower needs of The Gambia require redefinition and policy to support them. There should be no further training of PHNs until this is accomplished.

9. New roles and relationships of a rural health team will require continued infusion of assistance such as that provided in the past by UCSC.

CONCLUSIONS

10. A National Health Manpower Plan for The Gambia should receive top priority in health planning deliberations.

RATIONALE

10. WHO is theoretically assisting the MOH with this task.

RECOMMENDATIONS

10. A TOT may assist in bringing concerned groups into communication with each other.

Appendix 7

CONTACT PEOPLE DURING CONSULTATION MAY 24 - JULY 14

Dr. Samba, Chief Medical Officer
Miss Macnason, Chief Nursing Officer
Dr. Peter Lawrence, M/O, ODM
Dr. Akim, WHO
Dr. Syfulla, WHO
Dr. Chan, M.O., MOH
Bualah Joel, M.K., Community Health Nurse Training Center
Sister Coker, M.K., Community Health Nurse Training Center, Tutor
Sister Rollins, M.K., Sister in Charge
Yvonne Jackson, Director, P.C.V.
George Schwartz, Assistant Director, P.C.V.
Gary Lieman, Project CONCERN
Henry Cotton, WHO Laboratory Technician
Thomas Mulhern, Director, CRS
Bertha McBoge, MCH Coordinator
George Lowe, World Bank, RDP
Rachel Palmer, Principle of School of Nursing; Director FPA
Sister Fye, PHN Tutor
Bachary Sidibe, Adult Literacy Group
Dr. Joof, Education Planner
M.O. Sonko, Director of Curriculum Development Center
Momodou Gassama, Science Department CDC
Philip Walsh, Director Community Development
Bai Bojang, Deputy Director Community Development
Dan Phillips, USA Chargé d'Affaires
Dr. Langley, P.S. Economic and Development Planning

CONTACT PEOPLE (continued)

Jim Colbern UNDP

Mr. D. M. Jayne, Principle School of Public Health

Mrs. Harris, Res. Rep. UNDP

Bai Abi Phall, Health Educator School of Public Health

Abigail Joiner, School Enrolled Nurses

Mrs. Kah, School Enrolled Nurses

Olga Roberts, Midwife Tutor RVE

Dennis Jefford, World Bank, 1st Education Project

Dr. Adjukavick, MRC

Cyril Eyre, Extension Aid Unit, Department of Agriculture (Editor of SENELAR)

Dr. Fitzgerald, EPI Project

Doug Broom, USAID

Appendix ii

S.E.N.
School for Enrolled Nurses

C.H.N.
Community Health Nurses
(formerly aux. nur. tr. prog.)

Recruitment: Final selection - Hospital Matron. Candidates come from health aide (hosp. based) personnel on merit.
Age Limit:
Origin of School: April 76
Length of Course: 18 mos.

Recruitment: Public advertisement. Junior secondary h. Ability to speak two of the local languages. Pass the entrance exam.
Age Limit: 25 yrs.
Origin of School: April 75
Length of Course: 18 mos. (reduced to 12 mos.)

<u>Year</u>	<u>Starters</u>	<u>Completers/Yr.</u>
1976-77	16	9/77

<u>Year</u>	<u>Starters</u>	<u>Completers/Yr.</u>
1975-77	15	14/77
1978	18	

Organization:
Matron - RVH
↓
Tutors (A Joiner, Mrs. Kah)
Tutors base with Sch. Nsg., etc.

Organization:
Senior Nursing Officer M.C.H.

Tutor (Sister Coker)

Purpose:
Provide bedside, hosp. care under supervision of nurse.

Purpose:
Provide basic health services (preventive emphasis, health ed.) in communities from which recruited - rural primary care.

Outside Donor(s):
(Proposed)
World Bank - Gambia's 1st Educ. Program
Appraisal document - May 78
Dorm. at Bansong - 10 female, 10 male
Furniture for above

Outside Donor(s):
UCSC - '75-'78
Technician - Mansa Kongko
Equipment/supplies
Vehicle
American Embassy
Self help funds, classroom
Misc. - UNICEF
(Proposed)
American Embassy, Self help funds for extension to school to cater to increased intake.

Projections:
-↑to 2 yr. training?
- include rotation to CHN
Mansakongko

Projections:
-↓to 1 yr.
- expand to 30 intakes yr.

Salary upon Completion:

Salary upon Completion: Grade 4/5

Materials from Benin

1. **Final Report of Family Health training program
for nurse/midwives.**

THE FINAL REPORT
OF
The first Beninois Training Cycle
in Family Health for Nurse-Mid-Wives, organ-
ized by the Ministry of Public Health, with the help
of the Maternal Child Health Project of the University of California in
Santa Cruz

July 3 - September 29, 1978

COTONOU

By the Maternal Child Health Project
of the University of California

The Maternal Child Health Project of the University of California has already trained more than twenty Beninois Midwives, Nurses and Social Workers in Santa Cruz, during 12-14 week training sessions from 1973 to 1977.

One of the objectives of the California Project has always been to africanize this training so that the Midwives and Nurses could receive training on the spot with less sacrifice to themselves, their family and the government of Benin.

Three former Beninois trainees, Camarades Lucie Ouendo, Bernadette Dehoue, and Henriette Amoussou-Guenou, the most experienced in Health Education and Family Health, have been chosen by the Beninois government as trainers for the first Beninois training cycle.

With the help of Dr Paul Wilson, Medical Director of the Californian Project and Director of Family Health Training in Santa Cruz, and his associate Mrs. Emily Lewis, nurse specializing in Family Health, and with the support of the Ministry of Public Health, especially of Dr. Joseph Kodja, Director of Preventative Medicine, the three Beninois trainers began planning the training session on June 15, 1978.

Eight trainees were chosen by the government. One was waylaid, so the session began with seven trainees: five Midwives, and two nurses. During the first two weeks of the training session, called "Training of Trainers," the discussion is based primarily on the way adults learn, and on effective techniques to help them learn. Each trainee will, in the performance of her work, be required to train her colleagues as well as the public. This very important part of the training helped the trainees understand their own personality style, their

motivation for changing their own behavior, as well as for being agents of change in the realm of Preventative Health.

During the two weeks which followed, these subjects were studied: the anatomy and physiology of reproduction, gynecological problems, prenatal and post-natal consultations, infertility, and pregnancy spacing methods. Dr. Alihonou introduced the discussion on infertility, Dr. Assani the discussion of high-risk women, and prenatal care; Dr. Dodja explained the importance of prenuptial information.

Dr. Lawson spent four days with the trainees, reviewing their knowledge of pediatrics, growth and normal development, children's illnesses, the vaccination schedule and the importance of nursing and weaning.

Miss Surman, a Midwife who is^a responsible member of the Project, presented statistical data concerning services already offered in Benin, explained their importance and the way to assure their validity.

Each trainee had to make several presentations of her choice which were evaluated by the group.

The trainees began working in Family Health clinics as early as the fifth week. The clinics used were the MCH clinic, the Maternal clinic, the Benin National Committee for Family Planning, and the University clinic. Former Santa Cruz trainees Mrs. Rene Sadler and Mrs. Marie-Lucienne Ogoutchi acted as instructors in their respective clinics. Rachi Rachidatou (Santa

Cruz 1975) helped Mrs. Bernadette DEHOUE supervise the trainees and spent 12-16 hours in each of the clinics, averaging fifty gynecological examinations during the following six weeks.

In addition, the trainees were able to practice their new capabilities to perform heart, lung, ear, and eye examinations, exams which Dr. Walter taught them before his departure at the end of the training session.

The month of September was devoted to an new experiment. A Family Health service was to begin in Ouidah, a town forty kilometers from Cotonou.

A training session in sensitization for the staff of the medical services as well as for other officials, was to precede the opening of the new service. The trainees were able to take the responsibility of presenting this training. Each one took her part with confidence and composure. The two-week long training was very successful. This experience showed the trainees that they will be able to organize such a training in their own milieu, before the functioning of the Family Planning Service.

The last week of the training consisted of the evaluation of the experiment in Ouidah, of the training session, the presentation of the individual projects of the trainees, the distribution of the remaining printed material, and the preparation of visual aids.

A speech given by the trainees at an official closing, with a list of the representatives of the Ministry of Public Health (Dr. Lawson) and of the CNBPF is herewith attached.

SUMMARY OF THE
FAMILY HEALTH TRAINING PROGRAM
BENIN CYCLE I

<u>SUBJECT</u>	<u>Number of Hours</u>
Training of Trainers	80
<u>Theory</u>	
Anatomy and Physiology of reproduction	10
Gynecological Pathology	20
Infertility (Dr. Alihonou)	10
Women at high risk (Dr, Assani)	10
Pre and Post conceptional care (Dr. Assani)	10
Pre-nuptial examination(Dr. Kodja)	10
Methods of Contraception	20
Nutrition	20
Medical Examination	30
Pediatrics (Dr. Lawson)	20
Statistical data	10
<u>Health Education</u>	
Preparation and presentation of lectures - each trainee	48
Work in clinics	60
Field work (Ouidah)	80
Total of the study hours and of work during the 13-week session	<u>448 hours</u>

REPORT OF THE END OF
THE SESSION ON FAMILY HEALTH

At the beginning of the session on Family Health, organized for the first time in the Popular Republic of Benin and in Cotonou by the University of California, in conjunction with the Ministry of Public Health on June 3, 1971, there were seven of us, who were to undergo training for three months:

Cde. ADE Gisele	Nurse in the State of Applahoue
" ADONON Bibiane	Mid-Wife in the State of Allada
" AZANHOUE Jeanne	Nurse in the State of Djougou
" BOMARD Henriette	Mid-Wife in the State of Abomey
" DOUAMATEY Valerie	Mid-Wife in the State of Cotonou
" KAYOSSI Felicie	" " in the State of Pobe
" VIHO Victoire	" " in the State of Cotonou

The warm welcome given to us by the following personnel:

Dr. WILSON Paul
Dr. WALTER George
Mrs. LEWIS Emily
Miss SURMAN Marian
Cde AMOUSSOU-GUENOU Henriette
Cde DEHOUE Bernadette
Cde OUENDO Lucie

made us feel very comfortable.

The opening speech was given by Dr. Theodore BANIKOLE, reassuring us that

in the absence of the Minister of Public Health the following people would replace him:

Dr. ALOHONOU Eusebe

Dr. ASSANI Layisou

Dr. LAWSON Veronique

The representatives of the CNBPF : Cdes ANATO and SADLER

The two first were devoted to the training of trainers.

This training which taught us new methods of teaching adults owes its success to the familial framework and to the relaxed, cheerful atmosphere which was created by the trainers.

The Agenda or schedule which was conceived in order to attain the goal of the session, was modified each time that it was deemed necessary. This was done without disrupting our progress.

Next, the general training began, and lasted eight weeks, of which two were theoretical background and six, practical experience in clinics.

The theory, for us, was a review which allowed us to fill up the gaps in our knowledge, to acquire new knowledge and to improve our past background:

- Anatomy and physiology of the female and male reproductive organs
- Sanitary education
- Use of visual aids
- Demography and its problems in the world
- Sexual education
- Pelvic and vaginal pathology
- Generalities on family health

- Gynecology
- MCH
- Laboratory examinations
- Contraceptive methods

With practice in clinics we covered in depth the medical and gynecological examinations.

We became familiar with the different contraceptive methods.
(Abundant details on their use, advantages, and inconveniences were provided.)

At the beginning of the clinic in Oudiah, each one of us felt responsible for putting into practice the lessons we had learned.

The special interest we attached to this field-work contributed to the success of our work.

We strongly hope that this training session will be continued periodically for the instruction of our sisters.

We feel that Family Health is a necessary asset and that it would be desirable to have health centers where our people could make prenatal visits and receive periodic health check-ups.

We do not know how to thank the organizers for their devotion and spirit of collaboration.

Ready for the Revolution
the battle continues.

SECTION VI. General Materials

1. Maternal and Child Health Extension Project
Feasibility Study
2. Phase II subproject papers for The Gambia and Benin
3. Road to Health Card
4. Consultant Report of Edwin M. Gold, M.D.

FEASIBILITY STUDY

Maternal and Child Health
and
Child Spacing Project for Africa

Countries to be covered are:
Gambia, Dahomey, and Lesotho

Submitted by:

University of California Extension
Santa Cruz

A proposal for a feasibility study preliminary to an operations contract in the area of maternal and child health and child spacing programs in Gambia, Dahomey, and Lesotho is being submitted by University of California Extension in Santa Cruz in cooperation with the Coordinating Committee on International Programs (University Extension-Statewide).

Direct administration will be provided by University of California Extension/Santa Cruz, under the guidance of the Dean's Committee and in cooperation with the Department of International Health, University of California Medical School, San Francisco. Cooperation of the School of Public Health (UCB) is being sought.

The feasibility study will cover a nine and one-half week period, the first seven and one-half weeks are to be devoted to field visits in Gambia, Dahomey, and Lesotho and two weeks to be devoted to the compilation of findings and development of the project proposal to be based on those findings.

The team to do the feasibility study will be composed of our campus coordinator, a public health nurse and a physician who are familiar with maternal and child health problems in an environmental health context. These persons have been recruited. The three persons will function as a team and will visit each of the countries together. One or more personnel from USAID will also be included.

The duties of the campus coordinator will be:

1. To make immediate contact with the necessary governmental officials.
2. To make tentative arrangements for housing for the project staff.
3. To determine the availability of safe storage space for commodities.
4. To make provisions for the receiving and handling from shipping point to storage point of the commodities upon their arrival.
5. Check roads for accessibility between dispensaries.
6. Check extent of available refrigeration and electricity.
7. With assistance of PHN and M.D., check commodity list against existing supplies.
8. To make definite arrangements with local government as to procedure and time table for implementation.

The duties of the public health nurse will be:

1. To determine the role that children play in the culture.
2. To identify the method of decision-making within the rural community; Do males make decisions?, Is there a tribal council or other means

of decision making?

3. To determine the availability of volunteers, both male and female.
4. To assess the level of understanding, to plan for length of training program.
5. To identify the professional relationships between the physician, midwife, and other personnel in the dispensary.
6. To determine the extent to which pregnant women are utilizing existing MCH services.
7. Determine attitude of midwife toward family planning.
8. Check extent of existing supplies.
9. Check commodity list against existing supplies.

The duties of the physician will be:

1. To determine the prevalence of women with high risk conditions.
2. To estimate the prevalence of cervical erosion or other conditions which would contraindicate IUDs.
3. Estimate the positivity rate to tuberculin, to determine the feasibility of INH chemoprophylaxis for all positive reactors during pregnancy.
4. To determine which personnel will ultimately be inserting IUDs, i.e., if it is other than the physician, how much training will be required to instruct the individual to insert IUD?

5. To determine the feelings of the physician in charge of the dispensary regarding the project and learn how he would like to see the project handled in his dispensary.
6. To determine the incidence and the prevalence of disease and malnutrition in children being seen at the dispensary, with particular regard to children from birth to twelve months.
7. To determine the availability of the necessary medical and laboratory equipment such as microscopes, x-ray, centrifuge, autoclave, etc.
8. To determine the mechanics of the system for the delivery of health services.
9. To identify specific dispensaries and target population for the conducting of a project. This will be done in collaboration with all team members after consultation with host country officials.
10. To assist all other team members in their various duties.

When the team returns the two weeks will be used to compile the findings and to develop an operations project for each of the three countries.

MATERNAL AND CHILD HEALTH EXTENSION PROJECT

FEASIBILITY STUDY FOR:

THE GAMBIA, WEST AFRICA

DAHOMY, WEST AFRICA

LESOTHO, SOUTHERN AFRICA

SUBMITTED BY:

**Charles B. Beal, M.D., Physician,
East Palo Alto Neighborhood Health Center**

**Mrs. Carlee Spencer, M.P.H., Director of Nursing
and Family Planning, Santa Cruz County**

**James A. Franks, Program Coordinator,
University of California Extension,
Santa Cruz, California**

C O N T E N T S

	<u>SECTION</u>
SUMMARY	I
PROJECT PURPOSE	II
RATIONALE	III
OUTPUTS	IV
INPUTS	V
COURSE OF ACTION	VI
.....	
	<u>APPENDICES</u>
PARTICIPANT TRAINING	I
CAMPING EQUIPMENT	I-A
SUPPORT STAFF FOR OVERALL PROJECT	II
PEOPLE SEEN AND INSTITUTIONS VISITED	III
DAHOMY RATIONALE	IV
DAHOMY BUDGET BREAKDOWN	V
DAHOMY COMMODITY LIST	VI
POLIO AND DPT VACCINES FOR DAHOMY	VII
THE GAMBIA RATIONALE	VIII
THE GAMBIA BUDGET BREAKDOWN	IX
THE GAMBIA COMMODITY LIST	X
LESOTHO RATIONALE	XI
LESOTHO BUDGET BREAKDOWN	XII
LESOTHO COMMODITY LIST	XIII

SUMMARY

It is proposed that USAID undertake a five year regional project encompassing The Gambia, Dahomey and Lesotho in an effort to improve the health and general well-being of mothers and children. All three countries have identified the need for expanded maternal and child health services as top priority. Each country wishes to improve MCH services through the re-training of their health personnel so that better health delivery methods and health teaching will become an integral part of all health services. To do this, each country plans to develop one geographic zone (or more) to serve as a model providing basic health services including comprehensive maternal and child health services. In The Gambia and Lesotho, the "Model Health Center" will be rural. In Dahomey the "Model" will be initially urban; later shifting to a rural zone. All efforts will emphasize extending services to persons not now being served, through better utilization of existing MCH personnel and experimentation with the use of related health personnel and volunteers. The population base to be served in the demonstration areas will be:

The Gambia	12,000
Dahomey	120,000
Lesotho	27,000

In addition, each country wishes to assure the continuing upgrading of services by strengthening the Ministry of Health. A U.S. technician with a counterpart will work within the Ministry to accomplish this in The Gambia and Lesotho and will cooperate closely with WHO in accomplishing this in Dahomey.

The evaluation design will be completed prior to beginning activity in each country and the evaluation will be completed at the end of two years. Six technical assistants (five public health nurses and one public health educator) and one project director (physician) will be required to carry out the regional project.

Each host country will provide counterparts for U.S. technicians and will within the required budgets provide the usual drugs, supplies, services, personnel and facilities. The costs of additional demands made upon usual supplies as a direct result of the project are reflected in the funding requirements which follows:

Level of funding per year for a two year period is approximately \$550,000.00 (which includes \$25,000.00 for out-of-country training.)

Section II

PROJECT PURPOSE

Objective:

To assist the Republic of Dahomey, the Republic of The Gambia, and the Kingdom of Lesotho in promoting the improvement of the health and general well-being of mothers and children.

Goals:

1. To contribute to the reduction of infant and maternal morbidity and mortality in high risk mothers and infants by integrating health teaching into existing health services, and by assisting with the integration of child spacing services for high risk mothers into the maternal and child health program.
2. To establish training centers (two rural and one urban) where students and all levels of health personnel can learn methods of health teaching and child spacing.
3. To establish one urban and one rural training center where methods can be developed to reach populations in transition from rural to urban society.
4. Develop health teaching and personnel training methods which have application to other developing countries.
5. Extend maternal and child health services through the use of all types of health and related personnel and volunteers.
6. Demonstrate the importance of assigning a person who has specific responsibility for the continuing education and guidance of personnel giving maternal and child health services.
7. Provide and develop appropriate health education materials and equipment.
8. Expand present methods of identifying, educating and serving high risk mothers.
9. Participate in the development of record systems and the collection of health statistics and demographic data.
10. Assist with the development of supply systems insofar as it affects the MCH services.
11. Coordinate efforts with existing related programs such as WHO, Catholic Relief, voluntary family planning efforts, private foundations, missions, Red Cross, Departments of Agriculture, etc.

RATIONALE

For the implementation of an MCH/CS regional project in Africa, three small countries have been chosen which, though separated geographically, have several common characteristics. Details for each country are found in the Appendix.

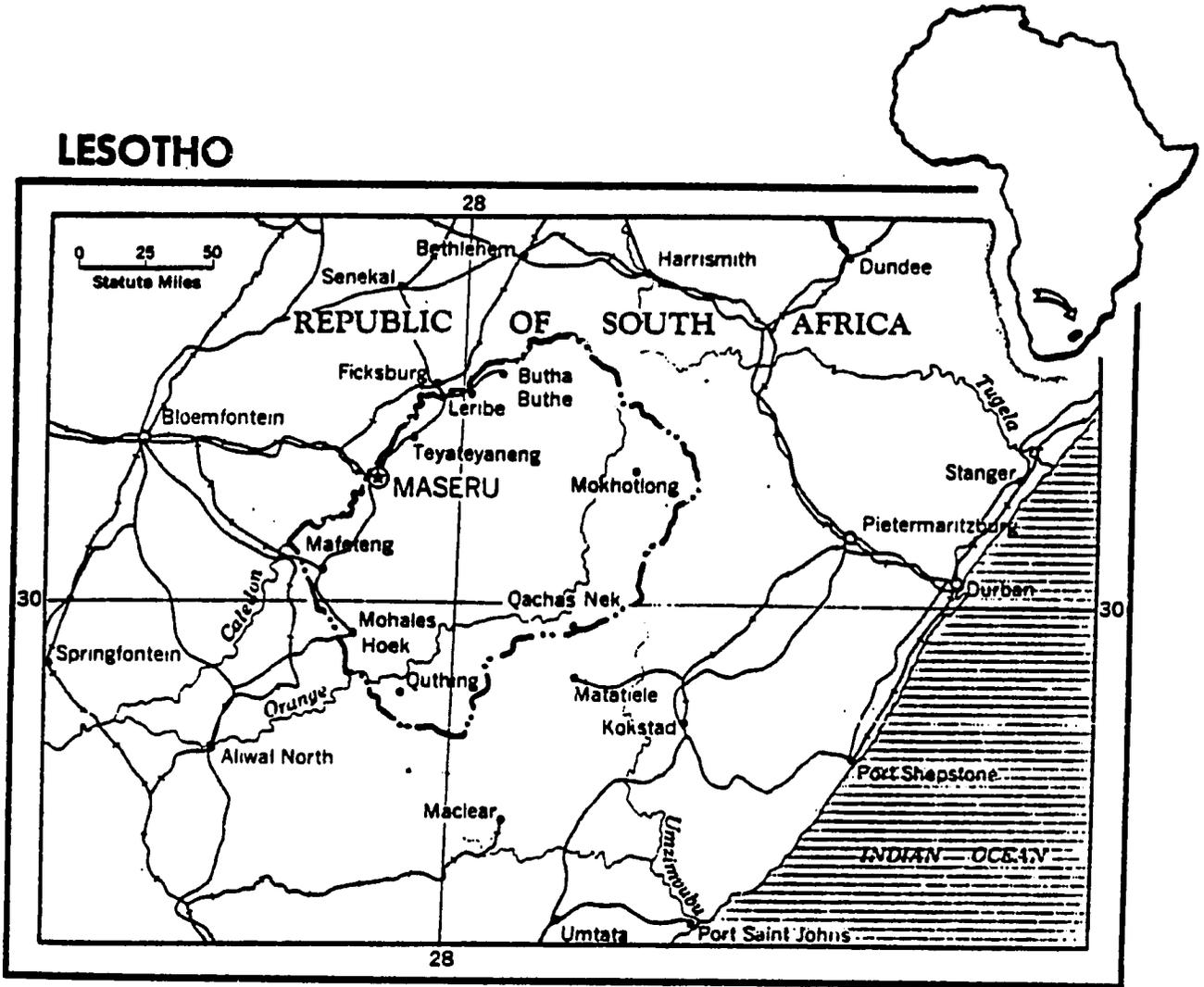
- a. The populations are largely rural, with a subsistence agricultural economy.
- b. The capital city in each country is moderately urbanized with some of the urban population being in transition from an agricultural to an industrial economy. This trend is most pronounced in Cotonou, Dahomey and least evident in Maseru, Lesotho.
- c. Health manpower, facilities, equipment, and medications are in very short supply.
- d. Major health problems include very high infant mortality, malnutrition and high incidence of communicable disease, much of which could be reduced through improved sanitation, proper nutrition and better use of presently available health facilities for MCH services.
- e. There is a need for continued and more effective in-service training of health personnel, particularly in basic health services, including training in methods of effective health education, especially of mothers and pregnant women.
- f. While only one of the three governments accepts family planning services as a function of the Ministry of Health, all three permit private family planning activities, and all three accept the principle that child spacing is appropriate upon medical indication, i.e., for high risk mothers.

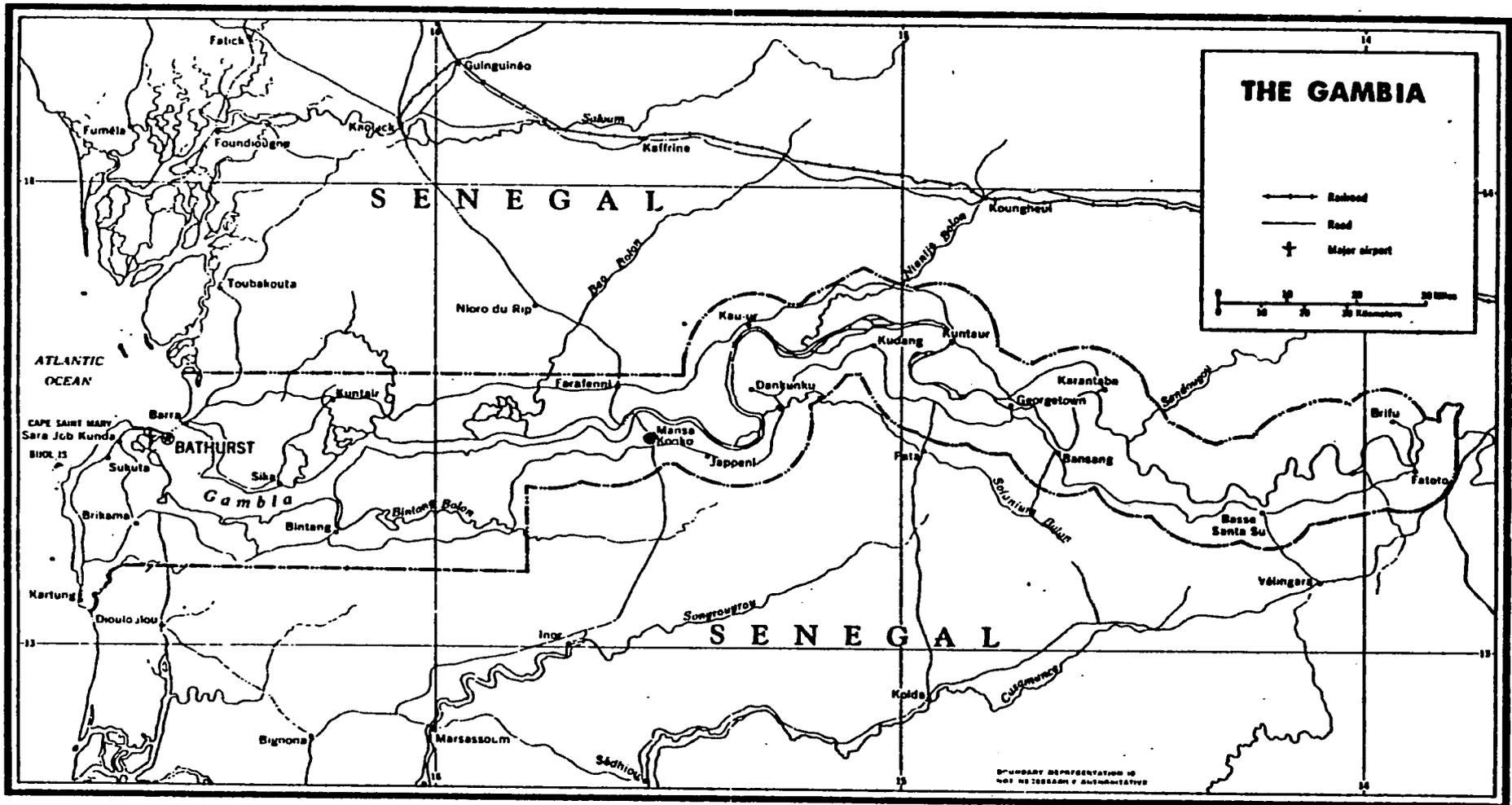
Conclusions are:

- a. The contribution of U.S. technicians working within the Ministries of Health of the three countries chosen will enhance the effectiveness of the health care delivery system of these countries and permit extension to people not now being served. Emphasis should be on maternal and child health, specifically in the reduction of infant morbidity and mortality, nutrition education, education in hygiene and more effective use of prenatal, intranatal and postnatal services. Alternative approaches such as increased use of medications were considered but none seemed as appropriate (partly because of expense) as that proposed here. The survey team believes that the most effective way to influence favorably maternal and child morbidity and mortality is to bring about change in the environment and practices within the home. It will be necessary to seek new ways to effect this change, and one appropriate method may be through the use of community volunteers appropriately trained. Through the same processes child spacing concepts and services can be introduced and eventually extended to large segments of the population.
- b. Goals can be accomplished by:
 - aa. Involvement in rural health center development, emphasizing the training of personnel in basic health services and recruitment and training of volunteers.
 - bb. Participation in an urban MCH complex and a defined urban community (in Cotonou) concentrating particularly on an increasingly difficult urban problem - the "population in transition".

- cc. Contributing to greatly needed planning and operational services at the Ministry of Health level (nursing services in The Gambia, and Dahomey and health education services in Lesotho) will complement and promote MCH/CS activities in the countries involved.
- c. The parallel activities in The Gambia and Lesotho (MCH/CS activities as a part of rural basic health services, plus planning and operations at the national level) and the complementary activities in Dahomey (MCH/CS in an urban setting; future extension into rural areas) assure a coherent program on a regional basis.
- d. A modest contribution of medications, laboratory equipment, other medical supplies, health education materials, vehicles and office equipment is essential. Project activities are expected to increase the demand for such items beyond the abilities of national health budgets to support them, at least within the first year or two. Specific commodity lists are appended.

LESOTHO





-411-

BUDGET

-412-

Page 18

	<u>First Year</u>	<u>Second Year</u>
U.S. Staff and Support Costs	\$ 50,810	\$ 50,041
Consultants and Support Costs	31,720	31,720
Field Director		
Salary and allowance	37,375	38,983
Travel	10,448	9,748
Office rent	6,000	6,000
Office supplies	3,960	2,000
House rent	<u>14,530</u>	<u>6,900</u>
	Sub Total \$154,843	Sub Total \$145,392

DAHOMEY

2 - U.S. Technicians

Salaries and allowance	43,700	45,360
Housing	24,200	13,800
Travel and vehicle costs	42,388	11,500
Offices for nurses	6,022	3,800
Camping equipment	450	
Local Personnel and Support	7,200	2,520
Health Education Materials	2,310	2,310
Medical Supplies	<u>32,690</u>	<u>32,690</u>
	Sub Total \$158,960	Sub Total \$111,980

THE GAMBIA

2 - U.S. Technicians

Salaries and allowance	42,100	43,680
Housing	24,200	13,800
Travel and Vehicle Costs	33,100	11,500
Offices for nurses	5,022	3,200
Camping Equipment	300	
Local Personnel and Support	5,160	5,160
Health Education Materials	3,660	3,000
Medical Supplies	<u>20,710</u>	<u>20,710</u>
	Sub Total \$134,252	Sub Total \$101,050

LESOTHO

2 - U.S. Technicians

Salaries and allowance	40,500	42,000
Housing	5,126	1,740
Travel and Vehicle Costs	34,462	15,850
Offices and equipment for nurses	6,630	3,000
Camping Equipment	300	
Local Personnel and Support	1,920	1,920

BUDGET -413-LESOTHO (continued)

Medical Supplies and
Educational Materials

First YearSecond Year55,00045,000

Sub Total \$143,938

Sub Total \$109,510

Total First Year \$591,993 Total Second Year \$467,932

Total two year project \$1,059,925.00

-414-

APPENDIX I

PARTICIPANT TRAINING

The local amount of \$25,000 is requested for third country participant training in Dahomey, The Gambia and Lesotho.

The participants will be identified as the project develops.

APPENDIX I - A

CAMPING EQUIPMENT

7 - sleeping bags	\$ 24.00 each
7 - SVEA stoves	12.00 each
7 - tents	20.00 each
7 - canteens	5.00 each
7 - air mattresses	10.00 each
7 - snake bite kits	3.00 each
7 - compasses	4.00 each
7 - mess kits	8.00 each
7 - swiss army knives	20.00 each
7 ponchos	10.00 each
7 - flash lights	12.00 each
Miscellaneous Equipment	100.00

APPENDIX II

SUPPORT STAFF FOR OVERALL PROJECT

	<u>First Year</u>	<u>Second Year</u>
I. <u>U.S STAFF</u>		
1 - U.S. Coordinator	16,500	17,325
1/2 - Purchasing Agent	6,000	6,300
1/2 - Accountant	6,000	6,300
1 - SRC	6,600	6,930
Fringe Benefits 1070	<u>3,510</u>	<u>3,686</u>
Sub Total	\$ 38,610	\$ 40,541
 <u>Travel</u>		
3 - trips \$1700 @ first year	5,100	
2 - trips \$1700 @ second year		3,400
U.S. travel first year	900	
U.S. travel second year		900
per/diem average \$20 per/day		
120 days first and second year	2,400	2,400
Office Supplies first and second year	1,800	1,800
Telephone and Telegraph	1,000	1,000
Office Equipment	<u>1,000</u>	
Sub Total	\$ 50,810	\$ 50,041
 <u>Consultants</u>		
4 - consultants per/year for		
3 months each	6,520	6,520
Travel	18,000	18,000
Salaries per/diem	<u>7,200</u>	<u>7,200</u>
Sub Total	\$ 31,720	\$ 31,720
 II. <u>FIELD DIRECTOR</u>		
1 - Field Coordinator	27,500	28,875
Fringe Benefits	2,750	2,888
25% Differencial	6,875	7,220
Visa, Passport, RTC	250	
 <u>Travel</u>		
Travel to Dahomey	1,200	
Household Effects (3,000 lbs.)	2,000	2,000
8 round trips Dahomey, The Gambia, Lesotho	5,088	5,588
per/diem	<u>2,160</u>	<u>2,160</u>
 <u>Office Rent</u>		
two offices / furnished	3,600	3,600
Utilities	<u>2,400</u>	<u>2,400</u>

SUPPORT STAFF FOR OVERALL PROJECT

II. <u>FIELD DIRECTOR</u> (continued)	<u>First Year</u>	<u>Second Year</u>
<u>Office Supplies</u>		
typewriter, standard w/french tray board	200	
filing cabinet, metal, standard, 4 drawer, with lock	210	
mimeograph machine	850	
office supplies	1,800	1,800
Medical Library	600	200
desk copier	300	
<u>House Rent</u>		
2 bedroom house	3,600	3,600
furniture	5,200	
utilities	3,300	3,300
temp. housing per/diem	2,430	
Sub Total	\$ 72,305	\$ 63,631
Total	\$ 154,835	\$145,392

PEOPLE SEEN and INSTITUTIONS VISITED

<u>PEOPLE SEEN</u>	<u>WASHINGTON D.C.</u>	<u>PRINCIPAL INSTITUTION VISITED</u>
Drs. PRINCE, HOWARD, KING Mr. HOWARD, Miss BELCHER Mr. ATWELL		USAID USAID USAID
<u>GENEVA</u>		
Mr. PEEL, Director Dr. Susan KESSLER Mr. ARAM-EL Dr. Alex KESSLER		ORT ORT ORT WHO
<u>ACCRA</u>		
Dr. Ernest NEAL & Mrs. NEAL, Pop. Program Mr. Ain KIVIMAE & Mrs. KIVIMAE, Pop. Program Mr. & Mrs. INGRAM, Asst. Director		USAID USAID USAID
<u>DAHOMY</u>		
Ambassador Mathew J. LOORAM Tobias HARTWICK, DCM & Mrs. HARTWICK James L. ROBB, Vice Counsel John GARON, Admin. Asst. John NELSON, Smallpox & Measles Souradjou IBRAHIM & Mme. Ikouderin DASSOUNDO, Asst. Dir. for Statistics Mr. William EGUE & Mme., Dir. of Protved Rev. WOOD, Pastor English Methodist Church Mrs. WOOD, R.N., Consultant, Family Planning Clinic Mrs. Mary MAW, R.N., Consultant, Family Planning Clinic David PAKOV, Director Coleen CONROY, R.N.		U.S. Embassy U.S. Embassy U.S. Embassy U.S. Embassy USAID High Commission of Plan High Commission of Plan Peace Corps. Peace Corps.
Mr. Gustavo CONEJO, San. Engineer Dr. Najuib AYAD, Consultant, Schistosomiasis Dr. Hans MEYER, Consultant, Choleva Mme. Marthe BOICHE, PHN & Dominique Dr. Otto SCHMIDT, MCH Mme. Eva CAULKINS, Consultant, Laboratories Dr. Joseph CODJA		WHO WHO WHO WHO WHO WHO Rural Basic Health Service Pilot Zone (ZDORA) Chief Basic Health Service Chief Mono District

PEOPLE SEEN

-419-

PRINCIPAL INSTITUTION VISITEDDAHOMY (continued)

Mr. Albert OUASSA, Minister	Ministry of Health
Dr. Achille VARAMGO, Dir. General	
Mr. Charles KOHLSTEDT, Admin.	(Cotonou) National Hospital Center
Dr. Veronique LAWSON, Chief Pediatrics	" " "
Mr. DA PIEDADE, Damieu, Gen. Supt.	" " "
Dr. S. ROSNEL, Pediatrician	Cotonou Child Health Center
Yolznde AMOUSSOU, Midwife-Nurse, Pediatric Practitioner	" " " "
Dr. L. ASSANI, Director	Cotonou Maternity Center
Dr. Olivier JOHNSON, & Mme.	School of Nursing
Mlle. Stanislaw STACHURA, Asst. Dir. (WHO)	" " "
Mr. Theophile GNAMBODOUE, Chief Instructor	" " "
Mr. GRUBBENS, Dir.	Agricultural & Nutritional Center, Ovando
Mlle. A.M.M. HIEL, Home Economist	" " " "
Mme. S. GRIMAUD, Home Economist	" " " "
Mme. Constance FACIA, Dir.	Social Center, Akpakpa
Dr. Alexis AMOUSSOU, Dir.	Chief Medical Services - Cotonou
Dr. Jacques WUENUM	Central Dispensary, Cotonou

THE GAMBIA

Mr. Robert BURKE, Chief Affaires	U.S. Embassy
Mrs. Marie BURKE, Secretary	" "
Mr. FAAL, Clerk	" "
Hon. Alhji I.M. GARBA - JAHUMPA, Minister	Ministry of Health
Mr. Hatib SENEGA - JENNEH, Perm. Sec.	" " "
Dr. John MAHONEY, Chief Med. Office	" " "
Dr. RIMMER, Med. Office of Health	" " "
Dr. A.D. FULLER-MCH	" " "
Mr. H.O. JALLOW, Accountant	" " "
Miss Patricia GRANT, Secretary	" " "
Dr. P.J. N'DOW, Superintendent	Chief Medical Services - Royal Victoria Hospital, Bathurst
Mrs. Harette DA COSTA, Matron	" " " "
Mrs. R.T. PALMER, Director	School of Nursing
Mrs. FYE, Inst. PHN	" " "
Miss O.L. ROBERTS - Midwife Tutor	" " "
Miss JOBE, Student	" " "
Mr. Loyd KEPFERLE, Director	Peace Corps.
Mr. I.A.S. BARANG - JOHN, Director	Family Planning Association
Mrs. M.J. McPHERSON, Nurse	" " "
Dr. S.J. PALMER, Consultant	" " "
Miss M. THOMAS, Aide	" " "
Miss E. SAMPSON, Aide	" " "

PEOPLE SEEN

-420-

PRINCIPAL INSTITUTION VISITEDTHE GAMBIA (continued)

Mr. John LE BER	Catholic Relief Service
Mr. T.D. SMART, Dispenser	Dispensary, Sukuta
Mrs. Jojo CHAM, Sr. Nursing Sister	Dispensary, Essau
Mr. J.Y. JOBE, Dispenser	" "
Mrs. Christina COKER, Nurse	Health Center, Mansa Konko
Mrs. A.J. DAVIES, Midwife	" "
Mrs. Rella KAH, Midwife	" "
Mr. Ronert SOL-NYANG, Dresser-Dispenser	" "
Mr. TOURAY, Dresser-Dispenser	" "
Mrs. Alice NICOL, Comm. Nurse (Aide)	" "
Mrs. Ranou JOBE, Comm. Nurse (Aide)	" "
Mr. Suke FOFANA, Orderly	" "
Mr. I.M. DRAMMEH, Leporsy Insp.	" "
Mr. GOSWELL, Leporsy Insp.	" "
Mr. Abdoulie BOJANG, Commissioner	Hdg. Lower River Division
Mr. Fending KEITA, Orderly	Rural Sub Dispensary, Bureng
Mr. B.K.M. SANNEH	Primary School, Bureng
Mr. Nyaninka DABO, Chief	Village of Bureng
Dr. Van DER PLAS, Dir.	Community Development Program
Mr. Demba SANWEY, Sen. Field Wkr.	Massembe
Mr. GARLING, Admin.	Medical Research Council
Dr. A.B.G. LAING, Malaria Research	" " "
Dr. M.E. WILSON, Parasitologist	" " "
Dr. WILKINS, Schistosomias Research	" " "
Dr. G.H. REE, Ward Physician	" " "
Miss M. HURST, Nursing Director	" " "
Mr. B. JAITAR, Dresser	" " "
Mr. Mathew PHILIP, Magistrate, Bathurst	

LESOTHO

Mr. Norman FRISBIE, Mrs. Arlene FRISBIE, Ch'Affaires	U.S. Embassy
Mr. LESETELI, Minister	Ministry of Health & Social Welfare
Mr. J.R.L. KOTSOKOAME, Perm. Secretary	" " "
Dr. Q.M. OHOBELA, Med. Office of Health	" " "
Dr. W.A. SMIT, Advisor to Minister	" " "
Mrs. Violet MAFOLE, Matron	" " "
Mrs. Elizabeth SIBIOLA, Chief PHN	" " "
Mr. MOHAPI, Pharmacist	" " "
Mr. Stephen NHLAPO, Senior Health Inspector	" " "
Mr. MONYAKE, Statistician	" " "
Dr. C. CYWINSKI, Representative	WHO
Miss Ilene CAHILL, Nurse Educator	WHO
Mr. Peter CANNON, Director	Catholic Relief Services
Mrs. Ann TAOLE, Senior Nurse	" " "
Dr. A.D. LABONA, Superintendent	Queen Elizabeth II Hospital,
Mrs. KOUE, Sen. Matron	Masera

PEOPLE SEEN

-421-

PRINCIPAL INSTITUTION VISITEDLESOTHO (continued)

Rev. H. LE BRECQUE, O.M.I., Superintendent	St. Joseph's Roman Catholic Hospital,
Dr. Vera BIELER, Physician	Roma
Dr. ROHRMANN, Biologist, Univ. of Roma	
Roselind MOENE, Staff Nurse	Thabana Morena Health Center
Staff Nurse	Tsakholo Health Center
Mrs. MPETA, Staff Nurse	Marakabei Health Center
Mr. MAKORO, Health Assistant	" " "
	School of Nursing, Masera
Mr. James ALRATZ, Director, Peace Corps.	
Mrs. MULAPO, Senior Exec. Office, Office of Education	
Mr. A.S. MOHALE, Perm. Sec., Min. of Agriculture	
Miss M.T. MOLAPO, Central Planning Office	
Dr. & Mrs. MOKOSE, Private Practice	
Mr. J. MOITSE, Principle Asst. Sec., Min. of Finance	
Mr. & Mrs. TAYLOR, UNDP	
Miss WEEKS, UNDP	
Mrs. NTSEKHE - North District	Public Health Nurses
Mrs. SAULI - Maseru District	" " "
Mrs. MAKOTOKO - South District	" " "
Dr. E.M. CHOI (Korean, expert in IUD insertion)	- Leribe Hospital & Health Center
Mr. MAKHETHA, Health Inspector	- (serves pop. of 45,000 to 50,000)
Mrs. MAILE, Matron	- (200 beds)
Constance MOLEFE, Staff Nurse	Maryland Health Center (Catholic)
Sister MARIA THERESA, Staff Nurse	St. Monica Health Center (Catholic)
Sister ROSE, Nurse Midwife	St. Rose Health Center (Catholic-
Sister MIRIAM ANGELA, Nurse Midwife	" " " American)
Sister YVONNE, Nurse	" " "
Mrs. KOTE, Staff Nurse	Emmanuel Children's Home
Dr. MOHALE, Chief Med. Officer, Mafeteng District	Mafeteng Hospital (112 beds)
Mrs. MOKHALI, Matron	" " "
Mr. MOHALE, Permanent Sec.	Department of Agriculture
Mr. J.S. BOFELO, Sen. Community Dist. Officer	" " "
Mrs. A.M. ITLALELE, Home Economics Advisor	" " "
Mrs. S. LEROTHOL, Nutrition Officer	" " "
Gwendolyn MOLETSI, Principal, Teacher	School of Nursing
Mrs. KHULUSE, Midwife Tutor	" " "
RANKHE THOA, Public Health Nurse Tutor	" " "

APPENDIX IV -422-

DAHOMEYRATIONALE

No adequate statistics are available in respect to infant or maternal morbidity and mortality. However, the reported mortality rate for children under 1 year is 110/1,000. Major causes of deaths in the total population are said to be malaria, infant gastro-enteritis, intestinal diseases, tetanus, nutritional deficiencies, and respiratory disease. Frequent complications of pregnancy include anemia, jaundice, kidney infection, hemorrhage, toxemia, hypertension and gonorrhoea.

Distribution of health professionals throughout the 6 states ("departments") can be summarized as follows:

Ratios	Physic/Pop.	Nurse/Pop.	Midwife/Pop.
<u>Best Area</u>			
Atlantique State (Includes Cotonou)	1/17,000	1/1,500	1/5,500
<u>Worst Area</u>			
Attakora State	1/110,000	1/2,700	1/33,000
<u>National Averages</u>	1/45,000	1/2,700	1/14,500

Throughout the country there are three major general hospitals, two smaller general hospitals, one major maternity center (in Cotonou) which has 6,500 admissions per year, approximately 55 lesser maternities, and 150 rural dispensaries. In addition, there is one major child health center (in Cotonou) and five lesser child health centers. There is one rural "demonstration" pilot zone for basic health services. This zone represents a Ministry of Health - WHO collaborative effort. There is one nursing school (at Cotonou) presently training a total of 118 nurses and midwives. Finally, in the child health center in Cotonou there has been established recently a family planning clinic, which at the time of our visit had been in operation one month and had provided IUDs for four women. The only other organized family planning service in the country, is within the general practice clinic of Dr. Walckhoff. Two social welfare centers, functioning under the Ministry of Health, exist in Cotonou, one in the section of Akpakpa, and the other in the St. Michael section.

Significant observations developed during the site visit are:

- Perinatal morbidity and mortality are excessive, though exact rates are unknown.
- Professional health personnel are inadequate in numbers. Facilities, likewise are deficient both in numbers and equipment. Medications frequently are in short supply.
- Health education is considered by the Ministry of Health to be one of the major needs of the entire population, particularly in respect to child care.
- Family planning is acceptable to most of the health professionals questioned, and deemed an urgent necessity by many of them.
- As in all major population center in Africa, the Dahomean cities have a large population in transition from a rural, traditional subsistence to an industrialized economy. This group is thought to be quite amenable to change.

-423-

DAHOMEYRATIONALE (continued)

- f. Rural, traditional population groups are reported not to be ready to accept child spacing services, though many urban people are, particularly among the women who hold jobs.
- g. Though there is no national population policy, there is fairly general agreement among health professionals that child spacing is a necessity for many women, both in regard to their personal health, and the economic well-being of their families. One opportunity for education in child spacing is among post-partum women attending the maternity center at Cotonou. It is estimated that 2/3 of the 6,500 women delivered annually return for their 6 weeks checkup. Unfortunately these women must be examined by the midwives and by the obstetrician in the delivery rooms. The medical director of the maternity center is anxious to construct additional clinic space for post-partum care. Such space would provide an excellent setting both for child spacing and health education activities.
- h. Cotonou is the center for the training of health personnel for all Dahomey and it offers the best facilities for this purpose. The city itself is made up of fairly self-contained population groups in which techniques for extension of MCH services can be studied and developed. One such example is the Akpakpa district, consisting of a homogeneous, generally poverty stricken population of 30,000. Health services provided for Akpakpa consist of a dispensary, one physician and several nurses, and a social welfare center, which, among other things, gives minor symptomatic treatment to children and engages in health education activities, particularly nutrition education, personal hygiene and homemaking.
- i. The Ministry of Health plans to enlarge the clinical laboratory at the Akpakpa dispensary. This laboratory is designed to serve the Akpakpa population, plus certain bacteriological and serological tests for the MCH complex and for the dispensary system in Cotonou.

Conclusions are:

- a. Improved MCH services, particularly in the education of mothers in regard to child care, represents one of the most urgent health needs of Dahomey.
- b. As MCH services improve there will be proportionally increasing acceptance of and demand for FP services.
- c. A medically and intellectually acceptable way to introduce and expand child spacing activities is to offer such services to women who have particular need of them. These women generally fall in the "high risk" category. Such women also often have more critical need of education in child care, since many of them have had difficult deliveries and non-viable pregnancies.
- d. It is appropriate to supply certain drugs, both preventive and curative to the National Pharmacy for distribution to institutions within scope of project.
Reasons are:
 - aa. Medications and vaccines recommended are basic to proper MCH service in Dahomey.
 - bb. All medications are in short supply and frequently entirely lacking in the country.

DAHOMY

RATIONALE (continued)

- cc. The successful development of the project will increase the need for these medications beyond that which is presently budgeted. Specific increased needs are anticipated in the areas of family planning, care of high risk mothers (so as to diminish their "risk") and care of children of high risk mothers (to improve their morbidity and survival rates).
- e. Some supplies should be furnished for the enlarged clinical laboratory at Akpakpa. This laboratory should enhance the health care of the target population, and facilitate the search for high risk mothers.
- f. The project should first be established in Cotonou with early extension to an accessible but more rural population. In this manner training can be provided for health personnel serving the entire country, family planning services will be offered to the most receptive population group, and studies in extension of these services can be readily accomplished.
- g. After appropriate training and extension techniques have been developed, further extension into other urban and rural areas may be anticipated. Ministry of Health officials have expressed that this expansion should first extend to the "pilot" zone.
- h. The experience in Dahomey will be primarily directed to "populations in transition" with later extension to the more traditional situation. The experience in the Gambia and Lesotho focusing immediately on two varieties of traditional, subsistence economies and culture should complement the former to provide truly parallel pilot projects. Thus, regionalization will have been accomplished.

APPENDIX V

DAHOMAY BUDGET BREAKDOWN

	<u>First Year</u>	<u>Second Year</u>
U.S. Staff and Field Director for Dahomey	\$ 51,612	\$ 48,464
<u>U.S. Technicians</u>		
2 - public health nurses	32,000	33,600
10% fringe benefits	3,200	3,360
25% differential	8,000	8,400
visa, passports, shots, etc.	500	
<u>Housing</u>		
2 - 2 bedroom houses	7,200	7,200
utilities	6,600	6,600
furniture	10,400	
<u>Travel</u>		
travel to Dahomey round trip	2,400	
temp. housing per/diem	4,800	
household effects		
3000 lbs. each	4,000	4,000
3 vehicles \$4200	12,600	
15,000 miles each @ 25¢ per/mi., gas & maintenance	11,088	
shipping	7,500	7,500
<u>Office Public Health Nurses</u>		
office space \$200 per/mo.	2,400	2,400
3 small metal desks	1,050	
desk with typewriter cabinet	350	
filing cabinet standard, metal w/locks, 4 drawer	140	
3 chairs straight back	150	
chair swivel, secretary	32	
miscellaneous office supplies	1,000	1,000
medical & resource books	300	150
shipping	600	250
<u>Camping Equipment</u>	450	
<u>Medical Supplies</u>	32,690	32,690
<u>Health Education Materials</u>	2,310	2,310
<u>Counterparts - Local Personnel</u>		
1 - counterpart for U.S. Technicians \$340 per/mo. for 12 months	4,680	
1 - bilingual secretary, locally hired, \$130 per/mo.	1,560	1,560
2 - driver-messengers, locally hired, \$40 each per/mo.	960	960
Total	\$210,572	\$160,444

COMMODITY LIST

DAHOMY

Drugs

Polio vaccine, sabin, trivalent - 20,000 doses
Tetnus Toxioid Aluman Precip. - 4,000 doses
DPT Toxioid - 10,000 doses
Neomycin-Polymixin-Bacetreicin eye ointment 1/8 oz. - 1000 tubes
Neomycin-Polymixin-Bacetreicin skin ointment 1/2 oz. - 1000 tubes
Applicators, silver Nitrate, tubes of 100 - 50 tubes
Tetracycline 250 mg. - 25,000 tabs
Hexa tamin, tabs - 100,000 tabs
Metronidazole tabs, 250 mg. - 5,000 tabs
Procaine Penicillin C, aqueous 3,000,000/5cc vial - 2,000
Nystation tabs, oral, 500,000 units - 5000 tabs
Thiabendazole, tabs, 250 mg. - 20,000 tabs
Ferrous glucinate, tabs, 300mg. - 100,000 tabs
Oral Contraceptive 80 mcg. estrogen component - 3000 cycles
Miscellaneous medications - lot
Hydrochlorothiozide, tabs, 50 mg. - 10,000 tabs

Medical Supplies

Freezer 14 cu. ft. 50 c 220V with self starting emergency generator - 1 only
Centrifuge, 6 place, motor driven 220V 50C - 1 only
Hemoglobinometer, Spencer - 2 only
Lancets, disposable 250/box - 25 boxes
Test-tubes, pyrex 15 x 125, 720/case - 4 cases
Stop watch 5th second, 7 jewel - 1 only
Timer, interval 120 min. - 1 only
Test-tube rack, wire - 10 only
Burets, Geissler, pyrex 100 ml. - 6 only
Bottles, wash, polyethylene, 4, 8, 16, 32 oz. 10 each size
Incubator, Bacteriology 17' x 23' - 230V 50/60C - 1 only
Culture tube basket, wire, large - 10 only
Petrie dish, pyrex 15 x 100 m. - 5/72 cases
Pipette, Red cell blood deluting - 24 only
Pipette, White cell blood deluting - 24 only
Talquist Hemoglobin scale - 50 only

-427-

COMMODITY LISTDAHOMEY (continued)Medical Supplies (continued)

Coplin staining dish - 10 only
 Centrifuge, microhemtocrit, with accessories, 250V 50C - 1 only
 Tubes, Centrifuge, pyrex 15 ml, plain - 60 only
 Blood sampling tubes vacuum 1000/case, EDTA - 5 cases
 Needles for blood sampling tubes, 100/box - 10 boxes
 Hematest, Aones 100/bottle - 25 bottles
 Miscellaneous Supplies - lot
 Microhematocrit tubes, plain & heparin, 100/vial - 50 vials each
 Michrohemitocrit reader
 Syringe, disposable 2 ml; 20 gauge needle - 5,000 only
 Syringe, disposable 10 ml., 20 guage needle - 5,000 only
 Counter, mechanical, differential blood count - 1 only
 Specimen containers, collapsible 500/case - 10 cases
 Bililabsticks, Ames, bottles of 100 - 50 bottles
 Burner, Bunsen, natural gas - 2 only
 Applicator sticks, plain, pkg. of 1000 - 10 pkg.
 Nutrient agar, 1 lb. jars - 12 jars
 Stain, papanicolaou, 480 ml.- 10 bottles
 Scales, bathroom, kilogram - 6 only
 Scales, infant, kilograms - 6 only
 Measuring tape, metric, steel - 8 only
 Iodine crystals, tech. grade, 1 lb. bottle - 3 bottles
 Compressors, unsterile 2 x 2 in.
 Compressors, unsterile 4 x 4 in.
 Gauze bandage rolls, sterile - 1 in.
 Gauze bandage rolls, sterile - 2 in.
 Gause bandage rolls, sterile - 3 in.
 Sedimentation rack Westergren, 6 unit - 1 only
 Sedimentation tubes, Westergren - 24 only
 Hemotocrit tubes, Wintrobe - 24 only
 Water bath, serology, 12 x 5 x 13" - 1 only
 Kahn test shaker with transformer 50C - 1 only
 Demineralizer iwth refill cartriges - 1 only
 Glovis examination, plastic, disposable, box of 50 - 200 boxes
 Specula, vaginal, bivalve, stainless, small - 5 only
 Specula, vaginal, bivalve, stainless, medium - 10 only

COMMODITY LIST

-428-

DAHOMEY (continued)

Medical Supplies (continued)

Specula, vaginal, bivalve, stainless, large - 10 only
Tenaculum, single pronged, servix, stainless - 5 only
Intrauterine devices, lippes type, inserter, size C - 500 only
Intrauterine devices, lippes type, inserter, size D - 500 only
Cotton, absorbant, rolls, 1 lb. - 50 rolls
Instrument tray, covered, 14 in., stainless - 3 only
Container, covered 8" dia., stainless - 6 only
Sound, uterine, stainless - 5 only
Thumb forceps, 8 in., smooth, stainless - 12 only
Dilator, hegar, stainless, size 3/4 - 5 only
Dilator, hegar, stainless, size 5/6 - 5 only
Kidney basin, stainless, 10 inch - 12 only
Basin, medication, stainless, 2 inch - 12 only
Sponge forceps, stainless, 10 inch - 5 only
Condom - individual pkg. - 3,000

Health Education Materials

Artist supplies - lot
Flannelgraph materials - lot
Motion picture films & film strips - lot
Tape recorder (AC/DC) & attachments - 1 only
Slide projector (AC/DC) & attachments - 2 only
Projector, motion picture (AC/DC) - 1 only
Screen - 1 only
Equipment cases for local storage and transportation - lot
Miscellaneous paper and supplies - lot

POLIO & DPT VACCINES FOR DAHOMEY

On the day the survey team visited the Child Health Center in Cotonou, there were brought in four new cases of paralytic poliomyelitis. There were also sixteen cases in the hospital. Apparently this pattern is consistent, for we saw many persons obviously post-polio in the streets, and usually begging. We also visited the "rehabilitation center" in the central dispensary. The facility consisted of one small unattended room, three pieces of furniture and one kiddy-car-like apparatus.

The two pediatricians to whom we talked stated unequivocally that their most urgent need in the form of drugs is polio vaccine.

The question arises as to the value and possible hazards of introducing such vaccines on a limited scale into Dahomey. First, if polio vaccine were imported as part of the project its use almost certainly would be limited to Cotonou, and possibly the basic health services pilot zone. Logistic and cost factors would prevent any widespread use in the rural areas at this time. The Dahomeen government has requested polio and DPT vaccines from UNICEF, but do not anticipate receiving any from that source until 1974.

As polio immunization is preventive in nature, provision of vaccine for this project clearly is most valid. Unfortunately, the number of cases "prevented" cannot be counted. However, the incidence of paralytic polio among children attending the Child Health Center seems sufficiently high to assume that numerous cases will be prevented. Certainly in West Africa every case of paralytic polio causes more suffering and economic loss than if the children actually were to die.

Finally, is there a long term public health hazard to the use of polio vaccine in Cotonou as suggested? We believe not. The virus undoubtedly is so widespread in the community, and most probably in the entire population of Dahomey, that the development of hard immunity in this or succeeding generations will not be diminished. The attenuated live virus vaccine is appropriate for use. A freezing unit with automatic emergency generator will be required for storage of the vaccine in Cotonou.

We conclude that since the use of poliomyelitis vaccine should reduce the infant morbidity and mortality in the project population, and since its use is both preventive in nature and strongly urged by responsible health authorities, a stock sufficient for the needs of the MCH complex, the Akpakpa district, and the basic health services project should be supplied as one of the project commodities.

DPT immunizations are already being given to children, and tetanus to pregnant women. However, both vaccines are in extremely short supply. Thus there is a very sufficient incidence of both whooping cough and tetanus in Cotonou, as well as in the whole of Dahomey. The increased demand for preventive services due to project activities makes an additional supply of these vaccines urgently needed.

APPENDIX VIII

THE GAMBIA

RATIONALE

Like all West African countries, The Gambia has a severe shortage of health manpower, facilities, equipment, and medications to meet the ever increasing public demand for health care. In this country some 325,000 people are scattered over a strip on either side of the Gambia River for 200 miles, its length. For administrative purposes the country is divided into one metropolitan area (Bathurst) and 4 rural states or "Divisions". The Lower River Division has a population of 12,000. Its administrative center is Mansa Konko, 110 miles from Bathurst.

The following health statistics are reported for the Gambia:

Facilities

General Hospitals (Bathurst and Bansang, Total 308 beds) - 2
Sanitorium, mental hospital, leprosy and research facilities (160 beds) - 5
Health Centers with beds (81 beds) - 11
Dispensaries - 28
Sub-Dispensaries - 39
Ante-natal and child welfare clinics are held in 31 locations.

Additional facilities include Schools of Nursing and Public Health (sanitary inspectors), a voluntary family planning agency, and the Medical Research Council, all in Bathurst. The Council (MHC) also maintains a "study community" Keneba, in Lower River Division.

Personnel

Physicians in government service 11
Other Physicians 7
Dentists 1
Qualified Nurses 15
Nurse-Midwives, all grades 41
Sanitary Inspectors, all grades 27
Other health care personnel and lab technicians 111

<u>Health Care Services</u>	<u>1968</u>	<u>1969</u>
Total outpatient visits, all services	648,535	751,939
New prenatal cases	18,178	19,973
Total prenatal visits	59,166	57,761
Deliveries by government personnel	4,294	4,079
New child health cases	18,919	35,522
Total child health visits	102,638	135,228
Home visits	3,317	2,448

Specific Data for Lower River Division is as follows:

Health Center (12 beds) - 1
Dispensaries - 7
Sub-Dispensaries - 11
Ante-natal and Child Welfare Clinics held in 9 locations
Physician resident - 0
Qualified Nurse - 1
Nurse - Midwives - 2
Other Health Care Personnel - 25

RATIONALE (continued)

<u>Health Care Services</u>	<u>1968</u>	<u>1969</u>
Total outpatient visits	193,970	145,120
New outpatient cases	39,567	88,104
Admission to Health Center Ward	451	411
New ante-natal cases	3,657	4,324
Total ante-natal attendance	11,191	11,584
Deliveries in Health Center	189	142
Child welfare total attendance	21,265	20,332
Home visits	109	94

Significant medical problems include dysentery, whooping cough, anemia, intestinal parasites, tuberculosis, leprosy, nutritional deficiencies, pneumonia and tetanus. The incidence of measles has been greatly reduced by the smallpox-measles immunization program. Published data and information given by health officials reveal the following:

- a. There is an increasing demand for health services, especially in the child health clinics.
- b. A high proportion of pregnant women attend prenatal clinics, but most of these women remain at home for their deliveries, unattended by trained personnel.
- c. An attempt to train village midwives failed because once trained in government centers, the women refused to return to their village to work.
- d. Mothers are beginning to show some willingness to embrace modern concepts of health practice and child feeding.
- e. The economic situation in The Gambia will not permit greatly expanded health facilities or a large increase in personnel at this time, or at anytime in the foreseeable future.
- f. The Family Planning Association clinics are just beginning to function in Bathurst. Some clinic sessions are held in conjunction with prenatal and child health clinics, but have not integrated by the Ministry into the national health services. The Family Planning Association plans to expand their services to the Lower River Division in 1972.
- g. A community development program exists in the Lower River Division. This program stresses new agricultural methods and day nurseries for children of mothers who work in the fields. This program uses both community volunteers and 15 division supported permanent cadre.
- h. The Lower River Division is entirely rural in character and from the point of view of health personnel and facilities, is the most underprivileged of all the divisions. Mansa Konko Health Center has been used on one occasion as a field training station by the School of Nursing. School authorities feel that this Health Center should be further developed to make it more effective for the training of student nurses in rural basic health services.
- i. There is no Division of Nursing Services at the Ministry level in Bathurst, though such has been recommended. One nurse is responsible not only for the administration of the Bathurst Hospital, but for nursing services in the entire country as well.
- j. Basic drugs and supplies are in such short supply that there presently is no provision to care for any additional persons seeking help as a result of project activities.

THE GAMBIA

RATIONALE (continued)

From this background the following conclusions are drawn:

- a. Immediate and realizable health advances are possible within the areas of in-service training of personnel and health education, particularly of mothers and of pregnant women.
- b. The organization, planning coordination of training for nursing services within the Ministry of Health needs immediate strengthening. Success of other aspects of the project will depend greatly upon a more effective central direction.
- c. A precedent and structure already exists for experimentation with extension of MCH services by means of volunteers and using community development techniques.
- d. The provision of a limited supply of medications, dressings, and other equipment is vital to project success.
- e. The Minister of Health clearly stated that he desired this project not to be only "Family Planning" but rather that it should cover the broad field of maternal and child health, including the provision of child spacing for medical indications. These views are consistent with the overall goals and objectives of the project.
- f. The projects provision for inputs in public health nursing at the Ministry level for overall planning as well in a rural health center for training and health education are consistent with the goals and plans of action developed in Dahomey and Lesotho, thus allowing the project to be regional in character.

APPENDIX IX

THE GAMBIA BUDGET BREAKDOWN

	<u>First Year</u>	<u>Second Year</u>
U.S. Staff and Field Director 1/3 for the Gambia	\$ 51,612	\$ 48,464
<u>U.S. Technicians</u>		
2 - Public Health Nurse	32,000	33,600
10% fringe benefits	3,200	3,360
20% differential	6,400	6,720
visa, passports, shots, etc.	500	
<u>Housing</u>		
2 - 2 bedroom house	7,200	7,200
utilities	6,600	6,600
furniture	10,400	
<u>Travel</u>		
travel to the Gambia (round trip)	2,200	
temp. housing per/diem	3,600	
household effects		
3000 lbs. each	4,000	4,000
2 vehicles \$4200	8,400	
shipping vehicles	7,400	
15,000 miles each, 25¢ per/mi., gas & maintenance	7,500	7,500
<u>Office Public Health Nurse</u>		
office space \$150 per/mo.	1,800	1,800
2 small metal desks	700	
desk with typewriter cabinet	350	
filing cabinet, standard, metal with lock, 4 drawer	140	
2 - straight back chairs	100	
1 - secretary swivel chair	32	
miscellaneous office supplies	1,000	1,000
medical & resource books	300	150
shipping costs	600	250
<u>Camping Equipment</u>	300	
<u>Medical Supplies</u>	20,710	20,710
<u>Health Education Materials</u>	3,660	3,000
<u>Counterparts - Local Personnel</u>		
1 - counterpart for U.S. Technicians \$250 per/mo.	3,000	3,000
1 - secretary, locally hired, \$100 per/mo.	1,200	1,200

The Gambia Budget Breakdown continued

<u>Counterparts - Local Personnel continued</u>	<u>First Year</u>	<u>Second Year</u>
2 - drivers - messenger, locally hired, \$40 each per/mo.	960	960
Total	<u>\$185,864</u>	<u>\$149,514</u>

APPENDIX X

COMMODITY LIST

THE GAMBIA

Drugs

Tetnus Toxoid Aluman Precip. - 4,000 doses
DPT Toxoid - 10,000 doses
Neomycin-Polymixin-Bacetracin, ophth. ointment 1/8 oz. - 500 tubes
Neomycin-Polymixin-Bacetracin, derm. ointment 1/2 oz. - 500 tubes
Tetracycline 250 mg., tabs - 25,000 tabs
Metronidazole tabs, 250 mg. - 5,000 tabs
Nystatin tabs, oral, 500,000 u. - 5,000 tabs
Thiabendazole, tabs, 250 mg. - 20,000 tabs
Ferrous glucinate, tabs, 300 mg. - 100,000 tabs
Oral contraceptive 80 mcg. estrogen content with iron - 2,000 cycles
Hydrochlorothiazide, 50 mg. tabs - 5,000 tabs
Isoniazide tabs, 100 mg. - 50,000 tabs
Streptonycin, injectible with diluent 5 mg. - 1,000 bottles
Applicators, silver Nitrate, tubes of 100 - 20 tubes
Sulfa sexidine, tabs 0.5 gm. - 5,000 tabs
Hexavitamin, tabs - 100,000 tabs
Penicillin, Procaine penic. G aqueous 3,000,000/5cc vial - 5,000 vials
Miscellaneous medications - lot

Medical Supplies

Measuring tape - English Metric, steel - 12 only
Balance double pan, single beam, metric - 4 only
Spatuala, flexible, stainless steel, 6 in. blade - 10 only
Slab, marble, square 6 x 6 in. - 10 only
Hematest, Aones, bottle of 100 - 25 bottles
Test tube pyrex, 15 x 125, 720/case - 2 cases
Cylinders, single graduated cove form, flint glass - 16 oz. - 12 only
Mortar & Pestle, porcelain - 100 mm. - 8 only
Mortar & Pestle, porcelain - 150 mm. - 8 only
Mortar & Pestle, porcelain - 215 mm. - 8 only
Talquist hemoglobin scale - 100 only
Lancet, disposable 250/box - 30 box
Bililabsticks - Ames., 100 bottle - 50 bottle
Bottles, screw cap - 2 oz. - 3,000 only
Bottles, screw cap - 4 oz. - 3,000 only

COMMODITY LIST

-436-

THE GAMBIAMedical Supplies

Gloves examination, plastic, disposable, boxes of 50 - 200 boxes
 Specula, vaginal, bivalve, stainless, small - 5 only
 Specula, vaginal, bivalve, stainless, medium - 10 only
 Specula, vaginal, bivalve, stainless, large - 10 only
 Tenaculum, single pronged, cervix, stainless - 5 only
 Intrauterine devices, lippes type, with inserter, size C - 500 only
 Intrauterine devices, lippes type, with inserter, size D - 500 only
 Cotton, absorbant, rolls, 1 lb. - 50 rolls
 Instrument tray, covered, 14 in., stainless - 3 only
 Container, covered 8" diameter, stainless - 6 only
 Sound, uterine, stainless - 5 only
 Thumb forceps, 8in., smooth, stainless - 12 only
 Scissors, surgical, 8 in., straight, stainless - 12 only
 Dilator, hegar, stainless, size 3/4 - 5 only
 Dilator, hegar, stainless, size 5/6 - 5 only
 Kidney basin, stainless, 10 in. - 12 only
 Basin, medication, stainless, 2 in. - 12 only
 Sponge forceps, stainless, 10 in. - 5 only
 Condom, individual pkg. - 3,000 only

Miscellaneous Supplies

Scales, bathroom, English - 10 only
 Scales, infant, English - 10 only
 Iodine, crystals, tech. grade, 1 lb. bottle - 3 bottles
 Syringes, disposable, 2 ml., 20 gauge needle - 2,000
 Syringes, disposable, 5 ml., 20 gauge needle - 1,000
 Syringes, disposable, 10 ml., 20 gauge - 1,000

Health Education Materials

Artist supplies - lot
 Flannelgraph materials - lot
 Motion picture film & film strips - lot
 Tape recorder (AC/DC) with attachments - 1 only
 Slide projector (AC/DC) with attachments - 2 only
 Projector, motion picture (AC/DC) - 2 only
 Screen - 2 only
 Equipment cases for local storage and transport - lot
 Miscellaneous paper and supplies - lot
 Duplicator and parts - 1 only

APPENDIX XI

LESOTHO

RATIONALE

The Kingdom of Lesotho is a mountainous enclave completely surrounded by the Republic of South Africa. Its population is approximately one million. However, at least 150,000 men are out of the country part of the year, working in South African mines. The problems of inadequate health manpower and facilities are compounded by the great difficulties of mountain travel. Political administration and the health delivery system is divided into nine districts, one of which is Mafeteng, lying south of Maseru the capitol. This district has a resident population of just over 100,000 and a non-resident population of 17,000.

Health facilities and personnel for the country are as follows (1968 data):

General Hospitals - 17 (1,639 beds)
One Leprosy and one Mental Hospital (475 beds)
Out patient visits and Hospital admissions - 245,198
Physicians in government service - 27
Dentists - 2
Physicians in private practice - 11
Physicians in Mission Hospitals - 11
Qualified Nurses in government service - 149
Ward Attendants, M & F - 257
Public Health Nurses - 5
Nutritionists - 5
Rural Health Assistants, male - 86
Qualified Pharmacists - 2
Dispensers, all grades - 34
Flying Doctor service - 1 Physician using commercial carrier.

Selected morbidity rates are:

Communicable Disease, all forms -	3,423/100,000
Tuberculosis, all forms -	372/100,000
Leprosy -	5.7/100,000

Common and significant diseases include influenza, tuberculosis and other respiratory illness, measles, enteritis, bacillary dysentery, nutritional deficiencies, syphilis, gonorrhoea, skin infections, typhoid fever, leprosy, and certain intestinal helminths (pork tape worm, trichuris, ascaris).

In the Mafeteng District there is one general hospital and three health centers (Tsakholo, Thabena Morena, and Malea-lea), served by one physician, one non-resident PHN, eight staff nurses, and twenty-three other health care personnel. Illness patterns are those of the nation at large. In 1970 at the Tsakholo Health Center there were 3,989 total visits, 165 prenatal visits, eight deliveries, and 200 health education talks.

Within the public health services there is a plan for the country-wide development of basic health services. The medical officer of health is anxious to establish a "model" center which would serve as a field station for basic and in-service training, and as a demonstration zone for rural health services for the entire country. WHO personnel fully support and will actively participate in such an effort. Objectives for the center are similar to those of other WHO supported health centers in Africa.

LESOTHO

RATIONALE (continued)

Relating closely to the Ministry of Health is the Extension Division of the Ministry of Agriculture. This division has developed an applied nutrition program, including adult education, vegetable production, poultry production, youth program, and school feeding. The youth program includes a Young Farmers' Club with sections on horticulture, poultry, fisheries, dairies, and school gardens. The Extension Division program is very active and is already beginning to have a beneficial effect on national nutritional problems.

The Ministry of Health also wishes to establish a central Division of Health Education. This division would offer immediate consultive services in health teaching methods and in the provision of materials to existing educational services (school teachers, Ministry of Agriculture, nutrition and community development programs, School of Nursing, in-service training for nurses). Simultaneously, a research program would begin into the most appropriate health education techniques and methods for Lesotho. Some of the field studies would be accomplished among the target population served by the Tsakholo Health Center.

The most pressing health education needs center on the training of mothers in proper nutrition of children, hygiene of the home, prevention of the spread of venereal disease, and use of trained personnel for obstetric services.

Population growth is estimated at 2.6% per year. The country is not considered overpopulated, though a large portion of the cultivable terrain is already being used. A private family planning clinic is functioning, though policy within the nation's health services is to permit child spacing for medical indications alone.

The following conclusions can be drawn:

- a. Two well defined areas of need have been identified to which the project may contribute effectively. These are:
 - aa. The establishment of a Division of Health Education within the Ministry of Health.
 - bb. Participation in the establishment of a demonstration zone for basic health services to be located at Tsakholo in the Mafeteng District. The center also will serve as a field training station for health personnel in the country.
- b. These two areas of activity complement each other in that a Division of Health Education at the Ministry level would contribute directly to the needs of the demonstration zone, while the zone itself will in turn offer a terrain for evaluation of methods developed by the Health Education Division.
- c. In the basic health services demonstration zone the U.S. technician with her national counterpart will be able to supervise and develop MCH services, while WHO technicians and their counterparts will be responsible for primary health care, sanitation, data collection, and school health. The Ministry of Agriculture will contribute particularly in the areas of nutrition and community development. The Division of Health Education in the Ministry will be able to contribute not only to MCH aspects, but also to school health and Ministry of Agriculture activities. The project director of the U.S. team can make valid contributions in each of these areas as well.

-439-

LESOTHORATIONALE (continued)

- d. An appropriate activity within the basic health services demonstration zone will be to identify high risk mothers and offer them child spacing services.
- e. The plan of action for Lesotho parallels that for The Gambia, and complements the plan for Dahomey. Thus true regionalization is accomplished.

THE KINGDOM OF LESOTHO BUDGET BREAKDOWN

	<u>First Year</u>	<u>Second Year</u>
<u>U.S. Staff and Field Director</u>		
1/3 for Lesotho	51,612	48,464
<u>U.S. Technicians</u>		
1 - public health nurse	16,000	16,800
1 - health educator	16,000	16,800
10% differential	8,000	8,400
visa, passports, shots, etc.	500	
<u>Housing</u>		
At Maseru \$20.00 per/mo. w/furniture	240	240
At Tsakholo \$125.00 per/mo.	1,500	1,500
local Purchase for Tasakholo house	2,386	
water system for Tasakholo house	1,000	
<u>Travel</u>		
2 - travel to Lesotho (round trip)	3,200	
temp. housing per/diem	900	
household effects		
3000 lbs. each	4,000	4,000
2 - standard vehicle	8,400	
1 - pick-up type vehicle	3,800	
shipping	2,312	
15,000 miles each, 25¢ per/mi., gas & maintenance	11,850	11,850
<u>Office Equipment</u>		
2 - duplicating machines	760	
2 - typewriters - non-electric	300	
2 - filing cabinets, metal standard, 4-drawer w/ lock	420	
2 - two drawer filing cabinets	125	
2 - card filing cabinets - small	150	
2 - card filing cabinets - large	300	
photocopying machine	300	
2 - office desks - large	700	
2 - office chairs, swivel	75	
2 - desks with typewriter cabinet	500	
miscellaneous office supplies	2,000	2,000
local printing costs	1,000	1,000
<u>Camping Equipment</u>	300	300
<u>Medical Supplies and Educational Materials</u>	55,000	45,000
<u>Local Hire Personnel</u>		
1 - secretary at \$90 per/mo.	1,080	1,080
2 - drivers - messengers \$70 each per/mo.	840	840

-441-

COMMODITY LISTTHE KINGDOM OF LESOTHO

Bed delivery complete with two piece cotton felt mattress covered with double coated rubber sheeting and chrome plated complete with accessories - 1 only
 Cart dressing and instrument table two shelves approx. 20" x 36" all steel - 2 only
 Refrigerator 4-8 cu. feet kerosene operated complete with spares - 2 only
 Scale, adult, springless, 140 kgms. x 100 gms. - 2 only
 Scale, infant beam type, 15 kgms. capacity x 10 gms. - 2 only
 Stand irrigator, single hooks - 2 only
 Stand, single bowl with 13" stainless steel basins - 3 only
 Sterilizer, dressing, pressure fuel heated, portable, approx. 14 x 15 I.D. with suitable kerosene pressure burner complete with spares - 1 only
 Stand, two bowl with 2 13" stainless steel basins - 1 only
 Sterilizer, instrument, fuel heated, 17" x 10" x 4" stainless steel - 2 only
 Sterilizer drum to fit 14" sterilizer in 9" - 2 only
 Stove kerosene single burner complete with spares - 4 only
 Stool, revolving, enamel finish, 13" diameter - 2 only
 Stretcher, army type - 2 only
 Table, examining, complete with accessories - 2 only
 Waste receptacle, approx. 14 qt. capacity, stainless steel shell and pail - 2 only
 Radio transmitter/receiver, PYE SSB125T - 1 only

Metal Utensils

Basin pus approx. 8 1/8 x 1 3/4 stainless steel - 4 only
 Basin pus approx. 10" x 4 1/2" x 2 1/8" stainless steel - 2 only
 Basin, solution, deep 12" x 4 1/4" stainless steel
 Basin, wash, shallow 13 5/16" x 3 5/8" stainless steel - 3 only
 Bath, infant, oval, 26 qt. white enamel - 2 only
 Bed pan adult stainless steel - 6 only
 Bowl, sponge, 20 oz. - 3 only
 Cup, solution, 6 oz. - 2 only
 Funnel, catheter, 2 oz. - 1 only
 Irrigator, approx. 1 1/2 qt., stainless steel - 2 only
 Jar, dressing, 2 3/4 qt. stainless steel - 2 only
 Measure, graduated, 500 cc. - 1 only
 Measure, graduated, 1,000 cc. - 3 only
 Pitcher solution, 3 qt. stainless steel - 1 only
 Tray, instrument 14 7/8" x 10 1/8" x 2 1/8" stainless steel - 1 only
 Tray, instrument with flat cover 12 1/2" x 7 3/4" x 2" stainless steel - 2 only
 Tray, instrument, shallow 19" x 13" x 3/4" stainless steel - 1 only

COMMODITY LIST

-442-

THE KINGDOM OF LESOTHO

Rubber and Plastic Goods

Apron, clear vinyl plastic, 36" x 40" - 4 only

Aspirator, nasal, infant, 1 oz. - 2 only

Hot water bag, 2 qt., rubber - 6 only

Catheter, Trachea, Delee - 2 only

Catheter, Urethral, 10^{Fr} (No. 5 Eng.) - 2 only

Catheter, Urethral, 12^{Fr} (NO. 6 Eng.) - 2 only

Gloves, surgeon assort., sizes - 24 pairs

Pump breast - 2 only

Sheet, rubber med. weight, 36" wide - 15 yards

Sheet vinyl plastic, 8 guage, 36"wide - 8 yards

Syringe, ear, uker, 3 oz. - 2 only

Tube, rectal rubber, 20 FRG (No. 11 Eng) -

Tubing, Latex - 20 feet

Glass Ware

Bottle, dropping, 15cc. - 6

Bottle, nursing, 8 oz. ih nipples - 24

Nipples, spares for above, rubber - 24

Dropper, medicine - 12'

Glass, medicine, 1 oz. - 24

Graduate glass 5 cc. conical - 6

Graduate glass 125 cc. conical - 2

Pitcher, graduated 32 oz. - 2

Syringe, irrigating 2 oz. - 2

Thermometer, clinical, oral, C^o - 8

Thermometer, clinical, rectal C^o - 8

Tube, connecting glass, straight - 4

Tube, vaginal, glass, 10 mm x 16 in. long, douche tip - 4

Miscellaneous

Brush hand surgeons - 6

Brush, nursing bottle, 12" long - 3

Cement rubber - 2 tubes

DDT powder blower - 2

Lamp, alcohol, 2 oz. - 3

Lancet Blood letting - 3

Mortar & Pestle, 4 oz., porcelain - 2

COMMODITY LISTTHE KINGDOM OF LESOTHO

Spatula, stainless steel - 2

Instruments for Diagnostic Purposes

Chart, vision test, snellen illiterales - 1

Depression, tongue, combination adult and child, stainless steel - 6

Flash light, pre-focus, 2 cell - 3

Tuning fork - 1

Hammer, percussion - 1

Head lamp - 1

Head mirror 3 1/2" diameter 1/2 opening - 1

Otoscope and ophthalmoscope set - 1

Pelvi-meter, graduated in c.m. - 2

Speculum, nasal - 1

Sphygmomanometer, preferably aneroid complete with band and cuff

Child size cuff for above - 1

Stethoscope - 3

Tape, measuring 6 ft. automatic return in c.m. - 2

Instruments for Operative and Treatment Purposes

Applicator, ear and nasal 8 1/2" - 1

Catheter, ternal 12 fr. - 1

Clamp- towel 3" - 8

Forceps, dressing 6 in. stainless steel - 6

Forceps, dressing 8 in. stainless steel - 4

Forceps, thermostatic straight, 6 in. stainless steel - 6

Forceps, thermostatic curved - 4

Forceps, thermostatic straight 6 1/4 " - 2

Forceps, mosquito straight 5" stainless steel - 6

Forceps, obstetrical kielland - 1

Forceps, sponge holding, 9" - 6

Forceps, sterilizer vaughn 7 3/4" - 2

Forceps tissue 6" stainless steel - 4

Forceps, utility and sterilizer straight 11" stainless steel - 1

Forceps vulsellum straight loin stainless steel - 2

Holder needle may 6" stainless steel - 1

Knife handle operating Bordparker - type No. 3 - 4

) Knife handle operating Bordparker - type No. 4 - 3

Knife blade operating Bordparker - type No. 10 - 6 pkgs.

COMMODITY LIST

-444-

THE KINGDOM OF LESOTHOInstruments for Operative and Treatment Purposes (continued)

Knife blade operating Bordparker No. 11 - 1 pkt.
 Knife blade operating Bordparker No. 12 - 1 pkt.
 Mask anesthesia Esmarch - 1
 Needle syringe 18g. x 2" Record - 4 dozen
 Needle syringe 20g. x 2" Record - 4 dozen
 Needle syringe 22g. x 1½" Record - 4 dozen
 Needle syringe 24g x ¾" Record - 2 dozen
 Needle syringe 26g. x ½" Luer - 4 dozen
 Needle syringe 20g. x 1½" Record - 5 dozen
 Needle suture 3/8" circle - 4 pkts.
 Needle suture surgeon ½ circle - 4 pkts.
 Probe 4½" silver - 2
 Probe 6" silver - 1
 Scissors bandage lister 7½" - 3
 Scissors dissecting curved 5½" - 4
 Scissors episiotomy 5" angular stainless steel - 2
 Scissors guage straight 8½" - 2
 Scissors operating curved 6" stainless steel - 2
 Scissors operating straight 6" stainless steel - 2
 Speculum vaginal S/size stainless steel - 2
 Speculum vaginal M/size stainless steel - 2
 Syringe glass 2cc Record - 24
 Syringe glass 5cc Record - 6
 Syringe glass 10cc Record - 6
 Syringe glass 20cc Record - 1
 Syringe glass 50cc Record - 1
 Syringe glass insulin 1cc Record - 1
 Syringe Tuberculin glass 1cc Luer - 10

Laboratory Equipment and Supplies

Microscope monocular complete with spares and accessories - 1
 Balance laboratory and dispensary stainless steel - 2
 Beaker 150cc pyrex glass - 2
 Beaker 250cc pyrex glass - 2
 Bottle sputum specimen with cap - 12
 Centrifuge hand complete for 15cc tubes - 1.
 Tube centrifuge graduated 15cc glass - 12

-445-

COMMODITY LISTTHE KINGDOM OF LESOTHOLaboratory Equipment and Supplies (continued)

Tube centrifuge ungraduated 15cc glass - 24
 Clamp test tube - 2
 Comparator, ph-test paper form - 2
 Test paper form for above comparator - 8 rolls
 Cover glass microne, square 22 mm 10 box - 8 boxes
 Gauge wire 4" x 4" with asbestos center - 3
 Hemacytometric complete with pipette - 2
 Hemocytometer pipette red cell - 6
 Hemocytometer pipette white cell - 9
 Hemoglobinometer sahli type complete - 4
 Pipette diluting hemoglobinometer - 2
 Tube measuring hemoglobinometer - 2
 Jar staining coplin - 3
 Lamp alcohol 4 oz. size with extra wicks - 10
 Paper filter qualitative package of 100 - 6 pkts.
 Pencil wax red and blue marking - 6
 Rack flood cedimentation westergren 6 unit complete - 2
 Pipette blood cedimentation westergren - 12
 Slide glass micro plane box of 72 - 100 boxes
 Stopper cork assorted - 10 lbs.
 Tripod iron 6" high - 4

Chemical and Stains

Acetic acid 99.4% R.G. 1lb. - 1 bottle
 Acetone R.G. 1 lb. - 1 bottle
 Ammonium sulphate R.G. 1 lb. - 5 bottles
 Ammonium hydroxide 28 to 29% R.G. 1 lb. - 1 bottle
 Benzidine R.G. (suitable for blood detection loz.) - 10 bottles
 Cupric sulphate R.G. 1 lb. - 1 bottle
 Formal dehyde 40% R.G. 1 lb. - 1 bottle
 Glycine, sp. G.R. 1.25 RG 1 lb. - 10 bottles
 Hydrogen peroxide 3% U.S.P. 1/4 lb. - 10 bottles
 Hydrochloric acid S.P. GR 1.19 R.G. 1 lb. - 2 bottles
 Iodine U.S.P. 1/4 lb. - 1 bottle
 Phenol white crystals R.G. 1 lb.
 Sodium bicarbonate powder R.G. 1 lb. - 10 lbs.

COMMODITY LISTTHE KINGDOM OF LESOTHOChemical and Stains (continued)

Sodium Citrate R.G. 1 lb. - 4 bottles
 Sodium nitriprusside crystals R.G. 1 oz. - 1 bottle
 Crystal violet stain 10 gm - 2
 Giemsa stain dry powder 10 gm - 2 bottles
 Wright stain dry powder 10 gm - 2 bottles

Non-UNICEF Catalogue Items

Bed hospital, all metal frame - 6x3'6"x6'
 Mattress, bed for above - 6x3'6"x6'
 Covers, mattress for above - 6
 Pillows - 12
 Slips, pillow - 36
 Sheets, bed, calico, white 60" x 80" - 60
 Blankets, brown 60" x 80" - 36
 Towels surgical large green - 36
 Towels, hand, large green - 36
 Towels bath large white - 24
 Cots, baby complete - 10
 Sewing machines, foot and hand operated complete with spares and accessories .. 2

Drugs and Dressings

Acetarsol Vag. Tabs - 2,000
 Acetest Tabs - 1,000
 Acetomenaphthone Tabs - 20x1000
 Aluminium Hydroxide Tabs - 200 x 100
 Aluminum Hydroxide Suspension - 10 litres
 Anusol Sips - 10 x 100
 Aspirin Tabs (Adult) - 60,000
 Aspirin Tabs (Children) - 20,000
 Benzyl Benzoate Application - 50 x 5 lbs.
 Bisacodyl Tabs 5mg - 100 x 1000
 Bisacodyl Supps. (Adult) - 10 x 100
 Bisacodyl Supps. (Children) - 10 x 100
 • Calcium Gluconate Tabs 300 mg - 4000
 Cetrimide Powder - 1kg.
 Chlorhixidine Obst. Cream - 10 x 1 litre
 • Chlorhexidine Gluconate Solution 20% - 2 litres

COMMODITY LISTTHE KINGDOM OF LESOTHODrugs and Dressings (continued)

Chloral Elixir - 5 litres
Chloramphenicol Caps 250 mg. - 10 x 1000
Chloramphenicol Susp. (Paed.) 125 mg/5ml - 100 x 100 ml
Chloramphenicol eye ointment - 100 x 15 gms
Chloramphenicol ear/eye drops 100 x 10 ml.
Chlortetracycline eye ointment - 100 x 15 gms
Cough mixture - 100 x 1 litre
Diphenhydramine Elixir - 10 x 500 ml.
Ferrous Sulphate Syrup (Paed.) - 10 x 1 litre
Ferrous Sulphate Tabs - 100 x 1000
Framycetin Paraffin Gauze 100 ml/100ml - 200 tins
Framycetin Paraffin Gauze 100mm/100mm - 200 tins
Gentian Violet Powder - 500 g.
Multivitamin syrup - 1000 litres
Multivitamin Tabs - 500 x 1000
Neomycin Caps - 2 x 1000
Neomycin Syrup 2 x 1 litre
Neomycin Bacetracin Polymixin Topical Spray - 50 x 100 ml.
Nicotinamide Tabs - 20 x 1000
Nystatin Persaries - 50 x 1000
Oxytetracycline Syrup 125mg/5ml
Paracetamol Tabs 0.5 mg. - 10 x 1000
Paracetamol Elixir - 5 litres
Penicillin VK Tabs 125 mg. - 50 x 1000
Penicillin VK Tabs 250 mg. - 50 x 1000
Penicillin V Suspension 125 mg/5 ml - 20 litres
Physohex Cream - 20 litres
Piperazine Citrate Tabs - 20 x 1000
Povidone Surgical Scrub - 10 litres
Polybactrin Antibiotic Spray 90g - 100 spray tins
Potassium Eff. Tabs - 50 x 1000
Soframycin ointment 15g - 200 tubes
Stilboestrol Tabs 0.5 mg. - 10 x 1000
Stilboestrol Tabs 1.0 mg. - 10 x 100 tabs
Stilboestrol Tabs 5.00 mg. - 10 x 1000 tabs

THE KINGDOM OF LESOTHODrugs and Dressings (continued)

Sulphadimithoxine Tabs Syrup - 100 x 100 ml
Suceinye Sulphadimidine Tabs .5g - 50 x 1000
Yeast Tabs - 100 x 1000 tabs
Adrenaline Injection 1: 1000, 10 ml vials - 100/10ml vials
Aminophyllin I/v inj 10ml - 100 amps..
Ergometrine inj. .5mg/ml - 100 x 5 amps
Hydrocortisone Soluble inj. 10 ml. - 100.amps
Benzathine Penicillin inj. 10 ml. - 2000 vials
Insulin PZI 40u./1ml - 50 x 10 ml vials
Insulin ZS Lente 40u./1 ml. - 50 x 10ml vials
Insulin soluble 40u./1ml - 50 x 10ml
Oxytetracycline inj. 250mg/ml. - 100 x 10ml
Promethazine 12.5% inj. - 1000
Procaine penicillin G inj. 300,000 u/ml - 2000 vials
Progestin inj. 5.0 mg. - 100 vials
Vit. K inj. 5mg/ml - 500 x 2ml
Vit. B inj. 10ml - 5 x 100 vials
Oxytocin inj. - 100 amps
Water for inj. 10 ml - 20,000 amps
Cotton wool, 1lb. rolls - 1000 rolls
Zinc oxide plaster 2", 3yard rolls - 200 rolls
Extension plaster 3", 3 yard rolls - 200 rolls
Surgical gauze 100 yd. roll - 300 rolls
Gauze tissue 1lb. rolls - 500 rolls
Kaolin poultice 5 lbs. - 100 lbs.
Lint, white, 1 lb. rolls - 200 rolls

Miscellaneous Items

Acid Citric Pulv - 5 lbs.
Acid Salicyl Sulphonic Pulv - 50 lbs.
Ammonium Bicarbonate Pulv - 50 lbs.
Barium Sulphate Pulv - 5 lbs.
Calamine Pulv - 50 lbs.
Calcium Carbonate Pulv - 50 lbs.
Calcium Chlorinata - 50 lbs.
Calcium Hydroxide Pulv - 20 lbs.

COMMODITY LISTTHE KINGDOM OF LESOTHOMiscellaneous Items (continued)

Creta Aromat Pulv - 50 lbs.
 Dextrose Monohydrate - 50 lbs.
 Glycerin - 10 gallons
 Kaolin Pulv - 50 lbs.
 Magnesium Carbonate Levis Pulv - 50 lbs.
 Magnesium Sulphate - 50 lbs.
 Magnesium Trisilicate Pulv - 50 lbs.
 Paraffin Liquid - 10 gallons
 Paraffin Molle Flav - 100 lbs.
 Potassium Chloride Pulv - 20 lbs.
 Potassium Citrate Pulv - 50 lbs.
 Potassium Permanganate Pulv - 10 lbs.
 Rhubarb Compound Pulv - 50 lbs.
 Sodium Bicarbonate - 500 lbs.
 Sodium Sulphacetamide Pulv - 5 lbs.
 Dispensing Bottles 2 oz. or 50 ml - 20,000 bottles
 Dispensing Bottles 4 oz. or 100 ml. - 20,000 bottles
 Dispensing Bottles 6 oz. or 250 ml - 20,000 bottles
 Dispensing envelopes for Tabs and Caps - 500,000
 Ointment Boxes 15gm - 10,000
 Dispensing Ointment Boxes 30gm - 10,000
 Pharmaceutical measures 10ml - 5
 Pharmaceutical measures 50 ml - 5
 Pharmaceutical measures 100 ml - 5
 Pharmaceutical measures 250 ml - 5
 Pharmaceutical measures 500 ml - 5
 Measuring cylinders 25 ml - 2
 Measuring cylinders 50ml - 2
 Measuring cylinders 250 ml - 2
 Measuring cylinders 500 ml - 2
 Measuring cylinders 1 litre - 2
 Beakers Glass 250 ml - 2
 Beakers glass - 500 ml - 2
 Beakers glass 1 litre - 2
 Spatula - 2

COMMODITY LISTTHE KINGDOM OF LESOTHOMiscellaneous Items (continued)

Spatula medium size - 2
Spatula large size - 2
Ointment slab large size - 2
Pencil mortar small size - 1
Pencil Mortar medium size - 1
Pencil Mortar large size - 1
Stainless steel mixing bowl 1/s
Dispensing Balance 2 kg. - 1

I. Subproject background:

1. Overview

BENIN
Dahomey, with a population of 2.8 million and an area slightly smaller than Pennsylvania, is one of the most densely populated countries in Francophone West Africa. About 90 percent of the people live in the rural sector, and the population growth rate is estimated at 2.8 percent. Life expectancy is 37 years and the infant mortality rate is reported as 110. As in The Gambia, major causes of infant and child deaths are malaria and other parasitic and infectious disease, the diarrhoea/pneumonia complex and malnutrition. There are less than one physician and four nurses for every 20,000 people. The average annual income is \$80, and government expenditures for health are just under \$2 per capita, which belies the fact that approximately 80 percent of the health budget is spent for salaries and services to urban areas. The health infrastructure includes general hospitals and "maternities," a network of 200 dispensaries providing curative and some antepartum care, one urban and six rural MCH centers, and mobile endemic disease teams. In addition, there are 11 social centers providing well-child care as well as social services.

BENIN

In Dahomey, health officials wanted the project to work with the population in transition from rural areas and traditional behavior to the urban area and the modern world. Pilot areas were located in the Akpakpa quarter of Cotonou, a transitional suburban area of 30,000 people living in small village clusters, and at the Central MCH Center

and Maternity Hospital where sick children and complicated maternity patients from Akpakpa are served. Health facilities in Akpakpa include a social center, three satellite village centers and a dispensary. One U.S. PH nurse-midwife technician has worked in Akpakpa with the director and midwife of the social center as her counterpart; and the other U.S. PH nurse worked in the Cotonou MCH Center where a senior midwife was assigned as her counterpart.

The fact that MCH services are fragmented between health and social services has presented problems, and the project has worked in both areas with the goal of influencing integration, at least at the local level.

2. National health goals and priorities

The new Government is reported to be putting great emphasis on rural development. However, APHA evaluators were not able to learn of existence of an operational development plan nor of the priority which is being given to health aspects of rural development.

Health planning has been going on for some time in the Ministry of Health, under the direction of a Chief of Studies and Planning with assistance of WHO. Several Ministry officials stated that highest priority is being given to preventive and rural health services. This would seem to be borne out by the existence of the WHO Basic Health Services project with its demonstration zone, the training of itinerant workers and home visitors, and a recent major change in Ministry organization which provides for decentralization and coordination of all health services at the district level.

Although Dahomey has no official population policy, family planning services are given at the MCH Center in Cotonou and the Government has permitted some 30 of its senior health staff to go out of the country for family planning training, presumably with the goal of expanding family planning services throughout the country.

3. Performance and accomplishments. Phase I, 1972-75

Progress is reported and discussed in relation to each of the project targets during Phase I.

Minimum health statistics and KAP data were collected in the pilot zone. This baseline data resulted in the refinement of project activities and has been and will continue to be used as a base to evaluate project achievements.

Improvements have been accomplished within the existing health delivery system, resulting in a new program of well-baby services, such as special care of referral for babies at risk. Emphasis has also been given to women in their first pregnancy, and home visits to mothers with problems are beginning. Near the termination of Phase I activities, there has been a 300 percent increase in the number of children brought in for health supervision.

New family planning records have been developed in the participating MCH/FP Center and the collected data revealed that there has been a doubling of family planning acceptors, one year after project staff designed health education materials were put into effect. These efforts have also resulted in a 60 percent increase in the number of parents who have purchased vaccines and have had their children immunized.

On-the-job training has been given to over 125 health workers

✓ REFER TO REPORT OF AN EVALUATION OF THE
MCH EXTENSION PROJECT IN THE CAMBODIA
AND DAHOMEY, FOR MORE INFORMATION AND DETAILS
FOR MORE DETAIL.

in the pilot zone. Follow-up indicates that the trainees are using what they learned. More recently a longer course was given to senior personnel. WHO in-country staff have accepted responsibility for continuing education of the health staff.

Although traditional birth attendants (TBA's) were scheduled to be utilized in the improved MCH/FP services, few have been identified and trained during Phase I of the project. Identification of other possible candidates is going on.

A system of supervision has been established insuring guidance for trained staff who are providing the improved services.

The project staff has worked with the Ministry of Health to upgrade the supply dispersal system to outlying areas; however, to date, achievements have been limited to integrating management and dispersal of project supplies and equipment into the existing limited government system.

The project staff has participated (as MCH/FP experts) in a variety of professional and community meetings. They have also been asked to assist with theoretical and practical field training in family planning for medical, midwifery, and nursing students.

At regular intervals since the inception of the project, U.S. staff and their counterparts have measured progress against activity targets. An overall end-of-project evaluation design will be developed when the Phase II work plan is agreed upon.

4. Participant training

Two key physicians, two pilot area midwives, and six other midwives have had, or are having, special MCH/FP training in the U.S. Staff

report a marked increase in project activity since return of the pilot area trainees. The other trainees are expected to initiate new MCH/PH services in at least four other districts.

5. Coordination with other donors

The UCSC staff has made an effort to coordinate project activities with those of the WHO Basic Health Services project. At the technical level, exchange has been good, but the extent of administrative and planning level coordination has varied with changes in WHO personnel. The present WHO representative received the evaluators only briefly and indicated his willingness to work with project personnel when the Government takes the initiative in bringing this about. Project staff has successfully collaborated with staff of other agencies - the CRS, FAC, CIDA, UNICEF, Peace Corps, church missions, and the FPA. The UHDP has almost no health input in ^{BENIN} ~~Dahomey~~ (WHO works quite independently), but it is interesting to note that even without a development plan, UHDP aid to Dahomey is increasing. A \$5 million grant was made this past six months for personnel and petrol costs.

6. Government support and commitment

Since its independence in 1960, ^{BENIN} ~~Dahomey~~ has had 10 different military and civilian Governments. The present Government's preoccupation with establishing itself firmly, and the many recent policy and personnel changes at all levels, make it difficult to assess potential commitment for this or any other project. At the Ministry of Health, the focal point for project planning and administration has changed several times. Now, it is through the Directors of Preventive Medicine and Social Affairs to the Permanent Secretary. Project staff seem to have free access and

good relations with these decision makers. All three of them expressed to the evaluators their support for the project and their desire to see it continue. The Permanent Secretary said priority was to be given to extending preventive services to the rural areas and he wished to use personnel trained at UCSC and simple and replicable equipment furnished by the project. Last year's Phase II planning was done with a different group of officials and replanning had been postponed, but the Permanent Secretary assured the team that it would be held the following week.

The Government has kept the commitments made in the Phase I agreement and, in several instances, has surpassed them. Counterparts were assigned, pilot area services and personnel made available, and staff were released for participant training. In addition, they have taken over the salaries for two counterparts, and two drivers, supplemental salaries for two additional counterparts, and a portion of vehicle maintenance costs. They have established a central health education office and plan to provide the project with office space there. They are working with project staff now on plans to integrate project vehicles and supplies and equipment into government transport and storage and dispersal systems.

Commitment to project purposes and program has increased markedly at the technical level. Project counterparts and their immediate supervisors are enthusiastically assuming leadership in the carrying out of ongoing programs, initiating additional innovations and, most importantly, in negotiating with top officials for project continuation and expansion. The Professor of Obstetrics/Gynecology at the Medical School and Director of the Nursing and Midwifery School is also strongly supportive.

II. Implementation plan, Phase II:

1. General

The successful pilot efforts, as related in Section I, will be adapted and replicated in at least two other rural areas of Dahomey.

The training center established in the Phase I pilot area, as well as selected rural sites, will be utilized to train health personnel in the delivery of improved health and FP services in the new area. Dahomean health personnel will assume responsibility for training and supervision of national personnel and the delivery of the health services and the host Government will, by end of project, have assumed total financial support^{1/} for the project activities (Phases I and II) following the following schedule:

		End Phase I		Phase II			
		1975	1976	1977	1978	1979	
% Support of project activities	Benin	<u>25</u>	<u>25</u>	<u>45</u>	<u>55</u>	100%	
	U.S.	<u>75</u>	<u>75</u>	<u>55</u>	<u>45</u>	-0%	

2. Outputs and output indicators

Output A. Demographic, health status and KAP data will be collected in each of the areas of expansion.

- (1) A profile of local health practices, utilization rates, public knowledge of existing preventive services, and information regarding prevalent diseases will be completed prior to start of other project activities. Results of a community-based postnatal pediatric follow-up project of 1,000 primigras will have been compiled.

^{1/} See budget table, page 29

4. Inputs

A. U.S. inputs (\$000)	<u>FY 76</u>	<u>IQ</u>	<u>FY 77</u>	<u>FY 78</u>	<u>Total</u>
(1) <u>UCSC personnel</u>					
*1 PH/Adm-Plan, 9 mos.)	165.7	0	171.4	206.8	543.9
2 PH nurses, full time)					
(2) <u>Local personnel</u>					
1 Project secretary)					
1 Driver/messenger)					
1 Guard)	6.5	0	7.1	7.9	21.5
1 Translator)					
1 Administrative Asst.)					
(3) <u>Consultants</u>					
2 man months	28.1	0	28.1	28.1	84.3
(4) <u>Participant Training</u>					
Out of country)					
Long term)					
Short term)	30.0	0	10.0	10.0	50.0
In-country logistic)					
support (trainees))					
(5) <u>Commodities</u>					
Audio-visual)					
Medical equipt. and supplies)					
Vehicles/Maintenance)	54.2	0	26.8	44.3	125.3
Contraceptives)					
1/ Orals and condoms	(27.0)	0	(30.0)	(30.0)	(90.0)
Others	(3.0)	0	(5.0)	(5.0)	(13.0)
(6) <u>Other costs</u>					
USCS support costs	125.1	0	107.0	103.4	335.5
including African travel					
TOTAL	409.6	0	350.4	400.5	1160.5

1/ Non-add - funded through AID Central Procurement.

PH Admin/Planner residing in Benin for 9 mos, then this field position is terminated and senior technician in Benin will assume COP duties.

<u>B. Host country inputs</u>	<u>FY 76</u>	<u>FY 77</u>	<u>FY 78</u>	<u>TOTAL</u>
(1) <u>Personnel</u>				
2 Driver/mechanics				
1 Social Center receptionist/clerk				
2 Counterparts				
(2) In-country transportation Vehicle insurance				
(3) Office Supplies & related materials	88.2	100.0	100.0	288.2
(4) Participant training replacement costs (in and out of country training)				
Subsistence allowance, training facilities and housing (in- country training)				

5. Input Methods of Verification and Assumptions will be found in the Logframe, Appendix D.

Output B. The existing family health services will be studied and then approved.

- (1) There will be a significant increase in utilization of MCH/FP services at the improved health centers which will result in a decrease of obstetrical wastage.
- (2) There will be a 50% continuation rate among PF acceptors.
- (3) There will be 20,000 people taught about environmental health and malnutrition.
- (4) The transportation, communication and supply systems will be coordinated.
- (5) TBAs (traditional birth attendants) will be trained and utilized in project activities. At end of project there will be approximately 60 TBAs in the improved system. And a TBA demonstration program will exist in Akpakpa and its satellite social centers.
- (6) The developed health education methods and materials will be refined and adapted (where necessary) to each of the expanded areas.

Output C. Training will be given to health personnel and others at the pilot MCH/FP training center or at other areas.

- (1) There will be 79 midwives trained in MCH/FP (59 in-country and 20 out of country. These 20 will be tutors.)
- (2) There will be 6 doctors trained in MCH/FP (4, in-country, who will be supervisors for the 4 areas; and 2 out of country to specialize in surgical procedures. One will train in Montreal to have access to French language training.)
- (3) There will be 1 senior level nurse/midwife trained in MCH/FP (out of country).
- (4) There will be 24 nurses trained in MCH/FP (in-country)

- (5) There will be 1 assistant social worker trained in MCH/FP skills (out of country).
- (6) There will be 80 medical students from the University Medical School trained in MCH/FP techniques (in-country).

The overall plan for the training of all health personnel (developed in conjunction with MOH) will be refined and adapted, where necessary, in conjunction with the voluntary agencies.

All training programs will include MCH/FP, and Nutrition Training and centers to be utilized include the following:

- a) On-the-job training for varying levels of health personnel at Cotonou PMI and Akpakpa Social Center.
- b) Department of Medical and Paramedical Education (DEMP) of University of Benin using integrated MCH/FP/NUT curriculum.
- c) Rural health team training program in the Government of Benin Basic Family Health Services Scheme.
- d) Professional training program in FP at the Maternite Universitaire.
- e) DEMP of University of Benin rural training facilities.
- f) Field training centers at district Social Center and its satellite clinics.

Output D. A data collection and referral system will be established and/or improved in each health center in the expanded areas.

- (1) There will be an effective record system for MCH/FP patients in use in each improved health facility.

- (2) There will be a functioning system of clinical data collection and analysis in the country for data emanating from all improved health facilities/ -462-

Output E. A regular method of supervision will be developed for improved health facilities in each of the expanded areas.

The following will be the structure of supervisory responsibilities:

1. The MOH will assign at least 4 Administrative level physicians with advanced training in MCH/FP/NUT to supervise the 4 areas.
2. The supervision of middle level MCH/FP/NUT personnel and services will be made the responsibility of the Director of Preventative Services.
3. The supervision of the TBAs will be by nurse/midwives assigned at rural social centers and maternities.

Output F. The UCSC team will participate in training programs and professional conferences of all levels of health and health-related personnel and provide MCH/FP training as requested.

Output G. A method for technical evaluation of the project activities in the expanded areas will be developed to assess concurrent effectiveness and results at end of project.

A detailed work plan will be developed by UCSC during the first six months of Phase II activities.

3. Output Methods of Verification and Subproject Assumptions will be given in the Logframe, see Appendix D.

LOGICAL FRAMEWORK*	PROJECT TITLE MATERNAL/CHILD HEALTH EXTENSION	PROJECT NUMBER: 932-11-580-358	COUNTRY: BENIN
NARRATIVE SUMMARY	OBJECTIVELY VERIFIABLE INDICATORS	MEANS OF VERIFICATION	IMPORTANT ASSUMPTIONS
<p>**GOAL** To improve the quality of life of African mothers and children.</p>	<p>A reduction of preventable maternal and infant/child morbidity and mortality by a significant degree.</p>	<ol style="list-style-type: none"> 1. Use sample surveys as provided for in the project implementation. 2. Use the project established health status data system. 3. Use any available host government data 	<ol style="list-style-type: none"> 1. Family planning (as child spacing) continues to be a desired component of MCH/FP services. 2. Improved MCH/FP services will lead to a reduction in morbidity and mortality. 3. Vital data exists or can be generated for measuring a reduction in morbidity and mortality
<p>**PURPOSE** (Phase I: To design and demonstrate simple but effective MCH/FP Services that will reach rural populations. Phase II: To replicate improved MCH/FP services in at least TWO other areas of the country.</p>	<ol style="list-style-type: none"> 1. By the end of the project, at least TWO areas of the country will have effective MCH/FP services integrated into the existing health delivery system. 2. The pilot area (established in Phase I) will function effectively as a training and demonstration center for further MCH/FP service replication. 3. Host country personnel will be fully prepared to carry out responsibility for training and supervision of national personnel and for the delivery of MCH/FP services in the project areas by project end; the host government will assume financial responsibility of the established MCH/FP services. 	<ol style="list-style-type: none"> 1(a) Clinic/health facilities records. 1(b) Supervisors records 1(c) Final project evaluation 2 (a) Training center records of attendance etc. 2(b) Follow-up studies on former participant trainees. 2(c) Final project evaluation. 3(a) Final project evaluation 3(b) Staff assigned 3(c) Government budgeted for continuation of services. 	<ol style="list-style-type: none"> 1. Qualified trainees available; replacements available during training. 2. Post training positions in expanded areas permit utilization of training. 3. Chosen areas will prove to be both practicable and feasible. 4. The local people will be motivated to accept MCH/FP services. 5. The rural health facilities staff will be motivated to upgrade and expand services. 6. The host government will allocate that amount of the health budget necessary for the continued support of the MCH/FP services.

LOGICAL FRAMEWORK	PROJECT TITLE MATERNAL/CHILD HEALTH EXTENSION	PROJECT NUMBER: 932-11-380-358	COUNTRY BENIN
NARRATIVE SUMMARY	OBJECTIVELY VERIFIABLE INDICATORS	MEANS OF VERIFICATION	IMPORTANT ASSUMPTIONS
<p>INPUTS***</p> <p>A. Demographic, health status and KAP DATA will be collected in each area of expansion.</p> <p>B. The existing family health services will be studied and then improved.</p>	<p>A.1 A system of standard records will be established to determine prevalent diseases state of malnutrition, FP acceptors, etc. A spot survey will compile a profile of local health practices, utilization rates and data on public health knowledge of existing preventive services.</p> <p>B.1 There will be an increase in utilization of MCH/FP services at the improved health centers, which will result in a ___% decrease of obstetrical wastage.</p> <p>B.2 There will be a 50% continuation rate among FP acceptors.</p> <p>B.3 There will be 20,000 people taught about environmental health and malnutrition.</p> <p>B.4 The transportation, communication and supply systems will be coordinated.</p> <p>B.5 TBAs will be trained and utilized in project activities. At end of project there will be approximately 60 TBAs in the improved system.</p> <p>B.6 The developed health education methods materials will be refined and adapted (where necessary) to each of the expanded areas.</p>	<p>A.1 Health facility records and spot surveys.</p> <p>B.1 Health facility records</p> <p>B.2 Health facility records</p> <p>B.3 Training records</p> <p>B.4 Observation of supply records</p> <p>B.5 Observation of training records.</p> <p>B.6 Developed methods and materials.</p>	<ol style="list-style-type: none"> 1. Cooperating governments accept the concept and necessity for MCH/FP divisions. 2. Expanded services desirable to governments, clinic staffs and communities. 3. Adequate facilities will be provided by cooperative governments. 4. Candidates available for training. 5. Nursing personnel permitted to provide full clinical family planning services. 6. Staff training leads to improved services. 7. Improvement of services leads to increased use. 8. Other donors and governmental departments will cooperate in manpower development. 9. Data collection and retrieval systems possible.

LOGICAL FRAMEWORK	PROJECT TITLE MATERNAL/CHILD HEALTH EXTENSION	PROJECT NUMBER: 932-11-580-358	COUNTRY BENIN
NARRATIVE SUMMARY	OBJECTIVELY VERIFIABLE INDICATORS	MEANS OF VERIFICATION	IMPORTANT ASSUMPTIONS
<p>**OUTIFUTS continued</p> <p>C. Training will be given to health personnel and others at the pilot MCH/FP training centers and (in Benin) at rural training centers.</p>	<p>C.1 There will be 79 midwives trained in MCH/FP (59 in-country and 20 out-of-country.)</p> <p>C.2 There will be 6 doctors trained in MCH/FP (5 in-country and 1 out-of-country)</p> <p>C.3 There will be 1 senior level nurse/midwives trained in MCH/FP (out-oc-country).</p> <p>C.4 There will be 24 nurses trained in MCH/FP (in-country).</p> <p>C.5 There will be 1 assistant social worker trained in MCH/FP skills (in-country).</p> <p>C.6 There will be 19 paramedicals trained in MCH/FP techniques (in-country).</p>	<p>C.1 - C.6 Training records</p>	<p>as above.</p>
<p>D. A data collection and referral system will be established and/or improved in each health center of the expanded areas.</p>	<p>D.1 There will be an effective record system for MCH/FP patients in use in each improved health facility.</p> <p>D.2 There will be a functioning system of clinical data collection and analysis in the country for data emanating from all improved health facilities.</p>	<p>D.1 Observation of record system</p> <p>D.2 Written data</p>	<p>As above.</p>

LOGICAL FRAMEWORK	PROJECT TITLE MATERNAL/CHILD HEALTH EXTENSION	PROJECT NUMBER: 932-11-580-358	COUNTRY: BENIN
NARRATIVE SUMMARY	OBJECTIVELY VERIFIABLE INDICATORS	MEANS OF VERIFICATION	IMPORTANT ASSUMPTIONS
<p>**OUTPUTS continued</p> <p>E. A regular method of supervision will be developed for improved health facilities in each of the expanded areas.</p>	<p>E.1 The MDH will assign at least 4 administrative level physicians with advanced training in MCH/FP/NUT to supervise the 4 areas.</p>	<p>E.1 Observation and supervisory records</p>	<p>as above</p>
<p>F. The UCSC team will participate in training programs and professional conferences of all levels of health and health related personnel and provide MCH/FP training as requested.</p>	<p>F.1 As reported in UCSC periodic reports</p>	<p>F.1 UCSC reports</p>	<p>as above</p>

LOGICAL FRAMEWORK	PROJECT TITLE: MATERNAL/CHILD HEALTH EXTENSION	PROJECT NUMBER: 932-11-580-358	COUNTRY BENIN
NARRATIVE SUMMARY	OBJECTIVELY VERIFIABLE INDICATORS	MEANS OF VERIFICATION	IMPORTANT ASSUMPTIONS
<p>**OUTPUTS continued</p> <p>G. A method for technical evaluation of the project activities in the expanded areas will be developed to assess concurrent effectiveness and results at end of project.</p>	<p>G.1 Evaluation design developed</p>	<p>G.1 Evaluation design document</p>	<p>As above</p>
<p>INPUTS**</p> <p>A. Contract with UCSC</p> <ol style="list-style-type: none"> 1. Field personnel 2. Technical consultants 3. Supplies and equipment 4. Participant training 5. Other costs 	<p>See summary budget schedule and individual country budgets.</p> <p>Cooperating governments will support all clinic operational staff, maintenance and counterpart personnel; physical facilities for improved services and incrementally increased portion of supplies and equipment for services. For details see specific country budget schedules.</p>	<ol style="list-style-type: none"> A.1 Personnel in place A.2 Consultants work A.3 Supplies and equipment arrive A.4 Training records A.5 Budget 	<p>(as related to Inputs)</p> <ol style="list-style-type: none"> 1. Continued funding by USAID 2. Continued University of California 3. Incremental financial support by cooperating governments. 4. UCSC recruits qualified staff. 5. UCSC finds or develops appropriate training programs. 6. Host governments provide qualified counterparts. 7. Host governments provide appropriate level personnel for participant training. 8. Cooperation with other donors.

LOGICAL FRAMEWORK	PROJECT TITLE: MATERNAL/CHILD HEALTH EXTENSION	PROJECT NUMBER: 932-11-580-358	COUNTRY: BENIN
NARRATIVE SUMMARY	OBJECTIVELY VERIFIABLE	MEANS OF VERIFICATION	IMPORTANT ASSUMPTIONS
**OUTPUTS continued			
B. <u>Cooperating country</u> 1. Personnel costs 2. Physical facilities 3. Supplies and equipment			

THE GAMBIA: PHASE II.

I. Subproject background:

1. Overview

The Gambia is a 7 to 20 mile wide strip of land extending for 200 miles along both sides of the Gambia River. Of its population of 357,000, more than 300,000 live in small rural villages. The annual per capita income is about \$90. The annual population growth rate is estimated at between 1.7 percent and 2.2 percent and the average life expectancy is 43 years. The high infant and child mortality rate is attributed to malaria and other parasitic and infectious diseases, the diarrhea/pneumonia complex and malnutrition. There are two government general hospitals in the country, nine rural health centers, some forty to fifty rural dispensaries, ten or eleven practicing physicians, and about two hundred nurses, midwives and dressers.

The project pilot area in the Lower River Division serves about 60,000 rural people, with a health center containing 11 hospital beds in Mansa Konko and 7 satellite dispensaries. The health center staff (which includes one nursing sister, two nurse-midwives, a dispenser, a health inspector, a leprosy officer, and eight auxiliaries) make regular treks to provide services at the dispensaries, each of which has a resident dresser. Before inception of the project, the services given were largely curative. Unlike some other African countries, it would appear that Gambian health center personnel are working at full capacity, and new services can be added only by adding staff, using volunteers, or substituting new tasks for old ones. One U.S. technician lives in Mansa Konko and works as the

counterpart of the health center sister. They share responsibility for demonstrating and testing new or improved MCH/FP services and also for developing the pilot area as the national rural field training center. The second technician and her counterpart are based in the Ministry of Health and make regular supervisory training visits to the pilot area as well as participate in national planning, health training programs and ongoing extension of national health education services to other population groups.

2. National health goals and priorities

APHA evaluators were told that the Ministry of Economic Planning is giving highest priority to rural development. The national health plan, now in a draft stage, is reported to place high priority on extending and improving basic health services in rural areas, with emphasis on MCH. It projects the building or upgrading of 5 to 6 rural health centers year as well as expanding the one existing provincial hospital and building a small community hospital in an unserved area. High on the list of health personnel development priorities is the training program for existing auxiliary personnel with which the project is assisting. With the support of the Ministries of both Planning and Health, a national policy to accept family planning as an essential part of MCH services will be considered by the Parliament this year.

3. Project initiation

There are a number of reasons why the project got off to a slow start in The Gambia. This was the only country where the Government-UCSC-AID agreement was required to have approval at a higher level of government than the Ministry of Health. The agreement was not ratified by the Cabinet until project personnel had been in the country seven

months. Key Ministry of Health personnel changes took place in the interval between design and negotiation of the project and arrival of project staff, and new officials did not automatically assume the commitments of their predecessors. It was necessary to reinterpret project purposes and goals, replan activities, gain new commitments and tool up for implementation. For example, the Government had agreed, during the feasibility study, to provide housing for a U.S. technician in the pilot area (which is a two and one-half to three hour drive over rough roads from Banjul). This commitment had to be accepted by new health officials, money allocated and a house constructed and furnished. It was one and one-half years before full-time work could begin in the pilot area. In addition, there was lack of understanding and acceptance of the administrative and planning authority of The Gambia based technicians, and local officials were unwilling to make decisions or take action except during the sporadic visits of the field coordinator. A basic misunderstanding, by both UCSC and GOG, about the desired long-term functions of the Ministry of Health based technician and her counterpart was not completely resolved until toward the end of the second project year.

The project staff, however, utilized this long waiting time constructively. In addition to their own orientation and study of the country's health problems and services, they designed and conducted a rural health survey, reinforced the MCH/FP content in the two health training institutions and in training programs for agricultural workers and youth groups, established informal relationships with other donors, and initiated selected project related activities in Banjul as well as in the pilot area.

4. Performance and accomplishments

Progress is reported and discussed in relation to each of the project targets during Phase I. ✓

A rural health survey was carried out during the first project year and the results were tabulated and analyzed at UCSC. The questionnaire however, was evaluated to be too elaborate and the sample - because of the insistence of the GOG - was far too large in light of the time and resources of the project staff. As a consequence, the survey results do not provide an accurate baseline for project impact evaluation. Recognizing this, the staff has initiated a series of small health center user studies which at this time give the promise of producing effective baseline information.

The existing services in the participating health facilities have been improved. Group patient health education efforts have been established and nearing the end of the Phase I activities, approximately 200 mothers are attending health education sessions each month.

New clinic records, safer techniques and new, easy-to-use equipment have been introduced and are being used effectively. Health problems which had been ignored in the past are being identified and preventive or treatment measures are now being taken.

Child spacing motivation and limited family planning services are now being given as government services through the health facilities. A referral and reporting system has been developed between the health center and referral hospital and transportation is provided to high risk mothers.

Regular biweekly training sessions are being held for pilot health

center staff and volunteers. MCH/FP training has been provided to pilot area child care supervisors and again to volunteers, who are, by and large, high school or post high school personnel. Only two TBAs have been trained and utilized in a volunteer capacity to date. An auxiliary nurse training program has recently begun and will provide MCH/FP training of all auxiliaries now in government service.

The pilot area is to be used for rural field training and re-training of all health personnel. It is now being used for field experience for basic nursing and health inspector students from Banjul and nursing students from Senegal.

After early lack of success with didactic training efforts, the project staff have developed demonstration and participation techniques applied with locally available materials as teaching aids. A manual of health education lessons for parents is being developed.

A system of project supply recording and dispersal has been completely integrated into the government system.

The project staff has participated in nursing school curriculum revision, they have assisted in an EEC/FAO-sponsored workshop, and have given a two-week course for 16 senior health personnel from a variety of GOG agencies and services.

5. Participant training

Three nurse-midwives have completed a family planning training course as project participants. One of these returned nurses is now the nursing sister in charge of the pilot zone health center and another will work as a Family Planning Association supervisor in a rural area. Both are having follow-up training in family planning techniques under

the supervision of local obstetricians.

6. Coordination with other donors

Project technicians have established good relationships with personnel of other donor and nongovernment agencies. They work particularly closely with CRS and FPA and have actively sought ways to encourage these and other agencies to participate in project activities. The GOG has obtained supplies and commodities for pilot activities from both UNICEF and CRS, and U.S. self-help funds have been used for health center and dispensary renovations. With project initiative, the FPA and Ministry of Health are meeting regularly to coordinate family planning activities. Project staff have participated in an Inter-Ministerial Group on Family Planning, the Preschool Committee of CRS, the EEC/FAO Rural Seminar in planning for a British supported management project in the Ministry of Health, and they have been told that they will be co-opted when a health planning subcommittee on MOH is established. WHO has just begun operations in The Gambia and is planning for a Basic Health Services project. The WHO Representative assured evaluators of his willingness to collaborate with the project.

7. Government support and commitment

The Government has lived up to nearly all of its commitments as defined in the agreement and, in several instances, has far exceeded them. They have provided counterparts, participants, facilities, personnel and operating costs in the pilot zone, supplies and equipment from CRS and UNICEF, and the Chief Medical Officer, himself, has served as the focal point for project administration. In addition, the Government provides office space in the Ministry of Health, housing for one U.S. technician,

-475-

and, in the past year, has taken over the salaries of drivers and secretary, postage and office supplies, vehicle maintenance and operating costs, and the handling of all project equipment.

The Acting CID and other Ministry officials were warmly supportive of the project and expressed their concern that it continue. In a letter to the evaluators the U.S. Charge d'Affaires commented, "To date the project has succeeded in moving the GOG from a position of opposition, first to tacit acceptance and now to one of understanding and active support for the goals of the project -- the change has been fundamental and, given at least the time originally projected, should become irreversible."

II. Implementation plan, Phase II

1. General

The successful pilot efforts, as related in Section I, will be adapted and replicated in at least two other rural areas of The Gambia.

The training center established in the Phase I pilot area will be utilized to train health personnel in the delivery of improved health and FP services in the new area. Gambian health personnel will assume responsibility for training and supervision of national personnel and the delivery of the health services and the host Government will, by end of project, have assumed total financial support^{1/} for the project activities (Phases I and II) following the following schedule.

		<u>End Phase I</u>	<u>Phase II</u>			
		<u>1975</u>	<u>1976</u>	<u>1977</u>	<u>1978</u>	<u>1979</u>
% Support of project activities	Gambia	<u>25</u>	<u>25</u>	<u>45</u>	<u>75</u>	100%
	U.S.	<u>75</u>	<u>75</u>	<u>55</u>	<u>45</u>	-0-%

2. Output and output indicators -476-

Output A. Demographic, health status and KAP data will be collected in each of the areas of expansion.

- (1) A profile of local health practices, utilization rates, public knowledge of existing preventive services will be completed prior to start of other project activities.

Output B. The existing family health services will be studied and then improved.

- (1) There will be a significant increase in utilization of MCH/FP services at the improved health centers, which will result in a decrease of obstetrical wastage.
- (2) There will be a 50% continuation rate among FP acceptors.
- (3) There will be 20,000 people taught about environmental health and malnutrition.
- (4) The transportation, communication and supply systems will be coordinated.
- (5) TBAs (traditional birth attendants) will be trained and utilized in project activities. At end of project there will be approximately 24 TBAs in the improved system.
- (6) The developed health education methods and materials will be refined and adapted (where necessary) to each of the expanded areas.

Output C. Training will be given to health personnel and others.

1. There will be 32 nurse auxiliaries trained for 18 months in F.P.
2. There will be 15 day nursery workers trained for one year in outreach education (5/year).
3. There will be 48 TBAs trained in outreach education. (16/center).
4. There will be 24 village volunteers trained for one year in outreach education (8/center)/
5. There will be 45 health center staff (15/center) trained for one year of inservice education.

6. There will be 24 area-council-paid nurse auxiliary (8/year) trained for six months in on-the-job training.
7. There will be 4 nurse midwives in FY 76, 2 in FY 77, and 2 in FY 78 to attend a family planning practitioner course.
8. There will be 15 graduates of a Training of Trainers program.

The overall plan for the training of all health personnel will be refined and adapted, where necessary. Training programs to be incorporated and centers to be utilized include the following:

Training Centers:

Mansa Konko
School of Nursing and Nurse/Midwifery
School of Public Health
Teacher training college
Vocational training center
Agricultural training center.

Data Collection and Retrieval System.

Improved record and referral system
An effective record system for MCH/FP in use in health centers.
A functioning system of collection and analysis of data.

MCH/FP Division

A position identified within the Ministry which is the pivot point for local responsibility for future program development and evaluation of MCH/FP in the country.

Training Programs

OJT for varying levels of health personnel from other health stations and TBAs in:

health education, family planning counseling, immunization theory and techniques, identification of high risk mothers, identification of high risk infants, village outreach, use of health growth charts, health records and their use.

Family planning training program for nurse midwives
Two cycles, 18 months, MCH/FP training program for nurse auxiliaries.

Outreach training programs for:

- 24 village volunteers
- 28 TLAs
- 75 Day nursery workers
- 20,000 villagers

Training of Trainers program for 15 project and related staff/year.

Output D. A data collection and referral system will be established and/or improved in each health center in the expanded area.

- (1) There will be an effective record system for MCH/FP patients in use in each improved health facility.
- (2) There will be a functioning system of data collection and analysis in the country for data emanating from all improved health facilities

Output E. A regular method of supervision will be developed for improved health facilities in each of the expanded areas.

The following will be the structure of supervisory responsibilities:

1. The MOH will assign at least 4 administrative level physicians with advanced training in MCH/FP to supervise 5 areas.
2. The supervision of middle level MCH/FP personnel and services will be made the responsibility of one nurse/midwife who is assigned to the office of the Director of MCH at the national level.
3. The supervision of lower level MCH/FP personnel and services will be nursing sisters assigned at the health centers.
4. The supervision of TBAs will be nurse auxiliaries.

Output F. The UCSC team will participate in the training programs and professional conferences (undetermined number) of all levels of health and health-related personnel and provide MCH/FP training as requested.

Output G. A method for technical evaluation of the project activities in the expanded areas will be developed to assess concurrent effectiveness and results at end of project.

A detailed work plan will be developed by UCSC during the first six months of Phase II activities.

3. Output Methods of Verification and Subproject Assumptions will be given in the Logframe, see Appendix D.

4. <u>Inputs</u>	<u>FY 76</u>	<u>IQ</u>	<u>FY 77</u>	<u>FY 78</u>	<u>Total</u>
A. U.S. Inputs (\$000)					
(1) <u>UCSC personnel</u>					
*1 PH/Adm/Plan, (9 mos))					
1 PH nurse, full time)	129.4	0	123.7	96.9	350.0
1 PH nurse planner)					
(2) <u>Local personnel</u>					
1 Project secretary)					
1 Driver/messenger)					
1 Guard)	8.1	0	8.9	9.8	26.8
1 Translator)					
1 Administrative Asst*)					
(3) <u>Consultants</u>					
2 man months	28.1	0	28.1	28.1	84.3
(4) <u>Participant training</u>					
Out of country)					
Long term)					
Short term)	40.0	0	10.0	10.0	60.0
In country logistic)					
support (Trainees))					
(5) <u>Commodities</u>					
Audio-visual)	41.3	0	32.6	31.6	105.5
Medical eqpt. & supplies)					
Vehicles/maintenance)					
Contraceptives)					
1/ Orals and condoms	27.0	0	30.0	30.0	90.0
Others	3.0	0	5.0	5.0	15.0
(6) <u>Other costs</u>					
UCSC support costs	103.3	0	107.2	100.0	310.2
including African travel	48.3	0	48.3		
TOTAL		0			

B. Host Country Inputs

(1) <u>Personnel</u>					
2 Driver/mechanics)					
1 Social Center)					
receptionist/clerk)	88.2	100.0	100.0	288.2	
2 Counterparts)					
(2) <u>In-country transportation</u>					
Vehicle insurance					

1/ Non-add - funded through AID Central Procurement.

* To provide short term consultant services to Gambia as required to train senior technician to assume COP responsibilities prior to termination of PH Adm/Planner position.

-481-

B. <u>Host country inputs</u>	<u>FY 76</u>	<u>IQ</u>	<u>FY 77</u>	<u>FY 78</u>	<u>TOTAL</u>
(1) <u>Personnel</u>					
2 Driver/mechanics					
1 Social Center receptionist clerk					
2 Counterparts					
(2) <u>In-country transportation</u>					
Vehicle insurance					
(3) <u>Office supplies & related materials</u>	93.8		100.0	125.0	318.8
(4) <u>Participant training replacement costs (in and out of country training)</u>					
Subsistence allowance, training facilities and housing (in-country training)					

5. Input Methods of Verification and Assumptions will be found in the Logframe, Appendix D.

LOGICAL FRAMEWORK*	PROJECT TITLE MATERNAL/CHILD HEALTH EXTENSION	PROJECT NUMBER: 932-11-580-358	COUNTRY: THE GAMBIA
NARRATIVE SUMMARY	OBJECTIVELY VERIFIABLE INDICATORS	MEANS OF VERIFICATION	IMPORTANT ASSUMPTIONS
<p>**GOAL**</p> <p>To improve the quality of life of African mothers and children.</p>	<p>A reduction of preventable maternal and infant/child morbidity and mortality by a significant degree.</p>	<ol style="list-style-type: none"> 1. Use sample surveys as provided for in the project implementation. 2. Use the project established health status data system. 3. Use any available host government data. 	<ol style="list-style-type: none"> 1. Family planning (as child spacing) continues to be a desired component of MCH services. 2. Improved MCH/FP services will lead to a reduction in morbidity and mortality. 3. Vital data exists or can be generated for measuring a reduction in morbidity and mortality.
<p>**PURPOSE**</p> <p>(PHASE I: To design and demonstrate simple but effective MCH/FP services that will reach rural populations.</p> <p>PHASE II: To replicate improved MCH/FP services in at least two other areas of the country.</p>	<ol style="list-style-type: none"> 1. By the end of the project, at least two areas of the country will have effective MCH/FP services integrated into the existing health delivery system. 2. The pilot area (established in Phase I) will function effectively as a training and demonstration center for further MCH/FP service replication. 3. Host country personnel will be fully responsible for training and supervision of national personnel and for the delivery of MCH/FP services in the project areas by project end; the host government will assume financial responsibility of the established MCH/FP services 	<ol style="list-style-type: none"> 1(a) Clinic/health facilities records. 1(b) Supervisors records 1(c) Final Project evaluation. 2.(a) Training center records of attendance etc. 2(b) Follow-up studies on former participant trainees. 2(c) Final project evaluation. 3 Final project evaluation. 	<ol style="list-style-type: none"> 1. Qualified trainees available; replacements available during training. 2. Post training positions in expanded areas permit utilization of training. 3. Chosen areas will prove to be both practicable and feasible. 4. The local people will be motivated to accept MCH/FP services. 5. The rural health facilities staff will be motivated to upgrade and expand preventive services. 6. The host government will allocate that amount of the health budget necessary for the continued support of the MCH/FP services.

LOGICAL FRAMEWORK

PROJECT TITLE
MATERNAL/CHILD HEALTH EXTENSION

PROJECT NUMBER
932-11-580-358

COUNTRY
THE GAMBIA

NARRATIVE SUMMARY

OBJECTIVELY VERIFIABLE INDICATORS

MEANS OF VERIFICATION

IMPORTANT ASSUMPTIONS

OUTPUTS**

A. Demographic, health status and KAP data will be collected in each area of expansion.

A. A profile of local health practices, utilization rates, public knowledge of existing preventive services and survey of prevalent diseases will be completed prior to start of other project activities.

A.1 Health facility records and spot surveys.

1. Improvement of services leads to increased use.
2. Staff training leads to improved services.
3. Other donors and governmental departments will cooperate in manpower development.
4. Nursing personnel permitted to provide full clinical family planning services.
5. Adequate facilities will be provided by cooperative governments.
6. Expanded services desirable to governments, clinic staffs and communities.
7. Candidates available for training.
8. Data collection and retrieval system possible.
9. Cooperating governments accept the concept and necessity for MCH/FP divisions.

LOGICAL FRAMEWORK*	PROJECT TITLE: MATERNAL/CHILD HEALTH EXTENSION	PROJECT NUMBER: 932-11-580-358	COUNTRY: THE GAMBIA
NARRATIVE SUMMARY	OBJECTIVELY VERIFIABLE INDICATORS	MEANS OF VERIFICATION	IMPORTANT ASSUMPTIONS
<p>OUTPUTS** continued</p> <p>B. The existing family health services will be studied and then improved.</p>	<p>B.1 There will be an increase in utilization of MCH/FP services at the improved health centers, which will result in a significant decrease of obstetrical wastage.</p> <p>B.2 There will be a 50% continuation rate among FP acceptors.</p> <p>B.3 There will be 20,000 people taught about environmental health and malnutrition.</p> <p>B.4 The transportation, communication and supply systems will be coordinated.</p> <p>B.5 TBAs will be trained and utilized in project activities. At end of project there will be approximately 24 TBAs in the improved system.</p> <p>B.6 The developed health education methods and materials will be refined and adapted (where necessary) to each of the expanded areas.</p>	<p>B.1 Health facilities records</p> <p>B.2 Health facilities records</p> <p>B.3 Training records</p> <p>B.4 Observation</p> <p>B.5 Training records; observation</p> <p>B.6 Developed methods and materials</p>	<p>Same as above.</p>
<p>C. Training will be given to health personnel and others at the pilot MCH/FP training centers and (in Dehomey) at rural training centers.</p>	<p>There will be -</p> <p>C.1 Nine health workers trained for 3 mos. in FP theory and techniques (3 per year)</p> <p>C.2 Sixty-four nurse auxiliaries trained for 6 mos. in FP.</p> <p>C.3 15 day nursery workers trained for one year in outreach education (5 per year).</p> <p>C.4 ___ TBA's trained in outreach education (8 per center).</p> <p>C.5 24 village leaders trained 1 yr. in outreach education (8 per center).</p> <p>C.6 45 health center staff trained for 1 yr. of in-service education (15 per center).</p> <p>C.7 24 area-council-paid nurse auxiliaries trained for 6 mos. of OTJ trg. (8 per year.)</p> <p>C.8 The staff of 4 health centers will attend a 2-day orientation program/center twice a yr.</p> <p>C.9 There will be 2 nurse midwives in FY 76, 2 in FY 77, and ___ in FY 78 to attend an FP practitioner course.</p> <p>C.10 There will be 30 graduates of a trg. of</p>	<p>C.1 - C.10 Participant Training Reports.</p> <p>Trained workers in place and giving service.</p>	<p>Same as above.</p>

LOGICAL FRAMEWORK*	PROJECT TITLE: MATERNAL/CHILD HEALTH EXTENSION	PROJECT NUMBER: 932-11-580-358	COUNTRY: THE GAMBIA
NARRATIVE SUMMARY	OBJECTIVELY VERIFIABLE INDICATORS	MEANS OF VERIFICATION	IMPORTANT ASSUMPTIONS
<p>OUTPUTS** continued</p> <p>D. A data collection and referral system will be established and/or improved in each health center of the expanded areas.</p>	<p>D.1 There will be an effective record system for MCH/FP patients in use in each improved health facility.</p> <p>D.2 There will be a functioning system of clinical data collection and analysis in the country for data emanating from all improved health facilities.</p>	<p>D.1 Observation of record system</p> <p>D.2 Written data</p>	<p>As above</p>
<p>E. A regular method of supervision will be developed for improved health facilities in each of the expanded areas.</p>	<p>E.1 The MOH will assign at least 4 administrative level physicians with advanced training in MCH/FP to supervise 5 areas.</p> <p>E.2 The supervision of middle level MCH/FP personnel and services will be made the responsibility of one nurse/midwife who is assigned to the office of the Director of MCH at the national level.</p> <p>E.3 The supervision of lower level MCH/FP personnel and services will be nursing sisters assigned at the health centers.</p> <p>E.4 The supervision of TBAs will be nurse auxiliaries.</p>	<p>E.1 Observation and supervisory records</p>	<p>As above.</p>

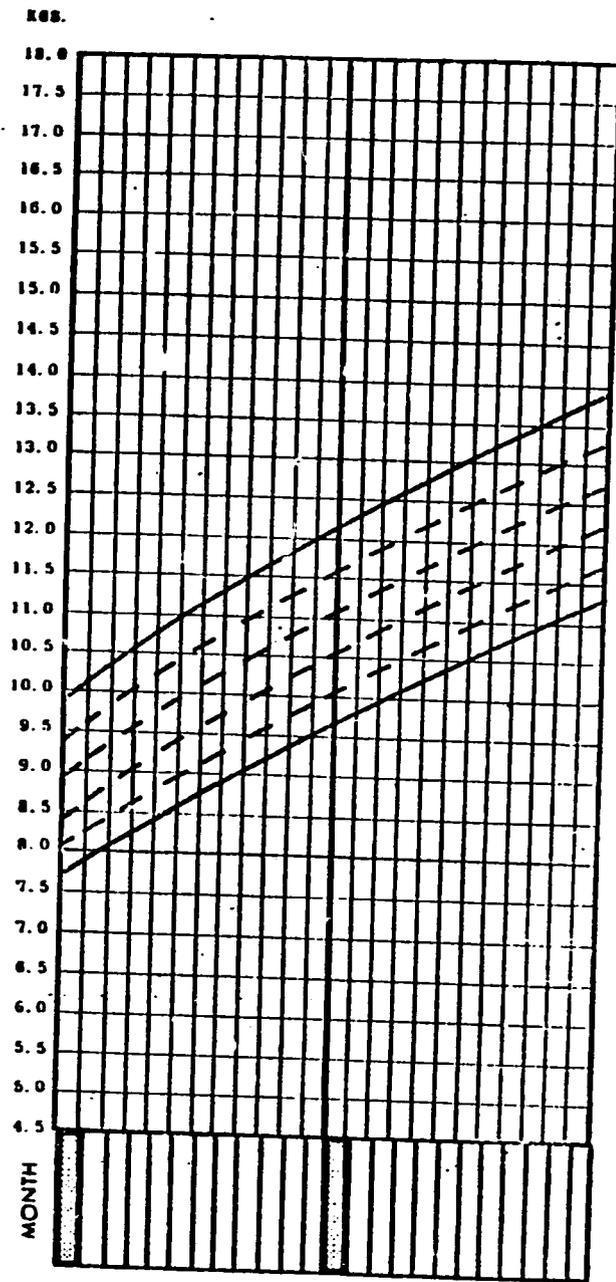
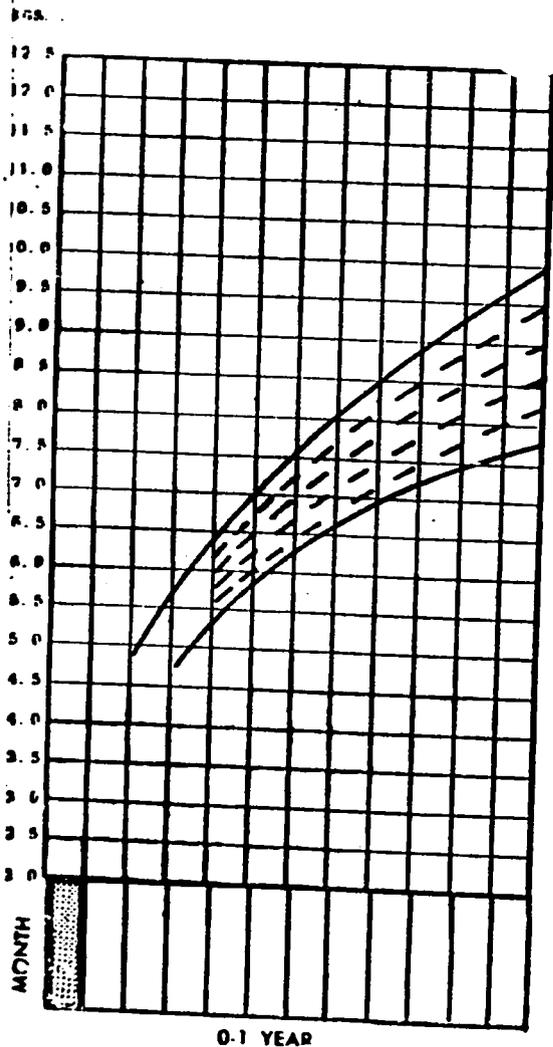
LOGICAL FRAMEWORK*	PROJECT TITLE: MATERNAL/CHILD HEALTH EXTENSION	PROJECT NUMBER: 932-11-580-358	COUNTRY: THE GAMBIA
NARRATIVE SUMMARY	OBJECTIVELY VERIFIABLE INDICATORS	MEANS OF VERIFICATION	IMPORTANT ASSUMPTIONS
<p>**OUTPUTS continued..</p> <p>F. The UCSC team will participate in training programs and professional conferences of all levels of health and health related personnel and provide MCH/FP training as requested.</p>	<p>F.1 As reported in UCSC periodic reports</p>	<p>F.1 UCSC reports</p>	<p>Same as above</p>
<p>. A method for technical valuation of the project activities in the expanded areas will be developed to assess concurrent effectiveness and results at end of project.</p>	<p>G.1 Evaluation design developed</p>	<p>G.1 Evaluation design document</p>	<p>Same as above.</p>

LOGICAL FRAMEWORKS	PROJECT TITLE: MATERNAL/CHILD HEALTH EXTENSION	PROJECT NUMBER: 932-11-580-358	COUNTRY: THE GAMBIA
NARRATIVE SUMMARY	OBJECTIVELY VERIFIABLE INDICATORS	MEANS OF VERIFICATION	IMPORTANT ASSUMPTIONS
INPUTS**			
<p>A. Contract with UCSC</p> <ol style="list-style-type: none"> 1. Field personnel 2. Technical consultants 3. Supplies and equipment 4. Participant training 5. Other costs 	<p>See summary budget schedule and individual country budgets. Cooperating governments will support all clinic operational staff, maintenance and counterpart personnel; physical facilities for improved services and incrementally increased portion of supplies and equipment for services. For details see specific country budget schedules.</p>	<ol style="list-style-type: none"> A.1 Personnel in place A.2 Consultants work A.3 Supplies and equipment arrive A.4 Training records A.5 Budget 	<p>(as related to inputs)</p> <ol style="list-style-type: none"> 1. Continued funding by USAID 2. Continued University of California support for project. 3. Incremental financial support by cooperating governments. 4. UCSC recruits qualified staff. 5. UCSC finds or develops appropriate training programs. 6. Host governments provide qualified counterparts. 7. Host governments provide appropriate level personnel for participant training. 8. Cooperation with other donors.
<p>B. Cooperating country</p> <ol style="list-style-type: none"> 1. Personnel costs 2. Physical facilities 3. Supplies and equipment 		<ol style="list-style-type: none"> B.1 Budget B.2 Facilities utilized B.3 Supplies and equipment utilized. 	

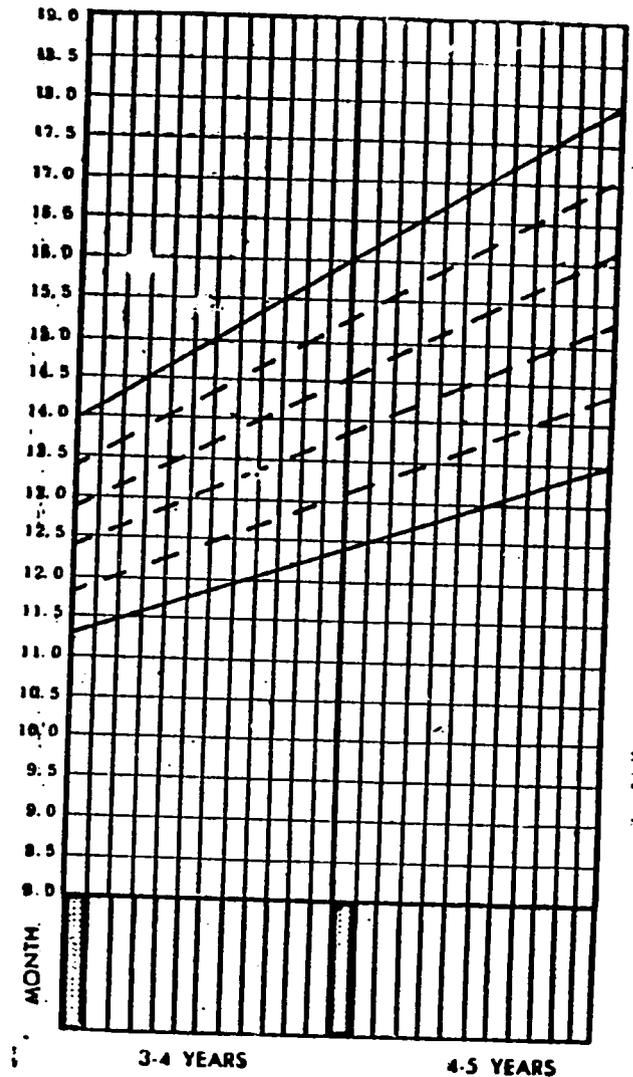
This is a Road-To-Health Card. It was designed and tested in Africa and is now widely used in a majority of developing countries. UNEX staff, working with host country MCH technicians adopted this simple form for record keeping to be used in all MCH clinics. It is kept by the mother who brings it with each clinic visit. Clients move about a good deal and the card's universality makes it possible for any clinic anywhere to establish the child's health status -- weight, curve, illnesses, immunizations. etc.

CHILD'S HEALTH AND WEIGHT RECORD OVER FIRST FIVE YEARS

MAJOR ILLNESSES TO BE ENTERED ON CHART



1-2 YEARS **2-3 YEARS**
UPPER LINE—This represents the average weight of healthy and well-fed children.
LOWER LINE—The weight of children should be above this line. A steady upward progress of the weight record is more important than its position.



3-4 YEARS **4-5 YEARS**
INSTRUCTIONS TO NURSE OR CLERK FOR COMPLETING CHART—Find out the month of birth of the child and fill this into all the black-edged spaces, then fill in the other months. Also mark off the years as shown.

October	November	December	January	February
74			75	

When the child comes for weighing make a large dot in that month's column against the weight. Connect this with the last dot.

CONSULTANT REPORT

OF

EDWIN M. GOLD, M.D.

U.C. SANTA CRUZ MCH/FP PROJECT

DAHOMY AND THE GAMBIA

JULY 18 - AUGUST 8, 1974

August 21, 1974

PURPOSE OF ASSIGNMENT

1. To ascertain degree of Government understanding of and commitment to project objectives.
2. To improve relationships with other International donors and/or agencies.
3. To develop the most effective approach for introduction of family planning as an integral part of MCH services in Dahomey and The Gambia.
4. Render opinion on appropriateness and use of equipment and supplies ordered by and sent to the Project.
5. Evaluation of Training Program Curriculum as to the needs of trainees at all discipline levels.
6. To assist in interpretation and utilization of Akpakpa KAP Study (Dahomey) and The Gambia Health Survey.
7. Make any appropriate recommendations to strengthen and/or facilitate implementation of Phase II work plan.

A. DAHOMEX - July 18-29, 1974

1. TO ASCERTAIN DEGREE OF GOVERNMENT UNDERSTANDING OF AND COMMITMENT TO PROJECT OBJECTIVES

Despite many frustrations encountered by the UCSC Project Staff as a result of the changes in government personnel during the past two years, there does exist at this time, with the incumbent MOH officials, an excellent rapport and sense of collaboration and cooperation. This was very evident to the Consultant in the course of his interviews with the MOH, Director of the Cabinet, Director General of Public Health, Director of Basic Health Services, Statistics, and Planning. In addition, the Consultant can report similar cooperation and acceptance of the Project and its objectives by the following: the voluntary Family Planning Association (CNDFP);

the Chairman of the Departments of Ob/Gyn and Pediatrics at the University Medical School; the Directrice of the Centre Social and the staff of the Centre de Protection Maternelle et Infantile (PMI).

It is the opinion of the Consultant that the Government of Dahomey not only understands the objectives of the Project, but that it is desirous that the objectives be successfully met so that the Government in its long range commitment can replicate and extend the pilot service and training capabilities developed by the Project in Phases I and II, after the Project phases out.

Some tangible evidences of government commitment to Project objectives, over the long range, are:

- a. The projected building of a Maternal and Child Health Center on the University site which will serve as a MCH Service Unit as well as a Family Planning and Health Education Training Center.
- b. The present MOH specifically spoke of increasing Government support for expansion of family planning services, and education in the health system.
- c. The MOH told the Consultant that he has plans for reorganization of PMI services and to extend such services to the 6 main provinces of the country.
- d. The Director of Basic Health Services, Statistics and Planning stated to this Consultant that the results of the Project KAP Study reinforces his future planning by making evident:
 - (1) the need to prevent unwanted pregnancy in the under 20 age group of the population,
 - (2) the need to improve the general educational level of the population,

- (3) the need to develop and expand health education,
 - (4) the need for outreach to clients to motivate them to increased use of existing health services,
 - (5) the need to improve standards of practice of the traditional birth attendants.
- e. The Director of Basic Health Services, Statistics and Planning also stated that Dahomey has the manpower and the logistical capacity to immunize, prophylactically, the entire population, if supplies of appropriate vaccines can be made available to the government health services. At present, government budgetary deficiencies severely limit purchase of such vaccines.

2. TO IMPROVE RELATIONSHIPS WITH OTHER INTERNATIONAL DONORS AND/OR AGENCIES

a. Comite National Dahomeen du Planning Familial (CNDPF):

In the course of meetings with the President, the Executive Secretary and the National Treasurer of the CNDPF the following areas of cooperation between the Project and the Comite emerged:

- (1) The Comite solicited aid and assistance from the Project in training Comite staff who would be assigned for service amongst the 17 service units throughout the country.
- (2) The Comite similarly requested aid and assistance from the Project in the preparation of teaching literature and aids that would be used for education and orientation of the Comite's clientele to family planning.
- (3) The Comite asked for Project assistance in the development of a formal request to IPPF that would formalize the CNDPF as an official affiliate of IPPF.
- (4) As tangible evidence of the liaison existing between the Project and the Comite, Dr. Walter has recently been appointed to the governing board of the Comite.
- (5) The President of the Comite personally requested assistance from Mr. Thomas Park in developing improved administrative procedures and structure for the Comite.

b. The World Health Organization (WHO):

On the afternoon of July 23rd the Consultant and Project staff had a productive meeting with Dr. S. Bernard (Acting Country Representative) and Dr. Louis Baldachi (WHO Consultant Team Leader). During this conference, the following areas of collaborative interest surfaced:

- (1) Dr. Baldachi heads a WHO consultant team that is in Dahomey working with the MOH to develop an improved general health structure. Dr. Baldachi exhibited extreme interest in having the UCSC Project collaborate with his team in the MCH/FP area.
- (2) Dr. Baldachi informed our group that by 1975 WHO would mount a health education project in Dahomey funded by UNDP.
- (3) The Project staff raised the possibility of the development of a pilot demonstration MCH/FP training unit that might be developed in the Centre Social in the Akpakpa Zone. This unit would have a multidisciplinary staff that would deliver comprehensive MCH/FP services to the population served; and in addition, would be developed as a training base for physicians, nurses, midwives, assistants, sociales, medical students, midwifery students, nursing students, paramedical staff and traditional birth attendants.

In the ensuing discussion there was agreement by the WHO representatives that they would be willing to collaborate in such a venture to the extent of provision of public health laboratory services and improvement of case management and record retrieval systems.

- (4) An additional area of collaboration between the Project and the WHO office would be Project personnel participation in the MCH/FP aspect of the ongoing in-service education programs of the MOH which are sponsored by WHO.

c. U.S. Peace Corps and the Ministry of Education:

Although the Consultant did not meet with any of the Peace Corps/MOE staff during his current visit, he learned that Project staff are involved in training the first group of primary school health educators in maternal and health and sex education.

d. The American Embassy:

The Consultant and the Project staff met with the economic and population officer and the Charge d'Affaires. During this meeting we were informed that the Embassy has available \$50,000 per annum in Special Population Assistance Funds. During Phase I the Project introduced SPA funds to the MOH. These funds were used for the construction of additions to three health centers and the construction of a satellite social center in Agbalilame.

e. Miscellaneous:

While the Consultant did not have the opportunity to meet with representatives of the Canadian International Development Association (CIDA), it might be propitious for Project staff to assist the MOH to use this resource for the development of sanitational facilities in the training zone.

CIDA has allocated 400 million CFA for basic sanitation projects and training in Dahomey.

The Consultant further understands that the Project staff has had ongoing collaboration with Catholic Relief Services (CRS) relative to milk distribution to infants and children under five and sharing in the development of health education materials.

3. TO ASSIST IN INTERPRETATION AND UTILIZATION OF AKPAKPA KAP STUDY

The data retrieved from the Akpakpa KAP Study developed a profile of the population in the area. Despite the fact that this profile may not be truly representative of the entire country, certain major findings emerged, that as previously stated in this report, have been of extreme help to the Director of Basic Health Services, Statistics and Planning. It is

worthy to repeat that these major findings have made evident to the MOH:

- a. the need to prevent unwanted pregnancy in the under 20 age group of the population,
- b. the need to improve the general educational level of the population,
- c. the need to develop and expand health education,
- d. the need for outreach to clients to motivate them to increased use of existing health services,
- e. the need to improve standards of practice of the traditional birth attendants.

Consultant comment: It is the opinion of the Consultant that:

- a. Much of the information obtained in the survey could have been obtained through other means.
- b. The collection of much of this type of data should be the primary responsibility of an appropriate agency in the MOH.
- c. The Project staff is to be highly commended on the development and execution of this study, particularly since no professional statistical counsel or assistance had been available to them.
- d. It would seem important to have agreement that this Project does not have as a primary objective or activity the conduct of such research study.

4. TO DEVELOP THE MOST EFFECTIVE APPROACH FOR INTRODUCTION OF FAMILY PLANNING AS AN INTEGRAL PART OF MCH SERVICES

On the basis of the experience of the UCSC MCH/FP Project staff, the health organization in Dahomey is such that the integration of FP services into existing MCH service functions is logistically simple and easy to effect. On the other hand, any attempt to introduce FP in the country as a free standing health service would be both inconsistent with the organization of the MOH and beyond its budgetary capacity.

The Consultant concurs with the opinions of the UCSC Project staff that the development of free-standing FP service places it into competition with existing MCH services; competition for personnel and budgetary funds which would thereby be wasteful of both of these scarce resources.

5. APPROPRIATENESS AND USE OF EQUIPMENT AND SUPPLIES ORDERED BY AND SENT TO THE PROJECT

The Consultant has perused the Project list of equipment and commodities that thus far have been received or on order, and is of the opinion that with the exceptions to be noted, specifically, all of the commodities and equipment are indispensable to the Project's functions.

Note: the exceptions referred to above are:

- a. Pregnosticon-Dri Dot pregnancy diagnosis kits
- b. Polaroid camcras and tape recorders

The Consultant also had the opportunity to review equipment and commodity requisition lists for Phase II and concurs with the UCSC Project staff that all items ordered are needed.

6. EVALUATION OF TRAINING PROGRAMS CURRICULUM AS TO THE NEEDS OF TRAINEES AT ALL DISCIPLINARY LEVELS

The Consultant during his brief stay did not have the opportunity to observe personally any teaching session in action. However, the Consultant reviewed the training program curricula of both Phase I and Phase II with Project staff. The curricula review revealed that both from the conceptual and contextual point of view, the curricula are extremely satisfactory and are well geared for the training of the appropriate levels of trainees, for which they were designed. It is a compliment to the UCSC Project staff that they were able to develop such excellent curricula without the help of an educational expert.

In regard to the Phase II curricula, it is observed that there will be not only an increase in the numbers of host country trainees to be trained, but also that there will be a broadening of the category of personnel to be trained as per page 6, item c. 2(1a and 1b) of the revised May 1974 Logical Framework for Dahomey.

7. RECOMMENDATIONS TO STRENGTHEN AND/OR FACILITATE IMPLEMENTATION OF PHASE II WORK PLAN

The Consultant and the Project staff had discussions as to the most efficacious implementation of the Phase II Work Plan. As a result of these series of discussions there was an agreement with the Project staff (in the absence of the field coordinator) that a modification be recommended in the work plan as follows:

- a. that the Centre Social as an existing facility be utilized to develop a pilot demonstration MCH/FP service and training center. It is envisaged that in this pilot center a multi-disciplinary team approach to comprehensive and integrated MCH/FP patient care services would be developed. Simultaneously, training functions for physicians, midwives, nurses, assistantes sociales, auxiliaires sociales, medical students, nursing students, midwifery students, medical faculty and paramedical staff and traditional birth attendants would be performed in the center. The objectives of this would be to concentrate on on-the-job type of training. The ability to implement this plan now, in an existing facility, would therefore not entail any MOH budgetary outlay for a physical plant.

Recognizing that MOH has on the drawing board plans for the building of a rural health training complex, which will take probably three years to come to fruition, implementing the plan now, as proposed, would enable the MOH to have trained staff, trained in multidisciplinary MCH/FP services, immediately available, to staff the new installation when it is completed. In other words, we are suggesting that the current proposed plan would effect a three year head start in the development of a comprehensive service/training facility.

As waves of various levels of personnel are trained in the proposed center in the principles and practice of comprehensive MCH/FP, they can be posted to rural health centers to provide such care for the population in the rural areas.

Professors Dan and Alihounou agreed in principle with the concept

of developing service and training in the Demonstration Rural MCH/FP Service and Training Center at the Centre Social in Akpakpa. However, they stated that it would be necessary for them to discuss the implementation of the concept with the MOH.

Dr. Gangbo who had been invited to this meeting was not able to attend.

- b. The Consultant recommends to the UCSC Project staff that they continue, unremittingly, the liaison that they have already established with the faculty of the medical, nursing and midwifery schools in the areas of curriculum development and personal training.
- c. The Consultant recommends that the Project staff continue to assist the Ministry in seeking vaccines for prophylactic immunization for the Dahomean population at no charge to the client.
- d. The Consultant recommends that the project staff continue to assist the MOH in seeking funds from various donors in the area of assistance to MCH/FP.

8. IDENTIFICATION OF HOST COUNTRY, USAID AND EMBASSY OR PROJECT OFFICIALS OR PERSONNEL CONTACTED OR CONSULTED

- (1) Captain Issifou Boraima, Minister of Health
- (2) Professor Yoro, Assistant Chief of Staff, Ministry of Health
- (3) Dr. Alexis Amoussou, Director General of Public Health
- (4) Dr. Samuel Gangbo, Director of Basic Health Services, Statistics and Planning
- (5) Pastor Harri Henri, President, National Committee for Family Planning (CNDPF)
- (6) Mr. Caspar Anato, Executive Secretary, CNDPF
- (7) Madame Bernadette Dehoue, National Treasurer and Midwife in Charge of Clinical Services of CNDPF
- (8) Mr. Francis McNamara, Charge d'Affaires
- (9) Mr. George Dies, Population Officer, U.S. Embassy
- (10) Dr. Bernard, Acting Country Representative, World Health Organization
- (11) Dr. Louis Baldacci, WHO Team Leader responsible for Basic Health Service
- (12) Professor Vincent Dan, Chairman, MCH Institute, University of Dahomey
- (13) Professor Eusebe Alihounou, Director of Ob/Gyn, University Maternity Service and Technical Consultant to the Minister of Public Health
- (14) Madame Constance Facia, Directrice, Centre Social D'Akpakpa
- (15) Madame Sitha Hodonou, Midwife, Centre Social D'Akpakpa
- (16) Madame Lucie Ouendo, Nurse, PMI of Cotonou

- (17) Madame Viho, Midwife at PMI
- (18) Miss Sue Eilen Nalder, Project Field Nurse
- (19) Mr. Tom Park, Project Field Administrator
- (20) Mr. Robert L. Minnis, Assistant Director, International Programs, UCSC Extension
- (21) Mrs. Leslie Goddard, Project Field Secretary
- (22) Mr. John Houehomkpe, Interpreter
- (23) Dr. George Walter, Project Medical Field Coordinator

ACKNOWLEDGEMENT

The Consultant wishes to express his deep gratitude to the Project Staff for their cooperation and the many courtesies shown to him during his stay in Dahomey. It was this exhibition of extreme cooperation that made the consultation visit not only pleasant, but productive as well.

In addition, Consultant wishes to express his deep gratitude, also, to Professor Yoro and Professor Alihoumou for their many courtesies.

B. THE GAMBIA - July 30-August 8, 1974

1. TO ASCERTAIN DEGREE OF GOVERNMENT UNDERSTANDING OF AND COMMITMENT TO PROJECT ACTIVITIES

Despite the fact that the UCSC Project by contractual official arrangements was supposed to have started in March, 1972, for a variety of reasons actual startup of project activities did not begin until November, 1973. The most cogent reasons for the delay were as follows: delay in construction of a house for the Mansa Konko Technician; delay in naming a Counterpart for the Banjul based Technician; and finally, there were a series of administrative misunderstandings between the Gambian Government and Project Staff. However, it must be stated that during this period of delay, valuable communication ensued between Project Staff and Gambia officialdom which eventually clarified the purpose and objectives of the UCSC Project. In addition, during this latent period the Project Staff completed the first Health Survey ever done in The Gambia. This survey, which developed a KAP profile of Gambian inhabitants in the Lower River and North Bank Divisions comprised a cohort of 4,449 individuals.

The Consultant is most pleased to report that during his visit he perceived, as a result of his interviews with His Excellency the President, the Acting Chief Medical Officer and the Medical Officer of Health, that there is an excellent understanding and acceptance by these officials of the purposes, aims, objectives and current activities of the Project Staff together with their counterparts. The major approval voiced by these officials of project activities, is due to their understanding of the integrative activities of the Project Staff. As stated by Dr. Samba, "I do not look upon the UC Project Staff as foreigners working in The Gambia, but look upon them as fellow Gambians." Further, the above officials look forward keenly to

the success of the demonstration pilot rural health center service and teaching activities in Mansa Konko, with the view that the government will be able to replicate such activities throughout rural areas. In addition they are extremely grateful for the Project objectives which plan to extend basic health education to the Gambian populace, as well as upgrading the technical capacity of the traditional birth attendants in the rural villages.

Similarly, the Consultant perceived in the course of his interview with the Acting Medical Superintendent of the Royal Victoria Hospital that The Gambia is "sold" on the UCSC-Gambia MCH Project. Dr. Oldfield further stated that the current activities of the Project integrate exceedingly well with the Gambia Health Plan which is under development by the Ministry and which will concentrate on rural health improvement. As evidence of government commitment to the objectives of the project is the fact that in the forthcoming Gambia Health Plan there is envisaged a reorganization of health services to make better use of existing facilities, to develop a chain of health centers covering the known population areas, and to place increasing emphasis on preventive health care.

Finally, in his interview with the Minister of Education, who is also currently Acting Minister of Health, the perception was gained by the Consultant that the Minister also was highly appreciative of the Project objectives to expand para professional health worker training and develop the team concept of health care delivery for the health centers in the rural areas.

In conclusion, at an interview that the Consultant and Project Staff held with the Commissioner, Lower River Division, it was gratifying to be assured by the Commissioner, despite his recent appointment to this post (1 week), of his cooperation and willingness to act as liaison between Area

Council officials and the Project Staff.

2. IMPROVEMENT OF RELATIONSHIPS WITH OTHER INTERNATIONAL DONORS AND/OR AGENCIES

a. United Nations Development Program

The Consultant and the Project Staff were most graciously received by Dr. Willard Harper, Resident Representative, and Mr. Anders Klum, Program Officer. In the course of the interview, there was mutual agreement that it would be most advantageous to Project Staff to receive from the UNDP office, periodically, documents and data relevant to population activities of the UNDP. During the interview, Project Staff requested assistance of UNDP for furnishings and equipment for the projected classroom and dormitory to be built at Mansa Konko. Dr. Harper stated that UNDP could not be of help in this matter, but strongly suggested that UNICEF would be the proper agency to approach for such assistance. He further recommended that Project Staff meet with Mr. Christensen and Mr. Tete, UNICEF Representatives based in Dakar, but who periodically visit Banjul. Mr. Christensen was on a fleeting visit to Banjul on Monday, August 5, 1974, but his appointments were so fully booked that it was impossible for Project Staff to meet with him, but they will follow up on this suggestion. In addition, Dr. Harper recommended the possibility of referring this request for equipment and furnishings for the classroom and dormitory to the regional office of WHO, and suggested contacting Dr. Atayi, the WHO representative based in Dakar. This will be done.

Dr. Harper also alerted the Project Staff to the fact that UNESCO would shortly launch a mass communication program for Family Planning in The Gambia and that Project Staff might benefit by making contact with the UNESCO team when it arrives in The Gambia.

b. Medical Research Council

On Thursday, August 1, 1974, the Consultant and Project Staff met at the MRC Headquarters with Dr. R.S. Bray, Director and Dr. Antony Coady, Staff Research Officer. Drs. Bray and Coady reviewed briefly, but thoroughly, the current major areas of research interest and activity of the MRC in The Gambia. Following this briefing, the UC staff was given a conducted tour of the research and clinical facilities of the MRC.

The tangible benefits derived from this visit were:

- (1) The offer by Dr. Bray to collaborate with Project Staff in training laboratory technicians. Dr. Bray is willing to throw the laboratory training capabilities of the MRC open to UC Project team for training laboratory technicians in simple laboratory procedures such as urine analysis, hemoglobin determination, blood smear examination and possibly stool examination.
- (2) Dr. Bray offered any degree of consultative assistance to the UC Project team in the areas of nutrition, education and practice, as might be required.
- (3) Dr. Bray stated that he was prepared to share information with the Project Staff in the areas of infectious disease control, nutrition and general hygiene.
- (4) Dr. Bray gave permission to the UC staff to use the library facilities of the MRC.
- (5) Dr. Coady offered the UC staff the opportunity to send dresser dispensers to MRC, on an individual basis, for 1 week periods, for retraining in current accepted standards of therapeutics of common diseases.

c. American Embassy

On August 1, 1974 the Consultant and Project Staff met at the American Embassy with Mr. Donnelly, acting Charge d'Affaires. The Consultant can report that the Charge reviewed and approved the two SPA funded projects relevant to Project activities at Mansa Konko, namely, the construction of the classroom and the housing facility for the Mansa Konko based project technician.

d. Family Planning Association of The Gambia

On Saturday, August 3, 1974 the Consultant and Project Staff met with Dr. Palmer, the founder of the Family Planning Association and Chairman of its Executive Committee. It was ascertained at this meeting that the Family Planning Association of The Gambia is a formal affiliate of IPPF and is supported by IPPF Funds. It is obvious to the Project Staff that, as is usual in all FPA's throughout the world, the Association in The Gambia devotes its activities strictly to education, motivation and services relevant to contraception, divorced from any integration with other health services. It was further elicited from Dr. Palmer that the Association had developed a corps of rural field workers. At the present time there are four such RFW's in Mansa Konko, four in Salinkene and four in Georgetown and Base Areas. It is the firm impression of the Consultant and Project Staff that the recruitment and training of rural field workers for the limited capacity of family planning activities only, is in direct competition with the recruitment and training of multipurpose health para-professionals by the UC MCH/FP Project.

The FP services offered in Family Planning Association clinics must be paid for by the client on a fee for service basis. This, too, raises the possibility of competition with similar services that are rendered free of charge in the government health services, including those at the Royal Victoria Hospital.

It is further ascertained that there has been no communication, at any level, between the FPA and the UC/Gambia MCH Project Staff, nor with the Medical and Health Administration in the Ministry of Health. This point was discussed in depth with Dr. Palmer and eventuated in the following:

- (1) That the FPA could be called upon to donate family planning supplies and equipment that they have on hand from IPPF, to government health clinics and the Royal Victoria Hospital as the need arises.
- (2) The FPA would take under advisement the recommendation from this Consultant that an Advisory Committee on family planning be organized, with representation from the FPA, the UC/MCH Project Staff, the Ministry of Health, the Ministry of Education, the School of Nursing and Midwifery.

On the last day of his appointment schedule in The Gambia (August 7, 1974) the Consultant and the Project Staff had the opportunity to meet Mr. Joseph Taylor-Thomas, Executive Secretary of the FPA. This meeting was most fortuitous and gratifying in that it served to introduce Miss Anne Richter to the Secretary, as well as affording the opportunity of open discussion regarding the mutuality of interest of the UC Project and the FPA. On the basis of such discussion Mr. Taylor-Thomas had a better understanding of the objectives of the Project; and the Project Staff developed a better understanding of the aims, capabilities and future plans of the FPA

This meeting seems to have opened a two way channel of communication between the Project Staff and the FPA. The Secretary of the FPA reiterated the promise previously made by Dr. Palmer that FPA would willingly supply medications and educational materials to the Project Staff on their request. In addition, the Secretary stated that he would keep Project Staff informed of the activities of the FPA.

e. Catholic Relief Services

On August 5, 1974 the Consultant and Project Staff met with Mr. Michael Weist, Program Assistant. Mr. Weist briefed the staff on current major activities of CRS in The Gambia, namely a child nutrition (under five) program using PL480 foods to give nutrition supplementation and nutrition health education via 12 dispensaries and day care centers in The Gambia.

The CRS has been and will continue supplying Corn Soya Milk and Bulgar Wheat to the Mansa Konko Health Center. Request was made and granted for a supply of Ilesha Weight Charts for use in the Mansa Konko demonstration center.

There was joint agreement on the need for a full time nutrition coordinator (Mrs. Eastwood) to be responsible for CRS activities in The Gambia. Mr. Weist invited the UC/MCH Project staff to call upon Mrs. Eastwood, when she arrives in The Gambia, so that there might be further and extended collaboration between the CRS and the Project Staff, particularly as relates to coordination of CRS and the Project activities in the garden and poultry projects underway in Jenoi.

3. APPROPRIATENESS AND USE OF EQUIPMENT AND SUPPLIES ORDERED BY AND SENT TO THE PROJECT

The Consultant has perused the Project list of equipment and commodities that thus far have been received or are on order, and is of the opinion that with the exception to be noted, specifically, all of the commodities and equipment are indispensable to the Project functions.

Note: the exception referred to is:

Polaroid camera

The Consultant agrees with Project Staff that in place of the Polaroid camera, an Instamatic Kodak would be of great benefit to document visually with slides, the health conditions in the villages, the general appearance and condition of the clients being served, the status of housing in the villages, etc., which could be used in the training program.

The Consultant also had the opportunity to review equipment and commodities lists for Phase II and concurs with the UC Project Staff that all items ordered are needed.

4. EVALUATION OF TRAINING PROGRAM CURRICULUM AS TO THE NEEDS OF TRAINEES AT ALL DISCIPLINARY LEVELS

Thus far, actual classroom training of trainees by Project Staff has been minimal. To this date, Project Staff activities have been almost completely focused on curriculum development at the School of Nursing and Midwifery and at the School of Public Health.

The Consultant, during his brief stay, did not have the opportunity to observe any teaching session in action, except for a casual observation of on-the-job training during his visit to Mansa Konko. However, the Consultant has reviewed the training program curricula of both Phase I and Phase II developed by the Project Staff. The curricula reviewed revealed that, both from the conceptual and contextual point of view, the curricula are extremely satisfactory and are well geared for the training of the appropriate level of trainees for which they were designed. As in Dahomey, it is a compliment to the UC Project Staff in The Gambia that they were able to develop criteria of such excellence without the help of a formally trained educational expert.

In regard to the Phase II training plan, it is observed that in the output of trainees there will be, not only an increase in the numbers of host country trainees to be trained, but also, that there will be a broadening of the categories of personnel to be trained, as per pages 3, 4 and 5, item c. 2 (1a-3a) of the Logical Framework - Prop work sheet for The Gambia. It is the understanding of the Consultant that the Prop work sheet referred to is tentative and will undergo revision shortly with the collaboration of The Gambia Project Staff and the Field Coordinator.

5. TO DEVELOP THE MOST EFFECTIVE APPROACH FOR INTRODUCTION OF FAMILY PLANNING AS AN INTEGRAL PART OF MCH SERVICES

On the basis of the experience of the UCSC MCH/FP Project Staff as well as on the basis of discussions that the Consultant and Project Staff had with the Acting Chief Medical Officer, the integration of FP services into the existing health services is both logistically simple and easy to effect. Such integration of FP into the general health services, and most specifically into MCH services, is not only compatible with the Project objectives, but is also compatible with the proposed government population policy which is currently under development.

As was previously noted in this report, in the discussion with the FPA of The Gambia, the Consultant strongly concurs with the opinions of the UCSC Project Staff that the development of free standing family planning services as offered by the FPA, places it in competition to the existing MCH services; competition for personnel, equipment and budgetary funds which are thereby wasteful of these scarce resources. It might be added that the Acting Chief Medical Officer likewise concurs with this opinion.

On the other hand, since The Gambia FPA is supported by IPPF and is the recipient of equipment, commodities and teaching aid materials for use in The Gambia, it is felt worthy to develop liaison with FPA for the major purpose of obtaining these much needed items from FPA on a regular basis, for the benefit of health services in The Gambia.

In the opinion of the Consultant, the demonstration pilot MCH/FP health center in Mansa Konko offers the best opportunity for not only being developed as a service and training unit for the delivery of comprehensive MCH/FP but also, as the ideal demonstration for the integration of FP activities in MCH services.

Further implementation of the introduction and integration of FP into expanded MCH services will be markedly enhanced as the training program at Mansa Konko Health Center gets underway to upgrade the capabilities of the traditional birth attendants. Obviously, also, the integration of FP into MCH services will be augmented as the training program for Auxiliary Nurses, Village Leaders, Health Inspectors, Dresser Dispensers, Midwives, Nurse Midwives, Community Nurses and Area Council employees gets underway.

Since it is definite that a full time Physician is soon to be posted to Mansa Konko Health Center, it will likewise be possible to orient and train this physician in FP skills.

6. THE GAMBIA HEALTH SURVEY

Beginning in March, 1973, Project Staff developed a questionnaire for the purpose of conducting the first health survey in The Gambia. The survey was completed by the end of June, 1973 and included data derived by interview, from a cohort of 4,449 inhabitants in the Lower River and North Bank Divisions of The Gambia. The raw data secured from this survey has been sent to Santa Cruz for data processing. It is unfortunate that the retrieved data has not been returned to the Project Staff in The Gambia for interpretation. Thus, the Consultant was not privy to the data and could not work with the Project Staff in the interpretation of the results and their possible value in planning for the future of the Project.

7. RECOMMENDATIONS TO STRENGTHEN AND/OR FACILITATE IMPLEMENTATION OF PHASE II

It is the opinion of the Consultant, on the basis of discussions that he and the Project Staff held with The Gambian officials within the health services, that continuing the proposals of the work plan is entirely

compatible with both the objectives of the UCSC Project and the reorganization of the health services plan that is being developed by the Health Ministry, to extend maternal and child health and FP services in the rural areas and to integrate further such service activities as well as training into the general health services.

- a. It is the opinion of the Consultant as well as of the Project Staff, that in order to ensure further implementation of the above concept, it is recommended that greater efforts for coordination of all MCH/FP health services and training capability within the country be actively pursued during Phase II by the Ministry of Health.
- b. The Consultant recommends that to successfully implement such coordination the post of MCH/FP Coordinator be created within the Ministry of Health as soon as possible. The coordinating responsibilities of such a post would greatly facilitate the continuation and expansion of MCH/FP services within the country and prepare for the continuation and replication of such services in the rural areas after the life of the Project.

Hopefully, the successful coordination of MCH/FP activities, which currently are operative within the country through a variety of national and international donors and/or agencies, would ensure more efficient utilization of budgetary funds, trained personnel, equipment and supplies. In addition, such coordination of both service and training activities would eliminate costly duplication of scarce health resources.

- c. As a supplement to the above recommendation, the Consultant further recommends that the Health Ministry urgently consider the creation of an MCH/FP Advisory Committee to the Ministry of Health. Such an Advisory Committee could be chaired by the Chief Medical Officer or the MCH/FP Coordinator, and committee membership would include representatives from the GFPA, the School of Nursing and Midwifery, the School of Public Health the Department of Ob/Gyn of Royal Victoria Hospital, the Matron of the Royal Victoria Hospital, the Medical Officer of Clinics and the UCSC Project Staff.

The potential functions of this Advisory Committee would be to assist the Ministry of Health in planning and implementation of health

services in the following areas:

- (1) Integration of MCH/FP services and training into the general health structure.
 - (2) Availability and accessibility of MCH/FP activities.
 - (3) Requisition and utilization of special medical equipment and supplies relevant to the objectives of both the Gambian government and the UCSC Project, to reduce further maternal and infant mortality and morbidity.
 - (4) Appropriateness of location, design and function of planned additional health facilities in the rural areas.
 - (5) Development and improvement of standards of preventive and curative health care delivery.
 - (6) Evaluation of health care delivery.
 - (7) Assessment of manpower training needs for health care delivery within the country.
- d. In the interest of sharing information on health care related activities within the country, the Consultant recommends that the MOH consider convening, two or three times a year, meetings and/or seminars for such purposes, by inviting representatives from such agencies as FPA, MRC, UNDP, CRS, Peace Corps, UCSC Project and such other agencies as may become involved in health care activities within the country.
- e. On the basis of his observations during visits to the health facilities in The Gambia, the Consultant recommends the development of a practical, standardised medical record keeping system of both clinical and operational nature, for the health system in The Gambia. This system would serve to develop practical information so necessary for future policy development for health services, urban and rural, inpatient and outpatient and used by the health centers, dispensaries, and hospitals in the country. This recommendation specifically applies to the development of statistics relevant to MCH/FP health services.
- f. As one of the major objectives of the project is the development of Mansa Konko as a rural demonstration MCH/FP service and training center, the Consultant recommends that continuing emphasis to reinforce a multipurpose team approach to health care delivery in both the training and service component, be pursued during Phase II.
- g. During his visit at the Mansa Konko Health Center, the Consultant was made aware of the serious problem involving patients presenting at the Health Center with complications during labor and/or delivery. There is the obvious problem of referral and transport of seriously

jeopardized patients to the RVH by virtue of the distance and the time involved in such transport. For this reason, the Consultant recommends that the magnitude of this problem be taken under investigation, by looking at the current records supposedly available at the Mansa Konko Health Center. Evaluation of this data seems important, in order to make a decision as to whether or not increased capabilities should be developed at the health center, for the management of emergency, life threatening complications, to both mother and/or infant. It would appear desirable that the decision making, predicated on the data to be secured, be a responsibility of the MOH with consultative advice from members of the UC MCH/FP Project Team, members of the Department of Ob/Gyn of the Royal Victoria Hospital and the Matron of the RVH.

Until such definitive decision is made, the Consultant recommends that capabilities for the replacement of fluid loss, as an adjuvant to treating obstetric shock, be made immediately available as part of the therapeutic armamentarium at the Mansa Konko Health Center. This means making immediately available intravenous fluids supplies and the equipment necessary to administer such fluid to the patient.

- h. In the interest of furthering the comprehensive nature of MCH/FP activities at the demonstration Mansa Konko Health Center, the Consultant recommends that the full gamut of immunization services and supplies be available at the Mansa Konko Health Center for use by the health team. This means the availability of the following vaccines: Measles, DPT, Polio, Tetanus and BCG. If this is achieved, the patients served by the Mansa Konko Health Center will have been afforded modern acceptable standards of health protection.

8. IDENTIFICATION OF HOST COUNTRY, USAID AND EMBASSY OR PROJECT OFFICIALS OR PERSONNEL CONTACTED OR CONSULTED

- President Sir Dawda Kairaba Jawara
- (1) Dr. P. N'Dow, Chief Medical Officer
 - (2) Dr. E.M. Samba, Acting Chief Medical Officer
 - (3) Dr. F. Oldfield, Acting Medical Superintendent, Royal Victoria Hospital
 - (4) Dr. Hatib N'Jie, Chief, Ob/Gyn, Royal Victoria Hospital
 - (5) Dr. Hassan, Chief, Ob/Gyn, Royal Victoria Hospital
 - (6) Mr. D.M.B. Jagne, Principal, School of Public Health
 - (7) Mr. Bairbi Phall, Health Educator, School of Public Health
 - (8) Mr. Willard Harper, Resident Representative and UNDP Coordinator
 - (9) Mr. Anders Klum, Program Officer, UNDP
 - (10) Dr. Perera, Medical Officer of Health
 - (11) Mr. K. Sanneh, Senior Health Superintendent
 - (12) Dr. R.S. Bray, Director, Medical Research Council
 - (13) Dr. Antony Coady, Medical Research Council
 - (14) Dr. S. Palmer, Founder, Family Planning Association
 - (15) Mr. Taylor Thomas, Executive Secretary, Family Planning Association
 - (16) Mrs. N. Dacosta, Nursing Matron, Royal Victoria Hospital
 - (17) Miss Olga Roberts, Midwifery Tutor, School of Nursing and Midwifery
 - (18) Mr. Donnelly, Charge, U.S. Embassy
 - (19) Mr. A. Cham, Minister of Education and Acting Minister of Health
 - (20) Mr. Jobarta, Commissioner, Lower River Division

