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MATERNAL AND CHILD HEALTH/FAMILY PLANNING PROJECT

FOR

THE GAMBIA, WEST AFRICA

BENIN, WEST AFRICA

LESOTHO, SOUTHERN AFRICA

* * * * *

NINTH SEMIANNUAL REPORT

(JULY 1, 1975 - DECEMBER 31, 1975)

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I N T R O D U C T I O N

The Ninth Semiannual Report of the Regional Maternal and Child Health/Family Planning project which is being conducted in The Gambia, Benin (formerly Dahomey) and Lesotho describes activities being carried out in the three countries as well as in the Home Office in Santa Cruz from July 1, 1975 through December 31, 1975.

Details of the activities which took place during this six month period are recorded in the body of this report, but highlights of the major events that occurred follow. As was noted in our last report, Mrs. Ts'edi Nts'ekhe from Lesotho passed away unexpectedly in July of 1975. Mrs. Nts'ekhe was selected as the original counterpart to Ms. Patricia Goodale, the UCSC technician who arrived in Lesotho in March of 1972, and Mrs. Nts'ekhe had served in the capacity of coordinator of maternal and child health/family planning services for the Ministry of Health since that time. The Ministry of Health of Lesotho selected Mrs. Manthua Seipobi as replacement for Mrs. Nts'ekhe and Mrs. Seipobi has been serving as counterpart to Ms. Goodale since her appointment. The project has been fortunate that the remaining counterparts have not changed during the period covered by this report, which has led to consistency and continuity in program efforts.

There were two major additions to the field staff during the second half of 1975. Dr. George Walter was succeeded as field coordinator by Dr. Paul Wilson, a pediatrician from Tiburon, California. Following his appointment, Dr. Wilson was given orientation in Santa Cruz and moved to Benin during the month of July to take over responsibilities of field coordinator. Dr. Wilson traveled to Benin with his wife, Norma, who is a pediatrics nurse practitioner. Another important

addition to the field staff was Ms. Turra Bethune who joined Ms. Anne-Marie Tinembart in Benin as the second field technician in that country. Ms. Bethune is a graduate of the University of Michigan School of Public Health where she received her M.P.H. in health planning and population planning. Ms. Bethune was joined in Benin by her husband, George, who is also a graduate of the University of Michigan School of Public Health. With these two additions to the field, the staff is now at full strength except for one technician in The Gambia. After three and one-half years of service, Ms. Ione Armstrong resigned from the project in August to accept a position at the School of Nursing, St. Thomas, Virgin Islands.

Two vehicle accidents occurred which involved project staff. An accident in Lesotho seriously damaged a project vehicle but injured noone. An accident in Benin in which a project Chevrolet Suburban rolled over three times resulted in a back injury to Ms. Tinembart. She was emergency evacuated to Switzerland where she is presently convalescing. She is expected to rejoin the project in February. Our sincere appreciation for the efforts of Ambassador James Engle, Al Alemian, Dr. and Mrs. Wilson, and the Benin Ministry of Health in insuring safe transport of Ms. Tinembart to Geneva.

During this reporting period, several significant changes occurred within the Government of Dahomey. One of these was the renaming of the country to The People's Republic of Benin. The name of the country was changed from Dahomey which had connotations of colonialism and referred to only one tribe in a multi-tribal country. The name "Benin" was selected for two reasons: (1) it would be a new name no longer associated with its previous status as a French colony and (2) it referred to the entire area around the Bay of Benin and would include all the tribes represented in the country.

A US/AID evaluation team which visited Benin and The Gambia in May, 1975,

found the program proceeding satisfactorily and recommended that the program be continued through Phase II. The results of this evaluation are attached as Appendix A. There have been some delays in obtaining approval of the Phase II proposal by AID/Washington and a firm budget has not been approved for this part of the project. The lack of these approvals has hampered project development, especially in The Gambia where the project is one staff person short.

This report is divided into four sections describing activities which have occurred in Santa Cruz, in The Gambia, in Benin and in Lesotho.

SANTA CRUZ OFFICE ACTIVITIES

Activities during the period July 1 through December 31, 1975, at the Santa Cruz office included implementation of a Nurse Practitioner/Family Planning (NP/FP) course for nurses and nurse-midwives from The Gambia and Lesotho; recruitment, orientation, and placement of new staff; negotiations of new program plans and budgets with AID/Washington; a program evaluation trip to Lesotho by Project Director, Jim Franks; an administrative trip to Africa by Assistant Director, Bob Minnis; and regular accounting and purchasing activities required much of the attention of the Santa Cruz based staff.

TRAINING

The English language NP/FP training cycle which was conducted October 13 through December 5, 1975, was attended by Mrs. Michelle Sarr and Mrs. Jorjoh Cham-Kinteh from The Gambia, and Mrs. Mirriam Khaketla, Mrs. Celia Nkhahle, Mrs. Ts'edi Moshabesha and Mrs. Dorothy Soqaka, all from Lesotho. A letter from one of the trainees from Lesotho has been included in the Lesotho section of this report.

STAFFING

Dr. Paul Wilson, the new field coordinator, was given orientation in Santa Cruz and attended French language instruction at the Monterey Institute of Foreign Studies for one month. After he completed his language training he joined the staff in Benin on July 12, 1975. Dr. George Walter completed his tour in Africa and moved to Santa Cruz and has remained on the staff as a consultant and trainer on the NP/FP training course.

PHASE II BUDGETING AND PROJECT PROPOSAL

During the months of October and November, Bob Minnis visited the three project countries to accomplish an administrative review and to collect information for the project's proposal for the calendar years 1976, 1977 and 1978. The results of Mr. Minnis's work in the three project countries were written into a proposal which was submitted to AID/Washington prior to the end of December. The current status of project funding is that an extension has been received to insure operation of the project for the months of January and February and it is anticipated that an additional extension will be granted until final action can be taken on the project proposal. As of December 31, 1975, the Santa Cruz office has not received a contract insuring project continuation for the duration of Phase II.

PROJECT EVALUATION AND CONSULTANTS

AID/Washington notified the University of California Extension that it planned to send a Health Project Design team to Lesotho to assess the current and future direction of the program in Lesotho. At the request of the UCSC Project Director, Jim Franks, this team was expanded to include a representative from the University of California. Mr. Franks joined the team which was composed of Dr. Rodney Powell, Dr. Eugene Boostrom and Mr. Oscar Gish. With the exception of Mr. Franks the members of the team were employed as consultants by the American Public Health Association to accomplish the health sector review in Lesotho. The major conclusion of this survey was that the University of California should continue operation of its program until the end of calendar year 1976 at which time a new program would be implemented. At the end of the survey the team felt: (1) that by the end of calendar year 1976 the Government of Lesotho would have the technical capacity for extending MCH/FP services throughout its facilities; (2) that the pilot area at Ts'akholo would be functioning effectively as a training demonstration center for further MCH/FP or related health activities' replication; (3) that host

country personnel would 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 the end of CY 76; and (4) that the host government will assume financial responsibility for and integrate necessary project activities into the government structure. Based on this study UCSC has recognized that its mission is near successful completion and has taken action to close down project operations by December 31, 1976. This is two months earlier than originally planned when the project contract was awarded by AID.

Ms. Elisabeth Burns, who had been sent to Lesotho at the request of the Ministry of Health of the Government of Lesotho to conduct a country-wide Retrospective Survey of Contraceptive Acceptors completed her work at the end of November, 1975. Analysis of this survey will be accomplished by a biostatistician to be sent out during the month of February, 1976. During Mr. Minnis's visit to Lesotho the Ministry of Health requested a biostatistician be hired as a consultant to assist the Ministry in analyzing four surveys which had been initiated by the MCH/FP project. These surveys include: the Retrospective Survey of Contraceptive Acceptors a Village Leaders Survey; a KAP Survey administered to medical professionals in Lesotho; and a Model Village Survey. A biostatistician from the University of California at Berkeley, Mr. Harrison Stubbs, was located to provide this consulting assistance. He will be traveling to Lesotho during the last week of February.

The Ministry of Health of Lesotho also requested that an OB/GYN be sent to Lesotho around June, 1976, to provide follow-up training for nurse practitioners who have been trained in Santa Cruz and to assist in the development of curriculum for localizing the nurse practitioner course in Lesotho.

PLANNING

A French language NP/FP training program has been planned to begin in February and run through April 16, 1976. The plan is to have eight nurse-midwives

from Benin attend a program to be conducted in Santa Cruz County with some additional clinical experiences programmed in Santa Clara County. This course will run ten weeks instead of the eight weeks of previous cycles as a result of evaluation by past trainees. The additional two weeks will allow more time for patient counseling and clinical skills practice.

Planning involved in the presentation of a project proposal for the continuation for Phase II was central to the Santa Cruz office activities during the past six months.

GENERAL ADMINISTRATION

The Santa Cruz office maintains a continuous review of project purchases and expenditures made here and in Africa. Unofficial monthly expenditures reports are sent to AID/Washington and an official report of expenditures is sent to AID by the University Accounting Office on a quarterly basis. All purchases of commodities for the project are made through the University Purchasing Office after an order has been approved through the field administrative office and the Santa Cruz office. In addition to medical supplies and books, a large number of family planning supplies were shipped to all three project countries. Two new vehicles were shipped to Lesotho to support logistical requirements of the project in that country. A great deal of difficulty was encountered in shipping household effects to Ms. Turra Bethune in Benin. These difficulties have been traced to communication problems between the University and the international freight forwarders. As of the closing date of this report, some of Ms. Bethune's household effects were in Lagos, Nigeria, awaiting clearance out of the port there.

VISITORS

In addition to numerous local visitors, we were pleased to receive two distinguished visitors from Lesotho on October 7. The Honorable Mr. Joseph

Kotsokoane, the Minister of Foreign Affairs visited the campus accompanied by Mr. Maiane from the Lesotho Embassy in Washington, D. C. A luncheon was held for Mr. Kotsokoane and Mr. Maiane which was attended by the Chancellor of the University, Dr. Mark Christensen; the Dean of University Extension, Dr. Carl Tjerandsen; the Vice Chancellor of the University, Dr. Eugene Cota-Robles; Dr. John Marcum, Provost of Merrill College; Robert Minnis, Assistant Project Director; and Ruth Wilson, a student who had done a field study project in Lesotho. Following the luncheon a reception was held at the home of Dr. Marcum where Minister Kotsokoane was interviewed by the San Jose Mercury.

Also visiting the Santa Cruz campus was Mr. Ben Pekeche, an employee of the Lesotho Family Planning Association. He visited Santa Cruz from November 5 through 7 where he was able to review the project activities with Dr. Tjerandsen, Dean of University Extension, and visit with the trainees from Lesotho.

Ms. Pat Goodale, public health nursing advisor in Lesotho was in the U.S. on a rest and recuperation trip, and she stopped by the Santa Cruz campus to assist in the development of a program proposal for Lesotho. Following her visit in Santa Cruz and other points in the Western United States, she traveled to Chicago where she plans to attend a Management Training Course with Mrs. Manthua Seipobi, her counterpart from Lesotho. This course is offered by the Chicago Planned Parenthood Association, Training and Research Center in conjunction with the University of Illinois School of Public Health. This program is scheduled to run from January 5 through January 30, 1976.

PROJECT ACTIVITIES IN THE GAMBIA

INTRODUCTION

As in the first half of 1975, the major concentration of project activity in The Gambia continued in the direction of updating existing health services, extending maternal and child health and family planning services into the rural areas, and integrating these services together with training into the general health services of the country. Much progress was made in preparing the curriculum for the Auxiliary Nurse Training program and the training school at Mansa Konko has been completed except for the roof and internal fixtures. Services continue to improve at the Mansa Konko pilot area. There is now a functioning postpartum clinic that is well attended. The introduction of family planning services continues at a more rapid pace. There have been family planning services established at the Royal Victoria Hospital in Banjul, and there are family planning education programs at Sukuta and Brikama and family planning information and counseling are now available at Mansa Konko. The Ministry of Health is planning to incorporate the activities of the Gambian Family Planning Association into its regular health program over the next three to five years. This, in effect, will amount to an absorption of the Gambian Family Planning Association services into the Ministry of Health program.

The UCSC public health advisor assigned to Mansa Konko, Ms. Ione Armstrong, left the project on August 12, 1975, to assume a position on the faculty of the School of Nursing at the University of Virgin Islands in St. Thomas. Ms. Anne Richter, the public health advisor assigned to Banjul, has been transferred to Mansa Konko to assume the duties of Ms. Armstrong. A replacement for the Banjul technician has not been selected at the time of this report.

Extensive program planning meetings were held during the months of October, November and December and the results of these meetings produced a tentative work plan for the calendar years 1976, 1977 and 1978. The Ministry of Health has also put together a scheme for improvement of maternal and child health in The Gambia for the ten year period 1975/76 to 1985/86. Dr. Paul Wilson spent a great deal of time in The Gambia reviewing the project there and visiting two potential expansion sites at Kuntaur and Kerewan. It is anticipated that during the calendar year 1976 activities will commence in these two expansion areas.

Mrs. Bertha M'Boge completed her training in the United States at the end of June, 1975, and has returned to The Gambia to assume the major responsibilities of coordinating maternal and child health services for the country.

PROJECT RELATED MCH SERVICES

Field reports from The Gambia concerning MCH services offered at Mansa Konko and some of the outreach areas in the field indicate a fairly consistent patient load. The exceptions to this are a sizable increase in well child visits over the past six months and an increase in the number of postpartum first visits. Following is a summary which reports the average monthly number of visits for MCH services and some of the training sessions which took place during this reporting period.

MCH SERVICES

| <u>Activity</u> | <u>Health Center</u> | <u>Field</u> |
|--------------------------|----------------------|--------------|
| Well child visits | 269 | 707 |
| Antenatal first visit | 67 | 217 |
| Antenatal revisit | 109 | 448 |
| Postpartum first visit | 74 | NA |
| Deliveries | 24 | 1 |
| DPT series completed | 25 | 19 |
| Tetanus series completed | 1 | 2 |
| BCG | 62 | 111 |

HEALTH EDUCATION

| <u>Location</u> | <u>Attendance</u> | <u>Number of Sessions</u> |
|-------------------------|-------------------|---------------------------|
| Royal Victoria Hospital | 157 | 3 |
| Sukuta | 612 | 7 |
| Mansa Konko | 79 | 2 |
| Brikama | 540 | 2 |

The establishment of family planning services at the Royal Victoria Hospital marks an important advance in the project in presenting family planning information to the people of The Gambia. This coupled with family planning education courses at Sukuta and Brikama and the counseling which is taking place at Mansa Konko represent major advances in the offering of family planning services in the rural areas of The Gambia. Although the introduction of family planning services and information through the project has been slow, this six months perhaps marks the most rapid increase in this area to date. The Ministry of Health's plan to absorb the Gambian Family Planning Association activities into the regular Ministry of Health maternal and child health program represents a major step towards the solidification of a national plan for family planning. As of the writing of this report, a detailed plan for incorporation of Gambian Family Planning Association activities into the Ministry has not been produced but it is anticipated that this takeover will be a gradual one, over the next three to five years.

GAMBIAN PLAN FOR MATERNAL AND CHILD HEALTH

A major planning step taken by the Ministry of Health during the second half of 1975, was the development of a plan for the improvement of maternal and child health in The Gambia. This plan which is included below was presented to the Gambian Government for consideration for incorporation into the Government's next Ten Year Plan.

Introduction

1. A plan for the development of the national health services of the Gambia, 1975/76 to 1985/86, has been prepared. The main thrust of the proposed development is to be directed at improvement and strengthening of rural health services, with a view to giving priority to the health needs of the rural majority as well as making a "frontal attack" on the leading health problems of the country. Another feature of the plan is that integration of services, especially at the peripheral level has been emphasized. But integration does not mean that services should lose their individuality and importance. The strengthening of maternal and child health services is an example of a special programme which is to be developed within the context of comprehensive basic health services. The purpose of this paper is to document details of the required development.

2. In this country, as in many other countries, mothers and children are provided with special (MCH) services, in addition to the general health services from which they also benefit. The special services include, inter alia, special staff, special hospital wards, and special sessions or clinics in hospitals, health centres, and dispensaries. In addition, there are a few MCH units which are established and operated as independent separate entities (these are mainly mission units). Government MCH clinics are operated in all 10 existing health centres, in 3 out of 15 existing dispensaries, in 12 out of 37 sub-dispensaries, in Bansang Hospital, and at New Street, Half-Die, and Serrekunda in the Banjul/Kombo St. Mary area. All the 8 mission rural health units, mostly in the Western Division, are primarily MCH establishments. The distribution of the clinics is illustrated in Table 1. It can be seen from this table that the country has a network of MCH institutions, even though the foundations of the existing infrastructure are not strong.

TABLE 1

DISTRIBUTION OF MCH CLINICS

| <u>Area</u> | <u>Population</u> | <u>No. of Clinics (Units)</u> | <u>Population per Clinic</u> |
|------------------|-------------------|-------------------------------|------------------------------|
| Banjul | 39,476 | 2 | 19,738 |
| Kombo St. Mary | 38,934 | 3 (a) | 12,978 |
| Western Division | 90,707 | 13 (b) | 7,000 |
| North Bank | 93,536 | 6 (c) | 15,589 |
| M.I.D. | 100,818 | 5 | 20,163 |
| Upper River | 87,074 | 3 | 29,024 |
| Lower River | <u>42,652</u> | <u>5</u> | 8,530 |
| TOTAL | 493,197 | 37 | |

(a) includes 1 mission; (b) includes 7 mission; (c) includes 1 mission

3. Many good reasons can be adduced to justify the priority given to the organization and proposed intensification of MCH services, if necessary ahead of the other branches of the basic health services. It is sufficient, however, to refer to only two reasons -- that the easiest and most effective strategy for increasing the total health of the nation is to improve maternal and child health and that mothers and children form the majority of the population. Most of the diseases that cause sickness, disability and death among children and those that are associated with pregnancy and childbirth are preventable. Women of child-bearing age and children as a group constitute 65% of the total population of the country. Young children (0-4) form 16.8% of the population; children as a whole (0-14) represent 41.5%; while child bearing women (15-49) represent 23.5%.

Maternal and Child Health

4. The general and ultimate aim of MCH services is to bring about a high standard of the health and well-being of mothers and children. Any future progress towards this goal will only be measurable if the present state of maternal and child health is defined.

5. MATERNAL HEALTH. There are no comprehensive data on the local pattern of maternal morbidity and mortality. But it is common knowledge that the majority of Gambian girls marry young and child bearing is their fulfillment of life. No figure is available on the crude fertility rate, but the crude birth rate is high (49-50 per 1,000). Frequent and repeated pregnancies are common: an analysis¹ of 132 mothers attending an antenatal clinic at Mansa Konkò showed that 16% were primigravida, 47% were having their second to fourth pregnancy, 25% were having their fifth to seventh pregnancy, and 11% were having their eights to tenth pregnancy. Those frequent pregnancies are a burden on maternal health, especially as mothers may be already weakened by sub-standard nutrition and endemic infections. Anemia is very common. Although the majority of women deliver easily, obstetrical complications occur (cephalo-pelvic disproportion, haemorrhages, sepsis). Toxemia of pregnancy is encountered commonly. According to one obstetrician with local experience the Royal Victoria Hospital 2 or 3 years ago had about one case of ruptured uterus weekly and about one death from toxemia of pregnancy monthly. The position has now improved but it is still about one case of ruptured uterus monthly and about one death from toxemia of pregnancy six-monthly. Table 2 illustrates the obstetrical experience in Banjul and Royal Victoria Hospital.

6. CHILD HEALTH. Data are more easily available in regard to child health. About 25,000 children are born alive in The Gambia each year. Of these, 5,425 (217 per 1,000) die before the age of 1; or 7,125 (285 per 1,000) die before the age of 2, or between 7,500 and 10,000 (30-40%) die before the age of 5².

TABLE 2

MATERNAL AND PERINATAL MORTALITY FOR MOTHERS HAVING CHILDBIRTH IN
ROYAL VICTORIA HOSPITAL AND IN BANJUL AND FOR BABIES BORN IN BANJUL

(Figures partly obtained from obstetrical register in R.V.H. and partly
from registers for births and deaths in Medical Headquarters.)

| YEAR | Hospital deliveries | Maternal deaths | Maternal mortality rate | Births in Banjul and R.V.H. | Still births Banjul & RVH | Still birth rate | Total births Banjul only | Perinatal deaths Banjul only | Perinatal mortality rate |
|------|---------------------|-----------------|-------------------------|-----------------------------|---------------------------|------------------|--------------------------|------------------------------|--------------------------|
| 1961 | 549 | 12 | 21.8 | 1205 | 55 | 45.7 | 1196 | 25 | 20.9 |
| 1962 | 706 | 9 | 12.7 | 1404 | 75 | 53.4 | 1268 | 36 | 28.7 |
| 1963 | 725 | 18 | 24.8 | 1441 | 93 | 64.5 | 1362 | 33 | 24.2 |
| 1971 | 1130 | 13 | 11.5 | 1881 | 139 | 73.3 | 1735 | 39 | 22.4 |
| 1972 | 1182 | 25 | 21.1 | 1908 | 109 | 57.1 | 1790 | 40 | 22.3 |
| 1973 | 1397 | 19 | 13.6 | 2102 | 126 | 59.9 | 1830 | 40 | 21.8 |

7. Most of the data is derived from the 1973 census. The experience of the Medical Research Council with the health of the children among the 700-800 people at Keneba seems to support this situation of high wastage. At N'Gayen Sanjal, 17 out of 46 women (35%) attending an antenatal clinic reported that their last born child had died. If this result (based on small sample) can be confirmed, it will be another pointer to the impression that the problem of child health in the country is one of survival.

8. The leading causes of childhood morbidity and mortality are not accurately defined for the whole country, but they can be summed up as an interaction of infections of malnutrition. The most common diseases are diarrhoea, respiratory tract infections, malaria, anaemia, and malnutrition. Table 3 is based on the impression of a doctor who has worked in The Gambia for a long time. Table 4 illustrates the pattern recorded for Banjul in fairly recent years.

TABLE 3

LEADING CAUSES OF CHILDHOOD DISEASE IN THE GAMBIA

| | |
|------------------------------------|---|
| A. Common and serious: | diarrhoea, pneumonia, malnutrition, malaria anaemia |
| B. Common but non-fatal: | Other respiratory tract infections, skin sepsis and skin conditions, ear and eye infections, intestinal parasites (hookworm, roundworm) |
| C. Less common: | Injuries, burns, poisoning, measles (? declining), whooping cough (if not epidemic), tetanus, tuberculosis, meningitis |
| C. Occurs but rarely diagnosed: | Amoebiasis, diphtheria, poliomyelitis, sickling syndrome, congenital abnormalities |

TABLE 4

ANALYSIS OF REGISTERED CAUSES OF DEATH AMONG UNDER FIVE CHILDREN
DYING IN BANJUL OR THE ROYAL VICTORIA HOSPITAL IN 1971 AND 1973

| | | |
|--|-----|--------|
| 1. Prematurity, perinatal conditions, neonatal infections | 188 | 27.68% |
| 2. Diarrhoeal diseases | 115 | 16.93 |
| 3. Pneumonia | 99 | 14.58 |
| 4. Malaria | 65 | 9.57 |
| 5. Tetanus | 15 | 2.20 |
| 6. Malnutrition | 12 | 1.76 |
| 7. Sepsis and septicaemia | 10 | 1.47 |

TABLE 4, cont.

| | | |
|----------------------------------|------------|--------------|
| 8. Anaemia | 9 | 1.32% |
| 9. Measles | 6 | 0.88 |
| 10. Whooping cough | 5 | 0.73 |
| 11. Meningitis | 3 | 0.44 |
| 12. Other diagnoses | 22 | 3.24 |
| 13. No specific diagnosis stated | 25 | 3.68 |
| 14. No diagnosis at all stated | <u>105</u> | <u>15.46</u> |
| TOTAL | 679 | 100.00% |

Deficiencies

9. Since MCH services are closely related to, or established as an integral part of, rural health services, the weaknesses in the present set-up for mother, and child health care will also parallel those in the general fabric for a comprehensive basic health service. These weaknesses are enumerated in the following paragraphs.

10. COVERAGE. It should be obvious from Table 1 that geographical coverage is far from satisfactory, for a service dependent on reaching the individuals concerned if it is to be effective. But demographic coverage is even more unsatisfactory, and the scope and quality of the present services are only modest. While the total number of live births in 1973 was expected to be 25,000, only 17,000 mothers attended at least once at antenatal clinics. Attendance at child health clinics may have been more encouraging. Out of a total of 83,191 children in the 0 - 4 age group, 62,000 were recorded as new cases at child health clinics in 1973.

11. FAMILY PLANNING. While the traditional activities of the MCH programme have yet to be put on a sound basis, the family planning component is still in a "budding" stage. The Gambia Family Planning Association (largely financed by external agencies, as in many other developing countries) has done some pioneering work in this field. With the part-time support of 6 doctors (3 in Banjul/Kombo St. Mary and 3 in the provinces), and a full-time staff at present of 2 nursing sisters, 6 welfare assistants, 4 field workers, it has raised its clientele from 1,307 at the end of 1971 to 5,846 at the end of 1974. Some effort has been made recently to motivate rural communities to accept and seek the family planning service, but most of the present coverage is limited to the urban population of Banjul and its environs. Furthermore, it is not certain at present as to whether

the loop will prove a successful method in The Gambia rural environment. The pill is the most popular method in Banjul.

12. STAFF. At the peripheral level MCH health workers in The Gambia at present are the trained nurses and untrained auxiliary nurses. Of the former, only 3 sisters and 12 trained nurses are deployed to the rural health services at present, and the basic training of these was not necessarily tailored to the needs of The Gambia MCH services. The MCH programme will to a large extent be made by the number and quality of trained MCH workers who become available during the development period.

13. SUPERVISION. At present one doctor is working part-time as supervisor of MCH services and part-time as paediatrician in the Royal Victoria Hospital. The other clinical specialists especially those concerned with the health of mothers and children, have yet to be auspiciously drawn into the problems of the peripheral MCH services. There are no doctors to provide guidance, leadership and supervision at the local level.

14. ACTIVITIES AND EQUIPMENT. These are not streamlined and standardized at present. This deficiency makes it doubly difficult for staff trying to cope with the work without being fully trained.

Programme Objectives

15. Existing MCH services in The Gambia are already directed at protecting mothers and children from preventable causes of illness and death, through antenatal clinics, supervision during delivery, and child health clinics. A start has been made in operating combined mother and child clinics, but in most places sessions for mothers are still organized and held separately from those of children. To strengthen the MCH programme in the country, it is necessary to widen the coverage and scope of the programme as well as to standardize and intensify its activities. To this end, the objectives of the programme over the 10 years plan period will be as follow:

- (i) To improve and strengthen MCH activities, and to extend these activities to cover at least 80% of pregnant women and children under 5 years of age.
- (ii) To incorporate family planning into the MCH programme.
- (iii) To immunize all pregnant women and children attending mother and child health clinics in accordance with a standard schedule.
- (iv) To standardize activities in mother and child health clinics according to methods worked out in Mansa Konko or other pilot area.

(v) To incorporate MCH programme into the basic health services where this is not already done.

(vi) To reduce prevailing maternal and child mortality by 50%.

16. In order to achieve these rather long-term objectives, it is necessary to have a preparatory or initial phase in which required personnel will be trained, activities will be standardized, more data will be collected, and doubtful methods will be tried out in a pilot area. At the same time, it is intended to make gradual progress towards improvement of MCH services over a wide front.

Organization of MCH Services

17. COVERAGE. The general approach and most of the activities in an MCH programme can be classified as preventive or public health. But MCH services are personal services, and as such they have to be organized so as to reach the individuals concerned in order to be effective. The question of coverage is therefore of critical importance in working out an effective organization. But here in The Gambia it is not only coverage with MCH services that is needed. Coverage with comprehensive basic health services is also essential. For this reason the strategy adopted to deploy peripheral MCH services, within the country's constraints of staff and running funds, is to post resident MCH workers to:

- (a) existing urban MCH centres, or polyclinics when established in future;
- (b) all health centres and (c) all dispensaries.

The staffing patterns proposed for health centres and dispensaries, the main institutions for MCH coverage, are contained in Annexe I. With that level of proposed staffing, it is expected that each health centre will have 2 to 3 satellite units which will be visited regularly by its staff, and each dispensary 1 or 2 satellite units. This arrangement will enable existing Government health centres and dispensaries alone, when fully staffed, to run regular MCH clinics in at least 70 stations throughout the country. This coverage could be expanded by new health centres (5) and dispensaries (10) and by mission units. Because most MCH consultations can be easily timed, with little detriment to the health of mother or child, the use of periodic or mobile clinics is technically disadvantageous in MCH work than it is in outpatient work. But even in the MCH field a mobile team cannot provide the daily and comprehensive care that should be aimed at for each community. Mobile health services, including mobile MCH clinics, therefore, will only be provided as a temporary expedient. At present it is not clear whether coverage by static units will also be more economical than the use of mobile teams.

18. It might also be necessary at a future date to consider posting resident MCH workers to some of the sub-dispensaries as a step towards converting these into dispensaries. But a home-based MCH service is ruled out at present. There are indeed some advantages in sending trained MCH nurses into homes, to conduct deliveries and health education there and to get first hand information on home conditions. But time is wasted in travelling, the demographic coverage achieved by one worker in these circumstances is small, and without the support of other institutional workers and facilities it is difficult to provide an effective standard of MCH service under such a scheme. On the other hand, it is appreciated that it is not always easy for busy and hard-working mothers in the rural areas to go, or bring their well and sick children, to clinic regularly. It shall therefore be necessary to ensure that arrangements will be available to motivate mothers' attendance. This will be done through contact with village leaders, through health education in clinics, and through the use of volunteers, traditional birth attendants and other non-medically qualified workers. One of the functions of the pilot scheme proposed in paragraph 19 will be to try out the use of traditional birth attendants, volunteers, and area council employees in visiting homes, especially homes where birth has taken place recently, in order to persuade and encourage mothers to attend clinics. In addition to motivating mothers, the conduct of MCH clinics will be organized with the objective of reducing to a minimum the time wasted by a mother in travelling to and waiting in a clinic. This is normally done by seeing mothers and their children in one clinic (combined MCH clinic); by ensuring prompt attention (a well organized flow of patients without long delays, waiting to be seen or for medicines); and by covering as far as possible all mother's needs in one visit and not asking them to come back to clinic when it is not essential.

19. DEMONSTRATION AREA. Extension and intensification of the existing pyramidal organization, with many MCH clinics at the primary contact or peripheral level, will entail many problems of communication between centre and periphery and of logistical support. Finding solutions to these problems could be facilitated by the initial use of a demonstration area. The U.S.-supported MCH scheme based at Mansa Konko is available for this purpose, and it is also intended to establish another pilot zone in Brikama. However, it will also be necessary to ensure that demonstration is succeeded by expansion without delay. An effort will be made to prevent the demonstration scheme from being an end in itself. Indeed most of the activities to be undertaken or intensified in MCH clinics are simple

(see Annexe III) and have already been tried out elsewhere. Very few countries have succeeded in integrating traditional birth attendants in their MCH programmes. In The Gambia the demonstration area will also be utilized to determine the feasibility of utilizing these workers. There are probably over 25,000 confinements occurring in the country in each year, and of these not more than 7,000 are delivered in institutions or by midwives at present.

20. At the central level, it is intended to strengthen the MCH organization by having an MCH Committee and a full-time MCH Medical Officer. One of the functions of the proposed committee will be standardize equipment for MCH centres and to streamline and standardize activities in MCH clinics. Tentative schedules of equipment and activities appear in Annexe II and III.

21. OPERATIONAL ORGANIZATION. The broad and institutional organization of the MCH programme has been outlined in the foregoing paragraphs. Each health centre and, in due course, each dispensary will have facilities for deliveries and short-stay admission after delivery. But institutional delivery will remain beyond the reach of many Gambian mothers for a long time to come, mainly because of shortage of staff and facilities, but also because of distance. For this reason, antenatal care will be conducted in such a way as to divide mothers into three groups -- the high risk group, to be referred to hospital during pregnancy or for delivery; the moderate risk, to be delivered under the supervision of trained workers in health centre or dispensary; and those that may be referred to a traditional birth attendant or be left to be delivered by relatives at home.

22. Apart from delivery the hub of the MCH programme is the MCH clinic. Detailed organization of work at each clinic will depend on local conditions, including the number of available staff, type of premises available and the expected number of mothers and children. Departmental guidelines will be issued on the matter and seminars will be organized for MCH team leaders.

23. REQUIREMENTS. Most of the requirements for the proposed expansions and improvements are those of the basic health services (health centres and dispensaries). Sharing applies especially to expensive equipment such as motor vehicle. So the general requirements of the MCH programme are those of the basic health services. At the same time, it is possible to identify the special requirements of MCH services in terms of staff, staff quarters, MCH premises, special MCH equipment, and even special transport for MCH work. These requirements are listed in Annexe II.

1. Analysis carried out during September and October 1974 by nursing staff operating the U.S.-supported Mansa Konko MCH Project.

Footnotes:

1. Analysis carried out during September and October, 1974, by nursing staff operating the U.S.-supported Mansa Konko MCH Project.
2. These data are calculated from the 1973 Census. The results of investigations undertaken by the Medical Research Council among the small community of 7000 to 8000 people of Keneba Village also indicate a high rate of childhood mortality. But a comprehensive system of registration of births and deaths is not as yet developed and there have been no country-wide investigations of child health. Banjul, the capital city, is the only place where accurate vital statistics are available and here the infant mortality is well below 60.

ANNEXE II: REQUIREMENTS FOR DEVELOPMENT OF MCH PROGRAMME

A. CENTRAL LEVEL

1. One MCH Medical Officer: to assist the Chief Medical Officer full-time in the following duties:
 - Launching the MCH programme
 - Supervision of MCH services, including evaluation of results, identification of problems, and reviewing the programme
 - Coordination of the MCH activities of other government and non-government agencies with those of the government health services
 - Long-term planning of the development of comprehensive rural (basic) health services.
2. MCH Committee: to provide professional leadership and guidance, and consisting of:
 - MCH doctors
 - Medical Officer of Health
 - Specialists in Obstetrics and gynaecology and paediatrics
 - Senior Sister Tutor, School of Nursing
 - Nurse-Administrator and counterpart of the U.S.-supported MCH project
 - A representative of The Gambia Family Planning Association
3. One Land-Rover S.W. for supervisory duty.
4. Hospital Services: Existing facilities (including specialist services) in the Royal Victoria Hospital, and in Bansang Hospital when it is improved, will be available for mothers and children referred from peripheral health units.

B. INTERMEDIATE LEVEL: There is no administrative or technical set-up at this level in The Gambia at present. But it is proposed to strengthen this link by appointing Divisional Medical Officers and building a third hospital in the middle zone of the country. The posting of Medical Officers to each division will enable the health centres to which they will be attached to cope with much referred MCH work. Each divisional medical officer will require one Land-Rover for supervisory work.

C. PERIPHERAL LEVEL

1. Staff

(a) Rural Health Centres

| | |
|--------------------|---|
| Existing | 10 |
| Under construction | 2 (Yorobawol W Kiang) |
| Proposed | <u>3</u> (Fatota Kudang Sankande) |
| TOTAL | 15 (each covering 2 or 3 satellite clinics) |

15 Sisters

15 Nurse Midwives grade I or II

15 Nurse Midwives grade III

45 Community Nurses

(b) Dispensaries

Existing 15

Proposed 10

TOTAL 25 (each covering 1 or 2 satellite clinics)

25 Nurse-MIDWIVES GRADE III

75 Community Nurses

2. Vehicles: One for each health centre and dispensary if not already provided.

3. Staff Quarters: At each health centre and dispensary.

4. Tentative Schedule of Minimum Required Equipment: (each health centre and dispensary)

(i) Weighing Station:

1 or 2 x 25 kg spring or beam scale

weight trousers (at least 12)

1 weighing scale for adults

(ii) Immunization and Injection Station:

4 x 5cc syringes

50 x 21 or 23 gauge needles (DPT, measles, medicines)

1 x 1cc tuberculin syringe

10 x 26 gauge needles (B.C.G.)

- 2 stoves* primus or bottle gas
- 2 sterilizers for syringes and needles
- 2 storage containers for syringes/needles
- 2 cold or ice boxes
- 1 refrigerator* (kerosene type for provincial units, electric for Banjul/Kombo St. Mary area)
- 1 Cheatles forceps

* Unless already provided for unit

(iii) Examination and Advice Station:

- 1 examination couch or bed
- 1 bed screen
- 2 sphygmomanometers
- 2 stethoscopes
- 2 otoscopes
- 2 tongue depressors
- 6 clinical thermometers (disposable)
- 2 spirit lamps
- 6 urine glasses
- material for urine test (? sulpha salicylic acid)

(iv) Delivery Suite:

- 1 labour bed
- 1 drip stand
- sterile drip sets (disposable)
- 1 wash stand
- 1 wash basin
- 1 delivery set (UNICEF Standard)
- beds, beddings

Applicable only if unit performing deliveries.

(v) Records:

- Growth charts (with polythene bags)
- Clinic-based duplicate cards
- Antenatal cards
- MCH registers
- Tally cards for attendances, diseases seen, vaccinations done, etc.
- Family Planning cards

D. TRAINING REQUIREMENTS

1. A School for Community Nurses, i.e., nurses at the auxiliary level for MCH (including Family Planning) work in health centres and dispensaries.
2. Strengthening of MCH component in the existing School of Nursing.
3. In-service short courses, seminars, etc. for existing staff.

E. RESEARCH: Determination of the most suitable method for Family Planning in the rural areas, and collection of more data on the local pattern of maternal and child health, and trial of logistical support for supply and storage of vaccines, through the use of pilot area.

ANNEXE III: TENTATIVE SCHEDULE OF SPECIFIC ACTIVITIES AND
DISTRIBUTION OF SKILLS IN MCH CLINIC AND CENTRES

A. Activities in MCH Clinic

| Name of Activity | Children | Antenatal | Post Natal and Family Planning |
|-----------------------------------|----------|-----------|--------------------------------|
| 1. Registration | X | X | X |
| 2. Weighing | X | X | |
| 3. Examination and advice | X | X | X |
| 4. Immunization | X | X | |
| 5. Dispensing | X | X | X |
| 6. Health and nutrition education | X | X | X |

B. Distribution of Skills at Centre

(Parentheses indicate that skill can be developed if necessary)

| Type of staff available or likely to be available in future | Registration and recording | Weighing | Exam/advice for children | Exam/advice for antenatal | Exam/advice for family planning | Intra-uterine devices | Deliveries | Immunization | Dispensing | Health/nutrition education | Referral problem cases | Injections | Home visiting |
|---|----------------------------|----------|--------------------------|---------------------------|---------------------------------|-----------------------|------------|--------------|------------|----------------------------|------------------------|------------|---------------|
| | Trained Nurses | X | X | X | X | X | X | X | X | X | X | X | X |
| Community Nurses | X | X | (X) | X | (X) | X | X | X | X | X | X | X | X |
| Medical Assistant | X | X | X | (X) | (X) | (X) | (X) | X | X | X | X | X | X |
| Dresser Dispenser | X | X | X | | | | | X | X | X | X | X | X |
| Health Inspector | X | X | | | | | | X | (X) | X | | (X) | X |
| Non-Medical Workers | (X) | (X) | | | | | | | (X) | (X) | | | X |
| Traditional Birth Attendants | (X) | (X) | | | | | (X) | | (X) | (X) | | | X |

AUXILIARY NURSE TRAINING - MANSA KONKO

It has been well over a year since the idea of developing an auxiliary nurse training program in The Gambia was formulated. During this time there were many major obstacles which needed to be overcome before the program could be put together. The United States Embassy in Banjul contributed money from their Self-Help Funds to construct a training school at Mansa Konko. This school has now developed to the point where it will be ready during the early part of 1976, possibly by the end of February. As of December, 1975, the school had been completed except for the roof and internal fixtures.

A second major step which was required prior to the commencement of training of auxiliary nurses was the preparation of a curriculum for this training. The maternal and child health team in The Gambia has now produced the curriculum for the auxiliary nurse training. Graduates of this program will be considered community health nurses. (See Appendix B.)

WORK PLAN - PHASE II

During the months of October, November and December, Bob Minnis from Santa Cruz and Dr. Paul Wilson, project chief of party, visited The Gambia with the purpose of developing a work plan for the calendar years 1976 to 1978. A general work plan for The Gambia was developed and submitted to AID/Washington for consideration prior to the end of December. During negotiations and discussions with the Ministry of Health it was decided that some rural clinics would be visited by Dr. Peter N'Dow, Chief Medical Officer of The Gambia, and Dr. Paul Wilson in an effort to determine the feasibility of expanding the program to these centers. The major sites visited for this purpose were located at Kuntaur and Kerewan. Following is summary of conditions of the facilities at Kuntaur and Kerewan and recommendations on upgrading the personnel and facilities in order to deliver adequate maternal and child health services at these two sites.

ASSESSMENT OF KUNTAUR AND KEREWAN

| FACILITIES | KUNTAUR | KEREWAN |
|-----------------------------|--|--|
| Electricity - 24 hours | None | None |
| 12 hours | None | None |
| Scales - Adult | No | No |
| Child | Yes (lbs) | Yes (lbs) |
| Delivery table or bed | Bed | Bed |
| Room | Yes | Yes |
| Maternity beds | 6 | 2 (New wing building of about 16) |
| Water | River (no pump) | Well (by pump to reservoir) |
| Staff | Nurse Midwife (Wed. Nursing Sister, Nurse Midwife and Dr. from Bansang for Infant Welfare) Dresser Dispenser | Nurse Midwife Dresser Dispenser |
| Equipment | Minimal - 1 baby bassinet | Minimal - 1 baby bassinet |
| Refrigerator | None | None |
| Sterilizer | None | A very small instrument sterilizer 1 kerosene stove |
| Delivery Log | None | |
| Antenatal | Approx. 10 new/month | |
| Immunizations | Irregular | Irregular (Nurse midwife not present) |
| 1st Infant postnatal visits | 8-11/week | |
| Transport | None at present | Landrover Ambulance |

Recommendations for Kuntaur

1. Nurse Midwife with MCH/FP training
2. Training at Santa Cruz, Spring 76
3. If this is accepted as site for replication, suggest asking district Commissioner to recommend candidates from Kuntaur for School at Mansa Konko.
4. Transport - Ambulance for transfer
Kerosene refrigerator (UNICEF)
Delivery table (UNICEF)
Sterilizer
Kerosene stove and lamp
Bring instrument supply up to minimum standards
Adult scales
Water filters
Review water supply -- investigate well with pump
5. Initiate and maintain adequate MCH records

Recommendations for Kerewan

1. 1 Nurse Midwife with MCH/FP training (to staff new maternity)
1 Nurse Midwife
If trekking is begun, additional Nurse Midwife required
 2. Train Nurse Midwife for MCH/FP at Santa Cruz, Spring 76
 3. If this is accepted as site for replication, suggest asking district Commissioners to recommend candidates from Kerewan for school at Mansa Konko.
 4. Maintain transport
Kerosene refrigerator, stove and lamp
Delivery table
Sterilizer
Bring instrument supply up to minimum standards
Adult scales
Water filter
Review water supply, inspect pump and reservoir and make necessary repairs
 5. Proper record keeping - MCH records
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PERSONNEL

As mentioned in the introduction, Ms. Ione Armstrong completed her work with the project in August and joined the faculty at the School of Nursing, St. Thomas, Virgin Islands. Ms. Armstrong had been with the project since March, 1972, and had served both in Banjul and in Mansa Konko. The Ministry of Health in The Gambia and the staff of the University of California both express their appreciation for

Ms. Armstrong's fine work and wish her the best of luck in her new position on the faculty of the School of Nursing. An important change of personnel in the U.S. Embassy in Banjul took place in August. The Charge d'Affaires, Mr. James McFarland completed his tour in Banjul and was replaced by Mr. Michael Wygant. Mr. Wygant has been very active in his support of project activities and we believe that we will have a long, fruitful and pleasant relationship with the new Charge d'Affaires. The field staff in The Gambia, the chief of party and staff in the office in Santa Cruz are all very anxious to find a replacement for Ms. Armstrong to be assigned in The Gambia, but because of difficulties in receiving funding for the next phase it is impossible to hire a replacement at this time. Several candidates have been interviewed and a selection will be made as soon as possible in the new year.

PROJECT ACTIVITIES IN BENIN

INTRODUCTION

With the arrival of Ms. Turra Bethune on July 7, 1975 in Cotonou, the staff in Benin was once again brought up to full strength. Ms. Bethune and Ms. Anne-Marie Tinembart spent considerable time during the first portion of this reporting period orienting themselves to Benin and to project activities planned for the country. Unfortunately for the project and for Ms. Tinembart, a serious accident occurred on the return trip from northern Benin on September 9, 1975. A Government driver was driving the project Chevrolet Suburban, a dog ran out in front of the car, and the driver in an effort to avoid hitting the dog inadvertently left the road, which resulted in the vehicle turning over three times. Ms. Tinembart suffered a severe back injury and had to be medically evacuated to Switzerland where she is under the care of a bone specialist and a physical therapist. As of December 31, 1975, she was recovering well and anticipated an early return to Benin to resume her activities there.

With new staff in Benin a great deal of effort was spent in planning for project implementation for the next two years. Ms. Bethune wrote a rather comprehensive report of her activities during the three-month period of July - September, and this report reflects a good deal of her thinking about future direction for the project in Benin. It is a refreshing view by a new staff member and has been included in this report.

Project activities continued to be centered around the PMI in Cotonou and the Social Center in Akpakpa. However, a greater outreach effort has been initiated to include increased activity in centers in Minontchou and Agbalilame. Also, efforts have been made to reach the northern areas of Djougou, and Parakou and visits were

made as far north as Napipingou.

Four nurse-midwives who were trained in nurse practitioner/family planning skills in Santa Cruz during the period April through June, 1975, returned to their positions in Benin at the beginning of July. Ms. Renee Sadeler returned to the Maternite in Cotonou, Cyprienne Daouda to the Maternite in Porto-Novo, Lamatou Manigui returned to Djougou and Mme. Rachidatou Abdou to Parakou. Their efforts have resulted in improved MCH/family planning services in all four areas. There is now an active family planning program centered at the Maternite in Cotonou and similar efforts are being made in Djougou, Porto-Novo and Parakou.

Extensive program planning meetings were held during the months of October, November and December and the results of these meetings produced an outline of a work plan for the calendar years 1976, 1977 and 1978. It will be necessary to refine and expand this plan as funding becomes available for the next three calendar years. A statistical report of activities at the Social Center at Akpakpa and at the outreach centers at Minontchou and Agbalilame during the calendar year 1974 was prepared by Mrs. Betty Pasela, consultant to the project in Benin. Mrs. Pasela completed this report in August, 1975, and it has been included in the body of this report.

Most of the preparations were completed to bring eight Beninoises to the U.S. for training in nurse practitioner/family planning skills. It is anticipated that seven nurse midwives and one social worker will be arriving in Washington, D.C. on January 30 and will spend 10 weeks in Santa Cruz beginning February 8, 1976.

QUARTERLY REPORT FOR JULY THROUGH SEPTEMBER, 1975, BY MS. TURRA BETHUNE

The following Quarterly Report was prepared by Ms. Bethune on the basis of her observations during the period July through September, 1975. During this period she met with Ministry officials, other project staff located in Benin, and she did extensive traveling throughout Benin, especially in the areas of Parakou,

Djougou in the northern part of the country. Ms. Bethune worked especially closely with two counterparts who had originally been assigned to this project: Mrs. Lucie Ouendo from the PMI in Cotonou and Mrs. Constance Facia, the Directrice of the Social Center at Akpakpa.

I. Introduction

The report which follows is more than an accounting of project activities in Dahomey during the three months since my arrival in July 1975. While stating what progress has been made in a number of areas, I place considerable emphasis in writing this first report on what I consider to be the proper future direction of the project in terms of overall philosophy and short run future objectives. It is my desire that some of the ideas which are briefly articulated below can be developed in consultation with other project members here and in California, and incorporated into a more formal statement of a project plan. It should be kept in mind, however, that what follows is not my idea of a complete plan but rather the beginnings of one.

In gaining a sense of where the project has been in the past and should go in the future one might ask what the major areas of emphasis must be in order to improve Dahomey's capability to insure that its mothers and children are in the best possible state of health. In my mind there appear to be four areas which demand first attention: malnutrition, communicable diseases, family planning, and statistics. The first two are the primary causes of morbidity and mortality of women and children in Dahomey. Family planning offers great potential for contributing to the improvement of the health of mothers and children as well as relieving the pressure exerted by a rapidly growing population in its demand for limited resources. Acceptance of family planning, however, can only be realistically expected of mothers when they are confident that children born to them will survive. If, in the face of high infant mortality, mothers choose to bear many children to insure that a smaller number will live to lead healthy lives, family planning can only become a truly credible alternative when this threat of infant death has first been eliminated. Finally, statistics are necessary to every society in order to make choices as to how to most efficiently improve the well being of the total society. The technology for improving the health status of mothers and their children may be known, but it is of no value if one cannot utilize the limited resources available to gain the most effect for the greatest number of people. Does it really improve the health status of mothers and children if only the educated and well off in Cotonou and Porto-Novo receive the benefits of the available

health resources? If not, how does one decide where to invest capital, how and what type of personnel to train, and what are the best ways to use the skills available? Many of the answers to these questions are better reached with the aid of statistical information.

Given these four areas of primary importance, we must ask how is the UCSC project addressing these areas. In the past to a great extent the approach has been to rely on the effects of a strong health education program. The strategy was primarily one of integrating health education for the prevention of illness and death with the MCH services delivered at two health centers in Cotonou. Eventually these two sites would develop into model centers for the training of personnel from other MCH services throughout the country as well as nurse, midwives and medical students from the University.

The Phase II Plan written in May, 1974 clearly and comprehensively outlines past involvement and the forward direction of the project. The main impression one receives is a heavy emphasis on family planning in-service training and the integration of family planning services in the Mono Province as well as a continuation of present activities at the Centre Social Akpakpa and the PMI in Cotonou.

Nevertheless, it appears that the Phase II Plan neglected to a certain extent the presumed first step for attaining the improvement of the quality of life through the reduction of preventable maternal and infant mortality and morbidity. Basic curative care at the primary level and preventive measures other than health education have not been given an appropriately high priority. The success of a family planning program might partially rest on a significant reduction in morbidity and mortality. Further, while integration of health education into MCH services is an important step in the prevention of morbidity and mortality, other steps must be taken to upgrade curative services if the health education program is to realize its potential. Examples of such services include vaccinations for all children, prenatal and postpartum care, and safe, aseptic delivery services for most women.

If the UCSC project is to have an effect on the health status of Dahomey's women and children, it will be due to the fact that the importance of all of the components of an MCH system of care have been recognized at the expense of none. This is what is beginning to happen at the Centre Social D'Akpakpa. Work here should continue along with the efforts to fulfill the initial project strategy of developing selected sites for the purpose of providing model training centers. However, let us keep family planning and health education in their proper perspective beside other components of the MCH system.

II. Project Status Report

A. Family Planning

1. P.M.I.

The family planning 1974 statistics from the PMI were compiled and reported the project by Mme Dehoue. The yearly report form used in 1973 was revised and some additions made in order to obtain more information concerning contraceptive behavior, clinic utilization, and infertility. The annual statistical reporting form was then mimeographed for use by the new family planning sites at the Maternite in Cotonou and Djougou and at the PMI in Parakou. It is hoped that the family planning services to be established will utilize this form so that the Health Ministry will eventually have uniform family planning data for planning purposes. To be even more optimistic, perhaps CNDPF will also find this format useful.

A brief simple summary of the 1974 statistics can be made in order to illustrate that the statistics can be used to give us information about the clientele being reached (and who is not reached), what their needs are, how they are attracted to the service, their fertility behavior, etc. The information can also give service utilization data, an indication of growth trends, and assistance towards making projections about future resource needs.*

Finally a comparison was made between the 1973 and 1974 PMI family planning statistics in an attempt to begin to look for trends for planning purposes. As a result a "client-type" was described simply to depict which women were utilizing the service and at what point in their reproductive lives, after how many children, and what methods they were choosing. The PMI personnel appeared to find this very interesting. If the increase in clients over time continues as in 1974 it is expected that there will be more than 500 women reached during 1975.

2. Maternite - Cotonou

Dr. Assani, director of the Maternite - Cotonou, designated his office for use as the family planning clinic site at the Maternite. To date the office has been equipped with the necessary instruments, contraceptives, etc. The following activities have taken place in addition to the provision of the equipment:

1. A clinic-patient information system which included a patient register, clinical records, infertility records, patient appointment cards, a simple inventory system, laboratory test recording system, and a number of client visits recording system. The notebook for doing a monthly inventory was designed to facilitate projecting future contraceptive stock needs in advance and for estimating yearly operational costs. Such data would then more easily enable the Ministry of Health to eventually budget appropriately for family planning services in Dahomey.

*See report of Mrs. Betty Pasela, consultant to project in Benin, pp. 45-65.

2. Oral instruction and demonstration took place in how to use the hemoglobinmeter, pregnancy test kit, sterilizer, and autoclave.
3. An information manual was provided which included a French translation of how to use or employ the hemoglobinmeter, sterilizer, autoclave, urine analysis test, and pregnancy test kit. It included the modes of action, indications, contraindications, precautions, secondary effects and dosage of Depo Provera 150, ethinyl estradiol, Norinyl 1+80, and lippes loops. For purposes of detection and referral the manual also included the criteria for identifying high risk women.
4. An attempt was made to determine personnel roles and responsibilities. At this time it is difficult because only 1 sage-femme and 1 fille de salle have been assigned to this service. There is need for a third person and this will probably become evident as the client volume picks up. The objective has been to try and develop a good support team so as to best utilize the time and abilities of the sage-femme. My impression is that this is understood by Mme Sadeler. However it cannot be demonstrated until a third team member is added.
5. A client flow pattern was discussed, but, again, without an appreciable client volume it is difficult to illustrate how team work and client flow patterns contribute to an efficient and effective clinic operation. Once the client volume has picked up, we hope to assist in this area.
6. Health education as it is presented to a group to introduce the idea of family planning and the different contraceptive methods, and on an individual basis to discuss usage of the method chosen has been continually stressed. To date a family planning causerie is given by Mme Sadeler twice a week to the 5-10 women per clinic who come to the postpartum private service at the Maternite. It is not being given to the 5-15 women per clinic who come twice a week at the same time but to the public service on the ground floor. Also, it has been integrated into the family planning clinical client flow pattern. Individual counseling is being given by Mme Sadeler after the women have been prescribed a contraceptive method. At this time we are trying to order the IPPF family planning flip chart. An order has been made to the Kenya office.
7. Initially, the lack of client volume is to be expected. In an attempt to attract clients, family planning causeries at the postpartum clinic are being given and a schedule of clinic hours handed out. Women are being encouraged to initially bring their husbands with them to talk to Mme Sadeler and discuss the methods available, and many are complying. The response has been very good in the two weeks the clinic has been functioning. However, referrals from other services in the Maternite are not being made at this time.

The following activities are planned for the next three months:

1. We will continue to assist with the client information system until it has hopefully become an integral part of the clinic functioning and is understood and properly recorded.

2. As client volume increases (assuming it does) we will continue to assist with defining personnel roles and responsibilities and with developing an efficient client flow pattern. The objective is to process as many clients as possible per unit of time while assuring that each woman is given the necessary spectrum of care.
3. Most importantly, we plan to collaborate with Mme Sadeler in preparing a small, informal in-service training session series with a 2-3 week duration for the sage-femmes in the Maternite. We will begin with 4-6 women in each series until we have reached all the nursing personnel. The first two series will include the 8 sage-femmes who conduct the public postpartum service on the ground floor. The in-service training will include:
 - a) Definition of family planning
 - b) Medical indications for family planning
 - c) Contraceptive methods
 - d) Family planning causeries and demonstrations
 - e) High risk detection and referral within the Maternite
 - f) Prenatal and postpartum and newborn health education.

3. Djougou, Parakou and Ouidah

The family planning kits plus additional supplies have been delivered to Djougou and Parakou. The medical officers of both provinces and in the institutions where the services are to be started have been notified and their approvals obtained.

It is planned that I will go initially to Djougou and then to Parakou for the month of October to assist in starting the services. I personally project that it initially will require a month in each site with frequent follow-up visits of one to two week duration. We have learned from our experience at the Maternite in Cotonou and will now attempt to do the in-service training of personnel before setting up and beginning the service. While this practice may not be necessary nor possible in all situations, it would facilitate obtaining colleague support and referrals in order to start with an appreciable client volume, and would allow to better illustrate clinic efficiency through defining team member roles and developing a client flow pattern.

Also, we will try to get a better integration of family planning services with the prenatal services that already exist. Perhaps starting the family planning service will have the beneficial side effect of becoming the means for starting a postpartum service. At the same time it would contribute toward our project goal of improving the well being of mothers. Ouidah is an area we would like to become involved in since there are two sages-femmes located there who were trained in Santa Cruz. The initial steps will be taken once we get the Parakou and Djougou family planning services started. This may occur before the end of the year.

B. Demonstration Pilot Area: Centre Social d'Akpakpa

Betty Pasela's 1974 statistics from the Social Center at Akpakpa provided us with some very valuable information about the 1974 health related activities. We were able to evaluate, plan our future course of action, and determine what our relationship to Akpakpa will be.

The following areas of involvement were explored based on data, observations, and experience to date.

1. "Consultation des Nourrissons" Client Volume:

It was apparent from the statistics that the 397 registered children had an average of 14.6 visits per child but that most were only coming to the pesee clinic for 6-9 months. This average number of visits far exceeds the number of visits that should have been made in that time. This is probably due to the fact that a child is required to attend a pesee clinic once a week every week. This has resulted in a large client volume at each clinic session with little time for individual counseling, health education talks or demonstrations.

It is recommended that a child be seen once a month unless there is need for more intensive supervision or unless the child is ill. The reduced client volume per pesee clinic would provide an opportunity for the Centre Social staff members to engage in more health education activities and some minor primary care. By designating attendance at the pesee by age, it would be possible to develop "causeries" particular to certain age groups.

2. Staffing

Present staffing does not allow for basic primary and preventive care the pesee. Traditionally it has not been thought to be the place for such care. However, the "pesee" presents an opportunity to deliver such care and could be potentially capitalized upon. Assignment of a full-time nurse would permit:

- provision of minor primary care at each pesee and early referral
- a vaccination program
- a medical chart review of each client
- a preliminary newborn physical examination on each child.

The assignment to the Centre Social of a full-time nurse-midwife would permit:

- development of a postpartum service which would be the step off point for newborn baby supervision and a family planning service.

3. Prenatal Consultations

The statistics indicated that the number of women completing the tetanus series and having an acceptable hematocrit level was very low. Also almost 50% of

the small number of children weighed after birth were either small for size or premature. 5.4% of the infants were known to have expired soon after birth due to umbilical hemorrhage and prematurity.

Such statistics indicate a need to stress malarial, intestinal parasite and nutrition health education more heavily at the prenatal consultation. These three areas appear to be the main contributors to debilitation and anemia before and during pregnancy. At present the large number of women attending such consultation prevents the individual supervision and counseling and group "causeries" that are necessary.

Obstacles to receiving anti-parasitic medication and the anti-tetanus series prenatally need to be removed so that these treatments are accessible to each client when indicated. The anti-tetanus series is especially important to those women who choose to deliver at home. At present less than 30% of all women in Cotonou deliver at the Maternite.

If time would permit, the next step would be a traditional "accoucheur" training program in Akpakpa and the surrounding villages where the satellite centers are located.

4. Data/Statistics

The 1974 yearly statistics reported by Betty Pasela proved to be extremely valuable for evaluating and planning purposes. However, the fact remains that Akpakpa personnel did not do the report and in the future need to record client data consistently and accurately. It is suggested that before the end of the year 1975 the monthly reporting form be revised to make it more meaningful and easier to work with. Again, we can attempt to work towards a greater commitment to recording accurate data. A Santa Cruz Project member cannot always be available to supervise this activity and carry it out. Process a greater commitment to the process of recording data would be possible if care is taken to continually demonstrate the utility of analyzing the data for planning purposes.

5. Transportation

It has become quite clear that the Centre Social d'Akpakpa and the Ministry of Health cannot afford to maintain one of the currently operated project vehicles if and when the project should terminate. In order to insure continuation of the Centre Social satellite center activities, it would be better to assist the Centre Social in repairing an available used 2 CV and maintaining it until its cost of utilization and maintenance is eventually assumed by the Ministry of Health and Social Services.

This has a greater probability of occurring successfully if the vehicle is a 2 CV rather than one of the large project vehicles which are expensive to operate and impractical to maintain.

Another needed change would be to transfer the present Centre Social d'Akpakpa chauffeur, Innocent Tofon, to the Bureau d'Education Sanitaire and obtain another chauffeur for the Centre Social. Innocent Tofon has some educational skills that could be useful to the Health Education Office.

Present Situation Centre Social d'Akpakpa

Dr. Alihonou, Director of the University of Benin Department of Medical and Paramedical Education (DEMP) has expressed an interest to rotate his students at the medical and midwifery schools through the PMI and the Centre Social d'Akpakpa. It is felt that some of the above mentioned changes and improvements should be made before the demonstration pilot area is more fully integrated into the clinical experience of the medical and midwifery students. There is still missing a real integration of primary curative care with preventive care, health education with daily prenatal and well baby care. Improvement in the area of compiling and utilizing data is also still needed.

Some discussion has taken place with the directrice concerning acquiring new medical personnel, reducing pesee to once a month visits per child, and repairing and maintaining a 2 CV. She has been receptive to all these ideas with the exception of reducing the number of pesee visits per child.

The Centre Social has come a long way but has a way to go before it truly meets the standards of a demonstration site. A real effort should be made again by the new team members for a reasonable length of time after which we would reconsider the question of the value of continued involvement.

C. Bureau d'Education Sanitaire

Mr. Adjovi, the Chef de Service, has had a difficult time re-establishing his office in a new, much larger building. Since my arrival in July he has pre-occupied himself with this move, trying to get a telephone installed, and now, more currently, with trying to staff his office. At present he is staff and director in one person.

Anne-Marie Tinembart and I have tried to start the wheels moving in the direction of beginning to compile a health education manual for Benin. The Chef de Bureau has been reluctant to start due to his lack of personnel. We frankly

feel that it will be several more months, perhaps the first of the year, before he will be ready and willing to begin collaborating with our project. He appears to be very anxious and willing to work with us which has been encouraging. Once started, the process can be expected to move slowly as this new office struggles to define its place and area of responsibility within the Ministry of Health. The potential for impact in the area of MCH is great with this office and, consequently, early assistance and involvement by the project will be very important. However, it will be necessary for the project to initially go slow here and give this office time to get on its feet.

III. Future Project Direction

In a narrow sense the resources of the UCSC project in Benin consist of two public health advisors, a project administrator, and a project coordinator. In discussions of future activities for the project, the question must simply be asked, "In what ways can these people utilize their time and skills to have the greatest possible effect on the health of the mothers and children of Benin?" What follows is a listing of possible future activities as viewed from both the perspective of the nation taken as a whole and of the individual health care institutions.

A. Nationwide Activities:

1. Collaboration with the Bureau d'Education Sanitaire
 - a. compile and publish a standard health education manual for use by all MCH personnel in Benin as a training tool and as an on site reference book.
 - b. assistance in the training of the Bureau d'Education Sanitaire staff to carry out periodic in-service health education throughout Benin.
2. Collaborate with the Ministry of Preventive Health in developing and integrating a vaccination program into the MCH system. This would involve making vaccinations both available and accessible. Currently the cost to children and pregnant women has prevented many from receiving vaccinations.
3. Integration of family planning services at key, preselected sites throughout Benin with a particular emphasis on one rural pilot demonstration site.
 - a. collaborate with and support the nurses and midwives trained outside of Benin in the USA by UCSC.
 - b. install broad concepts of health education which are applicable to all areas of MCH.

training programs in collaboration with either the Bureau d'Education Sanitaire or the Bureau de Service de la Medecine Traditionnelle.

5. Collaboration with the University of Benin Department of Medical and Paramedical Education (MCH division)
 - a. develop curriculum in family planning
 - b. develop suitable training aids
 - c. training for university clinical instructors in family planning in Santa Cruz
 - d. develop a student program of clinical rotations through demonstration sites, both urban and rural, to demonstrate
 - broad scope of MCH services
 - integration of MCH services
 - MCH health education
 - compilation and utilization of statistics
 - public health planning and administration
6. Creation and development of a middle level staff of MCH Coordinators to operate and mediate between the ministry and local MCH institutions.

B. Activities which have a single institutional impact but are justifiable in terms of their potential educational, long run significance:

1. Establish the Centre Social d'Akpakpa as a model demonstration center for maternal and child primary care and preventive services. The center should demonstrate an effective integration of curative and preventive care by offering the following services at an accepted level of quality and in a relatively efficient manner:
 - prenatal and postpartum care
 - family planning services
 - well baby supervision
 - primary sick baby care
 - nutrition education
 - health education
 - immunization education and services
 - high risk identification
 - community health outreach
 - adequate family health records
 - record recall to insure continuity of care
 - data collection for health and vital statistics
 - adequate health referral system
2. Establish a similar MCH demonstration center in the rural area of northern Dahomey.
3. Develop a primapara program at the PMI Cotonou.

ORDER OF PRIORITY OF PROJECT ACTIVITIES IN ACCORDANCE WITH PRESENT FEASIBILITY AND READINESS

| Area of Involvement | Initial Activities | Project Team Member(s) Involved |
|--|---|---|
| I. Development of one urban and one rural MCH demonstration site | <ul style="list-style-type: none"> - continue activities with Centre Social d'Akpakpa - begin to plan and negotiate with the MOH to select a rural site and obtain a commitment in terms of personnel, etc. | <p>Public Health Advisors</p> <p>Project Coordinator</p> |
| II. Collaboration with DEMP | <ul style="list-style-type: none"> - negotiate a commitment from DEMP to develop clinical rotations through an urban and rural MCH demonstration site - develop family planning curriculum - send university clinical instructors for family planning training in the spring | <p>Project Coordinator</p> <p>Public Health Advisors</p> <p>Santa Cruz Office</p> |
| III. Vaccination Program | <ul style="list-style-type: none"> - Plan with the MOH to: <ol style="list-style-type: none"> 1. reduce or eliminate the cost constraint 2. integrate vaccination into all MCH services | Project Coordinator |
| IV. Develop the currently designated four sites for family planning services | <ul style="list-style-type: none"> - continue to work with the Maternites in Djougou and Cotonou and the PMI in Parakou and to train more personnel at these sites | Public Health Advisors |

| Area of Involvement | Initial Activites | Project Team Member(s) Involved |
|--|---|---------------------------------|
| V. Collaboration with the Bureau d'Education Sanitaire | <ul style="list-style-type: none"> - as personnel are hired begin to plan for: <ol style="list-style-type: none"> 1. development of health education resource materials and visual aids for Dahomey 2. development of an in-service training team of-health education | Public Health Advisors |
| VI. Traditional "Accoucheur" Training Program | <ul style="list-style-type: none"> - projected for the future if number of project members and time permit unless the Centre Social d'Akpakpa decides to carry this or in their satellite center villages | |

The Bureau d'Education Sanitaire in the Ministry of Health and the National Medical School are two institutions which could play vital roles in the project's efforts to achieve its long term objective of improvement of maternal and child health services, particularly in rural areas. In the case of the Bureau d'Education Sanitaire, however, it will be some time before it will have developed to the point where its activities should be given strong attention. At this time there exists only a Chef d'Education Sanitaire without a staff. It has taken more than five months to move the office and resettle into another location. The selection and hiring of personnel and defining of responsibilities will also take some time. We should continue to make ourselves available to this office and to keep in close touch until they are ready to begin some close collaborative work together.

In contrast to the slow steps which must necessarily be taken with the Bureau d'Education Sanitaire, an immediate area of involvement should be the development of maternal child health service/family planning demonstration sites which eventually would provide a suitable training environment for students from the medical school and midwives. With one urban demonstration site (Akpakpa) and one rural demonstration site (possibly Djougou), it would be possible to illustrate the range of services necessary for a good national program of MCH services. In addition to serving as teaching ground for future physicians and midwives, these demonstration sites could at some date provide an excellent environment for in-service training of professionals from the Bureau d'Education Sanitaire. While all students would receive the appropriate specialized training, a further value of the demonstration sites is their role in demonstrating the benefits of health planning through the use of statistical data. Not of small importance, in addition, is the fact that a quality health service is made available with the type of strong institutional support necessary to insure its continued existence.

Following the more immediate priorities of developing demonstration sites and, concurrently, coordinating with DEMP in the development of a student clinical field training program, the third priority involves vaccination services. A comprehensive vaccination program, by no means a simple undertaking, is an essential to reducing morbidity and mortality. Without reducing the present obstacles to vaccinating most children, an MCH program would find itself on a shaky foundation at best and the diffusion of family planning services would probably take place at a substantially slower rate. My point is that a bit of research by a planning

consultant would be able to produce a simplified cost-effectiveness document illustrating to the government that the reduction in morbidity and mortality due to communicable diseases may save the government more in terms of resources now devoted to curative services and earnings now lost due to related nonproductivity than what it would spend to provide vaccinations at no cost to children in the first five years of life.

Following some work in the area of vaccination, the emphasis should be on continuing to develop the three currently designated family planning sites. These services are needed and are useful but are of limited value when they are available to small population groups and are in settings where the other complementing MCH services are nonexistent or inadequate. An attempt to integrate family planning into the other services is possible, but, unless the other services are also upgraded, the chances of maintaining a good family planning program are minimal. An effort to upgrade to some extent all the services is a task almost equal to trying to create a demonstration pilot site. At present we don't have the time or personnel for such undertakings at Parakou, Djougou and the Maternite at Cotonou despite the fact that Djougou may be a good place to create a rural demonstration site. Therefore, I tend to de-emphasize creating many family planning services and would rather have the emphasis placed on getting family planning into the university curriculum and developing a clinical training program at demonstration sites.

Finally, a real area of concern is reducing the risk of maternal and infant mortality at birth. The training of traditional "accoucheurs" could potentially not only reduce the morbidity/mortality risk but also help reduce the demand for health services at the limited number of Maternites located throughout Benin. This type of training should be a national effort and be undertaken by one of the Health Ministry offices.

PROJECT STATISTICS FOR 1974 AT THE SOCIAL CENTER AT AKPAKPA AND OUTREACH CENTERS AT MINONTCHOU AND AGBALILAME

When the UCSC nursing consultant, Ms. Judy Migdal completed her assignment and left Benin, the University of California hired Mrs. Betty Pasela to work as a consultant to the project. During her employment by the project she worked with Ms. Susan Nalder to record the following statistics from Akpakpa, Minontchou and Agbalilame. The report of statistics was compiled with the knowledge and assistance of Constance Facia, the Directrice of the Social Center at Akpakpa.

Statistiques - 1974: Consultations Nourrissons Centre Social D'Akpakpa;
Consultations Pre-natales Minontchou et Agbalilame

Pesee Akpakpa 1974

The following statistics cover a period from January 1, 1974 through July 1, 1975. This has allowed a maximum period of 18 months observation for children registered in December 1974. They were compiled to get an overall view of what had happened during our 1974 client-program and in an attempt to do better health education programming for the Akpakpa Social Center.

There were 397 mothers who registered in 1974 for pesee. Of this number, 18 charts are missing and 13 charts have no birth dates recorded; therefore, ages were not able to be calculated. A mother brings her child for four visits before she is given a registration number. This helps prevent registering mothers who are simply curious and come for only 1 or 2 visits. One number is given to each mother for all of her children; a man with several wives will therefore have several different numbers for his family.

The Akpakpa pesee program includes weighing the child and recording this weight on our chart as well as on a graphic chart the mother is given to keep. This graph shows the normal weight range for a child at this age. The mother is then given individual counseling, asked how the child is doing, told whether the child gained or lost weight, counsels the introduction of new foods, times for inoculations, etc. If the child is ill he is sent to petits soins (minimal sick child care) where he can be treated for serious disorders. There are also health education talks and nutritional demonstrations given once a month for babies 0 - 6 months and once a month for children 7 months and up.

Mothers begin the pesee at an early age. The following graph shows that 76.8% of the children are registered by the age of 3 months.

AGE WHEN ATTENDANCE AT PESEE BEGAN

| Months (age) | Number of Clients | % of Clients |
|--------------|-------------------|---------------|
| 1 | 158 | 43.5 |
| 2 | 73 | 20.1 |
| 3 | 48 | 13.2 |
| 4 | 24 | 6.6 |
| 5 | 21 | 5.8 |
| 6 | 9 | 2.5 |
| 7 | 11 | 3.0 |
| 8 | 7 | 1.9 |
| 9 | 3 | 0.8 |
| 10 | 2 | 0.6 |
| 11 | 2 | 0.6 |
| 12 | 1 | 0.3 |
| 13 | 0 | 0.0 |
| 14 | 0 | 0.0 |
| 15 | 1 | 0.3 |
| 16 | 1 | 0.3 |
| 17 | 0 | 0.0 |
| 18 | 2 | 0.6 |
| TOTAL | <u>363</u> | <u>100.1%</u> |

The clients registered in 1974 between January 1974 and July 1975 had made a total of 5,822 visits to the Social Center for the pesee. There is a total of 67 clients from 1974 who were still coming to the pesee in July 1975; this is 18.5% of the total registered. The following graph shows that 55.9% of the children made between 3 - 15 visits. The distribution of children is even in this range of number of visits. Expanding the range of visits, 72.8% of the children made 20 or fewer visits.

NUMBER OF VISITS PER CLIENT

| No. of Visits | No. of Clients | % of Clients | No. of Visits | No. of Clients | % of Clients |
|---------------|----------------|--------------|---------------|----------------|--------------|
| 1 | 9 | 2.3 | 26 | 3 | 0.8 |
| 2 | 4 | 1.0 | 27 | 7 | 1.8 |
| 3 | 18 | 4.6 | 28 | 4 | 1.0 |
| 4 | 14 | 3.6 | 29 | 5 | 1.3 |
| 5 | 18 | 4.6 | 30 | 4 | 1.0 |
| 6 | 15 | 3.8 | 31 | 3 | 0.8 |
| 7 | 16 | 4.0 | 32 | 5 | 1.3 |
| 8 | 22 | 5.6 | 33 | 1 | 0.3 |
| 9 | 23 | 5.8 | 34 | 6 | 1.5 |
| 10 | 13 | 3.3 | 35 | 5 | 1.3 |
| 11 | 13 | 3.3 | 36 | 3 | 0.8 |
| 12 | 17 | 4.3 | 37 | 3 | 0.8 |
| 13 | 18 | 4.6 | 38 | 0 | 0.0 |
| 14 | 14 | 3.6 | 39 | 0 | 0.0 |
| 15 | 19 | 4.8 | 40 | 1 | 0.3 |
| 16 | 11 | 2.8 | 41 | 1 | 0.3 |
| 17 | 10 | 2.5 | 42 | 1 | 0.3 |
| 18 | 6 | 1.5 | 43 | 1 | 0.3 |
| 19 | 16 | 4.0 | 44 | 0 | 0.0 |
| 20 | 11 | 2.8 | 45 | 1 | 0.3 |
| 21 | 6 | 1.5 | 46 | 1 | 0.3 |
| 22 | 9 | 2.3 | 47 | 0 | 0.0 |
| 23 | 1 | 0.3 | 48 | 0 | 0.0 |
| 24 | 8 | 2.0 | 49 | 1 | 0.3 |
| 25 | 12 | 3.0 | <u>5,822</u> | <u>394</u> | <u>99.5</u> |

The following graph shows over how many months the mother made visits; 41.5% of the children stopped coming to the pesee within 4 months and another 31.4% stopped within 8 months. To summarize, 72.9% of the children no longer utilized the pesee after 8 months.

MONTHS OF ATTENDANCE PER CLIENT

| Number of Months | Number of Clients | Percentage of Clients |
|------------------|-------------------|-----------------------|
| 1 | 44 | 11.2 |
| 2 | 40 | 10.2 |
| 3 | 36 | 9.2 |
| 4 | 43 | 10.9 |
| 5 | 35 | 8.9 |
| 6 | 29 | 7.3 |
| 7 | 25 | 6.3 |
| 8 | 35 | 8.9 |
| 9 | 23 | 5.9 |
| 10 | 25 | 6.3 |
| 11 | 17 | 4.3 |
| 12 | 16 | 4.0 |
| 13 | 11 | 2.8 |
| 14 | 6 | 1.5 |
| 15 | 3 | 0.8 |
| 16 | 3 | 0.8 |
| 17 | <u>2</u> | <u>0.5</u> |
| | 393 | 99.8 |

The age in months that the child stopped coming to the pesee is shown below. When their babies were between 3 - 9 months old 7 - 12% of the mothers dropped out of the program monthly. Note that 69.4% of the mothers stopped coming by the age of 9 months.

AGE WHEN ATTENDANCE AT PESEE STOPPED

| Age (Months) | Number of Clients | Percentage of Clients |
|-----------------|----------------------|--------------------------|
| 1 | 1 | 0.3 |
| 2 | 9 | 2.8 |
| 3 | 33 | 10.2 |
| 4 | 23 | 7.1 |
| 5 | 40 | 12.3 |
| 6 | 32 | 9.9 |
| 7 | 32 | 9.9 |
| 8 | 27 | 8.3 |
| 9 | 28 | 8.6 |
| 10 | 19 | 5.7 |
| 11 | 20 | 6.2 |
| 12 | 16 | 4.9 |
| 13 | 16 | 4.9 |
| 14 | 9 | 2.8 |
| 15 | 4 | 1.2 |
| 16 | 6 | 1.9 |
| 17 | 2 | 0.6 |
| 18 | 1 | 0.3 |
| 19 | 0 | 0.0 |
| 20 | 1 | 0.3 |
| 21 | 1 | 0.3 |
| 22 | 1 | 0.3 |
| 23 | 1 | 0.3 |
| 24+ | 2 | 0.6 |
| | <u>324</u> | <u>99.7</u> |

Clients still attending July 1975: 68

It was of interest to see how many ill children had been treated in petits soins. The number of visits by clients who were ill totaled 967; 16.6% of the total pesee visits. The percentage of clients who fell ill one or more times was 75.1% (296 children). 24.7% of the sick children (97) made between 4-8 sick visits.

NUMBER OF TIMES SICK PER CLIENT

| Number of Times Sick (Visits) | Number of Clients | Percent of Clients |
|-------------------------------|-------------------|--------------------|
| 0 | 97 | 24.7 |
| 1 | 74 | 18.8 |
| 2 | 65 | 16.5 |
| 3 | 49 | 12.5 |
| 4 | 35 | 8.9 |
| 5 | 24 | 6.1 |
| 6 | 18 | 4.6 |
| 7 | 11 | 2.8 |
| 8 | 9 | 2.3 |
| 9 | 6 | 1.5 |
| 10 | 1 | 0.3 |
| 11 | 2 | 0.5 |
| 12 | 0 | 0.0 |
| 13 | <u>1</u> | <u>0.3</u> |
| | 393 | 99.8 |

Total number of sick visits: 967

Of the 967 visits made by ill clients, 93 visits were referred to the PMI or the hospital. Thus 9.6% of the children ill were in need of professional medical care for more serious disorders.

NUMBER OF REFERRALS TO THE PMI OR HOSPITAL

| Number of Times Referred | Number of Clients |
|--------------------------|-------------------|
| 1 | 54 |
| 2 | 10 |
| 3 | 5 |
| <u>4</u> | <u>1</u> |
| 93 | 70 |

The weight and age of the child at the time of the last pesee attended by the child was recorded in hopes of seeing how many of the children were below normal weight standards (in general due to illness or malnutrition), and at what age this became most prevalent. This was not realistic since so many of our clients stop coming at much too young an age to give a valid long term view. Also, the charts utilized as a standard were based on the weight norms established for children of developed countries. It is thought that the norms for African children are slightly different. However the differences are not considered to be very significant and the graphs used are probably reliable in illustrating the percentage underweight.

Table 7 shows the weight of each child at the time of the last visit. (The last visit of children who stopped coming and of children still attending the clinic). 25.2% of the children were underweight on their last visit made while 65.1% were of normal weight and 9.7% were above normal weight. In checking back through the charts, it was found that 23 (34.3%) of the clients still attending pesee were below normal weights, 43 (64.2%) clients were within normal range and 1 (1.5%) client was above normal range.

TABLE 7:

LAST WEIGHT OF CLIENT BY AGE

| Age (months) | Number with Weights Below Normal | Number with Normal Weight | Number with Above Normal Weight | TOTAL |
|-----------------|--|------------------------------|---------------------------------------|----------|
| 1 | - | 1 | - | 1 |
| 2 | 2 | 7 | - | 9 |
| 3 | 4 | 17 | 10 | 31 |
| 4 | 2 | 14 | 6 | 22 |
| 5 | 6 | 27 | 7 | 40 |
| 6 | 4 | 23 | 3 | 30 |
| 7 | 5 | 23 | 3 | 31 |
| 8 | 6 | 19 | 3 | 28 |
| 9 | 13 | 19 | 4 | 36 |
| 10 | 9 | 16 | 0 | 25 |
| 11 | 6 | 22 | 0 | 28 |
| 12 | 7 | 13 | 1 | 21 |
| 13 | 5 | 16 | 0 | 21 |
| 14 | 6 | 9 | 0 | 15 |
| 15 | 3 | 7 | 0 | 10 |
| 16 | 6 | 8 | 0 | 14 |
| 17 | 1 | 3 | 0 | 4 |
| 18 | 1 | 1 | 0 | 2 |
| 19 | 1 | 0 | 0 | 1 |
| 20 | 1 | 0 | 0 | 1 |
| 21 | 1 | 1 | 0 | 2 |
| 22 | 2 | 0 | 0 | 2 |
| 23 | 1 | 2 | 0 | 3 |
| 24 | 2 | 0 | 0 | 2 |
| 25 | 0 | 0 | 0 | 0 |
| 26 | 0 | 0 | 0 | 0 |
| 27 | <u>1</u> | <u>0</u> | <u>0</u> | <u>1</u> |
| | 96 | 248 | 37 | 381 |
| PERCENT: | 25.2 | 65.1 | 9.7 | 100.00 |

How Can This Information Help Akpakpa Begin
a Health Education Program on a Cyclical Basis?

Although health education must always be geared to react to current problems, a cyclical health education program would be easier for the personnel at Akpakpa. It would allow repetition of a cycle of basic health education talks touching upon the subjects the personnel feel are the most important to the mother for the well-being of the child. It would mean health education could be done regularly in a planned pattern with a minimum of preparation.

Presently the mother is requested to bring her child to Akpakpa weekly. There are 2 nutritional demonstrations and 2 causeries per month in place of the pesee. One session is for children 0-6 months and another session is for children 7 months and over. A possible cycle might be arranged to make a program of 6 causeries and demonstrations for the younger children and another 6 causeries and demonstrations for the older group. This would give each mother the opportunity for 12 different causeries within one year which are geared to the age of her child.

The statistics show that we are dealing with a very young child population for a relatively short period of time. The program could rotate on a 4-6 month cycle without becoming too repetitious for the mothers.

There are no obvious solutions for the problem of the short length of time visits are made by the mother. Perhaps asking the mother to come just once a month might encourage mothers to come for a longer period of time. A child in good health really does not need to be followed every week. It seems the mother attends pesee until the child is older and she has more free time and can go to market, etc. The younger children seem to be in better health. It appears that pesee becomes almost more important when the child becomes older.

If mothers came just once a month there would be smaller groups to work with; this would make health education with the pesee more feasible (rather than pesee one week and health education another week). This might work out well if the older clientele could be encouraged to continue with the pesee. The grouping could be broken down into two for young and two for old children, each for a different day in the month's program. Smaller groups would give the personnel more time for individual work with clients and enables a health education program at the time of the pesee visit. The monthly statistics have shown that the return rate of mothers for health education is very low compared to the number who come for the pesee. (In Akpakpa the programme has been to have the mother return on

another day of the week for a nutritional demonstration and causerie. This return rate is very low compared to the number who come for the pesee.) It would be more efficient and effective if one could do the health education at the time of the pesee. Working with smaller numbers could make this possible.

These statistics are solely from Akpakpa. It would be most interesting to see if there are differences in statistics from the three satellite social centers -- Agbalilame, Sourou-Lere and Minontchou. Observation suggests that the women seem to enjoy coming and seeing their friends for a chat. Also, they depend upon the pesee more for sick child care (petits soins) since the dispensary, PMI, and the hospital are quite far away for them. This means the pesee clinic may be getting older children who usually come only when ill.

Prenatal Clinics 1974

This report concerns the prenatal clinics the Social Center of Akpakpa provides in Minontchou and Agbalilame for the women who registered in 1974.

Mrs. Sitha Hodonou, midwife, filed a report earlier this year which differs slightly in some instances from this one. The reason for this is that we have accumulated more return information since Mrs. Hodonou compiled her statistics. Return information is difficult to obtain since our clients are not accustomed to giving this type of information; many of our clients don't return after birth for the well baby clinics; women who were registered late in 1974 did not necessarily deliver until sometime in 1975 which imposes a time lag to compile return data.

The obstetrical history obtained is not always accurate. Many clients are excited for their first consultation and have a difficult time remembering how many pregnancies she has had, number of miscarriages, etc. Again, part of the problem is that our clients are not used to thinking in a "data framework". It is not at all unusual for a client to give an all together different name and quite a different obstetrical history at another time.

A consultation consists of obstetrical history, height, weight, blood pressure, urine analysis for protein, measuring uterine height, fetal heart beat, checking for edema and any problems the client has. The first visit includes a simple physical examination and hematocrit.

Clients are also encouraged to get three antitetanus vaccinations (3 injections at 3 week intervals) that cost 170 CFA each or a total of 510 CFA for the three if purchased at the Populaire Pharmacy. Private pharmacies charge

235 CFA per injection for a total of 705 CFA. The price difference is explained to the women. In Minontchou 10% of the clients finished the series of 3; Agbalilame had 3% finish the series. In obstetrical histories one realizes that here are many neonatal deaths caused by tetanus.

We did very little in the way of formal health education in 1974. We have begun a program of causeries since the health education program was held in Akpakpa Social Center this spring.

Prenatal Clinics in Minontchou - 1974

Minontchou had a total of 240 clients register during the year 1974. The following statistics are based upon the known returned data; it will be indicated when data is unknown.

I - Number of Pregnancies of Clients

| No. Pregnancies of Clients | No. Clients Pregnant | % Clients Pregnant |
|-------------------------------|----------------------|--------------------|
| 0 | 1 | 0.4 |
| 1 | 46 | 19.4 |
| 2 | 63 | 26.3 |
| 3 | 55 | 22.9 |
| 4 | 31 | 12.9 |
| 5 | 21 | 8.8 |
| 6 | 17 | 7.1 |
| 7 | 3 | 1.3 |
| 8 | 2 | 0.8 |
| 9 | 0 | 0.0 |
| 10 | 0 | 0.0 |
| 11 | <u>1</u> | <u>0.4</u> |
| | 240 | 100.1 |

II - Number of Living Children

| No. Living Children | No. Clients having this No. Living Children | % Clients having this No. Living Children |
|---------------------|--|--|
| 0 | 66 | 27.5 |
| 1 | 79 | 32.9 |
| 2 | 56 | 23.3 |
| 3 | 26 | 10.8 |
| 4 | 9 | 3.8 |
| 5 | 3 | 1.3 |
| 6 | <u>1</u> | <u>0.4</u> |
| | 240 | 100.0 |

III - Number of Children Died

| No. Children Died | No. Clients having this No. Children Dead | % Clients having this No. Children Dead |
|-------------------|--|--|
| 0 | 113 | 58.5 |
| 1 | 54 | 28.0 |
| 2 | 19 | 9.8 |
| 3 | 1 | 0.5 |
| 4 | 4 | 2.1 |
| 5 | 1 | 0.5 |
| 6 | 0 | 0.0 |
| 7 | 0 | 0.0 |
| 8 | 0 | 0.0 |
| 9 | <u>1</u> | <u>0.5</u> |
| | 193 * | 99.9% |

*46 clients were never before pregnant and therefore never had the opportunity to lose a child. These percentages therefore reflect the number of women who had previously had children and the number of children those women lost

clinic were not pregnant. The reasons were as follows: unknown, abdominal mass, menopause and anxiety.

IV - Number of Months Pregnant When Came for 1st Consultation

| No. Months Pregnant When Came for 1st Consultation | No. Clients this No. Months Pregnant | % Clients this No. Months Pregnant |
|--|--------------------------------------|------------------------------------|
| 2 | 5 | 2.2 |
| 3 | 9 | 3.9 |
| 4 | 40 | 17.5 |
| 5 | 78 | 34.1 |
| 6 | 47 | 20.5 |
| 7 | 30 | 13.1 |
| 8 | 17 | 7.4 |
| 9 | <u>3</u> | <u>1.0</u> |
| | 229 | 99.7% |

Please note 57.7% of the clients came for their first consultation before or during their fifth month of pregnancy. This could indicate that a repeated cycle of 4 months might be a good one for a health education program. Mme Hodonou felt repeating the same lesson for two consecutive weeks would be more effective in touching the clients since consultations are not done on a weekly basis until the eighth month.

V - Number of Consultations Attended

| No. Consultations Attended | No. of Clients Attending this No. Consultations | % Clients Attending this No. Consultations |
|----------------------------|---|--|
| 1 | 49 | 20.5 |
| 2 | 32 | 13.4 |
| 3 | 35 | 14.6 |
| 4 | 21 | 8.8 |
| 5 | 25 | 10.5 |
| 6 | 17 | 7.1 |
| 7 | 14 | 5.9 |
| 8 | 18 | 7.5 |
| 9 | 12 | 5.0 |
| 10 | 10 | 4.2 |
| 11 | 3 | 1.3 |
| 12 | 1 | 0.4 |
| 13 | 1 | 0.4 |
| 14 | 0 | 0.0 |
| 15 | <u>1</u> | <u>0.4</u> |
| | 239 | 100.0% |

A total of 1052 consultations were attended by the 1974 Minontchou clients. This is an average of 4.4 consultations per woman.

VI - Place of Birth

| Place | No. of Clients Delivering at this Location | % of Clients Delivering at this Location |
|-----------|--|--|
| Maternite | 75 | 32.8 |
| Home | 78 | 34.1 |
| Clinic | 2 | 0.9 |
| * Unknown | <u>74</u> | <u>32.3</u> |
| | 229 | 100.1% |

*No return data for this group.

VII - Sex of the Child

| Sex | No. Babies of this Sex | % Babies of this Sex |
|-----------|------------------------|----------------------|
| Male | 86 | 36.4 |
| Female | 81 | 34.3 |
| * Unknown | <u>69</u> | <u>29.2</u> |
| | 236 | 99.9% |

*No return data for this group.

There were seven sets of twins reported for prenatal clients in 1974. This is 8.4% of the total number of known children born (167).

VIII - Birth Weight of Infant

| Weight | No. Children Born at this Weight |
|-----------------|----------------------------------|
| 1.5 - 1.999 kg. | 3 |
| 2.0 - 2.499 | 4 |
| 2.5 - 2.999 | 18 |
| 3.0 - 3.499 | 22 |
| 3.5 - 3.999 | <u>6</u> |
| | 53 |

Only children born at the maternite, of course, have recorded birth weights.

IX - Clients Returning for the Pesee

| | No. Clients | % Clients |
|--|------------------|-----------------------|
| Pesee | 123 | 55.9 |
| Never returned after birth of child | <u>97</u> 220 | <u>44.1</u> 100.0% |

Minontchou had a very high rate of non-return mothers (44.1%) for the pesee. Women registered during February, March and April were especially delinquent. There was also a high rate of women registered in March, April and May who attended only one consultation. There are no apparent reasons for either of these.

In January during the consultations we began actively encouraging the women to return for the pesee after the birth of the baby. This appears to be having positive results. When I began working at the Social Center in Akpakpa in September, 1974, we would average 40 to 50 clients per pesee at Minontchou. In July, 1975, this number has increased to an average of 60 to 70 clients per pesee.

Hematocrits are done on new clients. Susan Nalder used 36 to 40% as the normal. Only 5.5% of our clients fell into this normal range. All clients are asked to buy a deworming medication (Nematorazine). We do not do any stool examinations for intestinal worms but we have found very few women who report they did not expel worms after taking the medication. Clients are also asked to take Nivaquine. The University of California has provided prenatal vitamins and oral iron for all our clients. In 25 hematocrits that were rechecked 36% showed a value increase, 16% remained stationary and 48% showed a decrease. The low hematocrit is probably due to intestinal worms, poor nutrition and malaria.

X - Client Hematocrits

| Hct. | No. Clients | % Clients | Hct. | No. Clients | % Clients |
|------|-------------|-----------|------|-------------|-----------|
| 15% | 1* | 0.5% | 22% | 5 | 2.3% |
| 16 | 0 | 0 | 23 | 3 | 1.4 |
| 17 | 0 | 0 | 24 | 9 | 4.2 |
| 18 | 0 | 0 | 25 | 15 | 6.9 |
| 19 | 0 | 0 | 26 | 11 | 5.1 |
| 20 | 2 | .9 | 27 | 20 | 9.3 |
| 21 | 3 | 1.4 | 28 | 27 | 12.5 |

*This client had twins, both of whom are living.

X - Client Hematocrits, cont.

| Hct. | No. Clients | % Clients | Hct. | No. Clients | % Clients |
|------|-------------|-----------|------|-------------|-----------|
| 29% | 21 | 9.7% | 35% | 14 | 4.8% |
| 30 | 18 | 8.3 | 36 | 3 | 1.4 |
| 31 | 15 | 6.9 | 37 | 3 | 1.4 |
| 32 | 18 | 8.3 | 38 | 2 | 0.9 |
| 33 | 13 | 6.0 | 39 | 2 | 0.9 |
| 34 | 9 | 4.2 | 40 | 2 | 0.9 |
| | | | | <u>216</u> | |

Mothers are sent to the Maternite or appropriate facility if the midwife feels she should see a doctor. Ten women were sent to the Maternite of the hospital for the following reasons: last birth had been Caesarian section, suspected TB, breast abscess, breast tumor, history of 5 previous premature births with all infants dead, albuminuria, jaundice, urinary infection and a very large ombilical hernia.

A total of 9 infants are known to have died (5.4% of total number of known children born in Minontchou in 1974). Reasons known were: ombilical hemorrhage of the infant and prematurity. The infant death rate for Minontchou in 1974 was 53.9 per 1,000 infants.

One mother died in Minontchou or 0.4% of the prenatal clients. The history obtained was as follows: she delivered at home and the child died the same day. Three days later she developed a headache and also died. An older son had died 11 days before her delivery. The prenatal consultations attended had been normal.

Prenatal Clinics in Agbalilame 1974

Agbalilame prenatal clinics began in November 1974. A total of 67 women had been registered within the first two months. The clinic set-up is the same as that of Minontchou.

The prenatal clinic was very well received in Agbalilame. The women appear most cooperative in coming to consultations and returning postnatal for the pesee.

The prenatal consultations as well as the pesee are presently being held in the Sacristy of the Catholic Church in Agbalilame. A Social Center funded by self-help funds from the American Embassy is presently under construction. It would appear from the past interest shown by the women here that a very active program

could be instituted.

The following statistics are based upon the number of prenatal clients registered in November and December 1974.

XII - Number of Pregnancies of Clients

| No. Pregnancies of Clients | No. Clients Pregnant | % Clients Pregnant |
|-------------------------------|----------------------|--------------------|
| 0 | 1 | 1.5% |
| 1 | 13 | 19.4 |
| 2 | 15 | 22.4 |
| 3 | 13 | 19.4 |
| 4 | 17 | 25.4 |
| 5 | 6 | 9.0 |
| 6 | 0 | 0.0 |
| 7 | 0 | 0.0 |
| 8 | <u>2</u> | <u>3.0</u> |
| | 67 | 100.1% |

XIII - Number of Living Children

| No. Living Children | No. Clients having this No. Living Children | % Clients having this No. Living Children |
|---------------------|--|--|
| 0 | 20 | 29.9% |
| 1 | 16 | 23.9 |
| 2 | 15 | 22.4 |
| 3 | 10 | 14.9 |
| 4 | <u>6</u> | <u>9.0</u> |
| | 67 | 100.1% |

XIV - Number of Children Died

| No. Children Died | No. Clients having this No. Children Dead | % Clients having this No. Children Dead |
|-------------------|--|--|
| 0 | 36 | 66.7% |
| 1 | 12 | 22.2 |
| 2 | 3 | 5.6 |
| 3 | <u>3</u> | <u>5.6</u> |
| | 54 * | 100.1% |

*13 clients were never before pregnant and therefore never had the opportunity to lose a child. These percentages therefore reflect the number of women who had had previous children and the number of children these women lost.

A total of 1 client coming to the prenatal clinic was not pregnant (1.5%). This woman had been under treatment at the Maternite and simply came to our clinic to see if our midwife could do something more for her.

XV - Number of Months Pregnant When Came to 1st Consultation

| No. Months Pregnant When Came for 1st Consultation | No. of Clients this No. of Months Pregnant | % of Clients this No. of Months Pregnant |
|---|---|---|
| 2 | 2 | 3.0% |
| 3 | 2 | 3.0 |
| 4 | 3 | 4.5 |
| 5 | 22 | 33.3 |
| 6 | 20 | 30.3 |
| 7 | 7 | 10.6 |
| 8 | 10 | 15.2 |
| 9 | <u>0</u> | <u>0.0</u> |
| | 66 | 99.9% |

XVI - Number of Consultations Attended

| No. Consultations Attended | No. of Clients Attending this No. Consultations | % Clients Attending this No. Consultations |
|----------------------------|---|--|
| 1 | 13 | 19.4% |
| 2 | 3 | 4.5 |
| 3 | 11 | 16.4 |
| 4 | 9 | 13.4 |
| 5 | 10 | 14.9 |
| 6 | 7 | 10.4 |
| 7 | 6 | 9.0 |
| 8 | 1 | 1.5 |
| 9 | 3 | 4.5 |
| 10 | <u>4</u> | <u>6.0</u> |
| | 67 | 100.0 % |

A total of 297 consultations were attended by the clients registered in 1974. This is an average of 4.4 visits per client which is the same as that average for Minontchou.

XVII - Place of Birth

| Place | No. Clients Delivering at this Location | % Clients Delivering at this Location |
|-----------|---|---------------------------------------|
| Maternite | 18 | 27.3% |
| Home | 43 | 65.2 |
| Clinic | 0 | 0.0 |
| * Unknown | <u>5</u> | <u>7.6</u> |
| | 66 | 100.1% |

*No return data for this group.

Note the high number of women choosing to deliver at home. It seems the traditional birth attendants (male) in Agbalilame are quite good. It was originally hoped a training area for TBAs could be set up in Agbalilame but it has never materialized. This would not only relieve the Maternite in Cotonou of some of its heavy burden of "normal" births but would assure getting the mother with problems during labor and delivering to the Maternite sooner, giving both mother and child a better survival rate.

XVIII - Sex of the Child

| Sex | No. Babies of this Sex | % Babies of this Sex |
|-----------|------------------------|----------------------|
| Male | 33 | 47.8% |
| Female | 30 | 43.5 |
| * Unknown | <u>6</u> | <u>8.7</u> |
| | 69 | 100.0% |

*No return data for this group.

There were 3 sets of twins born or 9.6% of the total number of children born (63).

XIX - Birth Weight of the Infant

| Weight | No. of Infants having this Birth Weight |
|-----------------|---|
| 2.0 - 2.499 kg. | 2 |
| 2.5 - 2.000 | 4 |
| 3.0 - 3.499 | 2 |
| 3.5 - 3.999 | 0 |
| 4.0 - 4.499 | <u>1</u> |
| | 9 |

Only children born at the Maternite have recorded birth weights.

XX - Clients Returning for the Pesee

| | No. Clients | % Clients |
|-------------------------------------|-------------|------------|
| Pesee | 60 | 92.3% |
| Never Returned After Birth of Child | <u>5</u> | <u>7.7</u> |
| | 65 | 100.0% |

Note the high rate of return for the pesee (92.3%). When I began working in Akpakpa Social Center in September, 1974, Agbalilame would average 30 clients per pesee each week. Since the prenatal clinics began this number has steadily increased until we now have over 100 pesees each week.

Hematocrits in Agbalilame are in about the same range as those of Minontchou; 5.7% of the women are within the normal range (this is using 36% to 40% as normal).

XXI - Client Hematocrits

| Hct. | No. Clients | % Clients |
|------|-------------|------------|
| 19 | 1 | 1.9% |
| 20 | 0 | 0.0 |
| 21 | 0 | 0.0 |
| 22 | 1 | 1.9 |
| 23 | 2 | 3.8 |
| 24 | 5 | 9.4 |
| 25 | 2 | 3.8 |
| 26 | 0 | 0.0 |
| 27 | 5 | 9.4 |
| 28 | 2 | 3.8 |
| 29 | 7 | 13.2 |
| 30 | 6 | 11.3 |
| 31 | 1 | 1.9 |
| 32 | 1 | 1.9 |
| 33 | 7 | 13.2 |
| 34 | 6 | 11.3 |
| 35 | 4 | 7.5 |
| 36 | 2 | 3.8 |
| 37 | 0 | 0.0 |
| 38 | <u>1</u> | <u>1.9</u> |
| | 53 | 100.0% |

A total of 4 or 6.3% of the known infants born are known to have died. The causes stated were: no known reason, prematurity, transverse presentation of second twin and the client waited too long before going to the Maternite. The child was born dead.

There are no known maternal deaths in Agbalilame.

PROJECT-RELATED MCH SERVICES

Field reports from Benin indicate that MCH services offered at the Social Center at Akpakpa and satellite centers show a consistent increase in patient load. This trend is especially evident in the 50% increase of baby weighings since September, 1974.

MCH SERVICES

| <u>Activity</u> | <u>Akpakpa Social Center</u> | <u>Satellites</u> |
|--------------------------|----------------------------------|-------------------|
| Well child visits | 664 | 735 |
| Infant malnutrition | 9 | 14 |
| Infant diseases | 110 | 128 |
| Prenatal first visit | - | 37 |
| Prenatal revisit | - | 117 |
| DPT series completed | 14 | 3 |
| Tetanus series completed | - | 2 |
| Orientation | | |
| -- P.M.I. | 7 | 13 |
| -- Maternite | - | 4 |
| -- Hopital | - | - |

HEALTH EDUCATION

| <u>Type of Activity</u> | <u>Attendance</u> | <u>No. of Sessions</u> |
|--------------------------|-------------------|------------------------|
| Group health talks | 383 | 6 |
| Nutrition demonstrations | | |
| --Group | 251 | 4 |
| --Individual | 5 | 3 |

LAB WORK

| <u>Type</u> | <u>Number</u> | <u>No. of Pathologies</u> |
|---------------|---------------|---------------------------|
| Albumin tests | 150 | 10 |
| Hematocrit | 38 | |

The establishment of family planning services at the Maternite in Cotonou marks an important advance for the project activities in Benin. Family planning

information has also been made available at satellite centers and the Social Center at Akpakpa. Also, as a direct result of the return of the trainees from their NP/FP training in Santa Cruz, there is now family planning information available at Porto-Novo, Djougou and Parakou. In general, efforts have been made to improve MCH services that are being offered in all of these areas.

A demonstration kitchen has been constructed adjacent to the PMI in Cotonou in which nutrition lectures and demonstrations will take place on a daily basis. Funds for the construction of this kitchen were supplied by the American Embassy in Cotonou.

WORK PLAN - PHASE II

During the months of October and November, Bob Minnis from Santa Cruz visited Benin with the purpose of developing a Work Plan for calendar years 1976 through 1978. Work has been completed on the plan for Benin and a proposal was submitted to AID/Washington for consideration prior to the end of December. Many of the recommendations contained in Ms. Bethune's report were considered in the preparation of the new proposal.

GENERAL ACTIVITIES

1. A decision was made regarding support of the transport system of the Ministry of Health. Because of difficulties in maintaining Chevrolet vehicles in Benin it was decided that no further vehicles would be supplied by the project. The only support we anticipate giving the Ministry in this area in the future is the repair of the Citroen 2 CV which will be used for transport at the Social Center at Akpakpa. In addition to maintenance problems, the consumption of large amounts of gasoline by the American vehicles has made it difficult for the Ministry of Health to assume financial responsibility for the maintenance and operation.

2. It was reported from the PMI or Maternite in Cotonou that several

Lippes loops snapped off during removal. Research in the United States seems to indicate that some Lippes loops were manufactured out of the United States and packaged in bulk and some of these tend to break upon removal. All of these Lippes loops were inserted prior to project inception in March of 1972 and none of the broken loops were supplied by the project. It is our understanding from the manufacturer that this has not been a widespread problem and that all the Lippes loops are now manufactured in the United States.

3. Shipment of Commodities: Shipment of commodities from Santa Cruz to Cotonou created a major problem for the project during this period. Several shipments were delayed in Houston through oversights by the freight forwarder. One shipment was sent to Lagos, Nigeria, where it was off-loaded and stored in a warehouse. The freight forwarder in New England failed to follow-up on this shipment and this delay, and at the end of this reporting period the freight is still in storage in Lagos. A shipment of contraceptive supplies ordered from General Services Administration was shipped out of New York via Air Iran to Beirut, Lebanon. These supplies have not yet been located and they are urgently needed in Benin. Follow-up by the UCSC Purchasing department will hopefully locate these supplies.

PROJECT ACTIVITIES IN LESOTHO

INTRODUCTION

Project activities during the period July 1 through December 31, 1975, continued at a rapid pace and maternal and child health/family planning services were extended to many areas of the country as participant trainees returned to their jobs throughout Lesotho. Included in this section of the report are the results of the training supported by the UCSC project and a description of where the trainees are working in their country. The Lesotho Government has released information from the Second Five Year Development Plan and this semiannual report contains excerpts of the health plans for the period 1975/76 to 1979/80. Most of the information comes from Section 13 of the Second Five Year Development Plan.

Perhaps the most important event effecting the future of Santa Cruz involvement in the health development of Lesotho occurred when a Health Project Design team was sent to Lesotho in October. The objectives of this study are enclosed because this report will probably determine the future of Santa Cruz involvement in Lesotho. As a result of the release of the Five Year Plan and the Health Project Design and a visit by the Assistant Project Director with staff, local health personnel and Ministry officials, a plan for the continuation of the project through calendar year 1976 was developed. An extensive planning chart was developed and is also included in this report.

The actual preparation of monthly reports on health education and maternal and child health activities has now been turned over to the Lesotho counterparts. Because this is the first reporting period when all of these reports were prepared by counterparts, a sample of the reports has been included as written. They give an excellent picture of the day-to-day activities which have taken place in Lesotho.

The project has had its tragedies and near tragedies during the past six months. As was mentioned earlier in the Introduction, Mrs. Ts'edi Nts'ekhe passed away in July leaving the position of MCH Coordinator vacant. Mrs. Nts'ekhe had been in that position since the inception of this project. Her replacement, Manthua Seipobi, quickly picked up on the activities of Mrs. Nts'ekhe and was planning to journey to the United States for an extended nurse practitioner/family planning and administrative training program. A near tragedy occurred when a project vehicle traveling in the mountains of Lesotho encountered a landslide covering the road. The driver, Mokuba Petlane, had to turn the vehicle over in order to avoid going over a 300-foot embankment. The project vehicle was badly damaged but fortunately none of the occupants was injured. Dr. Paul Wilson the new field director, who was also in the Benin accident, has traveled with great caution since the Lesotho accident.

Four nurse-midwives from Lesotho left their country in October to attend a nurse practitioner/family planning training program in Santa Cruz. They completed their program on December 5, at which time they returned to Lesotho to take up their job responsibilities. Ms. Pat Goodale planned to attend a January seminar in Management and Administration presented by Planned Parenthood in Chicago in cooperation with the University of Illinois. Prior to her attendance at the seminar she travelled to Santa Cruz to assist in the preparation of a project proposal for the calendar year 1976.

SECOND FIVE YEAR DEVELOPMENT PLAN 1975/76 - 1979/80

The following sections are quoted from the draft of the Second Five Year Development Plan for the Government of Lesotho. This section is entitled Social Infrastructures - "Health".

13.2 The provision of adequate health facilities, health education and environmental sanitation are critical components of Lesotho's national development efforts. While past efforts in these areas have undoubtedly had a positive impact, there is still room for major improvement. The effects of medical and public health programmes upon general well being are conspicuous; income levels, dietary practices, and housing conditions all have their effect as well. To improve the general health situation requires not only improved and expanded health facilities but also environmental improvement, education, and a rise of income levels.

13.4 Lesotho is relatively well endowed with health facilities. There are however, serious imbalances between the services available in the urban and rural areas. The prevalence of such causes of ill health as gastrointestinal disorders and tuberculosis indicate the importance of environmental sanitation and health and nutrition education as means of improving general physical well-being. The nation fortunately is free from many of the common problems of other parts of Africa such as malaria and bilharzia.

13.15 The Government's goals in respect of health are the promotion of a positive state of well being, the reduction of morbidity, and the treatment of ill-health. The Second Plan objectives are:

- The improvement and expansion of health services in the rural area of the country
- The strengthening of preventive/promotive health services.

The constraints which must be overcome in meeting these objectives are the limited number of trained personnel and limited construction capacity, particularly outside the urban centres. The delivery of health services, particularly in the rural areas, will be primarily the responsibility of nurses because of the limited number of doctors available.

13.16 The targets for the Second Plan have been formulated taking into account the existing constraints and include measures to overcome them. The targets are:

- The improvement of rural health services through the expansion of twenty-five health clinics (fifteen Government and ten non-Government) and the completion of two clinics started in the First Plan period. The expanded clinics will be staffed by a minimum of two nurses and one health assistant each.
- Immunization of all children against poliomyelitis, whooping cough, diphtheria, smallpox, and tuberculosis.
- Provision of basic sanitary facilities at all primary schools.

- Renovation and expansion of existing hospitals and the establishment of laboratories at all Government hospitals.
- The establishment of new training programmes for nurse practitioners and health aides.
- The establishment of an effective and coordinated nutrition program.

13.17 During the First Plan, steps were taken to improve rural health services and reduce the imbalance between rural and urban facilities. The Second Plan places a much greater emphasis on rural services. The local centers for the rural program are the health clinics, of which there are 90 in existence. Many of the clinics are physically inadequate to accommodate those attending and normally have residential facilities for only one nurse. The reconstruction and expansion of both clinics and residential facilities is essential if the rural population is to be provided with an effective service. A new standard clinic design is being prepared which will contain a minimum of five beds, examining/consultation rooms, a waiting area, and quarters for two nurses and a health assistant, who will work with the local communities on health, education, environmental sanitation, and nutrition matters. It is estimated that bringing existing units up to the standards specified will require an average of R30,000 per unit. The Second Plan provision for clinics thus totals R750,000.

13.18 It is imperative that information be collected enumerating the population within reasonable distance of each clinic in the country. Once such information is available, it may be necessary to relocate some units to improve the distribution of health facilities. The size of the staff required will also be affected by the population served. Thus, some clinics may require more than two nurses and provision for them will be incorporated into the clinic improvement program. A priority activity of the Ministry will be such a mapping exercise.

13.19 The clinics as well as the outpatient departments of hospitals will be staffed by nurse practitioners, a new group which will be trained during the Plan. The nurse practitioners will complete a year of training beyond their normal nursing program and be able to diagnose common ailments as well as provide treatment. In effect, the clinic nurses are already required to perform these functions, but without adequate training.

13.20 Despite the existence of prophylactic treatment against such diseases as poliomyelitis and whooping cough, these have not been eradicated in Lesotho. The number of BCG vaccinations given to infants has actually declined over the past few years. As a major preventive measure, a campaign to provide prophylaxis shots to all children will be mounted in the Second Plan. Once the campaign, which will

work largely through the health clinics, has been completed, the groundwork will have been laid to provide such treatment to infants and maintain a continuing program. The cost of the campaign will be R700,000.

13.21 A program to provide pure water and sanitary facilities at the secondary schools was undertaken in the First Plan period. The Ministry of Health will implement on a self-help basis the provision of similar facilities to primary schools. The first phase will cover 600 of the more than 1,000 schools and should be completed by mid-Plan. The construction of the facilities will be integrated with an education campaign to encourage villagers to make pit latrines at home. The Second Plan cost of the program is R500,000.

13.22 Lesotho has seventeen general hospitals and two specialized units, a mental hospital and a leprosarium. The general hospitals, as shown in Table 13.2, have 1,721 beds. One of these, the Queen Elizabeth II Hospital, is the national referral hospital.

TABLE 13.2: HOSPITALS, 1975

| <u>Government</u> | <u>Beds</u> |
|-------------------------------|-------------|
| Butha-Buthe | 85 |
| Leribe | 104 |
| Teyateyaneng | 78 |
| Queen Elizabeth II, Maseru | 317 |
| Mafeteng | 119 |
| Mohale's Hoek | 72 |
| Qacha's Nek | 64 |
| Quthing | 90 |
| Mokhotlong | 55 |
| <u>Mission</u> | |
| Seboche, Butha-Buthe District | 113 |
| 'Mamohau, Leribe District | 37 |
| Maluti, Berea District | 177 |
| St. Joseph's, Maseru District | 181 |
| St. James, Maseru District | 35 |
| Scott, Maseru District | 74 |
| Paray, Maseru District | 84 |
| Tebellong, Qacha's Nek | <u>636</u> |
| TOTAL | 1,721 |

13.23 Hospital facilities must be improved and expanded to accommodate the increasing demands for health care. Among the major projects which will be undertaken are:

- Construction of a new maternity wing at Queen Elizabeth II Hospital.
- Construction of a new leprosarium.
- Replacement of the Qacha's Nek Hospital which is a series of old and inadequate buildings.
- Improvements of mission hospitals and improvements of district hospitals, including laboratory facilities, sewerage disposal, and additional quarters for staff. The total allocation for hospital improvement and expansion is R 1 million.

13.24 Drugs and hospital supplies need to be provided as efficiently as possible. The completion of the drug stockpile will cost another R160,000. To prevent shortages of beds, sheets, kitchen equipment, and other hospital supplies, a capital provision of R100,000 has been made for the Second Plan period.

13.25 Preventive activities cover a wide range, from health education, environmental sanitation, maternal and child care and family spacing to prophylactic campaigns. Health education activities will be strengthened and expanded although limitations of staff put a serious constraint upon the speed with which this can occur. The district health team members, particularly the public health nurse and the health assistants, will undertake mass education campaigns, working closely with staff of the Ministry of Agriculture which deals with home economics and nutrition.

13.26 Environmental sanitation will also be promoted by the health assistants, who will be attached to the health centers. In addition to inspection of stores and restaurants, the inspection of water supply, the encouragement of the use of pit latrines, and other measures to improve the sanitary conditions will be intensified.

13.27 The maternal and child care program will be expanded. In order to improve nutritional conditions and to encourage pregnant women and infants to be brought to the health centers and out-patient departments for regular checks, a program of food distribution utilizing donations from the World Food Programme has been underway. At the present time, over half of the children under one year of age benefit from these services. The Second Plan target is to cover at least 90% and, if possible, all children under one year of age. The training program at Ts'akholo will be intensified to upgrade the services available.

13.28 Maternal and child health depends not only on nutrition and regular medical examinations but also on child spacing. Unless mothers are able to nurse their children for an extended period and recover their strength, subsequent pregnancies can lead to increased maternal and infant death rates. Apart from the purely health considerations parents also have a responsibility to feed, support and educate their children. It is difficult for parents to meet this responsibility unless they are able to exercise control over the frequency and numbers of children they have. Information on contraceptive techniques as well as contraceptives supplies will be disseminated as widely as possible and the necessary additional staff trained to extend and improve family planning services. The Second Plan target is to reduce the current rate of population increase, 2.2 per cent, to 2.0 per cent annually.

13.29 The health services which can be provided are critically dependent upon the numbers and efficiency of trained personnel. It is essential that a sufficient number of young men and women be trained as public health nurses, laboratory technicians, doctors, dentists and pharmacists. Facilities within Lesotho need to be established and expanded to provide training for the numbers required.

13.30 The Plan target for doctors in Government services is thirty-six, fourteen at Queen Elizabeth II of whom half will be specialists, two doctors at each of the other district hospitals (except Leribe and Mohale's Hoek where three are needed), at least three in administration, and one flying doctor. The mission hospitals should have at least two doctors per hospital, another sixteen. Recruitment for the private hospitals has been difficult in the past so that Government will consider the possibility of seconding medical officers. The number in private practice can be expected to rise from the present nine to at least twelve. Thus, the 1980 target for doctors is a minimum of sixty-four as shown in Table 13.3.

TABLE 13.3: DOCTORS NEEDED BY 1980

| <u>Government Service</u> | <u>36</u> |
|---------------------------|-----------|
| Queen Elizabeth II | |
| Specialists | 7 |
| General Practitioners | 7 |
| Butha-Buthe | 2 |
| Leribe | 3 |
| Teyateyaneng | 2 |
| Mafeteng | 2 |
| Mohale's Hoek | 3 |
| Qacha's Nek | 2 |

TABLE 13.3, cont.

| | | |
|--------------------------|---|-----------|
| Quthing | 2 | |
| Mokhotlong | 2 | |
| Administration | 3 | |
| Flying Doctor | 1 | |
| <u>Mission Hospitals</u> | | <u>16</u> |
| Seboche | 2 | |
| 'Mamohau | 2 | |
| Maluti | 2 | |
| St. Joseph's | 2 | |
| St. James | 2 | |
| Scott | 2 | |
| Paray | 2 | |
| Tebellong | 2 | |
| <u>Private Practice</u> | | <u>12</u> |
| TOTAL | | <u>64</u> |

13.31 Sixteen Basotho medical students are expected to complete their training by the end of the Plan period, thus almost doubling the number of Basotho doctors to thirty-five. The target for the Plan is to send a minimum of another thirty students for medical training. In addition there is a need for medical specialists which will be met by sending at least eight local doctors for advanced training in the areas of ophthalmology, ear, nose and throat, anaesthesiology, public health, radiology, pathology, pediatrics, and surgery.

13.32 With only three qualified pharmacists in Lesotho, there is an urgent need to train at least another five pharmacists over the Second Plan period. A minimum of ten students will be sent abroad for training, half of whom will be expected to return over the Plan period.

13.33 With no trained laboratory technicians, Lesotho has had to rely on external assistance. It is planned to send four students for laboratory technician training outside the country. Six laboratory assistants are presently being trained at the central laboratory in Maseru. An additional ten assistants will be trained over the next five years.

13.34 Dental services are totally inadequate with three qualified dental surgeons

practicing in Lesotho, one of whom is in Government service. A minimum of five students will be sent for dental surgery training. Dental aides will be trained locally, a total of ten over the Plan period.

13.35 There are presently 346 nurses employed in Government, mission and other health facilities. Most of them are doubly qualified nurse/midwives. There are, however, an inadequate number of public health nurses, nurse tutors, and specialized nursing staff. Over the next five years, another 60 midwives and 80 nurses will be trained. Because of double qualifications, the addition to the stock of trained nurses is estimated at 100, a sufficient number to meet the increased requirements for nursing staff.

13.36 To provide more adequate services, particularly at the health centres, a further upgrading of the nursing staff is essential. In-service training will be provided at Ts'akholo in maternity care, child care, and child spacing. A nurse-practitioner course of one-year's duration will be established at the nurses' training centre in Maseru to provide paramedical capabilities. Additional facilities will be required at both Ts'akholo and Maseru.

13.37 The expansion of training facilities in Maseru will provide the nucleus of a health training centre at which nurse practitioners, laboratory assistants, and health assistants will be trained. The training will be closely integrated with the work at Ts'akholo Rural Training Centre where a new program in training health aides is planned. Health aides will be persons recruited at the village level and given intensive training over a six to nine month period who will work with the villagers in health education, nutrition, and control of common diseases.

13.38 Concern about improving nutritional levels dates back to 1961 when a Permanent Bureau of Nutrition was established. In addition to the Ministries of Agriculture, Education, and Health, voluntary organizations and the Department of Community and Rural Development are represented on the Bureau. The pre-school, primary school, and institutional feeding programmes using food aid have undoubtedly had a significant impact upon nutritional levels. Since the inception of these programmes the incidence of diseases such as pellagra and kwashiorkor has decreased greatly.

13.39 The need for effective coordination of the efforts of the several ministries concerned with nutrition has been recognized for some time. The Permanent Bureau of Nutrition will be reactivated or a new agency created to provide guidance and coordination in nutrition matters to ensure that the several agencies concerned and their field staffs will work together to the maximum benefit of the nation. More than R14 million in Food Aid will be available for diet supplements in clinics,

schools, and other institutions.

13.40 The Second Plan capital programme for the Health sector is as follows:

| | |
|--|----------------|
| Health Clinics - Expansion and Improvement | R 750,000 |
| School Sanitation | 500,000 |
| Hospital Improvement and Expansion | 1,000,000 |
| Drugs, Supplies and Equipment | 360,000 |
| Training Facilities | <u>600,000</u> |
| | R3,210,000 |

Technical assistance (experts and fellowships) will total R6,696,000.

LESOTHO HEALTH PROJECT DESIGN TEAM

In October, 1975, a Health Project Design Team was sent to Lesotho to determine what the future activity by US/AID-funded projects should be in Lesotho. The following Introduction from that report produced by the team provides an outline of the objectives of the study. Section four of the report, Recommendations, has been enclosed as Appendix C.

INTRODUCTION

This report is the result of a five-week visit to Lesotho over the period 6 October - 8 November, 1975. The U.S. Agency for International Development, with the concurrence of the Lesotho Government, defined the specific objectives of the mission which are covered by this report as follow:

1. To assess the effectiveness of existing programs and plans in fulfilling the government's policies and priorities for health services as outlined in the Second National Development Plan.
2. To do a health sector analysis, including analysis of existing country health plans/programs, in line with the: national development plan; availability of resources (manpower, fiscal and facilities); absorptive capacity of national government, and priorities of Government of Lesotho. Based on the analysis, recommend and advise on:
 - a. steps to be taken for the development of and/or strengthening of an integrated health delivery system (health, nutrition, and family planning), with emphasis on providing basic health services to the majority of the poor population;
 - b. what should be an appropriate balance between preventive and curative health service programs, as well as appropriate deployment and distribution of facilities for such programs;

- c. health manpower development, training and utilization measures which would be taken to enhance the GOL's ability to implement an integrated health delivery system, particularly in regard to nursing and paramedical manpower disciplines;
 - d. measures to strengthen and improve the health planning, managerial and administrative capabilities of the GOL;
 - e. formulation of projects which are in line with the priorities and plans of the GOL and would facilitate the provision of integrated health services to the people.
3. To assess external assistance requirements for the development and implementation of health service programs, specifically:
- a. review ongoing external assistance programs;
 - b. recommend modifications, if indicated, of existing programs;
 - c. identify any additional types of assistance required and/or available;
 - d. make recommendations with regard to mechanisms for improving coordination of external assistance.

WORK PLAN - CALENDAR YEAR 1976

During the months of October and November, Bob Minnis from Santa Cruz visited Lesotho with the purpose of developing a work plan for Calendar Year 1976. Preliminary work was completed on the plan after lengthy discussions with Ministry of Health officials, UCSC technicians and their counterparts. This plan was submitted to AID/Washington for consideration prior to the end of December.

Following up on the presentation of the plan, the staff at UCSC with the support of project personnel, developed a PERT chart depicting the events that would be taking place before the end of the project in December, 1976. That PERT Chart is attached as Appendix D.

MATERNAL AND CHILD HEALTH/FAMILY PLANNING/HEALTH EDUCATION ACTIVITIES

As mentioned in the introduction to this section, the local counterparts to the UCSC project staff are now preparing the reports which are presented to the Ministry of Health in Lesotho and to the project office in Santa Cruz.

Because of the conciseness and ability of these reports to depict actual activities which are taking place in the country, several of these reports have been included in their entirety as presented to us by the project counterparts. They are interesting reading and they present a view of the project from the perspective of the Basotho participants.

MCH Monthly Reports

August

I. In-Country Training

A. General

1. L.F.P.A. Practitioners on the Job:

Four LFPA nurses attended a one-week workshop in the MCH Office organized by the Project. The purpose was to reinforce their previous experience and knowledge as practitioners within the LFPA. The workshop was officially opened by the Senior Medical Officer for Health. Instructors included the Permanent Secretary for Health, Nursing School Tutors, MCH and Health Education staff. Practicals still continued after the workshop, and further physician training remains to be planned with field director, Dr. Wilson.

2. L.N.T.T.C. (Lesotho National Teachers' Training Centre):

At this institution six hours were scheduled for a very wide M.C.H. coverage which would otherwise take at least one week to be absorbed. Four extra hours were used during students' free time (evening). The topics covered were:

- a) Human reproduction
- b) Infant and child care
- c) School health

The approach was introductory and outlines were handed out for all subject matter. We hope that the students will demand more official time to cover M.C.H. topics satisfactorily rather than encourage using their spare time to meet their needs. The group consisted of 38 students divided into C and D who will be teaching in Primary Schools.

3. Thaba-Khupa - Intensive Farmers Training Centre:

Lectures are conducted for two groups, first year (17) and second year (19). During this month coverage included:

- a) Human reproduction
- b) Family life
- c) Parenthood

These lectures were conducted in simple English as the groups are

of average level (standards 7 and 8). Time for lectures was 45 minutes only twice a week. For the month of September child care will be covered. More time was requested from the authorities since 45 minutes is inadequate compared to time travelled. This has since been rearranged and double sessions have been allocated.

4. U.B.L.S.:

'Manthuo Seipobi participated in a workshop invited by the National Council of Women. The workshop was organised for Teachers engaged in Day care centres and Nursery Schools. There were 12 participants for three days sponsored by the Extension Education Branch of UBLS. The following were discussed:

- a) The young child's needs
- b) Growth and development
- c) Importance of pre-school care.

The workshop was the first of its kind. The groups suggested:

- a) Continuity of such workshops twice a year as a start.
- b) Invitations to be extended to the Ministry of Education and Health.
- c) Volunteers engaged in these services in other districts.

5. Scott Hospital:

One day workshop organised by the Hospital was conducted to discuss and review an approach to the New National T.B. Manual. The Minister of Health present at this workshop, encouraged the 65 participants present to work more closely towards one common goal. Participants included the Senior Medical Officer of Health, Quthing Medical Officer, Mafeteng staff, Scott Health Region staff, Roma staff, Leribe staff, Public Health Maseru, MCH and Health Education staff.

6. Radio Health Program:

As Chairman for the Radio Health Committee, 'Manthuo Seipobi reports that health talks for August centred on Environmental Health. Health Education staff will start their series during September.

B. Ts'akholo Rural Health Training Centre

1. L.F.D.S. Weekend Workshop:

Three days workshop was conducted for 21 LFDS participants at Ts'akholo. The purpose was to observe and appreciate a pre-school program conducted in a Rural Health Centre. The Senior Medical Officer of Health officiated in the workshop and discussed practical problems in the National T.B. Control in Lesotho. Emphasis was made on T.B. contributing as high risk disease for childbearing mothers, as well as pre-school children. Other topics covered were:

- a) Why pre-school
- b) How to organise a pre-school clinic
- c) Immunizations (B.C.G. practicals done)
- d) Storage and maintenance of vaccines
- e) Learning and teaching techniques
- f) Group process
- g) High risk women and contraceptions

All went on well as programmed. During discussion important information was brought to our notice regarding vaccines for mountain clinics:

- a) Availability of vaccines - nil
- b) Distribution - poor
- c) Storage - poor
- d) Techniques - not too sure
- e) Refrigeration - not working

Obviously immunizations were not done in some of the mountain clinics. Instructors at the workshop were from the following resources: Ts'akholo staff, Mafeteng staff, W.H.O., C.R.S., M.C.H. and Health Education.

2. International Training:

Ts'akholo received one student on field assignment from Swaziland where she is in her final year of study as a home economist. The student spent 4 weeks at Ts'akholo. Her field work was arranged by Mrs. Hlalele, Ministry of Agriculture.

3. In-service Training:

In-service training for health aides continues as part of on-going program.

II. Out of Country Training:

A. Projected:

The Ministry of Health was encouraged to select four candidates for the next UCSC FP nurse practitioner course to begin in October. This course will be directed by Dr. George Walter. The Ministry of Health has extended an invitation to Lesotho Family Planning Association to accept one of the scholarships for nurses and also one of the doctor's scholarships for short term training.

B. Returnees:

1. Mafeteng - Matron Maile has organised a system of sending one nurse practitioner to the other two government health centres, Malealea and Thabana Morena on a weekly basis to begin working with nurses thus posted to include Gyn examination etc., in their activities. This will be extended to non-government facilities, as well.
2. Sister Khuluse has begun to organise postpartum services for patients attending MCH Clinic. She and Sister Rankhethoa have shared their knowledge in various formal and informal teaching programs.
3. Mohale's Hoek - Public Health Nurse Mochaoa's activities at Mpharane are apparently curtailed due to lack of vehicle support. The renovations to the health centre are in progress.

III. M.C.H. Expansion

A. Country-wide:

Equipment for designated expansion areas has been received in good condition. The intended dispersal is to areas where a family planning nurse practitioner is located. Thus far, none of the Phase II rural health centres has a trained practitioner in residence, although some of them could be visited regularly if transport were dependable. The Ministry of Health has approved the duplication of the pink 'maternal record' for distribution to its facilities. Requests for the record will be answered as soon as printing is completed.

B. Maseru:

The Ministry of Health and Lesotho Family Planning Association are jointly involved in upgrading the Queen Elizabeth II MCH Clinic in Maseru. This facility has a potentially important role to play as a training as well as service facility in MCH and will be assisted localising Family Planning practitioners' training.

C. Ts'akholo P.S. Expansion:

Meetings and site visits took place with a variety of field staff concerning expansion of MCH services to sub-stations around Ts'akholo.

IV. Research related to MCH

A. R.S.C.A.L.:

The retrospective survey of contraceptive acceptors has completed its first phase and the 4 surveyors are being trained for the direct patient interviewing phase. Ms. Burns's contract has been extended through December to see the survey through to completion.

B. Model Village Survey:

Status quo due to lack of full time support to develop a codable questionnaire. The enumeration of households was completed in July.

V. Visitors to Projects:

Drs. Barker and Evans were our visitors who were taken out to Mafeteng Hospital and Ts'akholo. They represented the Overseas Development Mission which has funded the construction for the dormitory at Ts'akholo.

B. Expected Visitors:

1. Mr. A. Alemian arrives 10/9/75.
2. Dr. Wilson arrives in October. Tentative program for meetings and country visits has been arranged.

VI. Plans

A. Requested rural training at Ts'akholo for September:

1. One staff nurse from Scott Hospital to observe and appreciate how to organise Health Services and how to use auxiliary personnel 15th - 26th September.
2. Health Assistants (6) 15th - 30th September; individual objectives outlined.

B. Other - In-country:

1. Continue at LNTTC
2. Health assistants theory in Maseru
3. Continue at Thaba Khupa

October

I. In-Country Training

Thaba Khupa:

Continuation of Lectures for the 34 students was conducted on School Health and a summary made on all topics covered. Students were also given talk about merits or demerits of early marriages for high risk assessment. After review of papers demerits gained more marks. From the lectures conducted during this last term it is hopeful that Mrs. Koali will be able to absorb most of them next year.

L.N.T.T.C.:

Third Session started with 40 student teachers exposed to health lectures for the first time. The group is too large and questions require basic information. To meet the students' requirements evening classes may be arranged in groups of 20 to allow 8 hours per group. Students have to facilitate this request through their faculty.

Pupil Dispensers:

29th - 31st M.C.H. Lectures were conducted to 12 students. The following topics were outlined: M.C.H. in Lesotho; scope of problems; services and manpower; reproductive cycle; pregnancy; infant and pre-school services; immunization; malnutrition; V.D. Dr. Ntobe participated in the lecture on drugs affecting reproduction and here student midwives were included. Pupil dispensers are ready to go to Ts'akholo for field experience in two groups: 16th - 22nd and 23 - 29th November, accompanied by their instructor.

Radio Program:

Nursing School through its trainees covered a very good health education program for the month. Scott Hospital comprehensive is to continue next month. This program is getting very good. Supervision from Health Education and S.M.O.H. guidance.

Q.E. II - Midwifery Students:

Arrangements were made for a series of lectures November 17, 18, 19, 20 and 21 in M.C.H. for the senior midwives. They have been scheduled to rotate to Ts'akholo in February.

Ts'akholo:

Skills training for the aids continues. There is need for the syllabus to be reviewed. The clinical instruction will continue. Community Health outreach input will need to be added.

The Project vehicle was withdrawn from Ts'akholo. Two-way radio communication has been disrupted due to technical breakdown.

II. Out-of-Country Training

Four nurses left the country for family planning practitioner course on 4th October, 3 government, 1 LFPA. They are centered at Santa Cruz, California for 8 weeks.

Two more nurses, under the auspices of other funds, were sent from two mission hospitals for similar training at Meharry.

III. Research Related to M.C.H.

RSCAL:

Phase II of the research still continued intensively and a lot of field work done to complete individual interviews. The staff may have to be reduced by two.

During November the survey team will follow up on defaulters (those who failed to respond to their letters) and the processing of data from medical records will be done on the computer at N.U.L.

Model Village Survey:

Questions have been organized into logical sections and a coding system has been incorporated. The agriculture related questions are consistent with the format developed as a standardized (and extensive) survey being developed by that Ministry. The steps to be taken now are:

- 1) Hiring a suitable person who will assist in finalizing the survey, testing it, and teaching and supervision of the interviewers.
- 2) Setting target dates for hiring interviewers and conducting the survey.
- 3) Hiring interviewers and conducting the survey.
- 4) Data processing and reporting.

The survey needs to be coordinated with the water survey being conducted by Aaron Cronin in Ts'akholo EA. 39.09 in December, January. (This survey intends to use Lesotho National University Geography students.)

IV. Expansion of Services

Meetings:

The last M.C.H. meeting indicated to start improvements in quality service next month in the QE II M.C.H. Clinic. L.F.P.A. Nurse and Motivator to report themselves to PHN and work together daily. Certain equipment from M.C.H. Project was transferred to M.C.H. Clinic, QE II, to support the intended training facility.

M.C.H. jointly with W.H.O. PHN reviewed criteria for prioritizing upgrading of Health Centres (funded by U.N.F.P.A.). Report compiled.

Practitioners in Country

There is ongoing training of staff on the job in the Districts. M.C.H. services are being improved. Resource persons are used and willing to help as per requests. In this way cooperation is improving in many fields. Week end workshops are getting popular with effective participation.

Quoting expansion building in M.C.H. at Mphaki are fast on the way. The building is almost complete and two days were spent out with the staff to start and revive the Health Committee and Voluntary Health Workers. (Detail report by Health Education.)

V. Visitors

AID/Washington team of 4 hosted by Ministry was accompanied to their field trips in the country whenever there was need. O. Gish, R. Powell, G. Boostrom J. Franks.

Bob Minnis from Santa Cruz, California also visited the M.C.H. project for two weeks to review activities.

Health Education Monthly Reports

August

Community and Rural Development Course:

The Department of Community and Rural Development ran a two-week orientation course for its Assistant Community Development Officers. Each Ministry was asked to send not more than two participants who deal directly with the community, and there were altogether 30 participants. The Ministry of Health sent Vincent Tolofi and Taps Raditapole. The course started on 11/8/75 and finished on 22/8/75. The course focused mainly on the integrated approach in rural development. Besides the ACDO's, the other participants came from Health, Police, Food Aid, and some student from Lesotho National Teacher's Training College. The course was at Agricultural College.

Lesotho Flying Doctors' Services Workshop:

All the LFDS nurses from the mountain clinics and the staff at the base in Maseru attended a three day workshop from 29/8/75 to 31/8/75 at Ts'akholo Rural Health Training Centre. Four nuns (nurses) from Paray Hospital, St. Theresa and St. Martin

also attended, altogether 26 participants had attended. The major topics covered in this workshop included Health Education Teaching Techniques, Pre-school Clinic, Child Assessment, Immunization Administration and Family Planning and High Risk Mothers.

Pupil Dispensers Training:

The Health Education lectures on Communication for 8 pupil dispensers continued and the topics covered in the month were Behaviours Affecting Communication and Communication Methods and Organisation. The lectures will go on through September.

L.F.P.A. Training:

Health Education staff participated in a one week training course coordinated by MCH staff for four LFPA Nurse supervisors starting from August 4th through August 8th. Mr. Mokuba Petlane spent a whole day's session with these nurses on "Assessment of Community Needs" and "Health Education Techniques" as related to family planning in Lesotho. This course was a continuation of training for these LFPA nurses on maternal and child health education approaches which started early this year.

Staff Training at Quthing Hospital:

The two District Medical Officers of Quthing invited the Health Education staff to conduct a two day training of trainers on teaching skills. The 10 who will be trainers were one LFPA field worker, two LFPA staff nurses, one Public Health Nurse, one Health Inspector, one Health Assistant, one nutritionist (Agriculture) and three hospital nurses. Both doctors attended most of the sessions. This took place on August 6th and 7th and the contents included: Developing a Schedule; Group Process; Defining Instructional Objectives; Lesson Plan; Lesson Presentation; and Self Teaching Improvement Skills.

Summary of the Training:

Quthing District Hospital (6), L.F.P.A. (3) and Agriculture Nutrition (1) are planning to conduct a one week course from August 11 - 15, for 10 village volunteers on Basic Health Services. The objective of this course is to teach the 10 volunteers to become the health extension workers for each of the 10 satellite clinics in the Quthing District. Their job is mainly basic health education. Our mission was to improve the teaching skills for the 10 would-be trainers for these volunteers.

Since this was the first unique opportunity to train staff on teaching skills, Mokuba and I (Sunny Fong) left for Quthing on August 5th with an open mind. (We were prepared to undertake almost anything.) Shortly after we left Mafeteng en route to Quthing, the project vehicle had clutch trouble. The gears failed to operate. We got a free ride from a bus and went to Mohale's Hoek for help. Meanwhile, Paseka was guarding the broken down car with all the training equipment and supply. Late in the same evening, Mokuba, with assistance from the District Health Inspector, got the Government Garage to tow the car to Mohale's Hoek for repair. The next morning, August 6th, the Health Inspector lent us his landrover, and we drove to Quthing.

Realising how little time we had we quickly met with the District Medical Officer, PHN and Health Inspector and decided how to go about this two-day course. What we had decided soon became the outline of the course:

1. Establishing a time schedule for the course.
2. Identifying teaching objectives, including the elements of what, when, who, where or how many.
3. Identifying elements in a group:
 - (a) What is my capacity as teacher and what is my specific teaching objective to a specific group?
 - (b) Who is my audience? What is his/her interest, needs, etc.? Does his/her needs match with my teaching objective?
 - (c) How can I best achieve my teaching objective?
 - (d) How do I assess my teaching and evaluate the effects of my teaching on the audience?
4. Each student makes a 15 minute lesson plan to be used in a live teaching session.
5. Each student presents his or her lesson as planned, and each student is evaluated through his/her prediction and then self-evaluation on how effective the teaching is. The students evaluate each teacher.

To help the students develop the lesson plan, a form is used. Similarly, each student/teacher evaluates each teaching performance used on a list of 17 items.

Working against time, we were able to accomplish this outline only because the group was highly motivated and followed religiously the simple ground rules of promptness, etc. To be certain how well these "teachers" can use their newly acquired skills and to offer additional assistance to the Quthing Training of village volunteers, Mokuba plans to be there on Wednesday and Thursday.

The project vehicle is still in Mohale's Hoek, and the Garage is trying to repair the clutch. We got lifts from a friend and returned to Maseru on Friday, August 8th.

Training of Voluntary Village Health Workers Training:

Following the Training of Trainers at Quthing, a five days' training course for ten voluntary village health workers was conducted from August 11th to August 15th, 1975. Health Education staff were invited to evaluate the effectiveness of the 10 trainers and got involved in the actual teaching of the villagers. Emphasis was on Identification of Health Problems in the Villages, e.g., T.B., and T.B. defaulters, communicable diseases, latrine installation, etc. Participants also learned and adopted effective technique of winning people's trust and confidence, identifying people's values, and associating the desired behaviour and results with those values.

The public health personnel in Quthing will follow up these trainees to see the effectiveness of this training effort and give them help where need arises.

Meeting at Ts'akholo:

On August 9th, Mr. M. Petlane participated in a meeting attended by 55 chiefs

and headmen in the Ts'akholo Health Centre catchment. The purpose of this meeting was (a) to keep the chiefs, as local authorities, abreast with some on-going health and related activities in the Health Centre, (b) to re-emphasize the role of chiefs as a link between the government agencies represented and the community, and (c) good community relations.

The following day, August 10th, another meeting was held with members from the Village Development Committee, Village Water Supply Committee, Community and Rural Development Officer (Miss Peleha), Public Health Nurse (Ms. Moshabesha) and Ts'akholo staff to iron out some of the communication problems at Ts'akholo in connection with water supply system at Ts'akholo. A full report of these two meetings had been submitted to the Senior Medical Officer of Health.

Instruction Health Teaching:

Health Education staff has been teaching and coordinating with MCH staff for the teaching of Health at LNTTC (38 students) and Thaba Khupa (55 students). The NTTC lectures were on Human Reproduction (anatomy and physiology); Infant and Child Care; Environmental Health, Community Health and Health Education.

The Thaba Khupa lectures were on Concepts of Diseases; Some Infectious Diseases in Lesotho; Parenthood; and Child Birth.

Comprehensive Health Scott Hospital Workshop:

Health Education staff participated in a workshop organised by Dr. M.D.A. Lambers - Scott Hospital, on August 23rd. The workshop was officially opened by the Honourable the Minister of Health, Chief P. 'Mota.

The purpose of this workshop was to discuss the new T.B. Eradication Approach and the New T.B. Manual. Participants included the Senior Medical Officer of Health, W.H.O. personnel, C.R.S., Scotts, Maluti and other agencies in Lesotho. Total attendance was 65 persons -- including Public health nurses, Nursing sisters, Health educators, Health assistants, Doctors and others.

O.D.M.'s Visit:

We had the pleasure to be visited by Drs. Evans and Baker in Lesotho. The British Government will finance the Dormitory which is about to be built at Ts'akholo. They were both highly impressed by the developments.

What's Ahead:

Mr. Al Alemian (UCSC/MCH Project Regional Administrator) will arrive in Lesotho on 10th September. Dr. Paul Wilson who replaces Dr. G. Walter will pay his first visit to Lesotho on 16th September. The project staff are arranging for a country orientation for these two officers. The touring route will include some of the proposed MCH expansion clinics in the mountains.

October

The months of September through December this year for the Health Education Unit are the busiest months because we have eight teaching and inservice education commitments.

These commitments are: Environmental Staff (2 weeks); 2nd Year Nursing Students (2 weeks); Berea District Health Workshop (2 days); Leribe District Health Workshop (2 days); Mafeteng District Health Workshop (2 days); Dispenser, Midwifery Students and L.N.T.T.C. continued. A ninth commitment is to follow up with the Mphaki Regional Health Committee leadership training.

Student Midwives

Another series of health education lectures for the seven student midwives of Queen Elizabeth II School of Nursing started on 17/10/75. The lectures will be given every Monday and Friday from 8:30 a.m. to 10:00 a.m. until December 5. The topics to be covered this month include Aims of Health Education, Principles of Health Education, Different Methods Used to Achieve Objectives, Importance of Promoting and Maintaining Team Work and the Relationship Between Staff Discipline and Staff Morale.

Pupil Health Assistants

The second term of the six Pupil Health Assistants started this month. The Health Education staff, pupils and tutor met and decided to continue with the second series of lectures every Tuesday from 10:30 a.m. to 12:30 p.m. through December 16. An examination on the subject will be written by the pupils on December 19.

Pupil Dispensers

The lectures on Communication for the seven Pupil Dispensers of Queen Elizabeth II Hospital was concluded this month with a lecture on Resolving Communication Barriers to Effective Communication.

Workshops in T.Y. and Leribe

Health Education Staff have assisted the Public Health Nurse from T.Y. (Berea District) to plan, organise and conduct the first Staff Training Course on T.B. and other subjects. This workshop will be conducted during the second week of November.

Assistance was also offered to the Leribe Staff who will conduct a workshop on M.C.H. during the month of November. Nurses from Butha-Buthe District and private agencies will attend this workshop.

Staff Meeting - Mafeteng

The monthly staff meeting for Mafeteng Hospital Staff, Ts'akholo Staff and M.C.H. Project team was held in Mafeteng Matron's Office on 22/10/75. The agenda for the meeting was matters arising from the minutes, Sekameng Pre-School Expansion, Ts'akholo Transport, M.C.H. Seminar in Mafeteng, Two-Way Radios and Project Training in Ts'akholo. Unfortunately Ts'akholo staff was unable to attend due to the vehicle breakdown. The next meeting will be held on November 26.

Radio Breakdown and Generator Repairs

The generator which is used for the operation of two way radio at Ts'akholo was repaired but soon thereafter the radio was damaged by the irregular voltage from the portable generator. Health Education Staff is trying to explore the possibility of having a battery power source for the radio to be installed at Ts'akholo.

Quthing District

On October 22 - 24, Health Education Staff was invited by the Quthing District Medical Officers through the Senior Medical Officer of Health to assist in conducting meetings with the chiefs and people of Mphaki and establish a Regional Health Committee which will assist chiefs, health staff and public to identify health needs and problems in the Seforong Ward. The committee was elected by 47 villagers and five area chiefs and two chiefs' representatives. Health Education Staff has been requested to train the nine committee members on some Health Education Techniques including: Team Building, Planning, Coordination, Communication Skills, Motivation and others. Meanwhile, the committee will work with the Health Staff, chiefs and public to identify members of their communities who will be trained as Voluntary Village Health Workers. It is envisaged that this training will be done during the month of January, 1976. A follow-up to Mphaki will be carried out in November.

Health Subject Kit

The Health Education Staff assists six of the 36 students who were taught last term at L.N.T.T.C. in the development and use of a Health Subject Kit. During their second year at N.T.T.C., these students will teach Health as their major subject and will be posted in various schools in the country as from January through December, 1976. They will return in 1977 and finish their third and final year at L.N.T.T.C.

USAID - Health Visit

A team of four consultants visited the Ministry of Health - Lesotho. The purpose of this mission was Health Sector Analysis. Health Education Staff developed and presented a paper on Health Education program which included objectives and activities since 1972, present activities; manpower available and proposed Health Education program during the second Five Year Development Plan.

Visitors

Bob Minnis, the Assistant Director of UCSC/MCH Project paid a two week visit to the MCH Project for consultation and administrative purposes of the Project.

PARTICIPANT TRAINING

One of the most difficult things to ensure when selecting candidates for out-of-country participant training is that the participants will be effective workers upon completion of their training -- effective in the sense that they will be assigned to areas of responsibility where they can utilize their new skills.

Below is a synopsis of the individuals who have received training as a direct result of this project and their current assignments in Lesotho.

Quthing: Sister Mokhali, in charge of district. Participated for two weeks in Training of Trainers and also had received Meharry scholarship for MCH/FP. Assisted in organizing her district's MCH services until her transfer to Maseru, 1975. District program continues. She is now posted at Polyclinic, QE II to assist in family planning services there.

Dorothy Soqaka, Staff Nurse. At the completion of her NP/FP training in Santa Cruz it was expected that she would return to extend government MCH/FP services to Mphaki government health center, Quthing District.

Mafeteng: Matron Maile, in charge of district. TOT, August, 1974 and MCH/FP Practitioner, UCSC, 1975. Has organized Ministry supported workshops as well as raised funds to promote weekend and on-the-job training in her district. The district's MCH Clinic is a cooperative effort of MOH, CRS and LFPA. Has a supportive role in maintaining the Ts'akholo Demonstration Project.

Thokoloane Maliehe, S/N in Charge, MCH Clinic, Mafeteng Hospital. TOT, August, 1974. MCH/FP Practitioner. Functions as MCH Practitioner as well as other duties.

Agnes Lephoto, S/N, MCH/FP Downstate, 1974. Provides on-the-job training to other government and private health centers in the district and assists in national training programs. Also does general nursing.

Matseliso Moshabesha, District PHN. NP/FP training in Santa Cruz. It was expected that upon completion of her training she would return to her duties conducting health education courses in village school health programs, conducting rural health education campaigns, supervision of MCH services and coordination of basic health programs in the district.

Angelina Pakose, S/N Mafeteng, to be posted to Ts'akholo. MCH/FP Practitioner, Downstate.

Ivy Marathane, S/N in charge, Ts'akholo. MCH/FP Practitioner at University of California, San Francisco and Santa Cruz. She has been working as a nurse practitioner at the Ts'akholo Pilot Project since her return to Lesotho.

Vincent Tolofi, Health Assistant. Nigeria FP Motivators program. Working out of the Mafeteng District in health education. He helped to develop the Model Village Survey.

Mohales Hoek:

Belina Mochaoa, District PHN, MCH/FP Practitioner, UCSC, 1975. Returned to her PHN duties after learning to drive so that district transport becomes less of a limiting factor in MCH expansion.

Qacha's Nek: Mirriam Khaketla, S/N, Qacha's Nek Hospital. MCH/FP Practitioner, UCSC, 1975. It was expected that she would go to the Boiketsitso expansion area first, then probably back to MCH expansion area in Qacha's Nek.

Leribe/

Butha Buthe: Flora Makotoko, District PHN, MCH/FP Practitioner, Downstate, 1974. Has assisted in the development of expanded services, Boiketsitso rural health center and organization of district MCH services, as well as functioning as PHN for two major districts in the country. Starting to teach family planning at Maluti Hospital School of Nursing.

Motina Ntene, Matron, Leribe District, TOT, August 1974. Assisting in hospital-based MCH program and Leribe-based training.

Maseru:

Chief Matron Mafole, headquarters, attended an administration training program at UCSC, 1974. Returned to assist in supportive activities as they affect nursing.

Public Health Tutor Rankhethoa, MCH/FP Practitioner, Downstate. Provides these training skills into the regular curriculum of student nurses as well as a variety of other health manpower and short term training programs.

Midwifery Tutor Khuluse, MCH/FP Practitioner, Downstate. Assisting in the integration of these skills into the curriculum of midwifery students and in the development of appropriate, Maseru-based, clinical experience.

Sister Nts'ekhe, Principal MCH Project Counterpart, returned to assume post of MCH Coordinator for the MOH. Deceased, 1975.

Christine Sauli, PHN, attended Nigeria FP Motivators program as temporary counterpart replacement, now in Central Medical Laboratory.

Margaret Mokhothu, Health Education Nutritionist. Nutrition and Family Planning, Meharry. Returned to Lesotho to work with the Health Education Unit. She has recently joined the staff of the National University of Lesotho as a nutritionist.

Mokuba Petlane, Health Educator for Lesotho. Associate of Sciences degree in Health Education, Cabrillo College, Santa Cruz County, two year program. Mr. Petlane was promoted to this post after completion of his training in Santa Cruz and the FP Motivators Program in Nigeria.

LFPA:

'M'antsasa Nkhahle, LFPA Nurse. MCH/FP Practitioner, Santa Cruz. Returned to Lesotho where she continued her work as a nurse with the Lesotho Family Planning Association.

GENERAL ACTIVITIES AND POINTS OF INTEREST

1. On December 5, Mokuba Petlane was officially promoted to the post of Health Educator for Lesotho. Mr. Petlane attended Cabrillo College in Santa Cruz County for two years in the pursuit of an Associate of Sciences Degree in Health Education.
2. Meeting with Ts'akholo Water Supply Committee, Village Development Committee, P.H.N., Community and Rural Development Officer and Health Centre Staff - August 10, 1975.

For more than six months the water supply at Ts'akholo has presented an unsurmountable problem. There is a shallow bore hole on which both a windmill and an engine were mounted.

1. The windmill was improperly installed and so could not function.
2. The diesel engine has been working without being serviced for more than twenty months and later began to crumble down.
3. At various points the uncovered galvanised pipeline burst open due to pressure exerted by frozen water inside.

Problem 1 has recently been corrected by Community Development. The windmill works but all the tanks supplying both the Health Centre and Community have been completely dry for more than two weeks.

Problem 2 was attended to about two months ago when Community Development took the engine to Maseru for repairs. It has not been returned to Ts'akholo yet. We are still waiting.

Problem 3 is unattended to.

The purpose of this meeting was, for the committees, to address themselves to the major problem underlying the aforesaid three, that is, communication breakdown between Committees and Community Development Office in Mafeteng.

Miss Peleha, Community Development officer, was used as a resource person on this matter. Miss Peleha pointed out that the Ts'akholo water supply sub-committee is answerable to the Ts'akholo Village Development Committee. Thus, its reports have to be channeled through Village Development Committee.

On the other hand, she said, the Village Development Committee at Ts'akholo has never submitted any report since it was elected in 1970. She requested that Health Staff in the Centre should continue with their technical advice to both these committees. And that the Health Staff

at Maseru should contact both Mr. Machai and Mr. Taylor, in order to expedite repairs of water supply system in Ts'akholo.

Meanwhile, Miss Peleha will see to it that the almost defunct Village Development Committee is revived and effective reporting system is established and followed by Village Development Committee Water Supply sub-committee, Health staff and the Chief of Ts'akholo.

3. 1975 Health Education Statistical Report

The following table has statistically summarized the amount of education program outputs in 1975. The Health Education staff themselves and in cooperation with colleagues had conducted 79 different groups, reached 10,142 people, and spent 1,173 hours.

It is estimated that for each hour spent in actual teaching another three hours was spent in the planning, preparation and related efforts.

Institutional education programs had increased from nine in 1974 to 20 in 1975 and the number of students increased from 98 to 222 in 1975. There were only 59 community and in-service education programs in 1975 compared to 69 in 1974, 10 less. The number of people reached in 1975 was 9,920 compared to 5,674.