



A Health Survey of AFGHANISTAN

A Health Survey in Afghanistan

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FOREWORD

The main objectives of the survey, whose results are presented in the following pages, were to review current health services and programs, to arrive at some conclusions as to whether these are adequate or are directed toward basic needs, and to suggest some steps which might accelerate health improvements in Afghanistan.

During the period of the survey, it was our privilege to visit all of the seven major provinces of Afghanistan and five out of the eleven minor provinces. Through a series of conferences with government officials, health workers, company executives and others, we learned of their plans and hopes for improving the health conditions of Afghanistan, as well as of their many frustrations.

On visits to hospitals and polyclinics, to staffs engaged in the prevention of disease, and to the institutions which are training health personnel we saw many ingenious devices which had been developed by the use of indigenous materials and imagination. There is ample evidence everywhere that the health manpower of Afghanistan is capable of solving many health problems without external assistance.

We were particularly impressed by the fact that people in all walks of life are interested in current health problems. Not only is it their desire to have better health, safe water and improved sanitation, but there are indications that they are willing to take an active part in obtaining them. The feeling was ever present that there is a thirst for knowledge among health workers and the lay population - an interest in learning how to prevent disease and in learning how to improve health practices.

The factual information included in this report is based upon information provided by the many people with whom we had contact as well as that which could be obtained from reports. With the language barriers encountered, and the need for translation, the report may contain certain errors. If it does, we apologize and accept full responsibility for them.

The first five chapters of the report contain a summary of the health situation in Afghanistan as we perceive it. In the sixth, suggestions are offered and in the last chapter we have ^{attempted} to give some of the details of our daily activities.

Those readers who are concerned primarily with the impact of disease on the people of Afghanistan may find their chief interest in the sections which treat with health problems. Those who bear responsibility for the development of policy and for the planning of health programs may find items of value in the sections which deal with the health services, the health facilities and the health manpower of Afghanistan. Finally, the attention of all readers is directed to the reasons offered for a recommendation that Afghanistan develop a long range national health plan.

It is our hope that this report will prove useful to the Royal Government of Afghanistan. If such is the case we will be amply rewarded for the effort which went into its preparation.

We wish to take this means to express our gratitude to the Ministry of Health for arranging our itinerary and for making it possible for us to meet with government officials, health workers and others.

Each of us would like to send personal letters of appreciation to every person with whom we had contact to express our thanks for their many courtesies and kindnesses and the help which each gave to make this report possible. But, as can be seen from the list included in the appendix this would be a formidable undertaking. Therefore, we ask that you accept this as our way of conveying a sincere expression of appreciation to you. We are convinced that Afghan hospitality has no rival.

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HEALTH SURVEY REPORT

I. CONDUCT OF THE SURVEY

A. Background for the Survey

The Second Five-Year Plan of the Royal Government of Afghanistan (RGA) envisaged a considerable investment of afghanis and a foreign investment of several millions of dollars in the improvement of its public health services and facilities, and listed in detail those projects for which the RGA hoped to obtain financial assistance from outside sources, including the United States.

During June 1962 officials of the RGA approached the USAID for assistance in financing projects included in the health sector of the Plan. The Mission did not respond favorably to the request for large capital investments to construct hospitals, but indicated that it might be willing to consider a request to bring technicians to Afghanistan to make a survey of the nation's current health activities, problems and needs.

Subsequently, on October 22, 1962, the U.S. Ambassador presented to the Prime Minister an Aide Memoire describing the views of the United States Government with regard to future assistance to the RGA in the economic development field. In addition to agreeing to assist appropriate officials in the planning and project preparation process of the Plan; to participate in its funding and implementation; and to continue to provide technical assistance in certain specific fields, the Aide Memoire included the statement, "USAID is also willing to respond favorably to a request for a team of specialists to study possible technical assistance in the public health aspects of the Plan."

In January 1963, the RGA requested that such a survey be undertaken by USAID. In response to this request, the survey team arrived in Kabul on July 7, 1963.

B. Operational Plan for Survey

As an outgrowth of a series of meetings with officials of USAID/A and the RGA, it was agreed that, through personal contacts and field visits, the survey team would be provided opportunities to become familiar with:

1. The organization and operation of the health ^{programs} ~~problems~~ and services of the country.

2. The principal health needs and problems.

3. The health manpower resources, their utilization and the potentials for increasing the supply of competent health workers.

4. The existing health facilities, including those for generalized and specialized medical care, safe water, waste disposal, communicable disease control, maternal and child health programs, and the training of health personnel.

5. Sources of internal or external assistance for health programs and service.

6. National planning for the improvement and/or expansion of health services.

C. Conduct of the Survey

The Kingdom of Afghanistan is a land-locked country having an area of 265,000 square miles and a population of perhaps fourteen million persons. The King is Head of State, ruling under a constitution which provides for a parliamentary government. The Parliament or National Assembly has two houses. The Prime Minister is Chief Executive and, as such, presides over a Cabinet consisting of the heads of the fourteen ministries and various other government agencies.

For purposes of regional administration, Afghanistan is divided into eighteen provinces. Seven of these are headed by Governors and eleven have a High Commissioner as head. The Ministry of Interior exercises general direction and control over provincial affairs, but other ministries, including the Ministry of Health, have some staff in each province. The Provinces are sub-divided for administrative purposes, but control remains in the provincial offices. The larger municipalities do, however, possess a substantial amount of autonomy in the conduct of purely local affairs.

To familiarize itself with the organization and operation of Afghanistan's health services, as well as its training facilities for health personnel, the survey team visited all of the seven major provinces, Kabul, Kandahar, Herat, Mazar-i-Sharif, Kataghan, Nangahar and Paktia, and five of the eleven minor provinces, Bamian, Talagan, Girishk, Parwan and Badakhshan.

Conferences were held with cabinet ministers, provincial governors, deputy high commissioners, mayors, collectors of internal revenues, national and provincial health officers and their staffs, chiefs and staff members of the National Malaria Eradication Program at national, regional

and unit office levels, personnel of the textile and cotton industries, officials and health personnel of the Rural Development Department and of the Helmand Valley Authority, the Dean of the Faculty of Medicine of Kabul University medical and nursing personnel of Ali Abad and Masturat Hospitals, the Director and staff of the Public Health Institute of the Ministry of Health, the Director of the Government Employees Health Insurance Plan of the Ministry of Finance, the Commander of the Labor Force, the Director of Health Services and the Chief of the Department of Canals and Dams of the Ministry of Public Works, the Director of the Labor Department and the Chief of the Drilling Section, Geological Survey Department of the Ministry of Mines and Industry, the President of the Afghan Water & Soils Survey Authority of the Office of the Prime Minister, WHO Advisors, CARE-MEDICO personnel, Peace Corps volunteers, and the contract physicians of the Afghanistan Construction Unit (ACU) and the Afghanistan Highway Construction (AHC) organization.

In Kabul, visits were made to various departments and sections of the Faculty of Medicine of Kabul University, to the Ali Abad and Masturat Hospitals and their schools of nursing, and the School Health Service, all operated by the Ministry of Education. Visits were made as well to the Shararah Maternity Hospital, the School for Nurse Midwives, the Avicenna Hospital, the Ten Bed Clinic, the Tuberculosis Center, the Women's Tuberculosis Sanatorium, the Public Health Institute, the Vaccine Production Center, the Malaria Institute, and the Central Laboratory operated by the Ministry of Health. The hospital operated by the Ministry of Public Works was also visited.

Outside Kabul, ward rounds were made in all of the hospitals visited, civil as well as industrial, and the patients' diagnoses and charts discussed with the medical personnel in charge. Polyclinic, dental and smallpox vaccination facilities were also visited and the available statistical records gone over with health and dental staffs. Visits were made to health units of the Rural Development Department in the Shewaki, Logar One and Logar Two Projects in Kabul Province, and the Said Khel project in Parwan Province. Visits were made also to textile and cotton industry plants to observe the working conditions and health hazards to which the workers might be exposed.

On visits in the Kabul area, the team was usually accompanied by Dr. M. Haidar Maher, the Director-General of Health Services in Kabul Province, or by Mr. Y. M. Majaddadi, Director-General of the Foreign Relations Department of the Ministry of Health; on visits to other areas of the country, Dr. A. R. Hakimi, the Director-General of Public Health Services in the Ministry of Health accompanied the team.

The itinerary for the survey was made by the Program Office of USAID/A in consultation with personnel of the Ministries of Health, Interior and Planning.

II. HEALTH PROBLEMS IN AFGHANISTAN

As stated previously, the purpose of the health survey was to make a review of the current health activities and programs in Afghanistan, to identify the major obstacles retarding the achievement of health improvements in the country and to suggest ways of overcoming the obstacles. The assessment of current activities required that the team become familiar not only with the organization and administration of health services and programs, but also with the health and disease problems with which they deal.

It was found that with the exception of malaria, reliable national data are not available on disease incidence, causes of mortality and morbidity or even on the number of births and deaths which occur.

The population of Afghanistan is not known. Estimates vary with some as high as fifteen million and others as low as eight million. The malaria eradication staff estimates it to be a little over fourteen million. A system for collecting vital statistics has been inaugurated, but as yet is not operative on a national basis. A majority of births occur at home unattended by health personnel and it is stated by officials and medical personnel that only a few of the infant and maternal deaths which occur are reported. The only recorded information relative to the incidence of disease and causes of morbidity and mortality is that contained in the reports submitted by the staffs of hospitals, polyclinics, maternal and child health and tuberculosis clinics and the Malaria Eradication Program.

Statements made regarding the health problems of the country cannot, therefore, be substantiated by reliable data. They are based on information provided by the health personnel with whom the survey team had contact and upon that included in reports made to the Ministry of Health.

As visits were made to the hospitals and polyclinics in various parts of the country, the health staffs took the survey team on ward rounds, discussed their diagnoses and findings and shared their opinions as to which health problems are of greatest significance.

The diseases which bring the greatest number of people to the attention of health personnel in polyclinics, hospitals and private offices of physicians are the communicable, the water-borne, the parasitic, the nutritional and other types of preventable diseases. Included in these are tuberculosis, human and bovine, trachoma, conjunctivitis, measles, typhoid, dysenteries, intestinal parasites, and nutritional anemias. Leprosy is also believed to be

a problem, although the incidence of this disease has not been determined. The health workers report that smallpox still constitutes a problem; that goiter is common in certain areas; and that typhus and rabies are ever present menaces. Some state that whooping cough is a common problem and others mention accidents.

The health personnel are in agreement that prior to 1948 malaria was the principal health problem with spleen rates up to 76% reported in some areas. As a result of control measure initiated in 1949 and the malaria eradication program undertaken in 1958, the incidence of this disease has been greatly reduced. Officials and medical personnel in all of the areas visited commented on the effectiveness of this program.

The greatest number of patients in the hospitals at the time of the survey were medical cases, with diagnoses of tuberculosis, anemia, dysentery, gastritis, arthritis or intestinal parasites. Among those seen there were some patients with malaria and others with typhoid fever. Several patients, victims of accidents, were under treatment for fractures, burns and lacerations.

The surgical cases, far less numerous than the medical, included patients with cervical adenitis, bladder stones, intestinal obstructions, osteomyelitis, and abscesses. The only elective surgery seen was for hernias, hemorrhoids and cataracts. Most of the hospitalized patients were adult males and many were identified as prisoners or members of the national gendarmery. The small number of women patients, who were seen in the general hospitals located outside the Kabul area, were hospitalized because of pulmonary tuberculosis, cervical adenitis or complications related to child bearing. The even smaller number of children who were in the hospitals at the time of the survey had been admitted for the treatment of parasitic infections, nutritional problems, tuberculosis, respiratory infections and injuries resulting from accidents.

According to health personnel, among the patients seen in polyclinics, cases of conjunctivitis, parasitic infections of the scalp, skin and intestinal tract, nutritional deficiencies and anemias are common throughout the year. During the summer months, there is a marked increase in gastro-intestinal problems and during the winter in upper respiratory infections.

Dental problems are also common, but by the time a majority of the patients seek care, extraction, crowns and artificial teeth are the only remedies.

III. AGENCIES ENGAGED IN HEALTH AND RELATED ACTIVITIES

A. Afghan Government Agencies and Other Groups

Health services in Afghanistan are provided by several ministries and various other government agencies, by industrial concerns and construction companies and by voluntary agencies.

1. Ministry of Health: The principal health agency of the government is the Ministry of Health. It operates general hospitals, polyclinics and dental services in the various provinces of Afghanistan. In Kabul it operates a tuberculosis clinic for males and females and a tuberculosis sanatorium for women, a general hospital (Avicenna) used also for residency training and the training of nurses aides, a demonstration hospital (the Ten Bed Clinic), a maternity hospital (Shararah) and its outpatient clinics, a hospital for the central prison, a nurse midwifery training program (Shararah), a general Medical Depot, a central diagnostic laboratory, a Public Health Institute, whose principal function at present is the training of various categories of auxiliary public health workers and the operation of a vaccine production center.

In addition to the above, the Ministry of Health operates a national malaria eradication program, a smallpox vaccination program and is about to start a pilot project for the control of trachoma.

The Ministry of Health has a directorate of health services, a maternal and child health service and a nurse-midwife training program (Rosantoon Society), a medical depot, a directorate for administration, the Public Health Institute, and a Malaria Institute.

a. The Directorate of Health Services is responsible for the administration and operation of (1) provincial health services including hospitals and polyclinics, X-ray and laboratory services and dental services, (2) communicable disease control, (3) the tuberculosis center and the tuberculosis sanatorium for women patients in Kabul, (4) the design of hospitals, (5) a press and information service, and (6) the drafting of health legislation. Within the Directorate of Health Services there are no technical departments, such as environmental health, nursing and midwifery, public health education, hospital administration, statistics, or public health administration to supervise or to provide technical guidance for health personnel at the provincial and local levels.

b. The Rosantoon Society, financed and staffed by the Ministry of Health, operates the maternal and child health service and the nurse-midwifery training program, and in addition, is responsible for receiving, warehousing and distributing all UNICEF supplies and equipment brought into Afghanistan.

c. The General Medical Depot is responsible for ordering, receiving, warehousing, compounding and distributing all drugs and medical and hospital supplies which are imported or purchased locally. These are used to meet the drug and equipment requirements of the hospitals and polyclinics operated by the Ministry of Health and by some of the other government agencies. The Depot is responsible also for stocking the pharmacies which the Ministry of Health operates as a means of controlling the price of drugs. The Ministry of Health is the sole importer of narcotics and their use is controlled by appropriate legislation.

d. The Directorate of Administration is responsible for the maintenance of personnel records, the preparation of payrolls, the purchase of foreign and local supplies and equipment, the maintenance of inventories on properties of the Ministry of Health, and for the letting of contracts for new construction.

e. The principal functions of the Institute of Public Health are: 1) the training of ancillary personnel including laboratory technicians, laboratory assistants, compounders, X-ray technicians, sanitarians, vaccinators, dental assistants, 2) field investigations and research, and 3) the provision of technical advisory services to the Ministry of Health.

f. The Malaria Institute directs and conducts the national malaria eradication program through regional and unit offices located throughout the malarious areas of the country.

2. The Ministry of Education: The Ministry of Education operates the Faculty of Medicine of Kabul University, the Ali Abad and Masturat Hospitals, a polyclinic, two schools of nursing, and a school health service.

The Ali Abad and Masturat Hospitals are operated as the teaching hospitals for the Faculty of Medicine and the two schools of nursing. They provide surgical, medical, obstetrical, gynecological and pediatric services. In addition, in the Ali Abad Hospital there is a tuberculosis sanitarium (110 beds) and a neuropsychiatric institution (80 beds) for male patients. In the Masturat Hospital, there is a neuropsychiatric ward (11 beds) for women.

There is no other Tuberculosis Sanitarium for male patients in the country and the neuropsychiatric facilities in the two hospitals are the only ones for the treatment of mental disorders.

Through its school health service the Ministry provides ambulatory medical care and some preventive medical services for 65,000 day and 10,000 boarding students in Kabul. Smallpox vaccination is available to all and typhoid-paratyphoid is offered for the boarders. Students are also tuberculin tested and given BCG vaccinations if indicated.

In connection with a program for the establishment of community schools in nonurban areas, the Ministry is engaged in improving sanitary conditions and in constructing latrines for these schools and for the communities in which they are located.

3. Rural Development Department: This Department functions directly under the office of the Prime Minister. The objective of the Department is to improve the levels of living of the rural population, and the achievement of health improvements is given high priority. There are eleven rural development project areas, three in Kabul Province, two in Nengarhar, and one each in Parwan, Paktia, Bamiyan, Badakshan, Ghazni, and Kandahar Provinces. Additional projects are scheduled for Kabul, Paktia and Bamiyan Provinces. There are between 50,000 and 60,000 people in each project area.

The emphasis of the health services provided is prevention. Measures to control prevalent diseases such as typhus, typhoid and smallpox are carried out, a maternal and child health service is maintained, and polyclinics are operated for the care of minor illnesses and injuries.

In addition to providing health services, the health unit in Shewaki is engaged also in the training of various categories of health personnel such as physicians, assistant doctors, sanitarians, midwives and auxiliary ~~nurse~~ midwives. Field experience is provided for undergraduate medical students from the Faculty of Medicine, student midwives from the Shararah Hospital School of Midwifery and student nurses (male) from the Ali Abad School of Nursing.

The health staff is composed of physicians, assistant doctors, midwives, compounders, vaccinators and sanitarians with the latter concentrating their efforts on helping communities acquire safe water and improved excreta disposal facilities.

Until August 1963, the health component of the rural development projects was operated entirely within the structure of the Rural Development Department. The responsibility for providing technical supervision of staff and programs now rests with the Ministry of Health.

4. Ministry of Finance: This Ministry operates and provides the major share of the budget for a health insurance plan for government employees. Membership is voluntary and fees are prorated on the basis of 2% of the employee's monthly salary. The membership of the Plan is made up of employees of fifty-two governmental agencies. Each member is entitled to receive care for himself, his wife and one child.

At present the Plan is providing 24,000 persons living in the Kabul area with a polyclinic service, a home delivery service, and house visits by physicians and nurses. When hospitalization is required, the patient is sent to Avicenna, Ali Abad or Masturat Hospital.

5. Ministry of Public Works: This Ministry operates hospitals and polyclinics for the manpower (labor force) engaged in its various construction and road building activities. In addition, through its Department of Canals and Dams the Ministry is concerned with the planned use of the water resources of Afghanistan for irrigation, hydroelectric power, flood control and navigation. A source of water for domestic uses is often a by-product of these multi-purpose water projects. When this is the case, municipalities are advised of the availability of stored water as a source for a domestic supply. Utilization of the source is the responsibility of the municipality inasmuch as the Department has no authority to engage in such activities.

6. Helmand Valley Authority: The Helmand Valley Authority operates and finances a hospital and polyclinic in Lashkar Gah as well as polyclinics in Marja, Nad-i-Ali and Derwashan. Connected with the Lashkar Gah operation is a nursing school which admits both male and female students. The Authority is presently constructing a new sixty bed hospital-polyclinic unit in Lashkar Gah and a twenty bed facility in Nad-i-Ali.

The treatment of illness is still the primary focus of the Helmand Valley health service, but efforts are being made to place greater emphasis on preventive measures and programs.

The health staff is composed of doctors, nurses, compounders, vaccinators, laboratory and X-ray technicians, dressers and sanitarians.

7. Ministry of Interior: The Ministry of Interior is responsible for the operation of the gendarmery service whose principal activity is the patrol of Afghanistan's borders to prevent the illegal entrance or exit of revenue producing goods. While this Ministry depends upon the Ministry of Health to provide hospital services for this group of its employees, it employs three physicians to provide them with ambulatory medical care.

The Directorate General of Statistics of the Ministry of Interior is responsible for carrying out a population census and for the periodic collection and publication of statistics on population, births, deaths, literacy, marriages, divorces, physical disabilities, and crime. A system has been established for recording births and deaths, but it is not operative on a country-wide basis.

8. Ministry of Defense: The survey team was informed that the Ministry of Defense operates hospitals and polyclinics for members of the Armed Forces, and that it maintains a school for medical corpsmen.

Since the team was unable to contact personnel of the medical corps of the Armed Forces of Afghanistan, a description of the services they provide and the health problems they encounter cannot be included in the report.

9. Ministry of Mines and Industry: This Ministry enforces the Labor Law which was enacted in 1946. This law is concerned with recruitment methods, working hours, vacations, employment benefits, regulations for the employment of women and children, and with compensation for disability and loss of life. With assistance from the International Labor Organization, the Labor Department of the Ministry is presently revising the old law and preparing new legislation for consideration by the National Assembly. It is planned that the revised legislation will contain a separate section on safety and hygiene.

The Drilling Section of the Geological Survey Department of the Ministry of Mines and Industry has drilled a number of deep wells for the study of underground water resources. These wells supply water for industrial and domestic use in the towns of Kunduz (2 wells), Kandahar (10), Kabul (6), and in Nangarkar Province (2). Six wells are planned for Paktia Province.

10. Industrial and Construction Companies: Several industrial and construction companies operate hospitals and provide polyclinic services for their employees. Others limit their activities to the maintenance of polyclinics and dispensaries and rely upon the Ministry of Health to provide care for those who require hospitalization.

The Afghanistan Textile Company operates two hospital-polyclinic units, one in Gulbahar and the other in Pul-i-Khomli, and the Da Spinzar Cotton Company maintains a hospital and polyclinic service in Kunduz. Employees and their dependents are eligible for medical care.

The Afghanistan Construction Unit operates a hospital-polyclinic at Chah-i-Anjir in Girishk Province, and a polyclinic near Kandahar. Also in the Kandahar area is a polyclinic operated by the Afghanistan Highway Constructors group (AHC). This company will soon open a new seven bed hospital-polyclinic unit. While the health facilities and services of ACU and AHC are maintained primarily to provide medical services for foreign contract personnel, emergency care and some surgical service is available for Afghan employees.

The team was informed that some banks, commercial establishments and industries such as sugar mills, cement factories and coal mines, employ physicians to provide polyclinic services for their employees.

11. Afghan Water and Soil Survey Authority: With several agencies of the government, foreign missions and contractors drilling wells for the study of underground water resources and measuring the flow of the main rivers of Afghanistan, this Authority, which operates directly under the office of the Prime Minister, is concerned with the correlation of the results of these studies as well as the planning and the carrying out of the additional studies required to complete the mapping of the ground and surface water resources of Afghanistan. The Authority is also concerned with the development of a comprehensive use of these water resources for irrigation, hydroelectric power, flood control and navigation. Inasmuch as a source of water for domestic and industrial uses is often the by-product of these multi-purpose projects, the Authority believes that it might well concern itself with these aspects of water usage.

12. Municipalities: The municipal authorities are left with the responsibility for dealing with the sanitation problems of the cities. This includes the provision of water for domestic use, disposing of human and other wastes, controlling pests, supervising food handling, markets and slaughter houses.

For some years, the municipality of Kabul has employed a sanitary engineer and sanitarians and during the summer of 1963, added a physician to its staff. The principal functions of this health staff are ~~night soil removal~~, street cleaning and the disposal of stray dogs. A new function is eminent. As a part of a civic improvement program in Kabul, a latrine program has been initiated in the old city. Since vault latrines are being installed, the collection and disposal of the human wastes will require constant vigilance.

Although rabies is reported to be a ~~real~~ problem in Kabul, dog owners are not required to have their dogs vaccinated, nor has the city set up a program to provide this service. Vaccine is produced locally and can be obtained from the Central Vaccine Production Center.

It is reported that a few other cities in Afghanistan have employed sanitarians, but the number is not known.

A majority of the Provincial Governors and Mayors with whom the survey team had contact are vitally interested in obtaining water for domestic and other uses. Several have initiated action, but all indicated that they desire and need competent technical consultation.

13 14. Agencies and Government Units with Related Interests:
In addition to the agencies which are providing health services for the general population or for special groups, there are other governmental units such as the Ministry of Agriculture and the Ministry of Press and Information that should be involved in health planning; The former because of a need to solve the problems of nutrition and bovine tuberculosis; The latter because of its interest in tourism and because of the assistance it can give in interpreting health problems and programs to the public.

a. Ministry of Agriculture: An appraisal of the nutritional status of the people of Afghanistan is important to national planning. Not only is it important for health workers to recognize the nutritional disorders of the area, but there is also need for the agricultural workers to know the quantity and quality of the essential nutrients which are being produced, their availability to the consumer, and the actions to be taken to augment those items which are in short supply, either by increasing their production or by improving their distribution.

Since animal husbandry is an important occupation in Afghanistan, it is essential that the Ministry of Agriculture give high priority to the prevention of the diseases which will kill or disable animals. It is equally important that this agency take measures to prevent and control animal diseases which are transmitted to man. In Afghanistan the most important of these is tuberculosis in cattle.

In almost every hospital visited by the survey team there were patients with bone tuberculosis or cervical adenitis. Such cases will continue to occur until active measures are taken to control tuberculosis in cattle. As yet the Ministry of Agriculture has not tackled the problem.

Bilharzias^{is} and the health hazards which accompany some of the innovations in agriculture may add to the health problems presently reducing the productivity of agricultural workers. The farm machinery, pesticides, herbicides and irrigation facilities which are introduced to stimulate production may produce unintentional negative results. Thus it is to the advantage of both the health and the agricultural agencies to develop joint plans and courses of action for solving existing problems and preventing potential problems.

b. Ministry of Press and Information: Safe water, adequate sanitary facilities, proper disposal of human and other wastes, and good foodhandling practices are the expectations of most tourists. The agency promoting tourism should make its plans and requirements known to the health authorities and work with them in developing and implementing appropriate activities and programs. On the other hand, the health authorities need the assistance of the Ministry of Press and Information in keeping the public informed about health problems and what can be done to prevent and control them.

B. International Organizations and Other Groups:

1. World Health Organization (WHO): At the time of the survey there were twenty-two WHO employees in Afghanistan. These included the Senior WHO Representative, eighteen technical advisors and three secretaries. There were seven additional positions for which the Organization was recruiting.

a. The eighteen WHO advisors presently in Afghanistan are assigned to specific projects with thirteen of them assigned to departments or programs of the Ministry of Health, two to the Rural Development Department and three to the Ministry of Education.

b. Of the thirteen advisors presently working with the Ministry of Health, five are assigned to the Malaria Eradication Program, six to the Public Health Institute, one to the Tuberculosis Center in Kabul and one to the Smallpox Eradication Program.

c. Those working in Malaria include two malariologists, one entomologist, one sanitarian and a laboratory technician. Three work in the Kabul office, one in Kandahar and the fifth in Kunduz.

d. Among the six WHO advisors based at the Public Health Institute, there are four physicians and two sanitarians. Previously one of

These physicians were assigned to the Faculty of Medicine of Kabul University where he taught Preventive Medicine. He now serves as advisor to the Director of the Public Health Institute. Another of the WHO physicians assigned to the Institute is a microbiologist and is helping with the organization of laboratory facilities, the training of laboratory personnel and with the conduct of field studies. The third member of the WHO physician group assigned to the Institute is a specialist in Public Health Education and is assisting with the development of staff for the Health Education Department of the Institute, with the health education aspects of the training programs and other activities of the Institute, and with the teacher training programs of the Ministry of Education. The fourth physician, a bacteriologist, works with the National Vaccine Center, a unit of the Institute.

The two WHO sanitarians who are assigned to the Institute are assisting with staff development, the organization of a sanitation department and the training of sanitarians.

e. The WHO advisors in Tuberculosis Control and Smallpox Eradication have headquarters in Kabul. Both are physicians.

f. When existing vacancies are filled, there will be a total of seventeen WHO advisors working directly with activities of the Ministry of Public Health. Two advisors, a malariologist and a laboratory technician (arrived September 1963) are to be added to the malaria project. A sanitary engineer and a statistician are to be added to the WHO complement at the Public Health Institute. At the present time, WHO is not recruiting a specialist in trachoma, although this assistance has been requested by the RGA. If project negotiations are successful WHO plans to recruit a specialist in trachoma within the next year.

g. There are three WHO staff members associated with the health activities of the Ministry of Education. These include a Professor of Pathology who is assigned to the Faculty of Medicine, and two nurse tutors, one assigned to the training program for male nurses at Ali Abad Hospital and the other to the training program for female nurses at Masturat Hospital. The latter completed her assignment in August 1963. A replacement is being recruited along with two additional nurse tutors to work with the nurse training programs. WHO is also recruiting a Professor of Physiology for assignment to the Faculty of Medicine. When all of these positions are filled, there will be six WHO advisors working with the Ministry of Education.

h. There are two WHO advisors, a physician and a sanitarian, assigned to the projects of the Rural Development Department. A public health nurse is to be added to this advisory group.

i. In previous years WHO provided technical assistance to the maternal and child health programs of the Ministry of Health. In addition to assistance provided the Shararah Maternity Hospital and the seven maternal and child health clinics in Kabul, the WHO advisors helped initiate MCH activities in Herat, Mazar-i-Sharif and Kandahar.

j. WHO supplies the smallpox eradication program with freeze-dried smallpox vaccine and tuberculosis control program with tuberculin and BCG vaccine.

2. UNICEF: This organization provides equipment and supplies primarily as support for active WHO projects.

a. The largest expenditure now is for DDT, drugs, vehicles and other equipment for the Malaria Eradication Program. Isoniazid is supplied for the Tuberculosis Control project. UNICEF supports most of the other active WHO projects by providing equipment and supplies.

b. Although maternal and child health activities are no longer assisted by WHO, the UNICEF continues to contribute to this program through the provision of milk powder, vitamins, soap and limited quantities of antibiotics.

3. CARE-MEDICO (Voluntary agency of the USA); This organization has at present five physicians, five nurses, one nurse-anesthetist, one laboratory technician and an administrative officer in Afghanistan. The professional staff works in two hospitals, one which is operated by the Ministry of Health (Avicenna Hospital located in Kabul), and the other by the Helmand Valley Authority in Lashkar Gah. In both institutions the CARE-MEDICO staff is engaged in training and service activities.

a. There are three CARE-MEDICO physicians (one surgeon and two internists), three nurses, a nurse-anesthetist, and a laboratory technician assigned to Avicenna Hospital, where they assist with the residency training program which is offered for physicians, and with the training program which is conducted for nurse aides. As yet there is only minimal coordination of effort between those responsible for the residency training at Avicenna and those responsible for basic medical training at the Faculty of Medicine.

b. At the Lashkar Gah Hospital there are two CARE-MEDICO physicians and two nurses. A training program for auxiliary nurses is underway and the student body includes both males and females. The Lashkar Gah School accepts students who have completed six grades of basic education.

4. Peace Corps of the USA: The health personnel of this organization consists of three nurse volunteers, two are assigned to the Avicenna Hospital and the third works in the obstetrical and gynecological department of the Masturat Hospital.

5. Agency for International Development (AID), United States Department of State: AID, through contracts and development grants for the support of other types of activities, has provided some assistance in health.

a. A twenty-five bed hospital with modern medical and dental equipment was constructed under a project for the development of an International Airport at Kandahar. With the exception of the runway, none of the other new airport facilities were in use at the time of the survey. It is planned that all will become operative as soon as the furniture which is on order is received and installed. The survey team was unable to learn who is to staff and operate the hospital at the Kandahar airport or who is to have access to the facility.

b. There are two other hospitals in the Kandahar area which are an outgrowth of United States assistance to Afghanistan. One is the twenty bed hospital at Manzel Bagh Camp which was constructed and operated for the use of the contract employees of the Morrison-Knudsen Company. This hospital is now a part of the Afghanistan Construction Unit (ACU) operations and is used as a first aid station and polyclinic. The ACU contract physician headquartered in Chah-i-Anjirs spends one day a week at the Manzel Bagh Hospital to conduct a polyclinic, to keep check on supplies and equipment and to supervise the activities of the two nurses who remain on duty throughout the week. As far as could be determined, there are no plans to reactivate this hospital. Meanwhile, the Afghanistan Highway Constructors group (AHC) is constructing and equipping a seven bed hospital and polyclinic at their camp about one mile distant.

c. Through activities supporting the Ministry of Education in the development of community schools, the USAID is participating in the installation of latrines for these schools and the communities they serve.

d. During the summer of 1963, the USAID made a grant of 28,000,000 afghanis to the Municipality of Kabul for civic improvements. A portion of the grant is earmarked for the construction of latrines in the old city.

e. In 1961 a grant of 2,000,000 afghanis was made to the Malaria Eradication Program of the Ministry of Health. This money was used to provide field allowances for staff working in areas outside of Kabul. The grant enabled the malaria organization to require full-time service of its staff.

f. AID has had only one programmed health project and this has been in connection with its assistance to the Helmand Valley Authority (HVA). For the past two years, through the assignment of a physician, and the purchase of equipment and supplies, AID has assisted with the construction of a sixty bed hospital in Lashkar Gah, and with the completion of a twenty bed hospital facility located at Nad-i-Ali.

It is planned that the new general hospital and polyclinic in Lashkar Gah will be ready for occupancy within two to three months.

The twenty bed hospital at Nad-i-Ali was started some five or six years ago by the HVA. At that time it was intended that this facility would serve as a general hospital for the area. This plan was abandoned when the resettlement program scheduled for the area was changed. At present the plan is to complete the hospital at Nad-i-Ali and to use it for the isolation and treatment of tuberculosis and other chronic diseases.

6. Other Foreign Governments: The Government of Czechoslovakia has assigned three health workers to Afghanistan. Two of these, a radiologist and a dentist, are working with the Government Employees Health Insurance Plan of the Ministry of Finance, and the third, also a radiologist, is working with the School Health Services of the Ministry of Education. A formal request has been made to the Government of Czechoslovakia to provide medical and paramedical personnel for the 100 bed hospital of the Ministry of Health in Kabul which is almost ready for occupancy. To date no official response to this request has been received.

The Government of the USSR has donated a portion of the equipment for this new 100 bed hospital in Kabul.

The Government of West Germany has agreed to equip, set up and staff a Blood Bank at the Institute of Public Health, as well as to provide a team of experts to help develop and carry out research programs.

Other governments have assisted by providing fellowships and observation tours.

IV. HEALTH SERVICES AND FACILITIES

✓ At the time of the survey Afghanistan had sixty-four hospitals with 1,943 beds to serve its civilian population, and twenty hospitals with 350 beds for the manpower (Labor Forces) engaged in road building and construction projects of the Ministry of Public Works. Information about the hospitals operated by the Ministry of National Defense was not available to the team.

1. Ministry of Health: The Ministry of Health operate fifty-six hospitals with a bed capacity of 1,029 beds. These hospitals vary in size from a five bed female and ten bed male hospital in some of the provinces to the eighty-eight bed Avicenna Hospital located in Kabul.

Separate hospital and polyclinic facilities for men and women, many times at great distances from each other, have resulted in the wasteful duplication of essential units, such as operating rooms, laboratories, pharmacies and stores for drugs, materials and supplies, kitchens and laundries.

The hospital facilities for women patients are generally inferior to those provided for men patients. In some areas, the only hospital service available to women patients is for complicated deliveries.

Autoclaving and sterilizing facilities for operating rooms, emergency rooms and dresser's stations in the provincial hospitals and polyclinics are limited. With the exception of the Avicenna Hospital, methods for anesthesia are limited to local, spinal, drop ether or chloroform.

Many of the provincial hospital and polyclinic buildings, either owned or rented by the Ministry of Health are either unsuitable or the available space is poorly utilized. Sanitary facilities are inadequate in some, totally absent in others. Housekeeping is at a low level in most, and many are fly infested due to poorly screened windows and doors or the complete absence of screening. Hand washing facilities on hospital wards and in the polyclinics are the exception rather than the rule. Kitchens are generally windowless, smoke stained, with the cooking done over an open wood fire, and without facilities for the washing of dishes or cooking utensils.

Judging from the hospitals and polyclinics visited, both in operation and under construction, it appears that medical care facilities are being

designed and constructed without benefit of hospital architectural consultation; sufficient consideration of the bed requirements of the area; or the availability of staff or resources for equipping, operating and maintaining the facility once construction is completed.

In several towns in Afghanistan the Ministry of Health as well as private industrial concerns are operating hospitals and polyclinics. The services provided by the industrial concerns for their employees and their dependents are free of charge, but other members of the community may also utilize these services for the payment of a small fee. The extent to which these facilities are being utilized by the non-factory population of the community could not be determined. Many of the patients in the company hospitals on the day the survey team visited were identified as non-company employees.

The provincial hospitals and polyclinics are supplied once a year with drugs, antibiotics, intravenous fluids, bandages, cotton, surgical instruments, and laboratory reagents, from the General Medical Depot of the Ministry of Health. As a result, large areas of the hospitals are taken up with the storage of drugs, materials, and supplies; the use of the drugs and supplies is restricted because there are no provisions for replenishment before the beginning of another year, except under emergency conditions; the drugs become outdated; and infrequently used drugs or equipment continue to occupy space that could be used for other purposes.

With the exception of two X-ray equipment repairmen, there are no provisions for the maintenance and/or repair of hospital furnishings, laboratory and operating room equipment (autoclaves, sterilizers, instruments), water pumps, electric motors, generators, or refrigerators. As a result many of these essential items are inoperable for long periods of time.

The Ministry of Health is attempting to develop and extend preventive health services, while still maintaining and improving its curative program.

Already the Malaria Eradication Program has been extended to a majority of the malarious areas of the country, and it is expected that eradication will be achieved before 1970. Almost without exception, the health workers, other governmental officials and industrial leaders in the areas visited by the survey team had favorable comments to make about this program. Cases of malaria still occur, but the incidence is negligible.

Other programs to prevent and control disease have been initiated by the Ministry, but as yet reach only a small percentage of the population. It is planned that they will be extended as rapidly as possible. This, of course, is dependent upon the development of suitable organizational plans and an infrastructure through which the services can be taken to the people.

The present efforts of the Ministry of Health which are aimed at prevention and control include: (1) the malaria eradication program, (2) the smallpox vaccination campaign which is being carried out on a house to house basis in Kabul and two other Provinces, (3) the maternal and child health services provided in the cities of Kabul, Herat, Kandahar, and Mazar-i-Sharif, (4) the typhoid inoculations available to the people seen in the polyclinics in some areas of the country, (5) the treatment of tuberculosis patients (females) in the sanitarium in Kabul, (6) the diagnostic and domiciliary treatment services for men and women provided by the Tuberculosis Center in Kabul, (7) the BCG vaccinations available to school children in Kabul and Jalalabad, and (8) the dusting of people with DDT in some areas of the country to control typhus.

Staff for the various hospitals, polyclinics and other programs of the Ministry of Health is supplied from its personnel cadre and is rotated at two year intervals. This rotation, which generally applies to all staff excepting those assigned to the Malaria Eradication Program precludes continuity of action within the various services of the hospitals and the polyclinics, as well as within the other programs of the Ministry.

With the exception of the Avicenna Hospital, which has a residency training program for surgeons and internists, and training programs for X-ray technicians and nurse aides, and the Shararah Maternity Hospital which has a nurse-midwife training program, none of the other hospitals or polyclinics operated by the Ministry of Health conduct courses of training for health personnel.

2. Ministry of Education: The 500 bed Ali Abad Hospital for male patients, and the 200 bed Masturat Hospital for female patients and the polyclinic located in downtown Kabul, provide the Faculty of Medicine of Kabul University with the clinical facilities for the training of medical students, interns, and male and female nurses. In addition these hospitals are used for postgraduate training for specialists and refresher courses for paramedical personnel.

The 500 beds of Ali Abad Hospital located in three buildings constructed some twenty years ago, are divided between the various

services as follows: internal medicine, 110 - general surgery, 110 - ear, nose and throat, 26 - ophthalmology, 26 - dermatology, 38 - pulmonary tuberculosis, 110 and mental diseases, 80 beds. The tuberculosis and mental disease services of the hospital are located in separate buildings; general surgery, ear, nose and throat and ophthalmological services each have separate operating room suites. The buildings have high ceilings, wide corridors, are well lighted and ventilated, clean and well maintained. Facilities for the diagnosis and treatment of patients appears to be adequate.

The Masturat Hospital, a multi-building complex, is generally considered to have 200 beds. However, facilities are such that more patients can be accommodated when the need arises. The bed strength at the time of the survey was as follows: obstetrics and gynecology, 40; pediatrics, 50; general surgery, 38; internal medicine, 40; ear, nose and throat, 13; ophthalmology, 13; dermatology, 11; and mental diseases, 11 beds.

The buildings and grounds of the Masturat Hospital are clean and well maintained. The facilities provided for the diagnosis, care and treatment of patients, including the services of a blood bank, appear to be adequate.

Patients admitted to both the Ali Abad and Masturat Hospitals are usually referred to them from the central polyclinic operated and financed by these hospitals. However, patients may be sent directly to either hospital by any physician. In such instances the hospital reserves the right of admission.

The staff of Ali Abad Hospital, as well as that of the Masturat Hospital, totalling some 80 physicians, 108 male nurses and 52 female nurses, are assigned to them by the Faculty of Medicine. Those physicians who have teaching assignments, as well as hospital duties receive part of their salary from the Faculty of Medicine and part from the hospital's budget.

A School Health Service operated by the Ministry of Education, is providing medical care and preventive medical services to 65,000 day students enrolled in 62 of Kabul's schools. Similar services are being provided to one vocational and six boarding schools with 10,000 boarders. These services are provided through a main center, with polyclinic, X-ray, laboratory and dental facilities, and eight subcenters equipped and staffed to administer first aid and to treat minor illness.

A health record is maintained for each student which records physical findings, laboratory examinations and illnesses. All students

receive smallpox vaccinations, are tuberculin tested and are given BCG vaccinations if indicated. The boarding students are also given typhoid-paratyphoid vaccine.

With the exception of a radiologist supplied at no cost by the Government of Czechoslovakia, all of the staff of the School Health Service which consists of the Director, who is a pediatrician, six doctors, a dentist, a laboratory technician and four graduate female nurses, are employees of the Ministry of Education.

3. Rural Development Department The Rural Development Department has established rural health units, in each of its eleven project areas. Each project area serves some 50,000 to 60,000 people. Three units are located in Kabul province, two in Nangahar province, while the provinces of Badakhshan, Bamiyan, Parwan, Paktia, Ghazni, and Kandahar each have one unit.

Each health unit is carrying out a maternal and child health program. Minor injuries are given first aid treatment and drugs are prescribed and dispensed for the treatment of diseases not requiring hospitalization. Smallpox vaccinations are being given as a part of the National Smallpox Eradication Program.

In some of the project areas the health units occupy buildings constructed especially as health units. In others, rented structures have been adapted to provide space for the examination of patients, minor first aid and the distribution of drugs. Of the units visited by the survey team, maintenance and housekeeping needs considerable improvement.

The total health staff for the eleven project areas consists of twelve physicians, seven assistant doctors, four midwives, six auxiliary midwives, fourteen compounders, one laboratory technician, eleven vaccinators, ten dressers and seventeen sanitarians. The sanitarians concentrate their efforts on helping communities to acquire safe water and improve excreta disposal facilities. The assignment is usually for two years and during this period salaries are paid by the Rural Development Department.

The school for the training of male nurses of the Ali Abad Hospital is utilizing the facilities of the Shewaki Center for a month of practical experience in a rural area for its third year students.

4. Ministry of Finance: Some ten years ago the Ministry of Finance established a Health Insurance Plan for Government Employees. Membership

in the plan is voluntary and fees are prorated at the rate of 2% of the employees' salary per month. The wife and one child of each member are also entitled to receive the health services provided by the Plan. At the time of the team's visit, the Plan had 24,000 registered members from fifty-two government agencies located in the Kabul area. The annual operating budget is approximately 2.4 million afghanis, of which two million is provided by the Ministry of Finance.

The office of the Medical Director of the Plan, space for its various clinic examining rooms, dental and laboratory facilities, pharmacy and drug storage are located in Kabul on the second, third and fourth floors of a rented building. The building has no piped water supply and with the exception of the laboratory and dental facilities the polyclinic was sparsely furnished and equipped.

The services of a polyclinic are available to members and their dependents six days per week. Laboratory and X-ray examinations and medications are provided free of charge. Home visits by Plan personnel are available to those who cannot attend the Polyclinic. The Plan also has a midwifery service which handles home deliveries. Hospitalization in the Avicenna, Ali Abad or Masturat Hospitals is arranged for those members requiring it. Dental care is also available. All members and their dependents are vaccinated for smallpox with vaccine provided by the Ministry of Health. The polyclinic operates a domiciliary tuberculosis treatment program which is independent from that operated by the Ministry of Health Tuberculosis Center.

The medical staff is made up of the Director, who is a dermatologist, four internists, one ear, nose and throat specialist, one surgeon, one ophthalmologist, one gynecologist and two pediatricians. The paramedical staff consists of two midwives, and X-ray technicians, two laboratory technicians, seven fulltime and five part-time trained nurses. The medical staff are contracted on the basis of the number of clinics they attend each week, while the paramedical personnel are hired directly by the Plan. The Plan also has on its staff a dentist and a radiologist supplied free of charge by the Government of Czechoslovakia.

With the exception of narcotics which are obtained from the General Medical Department, drugs and medical supplies are purchased directly by the Plan from various supply houses.

5. Ministry of Public Works: To provide medical care for its Manpower (Labor Forces) the Ministry of Public Works has established hospitals and polyclinics at its principal highway maintenance and road construction camps and a hospital in Kabul.

The principal construction camps of the Ministry of Public Works are usually located at some distance from towns having hospital or polyclinic facilities. To provide first aid facilities for the treatment of injuries and the care of illness of short duration, nineteen hospitals and polyclinics have been established. These are located in temporary buildings and tents and have a total capacity of 250 beds. The staff of these hospital-polyclinic units usually consists of an assistant doctor, a medical corpsman and a compounder.

Patients with injuries or illness requiring more than two or three days treatment are referred to the 100 bed Manpower Hospital in Kabul. This hospital is located in a three-story building constructed some thirty-five years ago as a palace. The building is not suited for a hospital since it has no operating piped water supply or heating system, and the sanitary facilities are inadequate for the number of patients hospitalized. The hospital has an internal medicine service only. It has no facilities for X-ray examination or laboratory work. Cases requiring surgery or orthopedic care are referred to the Central Military Hospital. Those patients with pulmonary tuberculosis are referred to the Tuberculosis Sanatorium of the Ali Abad Hospital or to the Tuberculosis Center of the Ministry of Health.

Except for the military medical corpsman, the entire medical staff of the Manpower Medical Services are members of the personnel cadre of the Ministry of Health. Their assignment with the Ministry of Public Works is usually for a two year period. During the period of assignment their salaries are paid by the Ministry of Public Works.

6. Helmand Valley Authority: The Helmand Valley Authority operates a twenty bed hospital and polyclinic located in Lashkar Gah, and polyclinics in Marja, Nad-i-Ali and Derwashan to provide health services for the employees of the Authority and the residents of the development area, ~~under development.~~ ✕

The hospital in Lashkar Gah is located in buildings originally constructed for dwellings. The building complex has beds for fifteen male patients and five women patients, a laboratory, an operating room with sterilizing and scrub room facilities, an X-ray, pharmacy, a polyclinic for both men and women patients; classroom and dormitory space for thirty male and female nursing students; a laundry and a kitchen. Although the buildings are functionally inadequate and crowded, they are clean and the equipment appears to be adequate. A new hospital building is now under construction.

The polyclinics located in Marja and Dewarshan are housed in buildings originally constructed by Morrison-Knudsen for ten bed hospitals and dispensaries. With the termination of the MKA contract, the hospitals were closed down and all equipment removed. The buildings in Marja is being rehabilitated and equipped to serve as a polyclinic to provide first aid facilities, and to treat minor ailments. The polyclinic in Nad-i-Ali is housed in a portion of a building which houses the area agriculture office. All three polyclinics have a permanent staff consisting of a male nurse, a compounder and a sanitarian. A doctor from Lashkar Gah visits the polyclinics in Marja and Nad-i-Ali once a week.

The new sixty bed general hospital, polyclinic, nurse training unit located in Lashkar Gah, as well as a twenty bed hospital for the care of patients with tuberculosis and a polyclinic unit located in Nad-i-Ali are being constructed and equipped by the Helmand Valley Authority with the assistance of AID. It is expected that these units will become operational shortly.

The staff of the medical care program of the Helmand Valley Authority is made up of three physicians, one assistant doctor, a dentist, an X-ray and laboratory technician, an assistant midwife, five compounders, five male nurses and three sanitarians. All are members of the Ministry of Health cadre of health personnel. During their two year period of assignment to the Helmand Valley Authority, their salaries are paid by the Authority.

In addition to providing medical care facilities to employees of the Authority and residents of the development area, the Helmand Valley Authority is utilizing these same facilities for the training and practical experience of the students (both male and female) enrolled in its school for auxiliary nurses. The CARE-MEDICO group, which consists of two physicians and two nurses, assigned to the Helmand Valley is providing technical assistance to the auxiliary nurse training program, as well as to the care aspects of the Authority's medical program for the Valley.

7. Ministry of Interior: The Central Prison of Kabul has a fifty-two bed hospital and polyclinic for the care of inmates. The administration, housekeeping and food services of the hospital are the responsibility of the Ministry of Interior. Professional services, drugs, materials and supplies required for the treatment and care of prisoners is supplied by the Ministry of Health.

The ambulatory medical services provided by the Ministry of Interior for its gendarmes is staffed by three physicians assigned by the Ministry of Health from its cadre of health personnel.

Gendarmes, and prisoners outside of Kabul that require hospitalization are admitted to facilities operated by the Ministry of Health.

8. Industrial and Construction Companies:

a. The Afghanistan Textile Company

The Afghanistan Textile Company operates two hospitals, one in Gulbahar with thirty beds, and another in Pul-i-Khomli with eighty beds, while the Da Spinzar Cotton Company operates a fifty bed hospital located in Kunduz. All three of these hospitals, together with their polyclinics, are housed in buildings originally planned and constructed as hospitals and polyclinics. The construction was completed at a time when facilities for hospitalization and medical care for foreign contract and locally-hired employees and their dependents was not otherwise available. The companies have continued to operate their hospitals to comply with contracts made with foreign technicians which include provisions for hospitalization and care, and to insure the availability of health services for their locally hired employees and their dependents. Hospitalization and care is provided for other members of the community on a bed space available basis, and for the payment of a small fee.

Each of these three hospitals provides care for both men and women patients. The same operating room, laboratory, pharmacy, X-ray, linen room, and kitchen facilities are used for the male and the female sections of the hospital.

All three hospitals have piped water systems supplied from deep wells, which also provide the factory complex with water, water borne sewerage systems, and a 24-hour a day electrical service. In general, the hospitals are clean, adequately equipped and well maintained. The operating room complex, and X-ray facilities of the Pul-i-Khomli Hospital are completely air conditioned. The Kunduz Hospital is in the process of remodeling its operating room suite, and constructing a new kitchen and laundry. Modern laundry equipment, electric stoves, ice boxes, mechanized equipment for food preparation, sterilizers, autoclaves, operating room tables, and a variety of new instruments are on hand ready for installation once the remodeling and new construction is completed.

With the exception of three direct-hire employees, two foreigners, both surgeons, and a pensioned Ministry of Health physician, the medical and paramedical personnel staffing these hospitals are members

of the personnel cadre of the Ministry of Health. Their period of assignment to these hospitals is usually two years, during which they retain their grade within the cadre, but receive their salary from the company.

b. The Afghanistan Construction Unit (ACU)

The Afghanistan Construction Unit has two hospitals, one with twenty beds at Manzel Bagh Camp, which is near Kandahar, and another with fourteen beds at Chah-i-Anjirs. These facilities were constructed and equipped as hospitals by Morrison-Knudsen Afghanistan (MKA) to comply with contracts made with foreign technicians for providing them with hospitalization and medical care, as well as to provide health services for locally-hired employees and their dependents. MKA's successor, ACU, has continued to operate the facilities, and a contract foreign physician is presently in charge of the operation of these facilities.

Both of the hospitals and polyclinics have piped water supplies, water borne sewerage systems and a 24-hour a day electrical service. The polyclinic of the Manzel Bagh Hospital is presently attended one day a week by the ACU contract physician, but trained paramedical personnel are available daily for first aid and the treatment of minor ailments. The hospital, although completely equipped with X-ray, operating room and laboratory facilities and a diet kitchen, is not being used for the present. The hospital at Chah-i-Anjirs is spotless, well equipped with X-ray, laboratory, operating room and polyclinic facilities, and is staffed with efficient locally-trained personnel. The patients are primarily males, but bed space is available for the care of female patients.

All of the staff of the ACU health facilities are contract or direct-hire personnel.

c. The Afghan Highway Contractors Group (AHC)

The AHC, a consortium of six American firms, has a polyclinic at its camp near Kandahar. The polyclinic is located in a residence adapted for its use. It is well equipped and staffed by a contract physician and two locally-trained male nurses.

In order to provide more complete medical services for its contract as well as its locally-hired employees and their dependents, the AHC is constructing a new seven bed hospital-polyclinic unit. The new unit will have an operating room, X-ray and laboratory facilities, a doctor's office and examining rooms and a pharmacy.

The personnel staffing AHC health services and facilities are contract or direct-hire employees.

V. HEALTH MANPOWER - Training, Utilization and Personnel Practices

There are no registries, professional organizations or licensing authorities, from which it was possible to obtain information concerning the numbers, types or whereabouts of the workers who have been trained for health careers. The information which follows was obtained from many sources and in some instances was identified by the informant as "an estimate only".

A. Training Opportunities

Two Ministries of the RGA, the Ministry of Education and the Ministry of Health, are engaged in providing training for candidates for health careers. The training is provided at no charge to the student, but all graduates are required to give two years of service for each year of training received. The graduates from all of the training facilities for health personnel automatically become members of a personnel cadre responsible to the Ministry of Health. Some are assigned to serve in programs of other agencies, while others are retained to staff the facilities and programs of the Ministry of Health.

The Ministry of Education operates primary and middle schools, the lycees, and Kabul University. As a part of the University, it provides for the training of pharmacists through the Faculty of Pharmacy and for the training of physicians through the Faculty of Medicine. Associated with the two teaching hospitals operated by the Ministry of Education are two schools of nursing, one for male nurses (Ali Abad) and one for female nurses (Masturat).

For its part, the Ministry of Public Health provides residency training for physicians at Avicenna Hospital, operates a school for the training of nurse-midwives at the Shararah Maternity Hospital, and has a training program for nurse aides at Avicenna Hospital. Through its Institute of Public Health, training courses are conducted for dental assistants, sanitarians, laboratory technicians, laboratory assistants, compounders, vaccinators and X-ray technicians.

There are other groups engaged in the training of auxiliary nurses and nurse assistants. These include the Helmand Valley Authority, the Afghanistan Construction Unit and the Afghan Highway Constructors group. Of these, the only formal program is the one carried out at the Lashkar Gah Hospital by the Helmand Valley Authority in collaboration with a CARE-MEDICO team. As yet the trainees of the aforementioned groups have no official recognition so are not available for admission to the regular personnel cadre of the Ministry of Health.

The Ministry of Defense is reported to have a training program for medical corpsmen, but no information was obtained regarding the length of training, entrance requirements or the curriculum.

1. Medical Education: The Faculty of Medicine of Kabul University was established thirty-two years ago and was the first faculty of the University. From its founding through 1961 there were 440 graduates. It is the only medical faculty in Afghanistan, but efforts are being made to establish a second one in Jalalabad.

For a number of years, the Faculty of Medicine carried out two training programs, one of six years duration for physicians, and one of four years duration for assistant doctors. The entrance requirement for candidates for the six year course was completion of the lycee, while that for the assistant doctor program was completion of the tenth grade. The training program for assistant doctors was terminated in 1952. Sometime prior to this, arrangements were made for selected graduates of the assistant doctor group to return for further study, and upon successful completion to be granted the Doctor of Medicine Degree. It is planned that this accelerated program will be continued until all who qualify and who wish to complete their medical education have had the opportunity to do so.

Present requirements for entrance to the Faculty of Medicine are high school (12 years), plus one year of study concentrated on mathematics, physics, chemistry and biology (MPCB) which is given at Kabul University. Following this program the candidates are admitted to the medical school. Upon completion of the five-year course of study offered by the Faculty, the graduates are required to have a one-year internship in Ali Abad or Masturat Hospital.

At the time of the survey, there were 444 students in the Faculty with 108 students in the first year class, 81 in the second, 56 in the third, 108 in the fourth, 91 in the fifth. An additional 69 of which ten are women were serving their year of internship. These are the first of their sex to be graduated from the Faculty.

The Faculty of Medicine has positions for 141 physicians for its teaching and clinical staff, but only 113 of the positions are filled. There are seventeen departments, ten for basic sciences and seven for clinical subjects. Preventive medicine is covered during the fourth and fifth year. No instruction is given in hospital administration.

Classes in the medical school are taught in several languages since there are foreign professors who are unable to teach in

Farsi. Their lectures are translated by interpreters, but this does not prove entirely satisfactory. Students, not fluent in French, German and English, are handicapped by their inability to communicate with their professors. They are handicapped further because the textbooks, periodicals and other materials published in Farsi are extremely limited.

Some physicians mentioned to the survey team that there is a tendency to sacrifice quality for quantity because of the country's need for more physicians. They said that a majority of the present student body of the Faculty of Medicine is ~~very~~ weak in the knowledge of any foreign language; that this not only constitutes a problem while they are students, but that it will make it impossible for them to go abroad for specialized study.

During the second Five Year Plan, the Faculty of Medicine hopes to establish a department of forensic medicine and to establish a Faculty of Dentistry. Efforts are being made also to obtain foreign professors for neuropsychiatry, radiology, biochemistry and social and preventive medicine.

2. Nursing and Midwifery Education: There are two schools of nursing and a nurse-midwifery school in Kabul, and a school for auxiliary nurses in Lashkar Gah.

a. Ali Abad School of Nursing

A school for the training of male nurses was opened in 1943 at the Ali Abad Hospital. A sixth grade education was required for admission and the students were given two years of formal instruction and one year of practical experience on the wards at the hospital. The instruction and supervision was provided by physicians. During the period 1943 to 1955 the school graduated 423 nurses. Of this group 62 are now working in the Ali Abad Hospital, 108 in health facilities of the Ministry of Health and 50 in hospitals of the Ministry of Defense. The whereabouts of the remaining 203 graduates is unknown.

In 1956 the Ali Abad Nursing School was reorganized, the curriculum was revised and the entrance requirement was raised to the ninth grade level. The new program is of three years duration. After the completion of a six month probationary period, the students spend two and one-half days per week in class and three and one-half days on the wards of the hospital for the remainder of their training. When the students graduate, they receive a diploma which is the equivalent to the baccalaureate degree given to lycee graduates. Those who enter military service are given officer rank.

Thirty students have been graduated from the new school. Three are instructors in the school, seventeen are employed by Ali Abad Hospital, six are in military service, three are working in health facilities of the Ministry of Health and one is employed by the Rural Development Department.

Sixty-five students are presently enrolled. There are twenty-one in the first year class, twenty-nine in the second year class and fifteen in the senior class. The students, who come from many parts of the country, are provided with dormitory facilities, meals, clothing and a small monthly stipend.

Surgery, Ear, Nose and Throat, Ophthalmology, Communicable Diseases and Medicine are taught by staff of the Faculty of Medicine. All other subjects are taught by the nursing faculty (three instructors) and a nurse tutor assigned by the World Health Organization.

b. Masturat School of Nursing

The Masturat School of Nursing which is operated by the Ministry of Education is an outgrowth of a training program in midwifery started some twenty years ago. Over the years the training was supplemented by some courses in nursing, but the emphasis remained on midwifery. In 1952 the decision was made to terminate the midwifery training and to concentrate on nursing. Before this occurred, some 250 women had been graduated. No records are available which show how many of these are still active in their profession.

When the present school of nursing opened in 1952 the entrance requirement was a ninth grade education. By 1959 there were sixty-six graduates who had received a diploma equivalent to a baccalaureate degree from the Lycees. In March 1961, when there were no candidates for admission who could meet the entrance requirement of a ninth grade education, it was decided to lower the admission requirement to six grades of basic education. This was done in March 1962.

There are now thirty-one students in the school in their first and second years of training. There is no third year class as there were no students admitted in 1961. The first year class has twenty-five students, seven with nine grades and eighteen with only seven grades of basic education. There are six students in the second year class, two with nine grades and four with seven grades of basic preparation. Because of the difference in the basic preparation of the students, nursing instruction

is now given at two levels in each class. The training program is of three years duration, but there are plans to increase it to four years in order to bring the students who have less than nine years of basic preparation up to a ninth grade level by the time they graduate. Even if this is done, some of the nurses who graduate will have less educational background than the graduates of Ali Abad. It is not known what type of diploma or certification Masturat will be permitted to confer for this training.

The Masturat School does not provide dormitory facilities for the students. Many must travel great distances between their homes and the school, and when the weather is inclement, it is difficult for them to meet their class schedule.

Although statistics were not available, it was reported to the team that around 300 midwives and nurses have been trained at the Masturat Hospital during the past twenty years. The total number now employed is not known, but it is estimated to be between 200 and 250.

c. Shararah Maternity Hospital, School of Nurse-Midwifery

A program for the training of midwives was opened at the Shararah Maternity Hospital in September, 1951. A ninth grade education was required for admission and the students received three years of formal instruction with the practical experience provided in Shararah Hospital and its seven maternal and child health clinics. One hundred and sixteen students have been graduated from the midwifery course, and there are fifteen students in the class which will graduate as midwives in November, 1963. Forty-three of the graduate midwives are employed by the Shararah Maternity Hospital. There they serve as staff for the hospital, assist in the instruction and supervision of student midwives, and attend the home delivery and visiting services of the seven maternal and child health clinics which the hospital operates in Kabul. No records are available which show how many of the other seventy-three graduates are active in their profession.

In March of 1963 instruction in nursing was added to the curriculum of the midwifery course with admission requirements remaining at the ninth grade level. Arrangements have been made for the nurse-midwifery students to obtain the required practical experience in nursing at the Avicenna Hospital. There are seventeen students in this first class, and they will be graduated as nurse-midwives in November, 1964,

d. Lashkar Gah School for Auxiliary Nurses

This school, which was started in 1961, is operated by the Helmand Valley Authority with the assistance of the CARE-MEDICO team. Thirty students are presently enrolled. Of these thirteen (ten male and three female) are in their second year of study, while seventeen (sixteen males and one female) are in the first year program.

Students with only six grades of basic education are admitted. Some consideration is being given to a proposal that the training program be enriched and extended to at least four years so that the graduates will have an equivalent of nine years of basic education, plus nurse training when they graduate. If this is done, the graduates will have an educational background comparable to a majority of the students presently enrolled in the Masturat School, but less than those of the Ali Abad school.

The nursing faculty of the school is composed of three American nurses. Two are provided by CARE-MEDICO and the third is a direct-hire employee of the Helmand Valley Authority.

3. Training Opportunities for Other Categories of Health Workers

The Institute of Public Health, a dependency of the Ministry of Health, is responsible for all of the training programs for paramedical personnel which are offered by the Ministry of Public Health. Within the confines of its own premises, the Institute provides faculty and facilities for the training of sanitarians, compounders, laboratory technicians, laboratory assistants and vaccinators.

Outside the Institute and within their own facilities, the Dental Association, the Shararah Maternity Hospital and Avicenna Hospital are providing training for dental assistants, nurse-midwives, and X-ray technicians. The curriculums followed by these institutions must have the approval of the Institute of Public Health and Institute personnel usually participate in the examination of their candidates for diplomas.

The Institute of Public Health, the Dental Association and the Avicenna Hospital accept students from the Ministry of Education, the Ministry of Defense, the Rural Development Department and the Municipalities. They also accept applications from individuals who respond to announcements made by press and radio that the Institute is offering courses of instruction in various health disciplines.

a. School for Dental Assistants

Sixty-five students have been graduated from the school since it opened in 1948 and all are employed. The course is of four years'

duration and a ninth grade education is required for admission. Seventy-three students are presently enrolled in the school. There are twenty-six in the first year class, nineteen in the second year, fifteen in the third year and thirteen in the senior class.

b. School for X-ray Technicians

Twelve technicians have been graduated from this school which opened in 1960, and all are employed. The course is of two and one-half years duration, and a ninth grade education is required for admission. Twenty-six students are presently enrolled in the school. There are eleven in the first year class and fifteen will graduate this year.

c. School for Sanitarians

Ninety-six students have been graduated from this school which opened in 1956 and all are employed. The course is two and one-half years duration and a ninth grade education is required for admission. Forty-eight students are presently enrolled in the school. There are twenty-six students in the first year class and twenty-two students are in their last year of instruction.

d. School for Compounders

One hundred thirty-nine students have been graduated from this school which opened in 1946, and all are employed. The course is of three years duration and a ninth grade education is required for admission. Seventy-nine students are presently enrolled in the school. There are twenty-five in the first year class, twenty-nine in the second year, and twenty-five students in their final year.

e. School for Laboratory Technicians

Fifty-one students have been graduated from this school which opened in 1956 and all are employed. The course is of two and one-half years duration and a twelfth grade education is required for admission. Students for this course of instruction are sent to the Institute of Public Health by the Ministry of Education. The school is closed for the time being due to a lack of qualified applicants.

f. School for Laboratory Assistants

Thirty-seven students have been graduated from this school which opened in 1956 and all are employed. The course is of three

years duration and a sixth grade education is required for admission. Thirty-eight students are presently enrolled in the school. There are twenty-five students in the first year and thirteen students are in their second year of instruction.

g. School for Vaccinators

One hundred eighty-eight students have been graduated since this school opened in 1960 and all are employed. The course is of two months duration and a sixth grade education is required for admission. Twenty-three students are presently enrolled in the school.

The students enrolled in all of the above mentioned courses come from many areas of Afghanistan. During the period of their training they are provided with a small monthly stipend and a cooperative allowance to help defray the cost of their expenditures for food and clothing.

B. Utilization of Health Workers

1. Physicians: According to the information provided by health personnel there are between 500 and 600 practicing physicians in Afghanistan. This estimate appears realistic since there were 440 graduates from the Medical Faculty from its founding through 1961, and the number who received basic medical education abroad has been relatively small. In the next six years the number of physicians will be augmented by an average of seventy-seven per year if 90% of those presently enrolled in the Faculty of Medicine complete their studies.

A vast majority of the 500 or more physicians now practicing are engaged in government service and maintain a private practice as well. Approximately 425 of them are reported to be engaged in the health programs of the various governmental agencies. The Ministry of Health alone employs 242 physicians and forty-four assistant doctors, and there are an additional 113 physicians on the staff of the Faculty of Medicine.

2. Nursing and Midwifery Personnel: It is estimated that some 800 midwives and nurses have been trained, and that of this number around 550 are working.

The Ministry of Health has 110 on its payroll and about the same number are employed by the Ministry of Education. Others work for the Ministry of Public Works, the Ministry of Finance, the Rural Development Department, the Helmand Valley Authority and for industries and commercial establishments.

If all of the nursing and nurse-midwifery students presently enrolled in the four schools complete their training, the existing cadre will be augmented by fifteen in 1964, sixty in 1965 and eighty in 1966.

3. Other Categories of Health Workers: In addition to the Ministries and other departments of the national government, some municipalities and private groups employ dental assistants, sanitarians, compounders and other categories of paramedical personnel. The Ministry of Health employs more of these types of paramedical workers than any other agency. At the time of the survey it had on its payroll the following:

Dental Assistants	-	44
Pharmacists	-	37
Compounders	-	182
Laboratory Technicians	-	32
Dressers	-	80
Vaccinators	-	210
Sanitarians	-	54
Sanitary Engineers	-	1
Health Educators	-	1
X-ray Maintenance Specialists	-	2

The cadre of paramedical personnel is being augmented each year. If all who are presently receiving training complete their studies, the following will be ready for assignment at the end of this school year:

Dental Assistants	-	15
X-ray Technicians	-	15
Sanitarians	-	22
Compounders	-	25
Vaccinators	-	23

C. Personnel Practices

1. Training provided in Afghanistan for health workers is at no cost to the student. Upon graduation, however, the trainee is committed to work two years for every year of training he received.

2. Many of the graduates of ~~all~~ the health training facilities maintained by the government automatically become members of the personnel cadre of the Ministry of Public Health. Exceptions include those whose training was sponsored by another agency and the physicians who are given appointments on the Faculty of Medicine and its teaching hospitals.

3. Members of this personnel cadre are assigned by the Ministry of Health either to one of its programs or facilities, to one of another government agency, or to hospitals and polyclinics of the Textile, Cotton and other Companies.

4. With the exception of the physicians who become members of the Faculty of Medicine, all other male health workers are required to serve in the military for one year.

5. The Ministry of Health usually rotates the members of its personnel cadre every two years. The rotation may result in moving the health worker from an assignment with another agency to one in the Ministry of Health or vice versa. The reason given for using the rotation scheme is that assignments in hardship posts are thus shared by all members of the cadre. A hardship post is defined as one where the opportunities to engage in private practice are limited.

6. The government has an established salary scale, promotion system and retirement plan which applies to its regular health workers. The grading system is on a scale of one to thirteen with one being the top grade. A newly graduated physician enters the scale at grade eight and receives a salary of 800 afghanis a month with an additional 200 afghanis given as a bonus for the University degree. Paramedical personnel with diplomas such as dental assistants, X-ray technicians, nurses, sanitarians, and compounders enter the service at grade ten, and a bonus of 100 afghanis per month is given for the diploma. Laboratory technicians start at grade nine, laboratory assistants at grade twelve and vaccinators at grade thirteen. After three years in a grade the employee is eligible for a one grade promotion, provided that his performance has been satisfactory.

7. All physicians employed by government are permitted to have a private practice. Exceptions to this are: a) Those employed by the Malaria Institute who are paid a field allowance, and b) the foreign contract physicians. Exclusive service is not required of other physicians because the salary paid by the government is hardly sufficient to cover living expenses.

8. Other categories of health workers are also permitted to accept outside employment to supplement the salaries they receive for government service.

XIV SUMMARY AND RECOMMENDATIONS

The fact that at least eight governmental agencies in Afghanistan are engaged in health activities indicates that there is a recognition by these agencies and by the government that goals for increasing worker productivity, agricultural development, industrial output or educational advancement are affected adversely by human illnesses. The fact that the Government of Afghanistan requested a health survey indicates that it is not fully satisfied that maximum returns are being obtained for the manpower and funds it is presently investing in health services.

In this chapter of the report the objective is to present an overall view of the situation as it exists, to pinpoint some of the areas where improvements can be made, as well as some of the approaches that might be used to bring about these improvements.

The obstacles which are enumerated are well known to the health workers of Afghanistan, for they are the ones who encounter these obstacles daily. The suggestions as to steps which might be taken to remove these barriers will have a familiar ring also, for they are a synthesis of the ideas of many individuals.

The development of adequate, effective and economical health services is a long term process even under the most advantageous conditions. Health manpower must be trained, health problems must be identified, appropriate programs must be designed and activated, the cooperation and active support of non-health agencies must be obtained, facilities must be established, staffed and maintained, and at the same time people who are ill must be given treatment and care.

All of the above are essential for the development of an effective health service, but alone they are not sufficient. They must rest on a solid foundation which has been carefully designed and constructed. This requires planning, organization and budget.

The health leaders in Afghanistan face many difficulties. Health manpower is in short supply, and it will continue to be until the nation can produce more candidates for health careers. Efforts to identify health problems and to develop suitable programs are hindered because health workers do not have adequate national statistics on population, births and deaths, causes of morbidity and mortality or on the incidence of disease. The solution of some of the important disease problems is dependent upon the achievements of non-health agencies and the degree to which they are able

and willing to act. The health services and programs which have been established can only reach a small percentage of the population because of the existing personnel practices and because communications and transport facilities are limited. Even in the treatment of the sick, some of the health workers are handicapped by a lack of diagnostic facilities and therapeutic drugs.

These then are some of the barriers which slow down the development of health services and programs for Afghanistan. But in spite of them a successful national malaria eradication program is being carried out, a national smallpox vaccination program has been started, the nucleus of a maternal and child health program has been developed, some preventive measure are being initiated for the control of tuberculosis, a network of hospitals and polyclinics exists, and physicians and auxiliary health personnel are being prepared for health careers.

Through the provision of technical assistance, the World Health Organization is helping develop the building blocks for the health services and programs of the future. WHO is involved in training programs for many categories of health workers, in the conduct of the malaria eradication and smallpox programs, in the preparation of vaccines, in the organization of a tuberculosis control program, and in the extension of health services to selected rural areas. UNICEF provides equipment, vehicles, therapeutic drugs, DDT, and other supplies to support several of the health programs of the government. CARE-MEDICO and the Peace Corps are rendering personal services and assisting with training. The Government of West Germany has agreed to help with the establishment of a blood bank and with the development of research programs. Other governments have expressed their interest in the health problems of Afghanistan through the provision of fellowships, equipment, drugs, funds, and the personal services of health workers.

There are, however, other areas of need which must receive attention if the present efforts of the government and those of outside groups are to produce maximum returns for the manpower, the facilities, and the funds which are presently being invested in health services and programs.

Problem 1

A majority of the people who avail themselves of the health services offered in Afghanistan have diseases or conditions which are preventable. These include dysentery, intestinal parasitic infections, tuberculosis (of both human and bovine origin), anemia, avitaminosis, malnutrition, and conditions arising from obstetrical care provided by untrained or inexperienced midwives. In spite of this fact, the primary focus of the health services

of governmental and other agencies is on the treatment of illness; although some attention is given to the methodology for preventing or eliminating the underlying causes which give rise to disease, the emphasis of medical education in Afghanistan is on the treatment of disease.

Recommendation

It is recommended:

a. That the teaching of preventive medicine be given a greater emphasis by the Faculty of Medicine; that the precepts of prevention be introduced as soon as the student enters the Faculty and that the methodology of prevention be included as an integral part of all clinical instruction, as well as in the courses given by the Department of Preventive Medicine.

b. That the malaria eradication program be provided the funds and the personnel it will require for the achievement of its goal. This program is at a critical stage. Great progress has been made in reducing the incidence of malaria which once was widespread throughout the nation, but the gains which have been made will be lost unless the attack phase is brought to a successful conclusion and the surveillance phase can be pursued with vigor.

c. That the present efforts to eradicate smallpox, to attack the tuberculosis problem and to provide care for mothers and children be expanded as rapidly as possible; that those responsible for these programs make a greater effort to keep other health workers informed of their findings. This will be a means of obtaining uniformity of use and optimal results from proven preventive and therapeutic regimens.

d. That all channels be utilized for keeping the public informed of the health problems of Afghanistan and the measures they can take to prevent or control them; that health education be continued as an integral part of all pre-service and in-service training programs for health personnel and for teachers.

Problem 2

The principal health agency of the government of Afghanistan is its Ministry of Health, but there are at least seven other governmental agencies which provide health services or are engaged in the training of health personnel. Coordination between these agencies is minimal. Each has its own particular interests and needs, each plans its own program on the basis of these needs, and each competes with the others for that scarce commodity, the health manpower of the country.

Recommendation

It is recommended:

a. That steps be taken to effect a meaningful coordination between all of these agencies; that the non-health agencies whose collaboration is essential either for the solution of specific disease problems or for the accumulation of data be invited to take an active part in health planning.

b. That all of these agencies and other related groups work together in developing a comprehensive long-range national health plan which sets forth realistic targets for improving existing programs, services, and facilities; for meeting the health manpower requirements of existing and projected programs and facilities; and for attacking health problems as yet untouched. Furthermore, that the national plan define the role and the responsibilities that each of the agencies will be expected to assume in the implementation of the plan.

c. That serious consideration be given to the development of a National Health Council which will serve not only as the mechanism for achieving coordination between agencies and for developing a national health plan, but also as a forum to sample professional and consumer attitudes, and as an influential group prepared to defend policies and to interpret them to other governmental bodies and to the public.

Problem 3

As yet the Ministry of Public Health has neither the organization nor the personnel required to provide effective administrative and technical supervision of the health services for which it is responsible. For example, the General Directorate of Health Services is the unit which serves as the principal link between national and provincial staffs. It is the unit that is responsible for communicable disease control, for the construction and operation of hospitals and polyclinics, for the tuberculosis control program, for maintaining X-ray and laboratory facilities, for the drafting of health legislation, and for health education of the public. Yet this Directorate does not have the services of skilled technical personnel in environmental health, hospital administration, hospital architecture, public health education or nursing and midwifery to help develop programs and to supervise field employees.

Recommendation

It is recommended:

That the Ministry of Health be supported in every way possible, both with funds and personnel, for the important task of re-organization which it now has under consideration.

Problem 4

The health manpower available to the Government of Afghanistan is not only limited in numbers and poorly distributed, but the members of this cadre are handicapped in their efforts to extend health services. The lack of communication with technical specialists at the national level, the lack of transport facilities and the need to supplement the salary they receive keeps the staff immobile. Services are provided for those who come to the established facilities seeking attention, but little is done to take services to the people living in the small communities and the rural areas of the country.

Recommendation

It is recommended:

a. That as the re-organization plans are prepared by the Ministry of Health due consideration be given to the personnel practices which impede the development of effective services at the provincial level as well as at the national level.

b. That sympathetic consideration be given to paying a non-practice allowance at least for the provincial health officers and for national staff, so that full time exclusive service and travel will be possible.

c. That in addition to a non-practice allowance, this staff be provided with the means for carrying out their responsibilities, including transportation, equipment and supplies.

d. That the personnel rotation system which is now in effect be carefully studied and indicated modifications adopted. It is wasteful to assign personnel with special training and skills to a job which does not require them. For example, a surgeon should not be required to serve in a facility which does not have an operating room; a person with specialized training in tuberculosis is much more valuable if he is permitted to remain in the tuberculosis program.

Problem 5

Many of the hospitals and polyclinics located outside the Kabul area are substandard in terms of administration and maintenance. Available space is often poorly utilized. Sanitary facilities are inadequate in some and totally absent in others. Very often the housekeeping leaves much to be desired. Many essential items, such as laboratory and operating room equipment, motors, pumps and refrigerators remain unserviceable for long periods of time because of the limited provisions for maintenance and repair.

Recommendation

It is recommended:

- a. That consideration be given to including at least some instruction in hospital administration in the curriculum of the Faculty of Medicine, for under the personnel rotation system, a majority of the graduates will at some time or other be required to administer or assist with the administration of a hospital.
- b. That seminars and short courses in hospital administration be organized for the physicians presently in service.
- c. That instruction in food handling, food service and housekeeping be included in the training programs for nurses, midwives and auxiliary nurses.
- d. That adequate provisions be made for the maintenance and repair of the equipment which is essential to the operation of hospitals and polyclinics.
- e. That the sanitary condition of all hospitals be studied and improved as quickly as possible. All should have safe water, adequate handwashing and toilet facilities, screening, laundries, acceptable food preparation, food service and dishwashing facilities.

Problem 6

Some governmental agencies operate separate hospitals and polyclinics for men and women, and those provided for women are generally inferior. The two hospitals are often located at great distances from each other. This results in increased overhead costs because additional staff is required. It requires also a greater initial investment because many essential hospital units such as operating rooms, laboratories, pharmacies, X-ray departments, storerooms, kitchens, and laundries must be duplicated. This practice is

changing for in many of the new hospitals now under construction care will be provided for both males and females.

In some communities there is one hospital operated by an industry and another by the Ministry of Health. Often both are only partially filled and usually the facility operated by the industry has a greater bed capacity and more adequate facilities

Recommendation

It is recommended:

a. That a study be undertaken to determine whether some of the existing hospital facilities could be re-arranged or remodeled to accommodate both males and females, thus making it possible to close the second hospital.

b. That a study be made to determine whether it is advantageous for both industry and the government to maintain separate facilities in the same community or whether it could be in the best interests of the patients and of the government to close the government facility and to arrange for patient care on a pay basis in the hospital operated by the industry.

c. That the Ministry of Health seek technical advice from a competent hospital architect for the design of new hospitals and for the establishment of a department and staff to provide these services for the future.

Problem 7

Water, next to soil, is the most widely used natural resource in Afghanistan. Vast sums have been invested to utilize this resource for the irrigation of cropped areas and to produce sources for hydro-electric power, but little concern has been given to supplying people with safe water. At least three governmental agencies are involved in developing and utilizing the nation's water resources, but not one of these has the authority to develop these resources for domestic uses. Nor is there any authority responsible for planning or supervising the disposal of human, industrial and other wastes. Governors and Mayors throughout the country are preoccupied by these problems, but there is no agency to which they can turn for technical advice, feasibility studies, or review of plans submitted to them.

Water borne diseases and intestinal parasitism are serious problems in Afghanistan and will continue to be until people can have safe water and proper excreta and waste disposal facilities.

Recommendation

It is recommended:

- a. That the government assign to a competent authority the responsibility for the development and maintenance of water supplies for domestic uses and of disposal facilities for human and other wastes.
- b. That concurrent with this development the Ministry of Health plan for the quality control of these systems by establishing and staffing a department of public health engineering within its organizational structure.
- c. That through the medium of conferences, field visits and written communications the governors and mayors of the country be provided with technical advice on appropriate approaches for meeting the water and sewage problems in communities and in rural areas.
- d. That some instruction in public health engineering be included in the curriculum of the Faculty of Engineering, Kabul University.

Problem 8

Medical education in Afghanistan is dependent upon foreign professors for the teaching of some of the pre-clinical and clinical subjects. As a result, instruction is given in several languages. Interpreters are used, but students not fluent in French, German or English are handicapped by their inability to communicate directly with the professors. They are further handicapped by their inability to utilize the majority of the text books, periodicals and other medical literature available for study or reference.

Recommendation

It is recommended:

- a. That the Faculty of Medicine make a determination as to which second language is the most useful medium for instruction under the present circumstances.
- b. That consideration be given to providing intensive training in the foreign language selected to all students during the MPCB program, or as an addition to it.

c. That as an interim measure special guidance and instruction be given to the interpreters who assist the foreign professors in their didactic teaching and demonstrations, so that the interpreters will be able to convey the full context of the subject being taught.

d. That, once the second language of instruction has been selected, provisions be made to supply the library of the Faculty of Medicine with current texts, periodicals, and other reference material in that language.

Conclusion

The recommendations outlined above are offered as suggestions. The decision as to whether they are useful or even possible must be made by the people of Afghanistan.

It is the opinion of the survey team, however, that national planning for health is essential and that it should be given a high priority. The economy of the country should not be burdened by a wasteful duplication of health services or by expenditures for unnecessary social overhead costs. It is unnecessary that the manpower of the nation be drained by preventable illnesses and premature deaths.

It is the belief of the team that Afghanistan can find the proper solutions for the obstacles which are presently blocking health progress. It is believed also that these solutions need not require large expenditures of funds. They will, however, require time, effort, leadership and perhaps technical assistance additional to that already available.

The following suggestions are offered:

- 1) It would be desirable for the government to seek technical assistance to guide the development of a comprehensive long-range national health plan and to help effect coordination between the agencies which are engaged in health services.
- 2) In making plans for the reorganization of the Ministry of Health and in their implementation, the assistance of specialists not presently available to the government may be required.
- 3) For the up-grading of facilities, advisors in hospital administration and hospital architecture would make a valuable contribution.
- 4) A specialist in public health engineering could assist with the development of National and local plans for obtaining safe water for domestic purposes and for the disposal of human and other wastes.

5) Finally, a team of medical education specialists might be of assistance in reviewing the medical education program and in offering concrete proposals for its improvement.

VII. JOURNAL OF FIELD VISITS

Sunday, July 7 through Saturday, July 13, 1963

The team spent this period becoming familiar with the organization and activities of the USAID Mission, the events which led up to the request for a health survey, and in preparing a proposal for its conduct.

On July 10th the team was introduced to H. E. Dr. Abdul Rahim, Minister of Health, by Mr. Delmas H. Nucker, Director, United States Agency for International Development, Afghanistan. Mr. James Cudney, Assistant Program Officer of AID, who had been appointed to act as liaison between the Ministry and the AID Mission, accompanied Mr. Nucker and the team to the Minister's office.

During the meeting the Minister reviewed some of the problems he faces in trying to develop effective health services for Afghanistan.

Plans for the conduct of the health survey were discussed, ~~and an outline was developed.~~ It was agreed the team would prepare a written summary of these plans, including a listing of the agencies to be contacted.

This was done and submitted to the Minister on July 13th.

Sunday, July 14, 1963 - Kabul - Ministry of Health and Shararah Hospital

10:00 AM Met with personnel of Ministry of Health and obtained general background information concerning health problems in Afghanistan, a description of the organizational frame work of the Ministry of Health and orientation to the functions of its various departments and units. Plans for the conduct of the survey were discussed.

Those present at the meeting were:

Dr. A.Qaum Rassul	Deputy Minister of Health
Dr. A. Rahman Hakimi	Director General of Public Health Services, Ministry of Health
Dr. Abdul Ghani Afsel	Director of Tuberculosis Center

Sunday, July 14, 1963, Continued

Dr. Ghulam Sekria	Vice President of General Medical Depot
Dr. Abdul Qadeer	Vice President of the Malaria Institute
Dr. M. Aslam Salimi	Director General and Orthopedic Surgeon - Avicenna Hospital
Dr. Mohammed Omar	President of the Public Health Institute
Dr. M. Haidar Maher	Director General of Public Health Services for Kabul Province
Dr. A. Satar Seraj	Director for Medical Legislation & Sanitary Regulations, Ministry of Health
Mr. Habibullah	Director General of Administrative Services
Mr. Y. M. Mojaddadi	Director General of Foreign Relations Department, Ministry of Health

2:00 PM Visited the Shararah Maternity Hospital.

The program and plans of the hospital were discussed with the Director Madame Nazifa Nawaz and the Chief Medical Officer, Dr. Mohammad Akram, who is an obstetrician and a gynecologist.

The hospital, which was opened some twelve years ago, is operated by the Ministry of Health and can accommodate sixty-five patients. Forty of the beds are free while the remaining twenty-five are for pay patients. The charge for the use of these beds is fifty afghanis per day.

Sunday, July 14, 1963, Continued

The rooms for patients, ranging from single bedrooms to six-bed wards, and the offices for the midwives and doctors are spotlessly clean, light and airy.

In addition to facilities for taking care of normal and complicated deliveries, the hospital has a well equipped operating room for gynecological surgery.

The maternity service has an average of 150 to 170 deliveries per month, while ten to fifteen patients are admitted monthly to the gynecological service.

The outpatient department for the Shararah Hospital is located on the hospital grounds, but in a separate building. It contains offices and examining rooms, a small laboratory, an X-ray department and a conference room where classes for expectant mothers are held.

The Shararah Hospital has a school for the training of midwives which was opened in September 1951, and the Director of the Hospital, Madame Nazifa Nawaz, serves also as the Director of the School of Midwifery. Since its opening the school has graduated 116 midwives. A ninth grade education is required for admission to the three-year course of instruction. Upon successful completion of the course the midwife is considered to have the equivalent of a twelfth grade education.

At the time of the team's visit there were fifteen students in the class which will graduate as midwives in November 1963.

In March of 1963 instruction in nursing was added to the midwifery course, and arrangements were made for practical experience in nursing to be provided at Avicenna Hospital. There are seventeen students in the class receiving instruction in nursing and midwifery. This group will be graduated as nurse midwives in November 1964.

Facilities provided by the Shararah Hospital for the School of Nurse-Midwifery include an office for the Director, a large lecture room, a library, classrooms and a student dormitory. The classrooms are well equipped with manikins, models, charts and other teaching aids.

Sunday, July 14, 1963, Continued

In addition to the Director, the staff of the Hospital includes five obstetricians and gynecologists and forty-three graduate midwives. These graduate midwives staff the services of the hospital, assist in the instruction and supervision of the student midwives, and attend the home delivery and visiting services of the seven Maternal and Child Health Clinics in Kabul which are operated by the Hospital.

The division of these forty-three midwives by service is as follows: Delivery Room 5, Nursery 5, Operating Room 5, General Hospital Duty 9, Maternal and Child Health Centers 15, and faculty for the School of Midwifery 4.

The beginning salary for a graduate midwife is that of grade ten in the pay scale (Afs 741 per month), but with the extra allowances for her diploma, night duty, food and clothing she receives approximately 1, 100 afghanis per month.

Other than the forty-three graduate midwives employed by the Shararah Hospital, the School of Midwifery has no records of the whereabouts of the remainder of its 116 graduates.

Monday, July 15, 1963 - Kabul - Public Health Institute

8:30 AM Visited Institute of Public Health and discussed activities of the Institute with the following staff:

President - Dr. Mohammed Omar

Vice President - Dr. M. Naim Sharaf (Public Health Adm.,
AUB 1957-58)

WHO Public Health Advisor - Dr. K. V. Krishnam (India)

The Institute has three principal functions: 1) training, 2) research and 3) provision of a technical advisory service for the Ministry of Health.

Visits were made to following sections of the Institute:

<u>Section</u>	<u>Persons Seen</u>
Division of Microbiology	Dr. M. Ismail Tahiri - Chief of the Division Dr. Walter Frohlich - WHO Advisor

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Section of Bacteriology and Virology	Dr. M. Azim Mojadidi - Chief of the Section
Section of Immunology- Serology	Dr. A. Sattar - Chief of the Section
Section of Parasitology (Protozoology & Helmin- tology)	Dr. M. Kasim Waziri - Chief of the Section
Section of Haematology	Dr. Nabiullah Alifi, Chief of the Section
Division of Biochemistry	Mr. Rasool Miakhail, Chief of Division
Section of Food Analysis	A. Qadir Awa, Chief of Section
Section of Water & Sewage (Chemical Aspect)	Mr. Sayed Asadullah, Chief of Section
Section of Biochemistry & Nutrition	Mr. M. Nabi Shifai, Chief of Section
Division of Epidemiology & Statistics	Dr. Sayed Murtaza Saidi, Chief of Division (Trained Johns Hopkins)
Division of Mother - Child Health (MCH)	Dr. Nizamuddin Shohabzada, Chief of Division
Division of Public Health Administration	Dr. M. Naim Sharaf, Chief of Division Dr. Krishnan, WHO Advisor
Section of Health Education	Dr. Burna, Chief of Section Dr. H. Dix, WHO Advisor
Section of Environmental Sanitation & Industrial Hygiene	Mr. S. M. Roshan, Chief of Section, AUB Mr. Beaton, WHO Advisor Mr. Krisp, WHO Advisor

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As visits were made to the various sections the team was given information about activities underway, as well as plans for future action. Some of the departments are handicapped by lack of equipment, but these difficulties are being overcome one by one.

When the team arrived in the carpentry shop of the Institute, the sanitation students had just finished a laboratory session. The activity for the day had been the building of forms for making latrine slabs.

The Institute of Public Health is responsible for the training of sanitarians, compounders, laboratory technicians, laboratory assistants, vaccinators, dental assistants, nurse-midwives and X-ray technicians. The facilities required for the training of sanitarians, compounders, laboratory technicians, and vaccinators are provided by the Institute. Those required for the training of dental assistants, nurse-midwives and X-ray technicians are provided by the Dental Association, The Sharah Maternity Hospital and the Avicenna Hospital, respectively. The curriculums followed by the latter three institutions must have the approval of the Institute of Public Health and Institute personnel participate in the examination of candidates for diplomas.

The survey team was given the following information relative to the courses of training with which the Institute of Public Health is concerned:

1. Dental Assistants: The school was opened in 1948. The course is of four years duration and a ninth grade education is required for admission. Sixty-five dental assistants have been graduated and all are employed. The present enrollment is seventy-three students divided as follows: First year 26, second year 19, third year 15, and fourth year 13 students. The graduates enter the pay scale at grade ten with a base salary of 741 afghanis. They receive a bonus for diploma of 100 afghanis and a cooperative allowance (food and clothing) of 228 afghanis. Total amount received 1,069 afghanis per month.

2. X-ray Technicians: This school opened in 1960. The course is of two and one-half years duration and a ninth grade education is required for admission. Twelve X-ray technicians

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have been graduated and all are employed. The present enrollment is twenty-six divided as follows: First year 11, and second year 15 students. Graduates enter the pay scale at grade ten level with a base salary of 741 afghanis and receive a diploma allowance of 100 afghanis and a cooperative allowance of 228 afghanis. Total amount received 1,069 afghanis per month.

3. Sanitarians: The school was opened in 1956. The course is of two and one-half years duration and a ninth grade education is required for admission. Ninety-six sanitarians have been graduated and all are employed. The present enrollment is forty-eight students divided as follows: First year 26, and second year 22 students. Graduates enter the pay scale at a grade ten with a base salary of 741 afghanis and receive a bonus for diploma of 100 afghanis and a cooperative allowance of 228 afghanis. Total amount received 1,069 afghanis per month.

4. Compounders: This school was opened in 1946. The course is of three years duration and a ninth grade education is required for admission. One hundred thirty-nine compounders have been graduated and all are employed. The present enrollment is seventy-nine students divided as follows: First year 25, second year 29, and third year 25 students. Graduates enter the pay scale at the grade ten level with a base salary of 741 afghanis, and receive a diploma bonus of 100 afghanis and a cooperative bonus of 228 afghanis. Total amount received 1,069 afghanis per month.

5. Laboratory Assistants: The school was opened in 1956. The course is of three years duration and a sixth grade education is required for admission. Thirty-seven laboratory assistants have been graduated and all are employed. The present enrollment is thirty-eight students divided as follows: First year 25 and second year 13 students. Graduates enter the pay scale at a grade twelve level with a base salary of 525 afghanis and receive a certificate allowance of fifty afghanis and a cooperative allowance of 228 afghanis. Total amount received 803 afghanis per month.

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6. Vaccinators: The school was opened in 1960. The course is of two months duration and sixth grade education is required for admission. One hundred eighty-eight vaccinators have been graduated and all are employed. The present enrollment is twenty-three students. Graduates enter the pay scale at a grade thirteen level with a base salary of 492 afghanis and receive a certificate allowance of thirty afghanis and a cooperative allowance of 228 afghanis. Total amount received 750 afghanis per month.

7. Laboratory Technicians: The school was opened in 1956 and the course is of two and one-half years duration. A twelfth grade education is required for admission. Fifty-one laboratory technicians have been graduated and all are employed. The school is closed temporarily for lack of students. Graduates enter the pay scale at a grade nine level with a base salary of 842 afghanis and receive a diploma allowance of 150 afghanis and a cooperative allowance of 228 afghanis. Total amount received 1, 220 afghanis per month.

The Institute of Public Health accepts students for all courses of instruction it offers from the Ministry of Defense, the Rural Development Department, the Municipalities, and from the individual applicants who respond to announcements made by press and radio that the Institute is offering courses of instruction for paramedical personnel.

2:30 PM Visited the Division of Vaccine Production which is a unit of the Public Health Institute. The team was accompanied by Dr. Naim Sharaf, Vice President of the Institute.

Discussions were held with the Chief of the Vaccine Center, Dr. S. Mahmood Nissar and with the WHO Advisor, Dr. D. Petrovic.

Smallpox (lymph), cholera and typhoid-paratyphoid, vaccines are produced in this center as well as rabies vaccines for the treatment of humans and for the immunization of small animals.

Monday, July 15, 1963, Continued

The Vaccine Center is housed in old buildings which once were occupied by the Faculty of Medicine. All sections were clean and orderly including the animal quarters.

The employee who is in charge of the animal house demonstrated a very ingenious table he had designed for holding the calf in position to make it easier to remove the lymph.

Vaccine is not produced during the summer months. The reason given is that it is impossible to control temperatures and protect the material from dust.

There is a treatment room in one section of the Center which is used for patients who are receiving anti rabies treatment. The team was informed that rabies is not uncommon in Kabul. In fact, that during the preceding four months 178 people had been treated at the Center.

Tuesday, July 16, 1963 - Kabul - Malaria Institute, General Medical Depot, Tuberculosis Center, Ministry of Planning

8:30 AM Visited the Malaria Institute and discussed the malaria eradication program with Dr. Abdul Qadeer, the Director, Dr. W.S. Wenzel, the WHO Senior Malariologist, and Miss M. Ribaux, the WHO Laboratory Technician.

A malaria control program was started in Afghanistan in 1949 and shifted to an eradication program in 1958. There are five million people at risk in fourteen of the eighteen provinces, of these there are two million who are nomads. The pre-eradication survey revealed an 18% spleen and a 25% parasite rate. There are two vectors, *A. superpictus* and *A. culicifacies*. One round of residual spraying with DDT is carried out annually during June, July and August. Larvacide programs are conducted in Kabul, Jalalabad, Herat and Pul-i-Khomli and therefore, there is no residual spraying done in these cities.

The budget obtained from the government for malaria amounts to 13.5 million afghanis. An additional 2.5 million is obtained from industry in the form of contributions. AID gave two million afghanis in 1961 to provide field allowances for malaria staff. The allowance is given to staff working outside the Kabul

Tuesday, July 16, 1963, Continued

area and permits the malaria organization to require the exclusive service of all personnel receiving the allowance.

For purposes of administration, three regional offices have been established. These are located in Kabul, Kandahar and Kunduz. Each of these is under a regional director. The regions have been subdivided into units. The staff working in the area covered by the unit is supervised by and reports directly to the officer in charge of the unit office.

The program has established a goal of one surveillance worker for every 12,500 people. All physicians in the country are urged to take blood smears on fever cases and to send the slides to a malaria office for examination. In some areas of the country volunteer surveillance workers have been given instruction and are helping by taking smears on people in their villages.

It is expected that the malaria eradication program will be in the maintenance phase by 1968.

11:30 AM Visited the General Medical Depot.

The General Medical Depot is operated by the Ministry of Health; its Director is Dr. Ghulam Sekria.

Dr. Sekria informed the team that the Ministry of Health imports all of the drugs, medical supplies and equipment required for the operation of its hospitals and polyclinics, as well as those of the health services operated by the Ministry of Public Works, the Ministry of Interior, the Rural Development Department, and other government agencies. In addition the Medical Depot stocks and operates pharmacies which are located in every province in Afghanistan in order to make pharmaceutical preparations readily available in all areas and to control their prices.

The Ministry of Health is the only agency authorized to import narcotics into Afghanistan. The distribution, sale and use of narcotics is controlled by appropriate legislation.

Tuesday, July 16, 1963, Continued

The General Medical Depot itself is made up of various sections for the warehousing of drugs, materials and equipment received and for packing them for shipment to hospitals and polyclinics throughout Afghanistan.

The Depot imports pharmaceutical preparations which are ready for administration, as well as alcohol and the chemicals needed for the compounding of various formulas.

The Depot has two pill making machines, one of which is said to be some thirty-five years old. The survey team was fascinated by an ingenious pill coating and drying machine. The only power available to rotate the drum of this machine in which the coated pills are dried was an electric motor rated at 2,000 revolutions per minute. The speed of this motor has been reduced to some twenty revolutions per minute by a series of gears and pulleys and the drum heated by an electric space heater placed nearby.

At the time of the visit of the survey team all of the fluids and distilled water for intravenous use and injections were being imported. Although the Depot has equipment on hand to produce pyrogen free distilled water it will still be necessary to import glass ampoules and bottles since none are manufactured in Afghanistan. The Depot also produces alcohol by the distillation of raisins, but the capacity of the still is not sufficient to supply current demands.

2:30 PM

A visit was made to the Tuberculosis Center which is operated by the Ministry of Health. After making a tour of the establishment, the program of the center was discussed with Dr. Abdul Ghani Afsel, members of his staff, Dr. Abaevi Sarwar, Dr. Abdul Haddi, Dr. Mir Haidar Hasamia, Dr. Abdul Majid, and the WHO Advisor, Dr. V. A. Firssova.

The Center serves as a tuberculosis diagnostic and treatment center for residents of Kabul and the surrounding area, but attends people who come from any part of the country seeking care. It is planned that the program will be extended to other provinces as soon as funds and staff are available.

Tuesday, July 16, 1963, Continued

There are 800 patients receiving domiciliary treatment. When hospitalization is required, male patients are referred to the TB Sanatorium operated by the Ministry of Education and female patients to the Sanatorium run by the Ministry of Health.

The medical staff reported that they are discouraged by the results obtained from the drug therapy they use in the domiciliary treatment program. They stated that the only drug available to them is isoniazid which is supplied by UNICEF and that many patients have become resistant to this drug. None of the other drugs used in modern treatment of tuberculosis are available either from UNICEF or the Ministry of Health.

The Center operates a contact and follow-up service. When a case of tuberculosis is diagnosed, efforts are made to get the contacts of the patient in for an examination. When persons who have a diagnosis of tuberculosis fail to return for treatment or a scheduled examination, home visits are made.

The Center is assisting also with a tuberculin testing - BCG program being carried out among the school children in Kabul in collaboration with the School Health Services of the Ministry of Health. A similar program was carried out by the Center in Jalalabad during the past year.

Wednesday, July 17, 1963 - Kabul - Faculty of Medicine, Ali Abad Hospital and Ministry of Planning

9:00 AM Visited the Faculty of Medicine of the University of Kabul and discussed the program with the Dean, Dr. A. Samad Seraj.

The Medical Faculty is thirty-two years old and was the first faculty established in the University. The Faculty has seventeen chairs, ten for basic sciences and seven for clinical departments, and two teaching hospitals with 700 beds. The hospital for males has 500 beds and the one for females has 200 beds. A polyclinic, which serves both males and females, is also used for teaching purposes.

Twelve of the seventeen chairs are filled by Afghan professors and five by foreign professors. Those filled by the latter are Ear, Nose and Throat, Bacteriology, Pharmacology, Pathology and Neurosurgery. These professors come from four countries with two from Germany and one each from Turkey, France and the United States. The American is provided by WHO while the others are employed on a contract basis by the Faculty.

Wednesday, July 17, 1963, Continued

The requirement for entrance to the Faculty of Medicine is completion of high school, plus a one-year MPCB course during which study is centered on mathematics, physics, chemistry and biology.

The program in the Faculty is of five years duration following which a one year internship is required. The first women doctors will graduate this year. The present body consists of the following:

1st year class 108 with 20 females
2nd year class 81 with 10 females
3rd year class 56 with 9 females
4th year class 108 with 20 females
5th year class 91 with 14 females
6th year class 69 with 10 females (internship)

The Faculty of Medicine has 141 positions for doctors of which 113 are now filled.

Vacancies in the cadre of the Faculty of Medicine are filled by competitive examination. The successful candidates are exempt from military service if they agree to remain with the Faculty for five years.

Those graduates of the Faculty of Medicine who are unsuccessful in the competitive examination, or who are not interested in a Faculty appointment, enter the civilian health cadre of the Ministry of Health. The twenty or more students sent to the Faculty by the Department of Defense each year enter the military health services of Afghanistan. Every graduate of the Faculty is required to serve in one service or another for a minimum of two years for every year of professional education provided free of charge by the Government.

The Faculty has a residency program for specialists and refresher courses for para-medical personnel. No instruction is given in hospital administration.

There are plans to open a second Medical Faculty in Jalalabad to train Pushtu-speaking doctors.

In the second Five-Year Plan, the Faculty of Medicine plans to establish a Department of Forensic Medicine; obtain foreign professors for neuropsychiatry, radiology, bio-chemistry, and social and preventive medicine; obtain additional equipment for bacteriology, physiology, and anatomy laboratories; and establish a Faculty of Dentistry.

Wednesday, July 17, 1963, Continued

There are two nursing schools under the Faculty of Medicine, one for males, the other for females.

10:30 AM Visited Dr. Abdullah Wahidi, President of hospital services in the teaching hospitals of the Faculty of Medicine.

Ali Abad Hospital has 500 beds of which 100 are for TB patients and eighty for mental diseases. The staff consists of eighty physicians from the Faculty of Medicine and 108 male and fifty-two female nurses.

Masturat which is the women's hospital, has 200 beds with forty reserved for obstetrics and gynecology, thirty for surgery, thirty for internal medicine and fifty for pediatrics.

3:00 PM Accompanied Mr. Cudney to call on H. E. Mr. Abdul Hai Aziz, Minister of Planning. Plans for the survey were discussed. The Minister offered to be of assistance if needed.

Thursday, July 18, 1963 - Kabul - Municipality of Kabul, School Health Services and Rural Development Department

8:30 AM Visited the Municipal Health Department and the office of the Mayor of Kabul.

The health department of the city of Kabul was established some seven years ago, but never became fully operative due to lack of personnel. At the time of the team's visit to the department, the Director, Dr. Fakiri, had only been in office fifteen days. In addition to the director, the health department employs a sanitary engineer, who has been abroad on a WHO fellowship, and several sanitarians. The principal functions of the health department are the cleaning of streets, the inspection of markets, the disposal of refuse, and the collection and destruction of stray dogs.

Although rabies is said to be a problem in Kabul, dog owners are not required to have their dogs vaccinated, nor has the city set up a program to provide such a service, even though rabies vaccine is produced by the Vaccine Production Center of the Ministry of Health.

The Mayor of Kabul, Mr. Mohammad Asghar described the environmental health problems of the city and the plans for increasing its

Thursday, July 18, 1963, Continued

water supply. The present distribution system which is supplied from deep wells and springs located in Paghman and Kargat, serves only 75% of the city. The remainder of the city is supplied from individual shallow wells.

The mayor also described the program for latrine construction for those areas of the city which are soon to be cleared and replaced by parks. The latrine program is meant to serve as a temporary solution. In time they are to be replaced by a water borne sewerage system.

9:30 AM Visited the Central Office and Polyclinic of the School Health Service, Ministry of Education.

The School Health Service is operated by the Ministry of Education. Although it was established only two years ago it is providing medical care and preventive services to the 65,000 day students enrolled in sixty-two primary and secondary schools in Kabul. Similar services are also being provided to one vocational school and to six boarding schools which have 10,000 boarders.

The Director of the School Health Services is Dr. Aziz Seraj, a pediatrician. His staff consists of six doctors, a dentist, a laboratory technician and four graduate female nurses. The program has the services of a radiologist who is supplied at no cost to them by the Government of Czechoslovakia.

The central polyclinic is equipped with an X-ray machine, dental and laboratory facilities and various rooms for the examination of patients. A health record is maintained for each school child. The information recorded includes the student's name, school, sex, age, height, weight, results of blood, stool and urine examinations, the inoculations received and a history of illnesses.

All students are vaccinated for smallpox, tuberculosis tested and given BCG vaccine if indicated. The boarding students are given typhoid-paratyphoid vaccine.

In addition to the central polyclinic, the School Health Service operates eight sub-centers which are located in schools. These are staffed and equipped to administer first aid and to treat minor ailments.

Thursday, July 18, 1963, Continued

With the assistance of UNICEF and the wife of the American Ambassador, four day-nurseries have been opened to care for the children of school teachers.

The Director believes that instruction in personal hygiene, communicable disease and first aid should be included in the curriculum of the teachers being trained for the teacher training centers and has sought the assistance of Dr. H. Dix, the WHO Health Education Advisor, in getting these courses established.

At the time of the visit the School Health Service was operating in Kabul only. However, the team was informed that there are plans to introduce similar programs in Jalalabad, Kandahar and Herat during the next year, and to open a forty-bed children's hospital in Kabul.

2:00 PM Visited the office of the Vice President for Technical Services of the Rural Development Department. The Vice President, Mr. Abdul Samad Bakhshi, briefed the survey team on the objectives of the rural development program, the scope of the program and the organizational structure of the Rural Development Department which is the central operating agency for the program.

The rural development program commenced in August, 1954, with the establishment of a rural welfare training and demonstration center at Shewaki. With the development of field operations, the activities of the Department have been extended to several of the provinces of Afghanistan. The principal activities of the Department are in the fields of agriculture, animal husbandry, fundamental education, rural health and sanitation.

Rural health units have been established in each of the Department's eleven project areas. Three of the project areas are located in Kabul Province, two in Nangahar Province, and one each in the Provinces of Badakshan, Bamiyan, Ghazni, Kandahar, Paktia, and Parwan. Each project area serves some sixty to sixty-five thousand people. The activities of each health unit are carried out by a staff of medical and paramedical personnel assigned to the Department by the Ministry of Public Health from its cadre of health workers. On the day of the survey team's

Thursday, July 18, 1963, Continued

visit, the total health staff for the health units of the Department's eleven project areas consisted of twelve physicians, seven assistant doctors, four midwives, six auxiliary midwives, fourteen compounders, one laboratory technician, eleven vaccinators, ten dressers and seventeen sanitarians.

Following the briefing, the survey team visited the Shewaki Training and Demonstration Center, which is located some ten miles south of Kabul. They were accompanied by Dr. D. Penman, Senior WHO Officer assigned to the Rural Development Department.

The health unit at Shewaki occupies two buildings which were designed and constructed for use as a polyclinic, for classes and demonstrations for the public, and for the training of various categories of health personnel. One building is occupied by the office of the director and administrative section of the center, a pharmacy, a storehouse for drugs and a room for first aid treatment and dressings. The second building contains a number of rooms which are used for doctors' offices, examining rooms, a laboratory and a conference room for demonstrations and instruction in maternal and child health care.

The center is supplied with water from an elevated tank which is filled with a hand pump from a shallow well on the premises. The waste water from the hand basins and sanitary installations in the building is discharged into what appeared to be a septic tank. At the time of the team's visit a majority of the sanitary facilities were not functioning. The center also has a protected vault latrine of the type which the sanitarians have introduced in the rural areas.

The staff of the center holds pre-natal, postnatal and well baby clinics; carries out a smallpox vaccination program, provides curative treatment for diseases and minor injuries and is engaged in some health education. The sanitarians concentrate their efforts on helping communities and individual householders in the project area to acquire safe water and to improve excreta disposal facilities.

The technical staff in agriculture, education and health is assigned to the Department by the respective ministries. Village level

Thursday, July 18, 1963, Continued

workers who have been trained for this program have a sixth grade education, plus one year of training in a center operated by the Department. These workers are then assigned to villages to carry out development activities.

Saturday, July 20, 1963 - Kabul - World Health Organization, Avicenna Hospital, Central Laboratory and Ten-Bed Clinic

8:30 AM Visited the senior WHO representative, Dr. R. L. Tuli, to discuss WHO projects and to obtain his opinions relative to problems and solutions. He provided information about the projects supported by WHO and UNICEF and gave a description of some of the activities in which the organizations are engaged.

According to Dr. Tuli's analysis the major needs in Afghanistan are as follows:

1. Define health problems and types of health services required to take care of the problems.
2. Support and complete malaria eradication program.
3. Train professional personnel.
4. Strengthen health services by the training of paramedical personnel.
5. Determine how to avoid problems which result from industrialization and irrigation.
6. Promote better organization and administration of health services.
7. Develop programs of environmental sanitation.
8. Develop program for hospital administration and provide hospital architects for the planning of new constructions.
9. Make feasibility studies for water supplies.

Dr. Tuli stated that he does not believe that short-term programs should be undertaken unless they are integral parts of a long-term program.

Saturday, July 20, 1963, Continued

WHO has plans to send additional people abroad to study basic pre-clinical and clinical subjects, but does not propose to provide for service jobs in the Faculty of Medicine.

2:00 PM Visited the Avicenna Hospital.

The program and plans of this institution were discussed with the Director, Dr. Aslam Salimi, an orthopedic surgeon, and with members of his staff. These included Senior Surgical Resident, Dr. Mir Mohammad Azim Ashami, and the Senior Medical Resident, Dr. Ali Ahmad Mir Hashimi. Both of these residents graduated from the Kabul University Faculty of Medicine four years ago.

Prior to 1959, the Avicenna Hospital had only twelve beds. With the increasing demand for more hospital beds and improved facilities for the diagnosis of disease and care of patients, the present hospital was opened in 1959. It was constructed and is operated by the Ministry of Health.

The hospital admits both male and female patients and can accommodate ~~eighty~~ fifty-eight patients. Fifty-eight of the beds are free while the remainder are for pay patients. The charge for the use of these beds is thirty to forty afghanis per day.

The fifty-eight free beds are divided between the various services as follows: Internal medicine 25, orthopedic surgery 13, general surgery 12, ear, nose and throat 4, and ophthalmology 4.

The wards, ranging in size from two to six beds, the treatment rooms, the nurses stations and the doctors offices are clean, light and airy.

The hospital has two well equipped operating rooms, with individual air conditioners. There is also a fracture room. The sterilizers and autoclaves are electrically operated and a gas anesthesia machine is available. In addition to general surgical procedures, the hospital is equipped to do lung surgery and to relieve mitral stenosis.

The clinical laboratory is equipped to do routine blood, urine and stool examinations, sedimentation rates, direct smears and

Saturday, July 20, 1963, Continued

cultures and blood chemistry determination. Although space is limited, the laboratory appears to be functioning efficiently. The hospital has space for the storage of drugs and other supplies and a central pharmacy.

The hospital also has an office for a dentist and a fairly well-arranged and equipped emergency room and admitting office. Although the building has only been occupied since 1959, it has the appearance of a much older structure.

The laundry and sewing rooms are located in a separate building. The former is furnished with some mechanized equipment.

The medical and paramedical staff is made up of sixteen doctors, twenty female nurses, six male nurses, two laboratory technicians, two compounders, two dressers and two dental assistants. At the time of the team's visit CARE-MEDICO had three physicians (Dr. and Mrs. Robert Axelrod, both internists, and Dr. Sambamurti Srinivasan, a surgeon), three nurses, one nurse anesthetist and one laboratory technician assigned to the hospital. In addition, two Peace Corps nurse volunteers were working in the hospital.

The CARE-MEDICO group and the Peace Corps nurses assist in the residency training program which the hospital offers for physicians, the training program which is conducted for nurse aides, and in the clinical nursing experience being provided for students enrolled in the Shararah Hospital's nurse-midwife training program.

The polyclinic of Avicenna is in a building which the Red Crescent Society provides rent-free. This building is located in the same compound as that occupied by headquarters of the Society and is within walking distance of the hospital. Some 2,000 patients per month are seen in the polyclinic. The staff and the costs for operating the clinics are provided by Avicenna.

Patients admitted to Avicenna Hospital are generally referred to it from the polyclinic or directly from the emergency room. However, patients may be sent to the hospital by any physician. In such instances, the hospital reserves the right of admission. The patients admitted to the free beds are primarily 1) emergency

Saturday, July 20, 1963, Continued

cases such as injuries, burns, fractures, and conditions within the abdomen demanding immediate operation, b) patients with diseases in which response to therapy is usually assured, c) patients for which corrective surgery is indicated and d) patients with diseases which provide experience in diagnosis, treatment and care for the hospital's professional staff.

The X-ray Department of the Hospital is located in a separate wing and is equipped with five machines of varying potential for radiography and fluoroscopy, two diathermy machines and an X-ray machine for the treatment of skin lesions and ring-worm of the scalp. In addition, the department is equipped with three electrocardiographs. The staff consists of six radiologists and two other physicians. Some 200 X-rays are taken daily. The X-ray Department also operates a school for the training of X-ray technicians which opened in 1958. For admission to this school a ninth grade education is required. The three-year course is divided into two years of classroom instruction and one year of practical training. The classrooms are housed in a building near to the Department and the practical experience is obtained in the Department itself.

Upon completion of the course the technicians are considered to have the equivalent of a twelfth grade education. At the time of the survey team's visit there were eight students in the first year class and thirteen in the second year class.

3:30 PM Visited the Central Laboratory of the Ministry of Health - Kabul.

This laboratory is located in a new two-story building which was designed for this purpose. It was opened in January, 1963. It is adequately staffed, well equipped and spotlessly clean. There are sections for bacteriology, bio-chemistry, serology, pathology, a morgue and a blood bank.

The director of the laboratory, Dr. Said Sadiq, informed the survey team that the laboratory accepts specimens for examination from any of Kabul's hospitals and polyclinics. The laboratory also performs all of the blood tests for syphilis done in Kabul. This amounts to some 500 tests per week of which one to two percent are positive.

Saturday, July 20, 1963, Continued

4:30 PM Visited the ten-bed clinic.

This clinic occupies a new two story building located in the same compound as the Avicenna Hospital and the Central Laboratory of the Ministry of Health.

The clinic, which was opened in April 1962, was constructed by the Ministry of Health as a demonstration in hospital design and equipment and to provide superior accommodations and medical care facilities for those patients who can afford to pay for such services. Patients occupying a single room are charged 200 afghanis per day, while those in a double room pay 150 afghanis daily.

The clinic is generally considered to have ten beds, but facilities are such that more patients can be accommodated when the need arises. The clinic has a well equipped operating room, a small laboratory and pharmacy, as well as doctors' offices and examining rooms for the ambulatory care of patients. Food is supplied from a modern, well equipped and clean kitchen.

The clinic has a lay hospital administrator trained in Australia and the medical staff is made up of eighteen physicians who practice in Kabul.

Monday, July 22, 1963 - Jalalabad

Left Kabul at 6:00 AM. Travelled by AID Jeep station wagon to Jalalabad, capital of Nangahar Province, arriving there at 9:30 AM.

The Ministry of Health operates two health facilities in Jalalabad, a fifty bed hospital and polyclinic for male patients and a ten bed hospital and polyclinic for female patients. A new fifty bed hospital for women patients is being constructed adjacent to the present women's hospital.

The staff of the two hospitals consists of Dr. Haji Hasan Ali, Chief Medical Officer, who also serves as the Provincial Health Officer, Dr. Mohammad Amin, a surgeon, Dr. Abdul Shokoor, an internist, Mr. Mohammad Hasan, a dental assistant, X-ray and laboratory technicians, two compounders, two dressers and a midwife.

Monday, July 22, 1963, Continued

The hospital for male patients has two operating rooms, one for septic and another for aseptic cases; a dental office equipped with a foot engine and a fair amount of instruments for dental care, extractions and the making of false teeth; a small laboratory equipped to do routine blood, urine and stool examinations; a medical depot and pharmacy; an X-ray department and a polyclinic. The space for the hospitalization of patients is divided into two and four bed wards. Food preparation is done over an open wood fire. The laundry is being remodelled to provide for the boiling of patients' garments and bed clothes.

On the day of the team's visit there were twenty patients in the hospital with diagnoses of pulmonary tuberculosis, malnutrition, anemia, fractures resulting from accidents and post-operative hernias and hemorrhoids.

The hospital building is well maintained and clean. There are flush toilets and running water for the hand basins on the wards, but no running water in the operating room suite.

The women's hospital is located in a former residence and water is obtained from an open well by means of a bucket. The polyclinic has a room for the examination of patients, a small laboratory and a pharmacy. The three patients who were in the hospital on the day of the team's visit had been diagnosed as pulmonary tuberculosis and anemia.

In addition to the hospitals in Jalalabad, there are two other ten bed hospitals for male patients in the Province. Fifteen physicians are working in the Province, eight for the Ministry of Health, four with the Rural Development Health Units and three with the Ministry of National Defense.

While in Jalalabad a visit was made to the office of H. E. General Kahn Mohammad Kahn, Governor of Nangahar Province and Commander of the armed forces of the military area. Environmental health problems were discussed and the Governor told of the plans which are being developed to supply Jalalabad with safe water. The Governor informed the team that there is a Lycee for boys and that this year for the first time the schools for girls offer nine grades.

Monday, July 22, 1963, Continued

The survey team also visited the Malaria Eradication Program Unit Office. The transmission season in the province extends from July 15th to September 15th and spraying operations for this year have been completed. Fifty of the unit's permanent employees are surveillance agents.

The Chief Medical Officer of the Province entertained the team and the medical staff of the hospitals at a luncheon served in the hospital.

Enroute to Kabul the team stopped to meet the Medical Officer in charge of the Manpower Health Service provided by the Ministry of Public Works for the 1,200 laborers working on the Kabul to Jalalabad highway.

Tuesday, July 23, 1963 - Sarai Khwaja, Charikar and Gulbahar

Left Kabul at 7:30 AM by AID vehicle and arrived in Sarai Khwaja at 8:45 AM.

The hospital which is operated by the Ministry of Health is located in a two building unit which was opened one year ago, and which was designed to serve as a hospital and polyclinic. The larger of the two buildings has ten beds for male patients, sanitary facilities, an examining-treatment room, a pharmacy and quarters for the doctor in charge. The second building contains the kitchen and the medical and other stores. The hospital building is not screened and flies were in abundance. Both buildings have electric lights and piped water supplied from a well in the basement of the larger building.

The hospital staff consists of the medical officer, Dr. Said Taib, a vaccinator, a dresser and a compounder. Six of the ten beds were occupied at the time of the visit. The hospitalized patients were suffering from acute diarrhea, pulmonary tuberculosis and malnutrition.

Left Sarai Khwaja at 9:15 AM arriving in Charikar at 9:45 AM.

Charikar is the capital of Parwan Province and there are two Ministry of Health hospitals in the town, a twenty bed hospital for male patients and a ten bed hospital for female patients.

Tuesday, July 23, 1963, Continued

The hospital for male patients is located in a dark, poorly maintained building of undetermined vintage. The survey team was informed that the building has been allowed to run down since it is to be torn down to make way for improvements envisaged by the city planners. The hospital has twenty beds for male patients, an operating room, a laboratory, a medical stores and an office for a dentist. The X-ray department, the pharmacy, the polyclinic, and the office for the provincial health officer, who also serves as the director of the hospital, are located in a building separate from the hospital. At the time of the survey team's visit, one of the patients receiving care had been diagnosed as typhoid while the others were cases of pulmonary tuberculosis, bone tuberculosis and cervical adenitis. There were also some victims of automobile accidents.

The hospital staff is made up of three doctors, Dr. Abdul Rahim, an internist, Dr. Said Ahmad, a surgeon and Dr. Mohammad Anwar, a radiologist. The remainder of the staff is composed of a dentist, four male nurses, an X-ray technician, a laboratory technician, two dressors and two compounders.

The survey team did not visit the ten bed hospital for female patients.

Left Charikar at 10:45 AM for Gulbahar stopping on the way to visit the headquarters of the Rural Development Department's Said Khel project. The members of the health staff were away on tour of the project area, so it was not possible to obtain information about the health services and programs in the area. A member of the Education Section informed the survey team that the project serves 55,822 people, living in 13,990 houses located in the 124 villages of the area. The Education Section has established and is operating twenty-nine village schools which provide instruction from the first through the third grade. Nineteen of these schools are for boys and ten are for girls. The project headquarters provides space for a community center and literacy classes have been organized for adults.

The two buildings occupied by the health unit are of the same general design and configuration as those of the Shewaki Center. It was not possible for the survey team to go through all of the rooms of the unit, but from those visited it appeared that maintenance and housekeeping were somewhat neglected.

Tuesday, July 23, 1963, Continued

Arrived at the hospital and polyclinic of the Afghanistan Textile Company located at Gulbahar at 11:45 AM.

The Gulbahar textile mill, which was opened some three years ago, is the largest mill of its kind in Afghanistan. The hospital, built during the time of the construction of the mill, has a total of thirty beds with twenty beds for male patients, six beds for female patients and four beds for patients with contagious diseases.

The staff consists of Dr. Mir Ahmad Ali, the Director, who is an internist, two other internists, Dr. Yahya Yaqubi and Dr. Said Kaium Hussaini, a female dentist, one midwife, eight nurses and two sanitarians.

The hospital has an operating room, a delivery room and a fracture room. It is equipped with an X-ray machine which can be used for radiography as well as fluoroscopy.

The polyclinic occupies a separate building which has office space for the director, a record room, doctors' offices and examining rooms, an examining room for the midwife, an office for the dentist, a laboratory and a pharmacy. The hospital, as well as the polyclinic facilities appeared to be well equipped and were spotlessly clean.

The health facilities of the textile company serve its 1,000 supervisory and office personnel and their dependents as well as 4,000 laborers. Pre-employment physicals, including a chest X-ray, are required. Those found to have tuberculosis or other communicable diseases are declared unfit for employment. All employees receive smallpox vaccinations and are tuberculin tested and vaccinated with BCG where indicated.

Some 300 female dependents utilize the services of the polyclinics and the midwife attends four to five deliveries per month.

The hospital, polyclinic, living quarters for employees and the mill are supplied with filtered water. The whole factory area has a water borne sewage system.

The survey team members were guests of Mr. Abdul Malik, president and chief engineer of the Gulbahar textile mill.

Conversation during the luncheon centered on occupational hazards, absenteeism and labor turnover. The team was informed that during the harvest season there is considerable absenteeism, also that the labor turnover is about 30% per year.

After luncheon Mr. Malik took the team on a tour of the factory.

The buildings are well ventilated and an exhaust system keeps dust and lint at a very low level in most areas of the mill. In the other areas employees are provided with respirators. The sanitary facilities and provisions for bathing appear to be adequate. The team was informed that all employees are provided with meals, but time did not permit a visit to the kitchen and dining area.

Wednesday, July 24, 1963 - Kandahar

2:00 PM Left Kabul via Ariana and arrived at Kandahar at 3:30 PM. The team was received by the Provincial Medical Officer and his staff. The medical and dental staff of Kandahar includes the following:

Dr. Mohammad Sarwar Hotaky, Provincial Medical Officer

Dr. Mohammad Azim, Surgeon

Dr. Said Amamuddin Bahramy, Surgeon

Dr. Mohammad Aziz Malikasgher, Radiologist

Dr. Mohammad Sharif Shah, Radiologist

Dr. Abdul Said Murtaza, Obstetrician and Gynecologist

Dr. Zamanuddin Amiry, Internist

Dr. Abdul Kayeum Fazil, Pediatrician

Wednesday, July 24, 1963, Continued:

Dr. Azim Asmat, Ophthalmologist

Dr. Mirsham Suddin, Dentist

Visited the seventy bed provincial hospital for male patients. This hospital is housed in what appears to be an old building but the halls, wards and examining rooms were clean and orderly. Bed linens and patients' gowns were new.

The hospital has an operating theatre, a laboratory and a pharmacy, all of which are sparsely equipped.

One twenty bed ward is reserved for tuberculosis patients and on the day of the visit twelve of the thirteen patients in this ward were members of the gendarmery.

There is a new polyclinic building in the hospital compound which is well arranged. It has a spacious waiting area, several examining rooms and all windows and outside doors are screened.

The radiology department is in a separate compound about two blocks from the male hospital. The department is equipped with two X-ray machines, a fluroscope, an EKG machine, a shortwave heat treatment machine, and a machine for X-ray treatment of skin and scalp lesions. The X-rays which were seen were of good quality.

The provincial hospital for women patients is housed in what was formerly used as a warehouse for grain storage. There are thirty-five beds in this hospital with some of them reserved for children. The hospital is equipped with a delivery room and an operating theatre. It was noted that some of the equipment had been provided by UNICEF.

At the time of the visit to the women's hospital, there were four children receiving care. The diagnoses were anemia, dysentery and malnutrition. The three women patients included a newly delivered mother, a case of tuberculosis and one of anemia.

In the polyclinic attached to the women's hospital there is a MCH center where powdered milk, vitamins, calcium and soap provided by UNICEF are distributed to mothers and children.

Wednesday, July 24, 1963, Continued

The dental clinic, which serves both male and female patients, is located in a portion of the building used for the women's hospital. Attached to it is a dental laboratory and storage space for equipment and supplies.

According to the medical staff, tuberculosis, dysentery, conjunctivitis, trachoma and parasitic infestations are the major health problems of the area. A trachoma survey, which was carried out with the assistance of a WHO expert, revealed that 69% of the group examined had trachoma. Thirty-one percent of the positives were classified as active.

The population of Kandahar Province is estimated to be between 400,000 and 500,000, with approximately 80,000 in the City of Kandahar. The present water supply for the city comes from deep wells. There is interest in developing a municipal water system for Kandahar and this has been included in the Second Five Year Plan. Human wastes are used for fertilizer. There is no sewerage disposal plan.

7:30 PM

A visit was made to the camp of the Afghanistan Highway Constructor's Company located on the outskirts of Kandahar. The company operates a small clinic which is under the direction of Dr. Ernesto Paita, a contract employee. He is assisted by three nurses who were trained by one of his predecessors.

The clinic is maintained to provide medical services for contract personnel and their dependents. A new hospital-polyclinic with eight beds, an operating theater, X-ray unit, dental office, a pharmacy, and an outpatient department, is under construction and is to be ready for occupancy within a month. It will be fully air-conditioned.

Thursday, July 25, 1963, - Kandahar and Herat

Visited the new facilities at the Kandahar International Airport which were constructed with U.S. assistance. These were completed some time ago, but have not been opened.

The Airport Manager, Mr. Aziz Ahmed Etemade, took the team on a tour of the new terminal, the hotel for transient passengers which has an attached twenty-five bed hospital, and the housing development which will be used by airport personnel.

Thursday, July 25, 1963, Continued

The terminal has a beautifully equipped snack bar and kitchens. Cooking utensils and serving units are made of stainless steel and the refrigeration system is of the latest design. The hotel-hospital unit is located about one-half mile distant. Hotel guests will be served in one of the terminal restaurants and meals for hospital patients will be carried from the terminal to the hospital.

The hotel-hospital building will accommodate 125 people. It is planned that the fifty double rooms in two of the wings will be used as a hotel. The third wing will be used as a hospital and will accommodate twenty-five patients. All rooms have a private bath. Attached to the third wing is a unit with an operating room X-ray unit and darkroom, a diet kitchen, a two-chair dental office, examining rooms, and a laundry. All of the equipment is of the latest design. Some of it has been installed, but many items are still stored. In addition to equipment, there is a considerable amount of supplies in storage and it was noted that some of the X-ray film had or would soon reach its expiration date.

The survey team was not able to learn who is to operate this hospital, who will have access to the services provided, or how the facility is to be staffed.

The housing development for airport personnel consists of ten four-bedroom houses, twenty three-bedroom houses, and ten two-bedroom houses. These, as well as the hotel-hospital unit and the airport terminal, are supplied with water from a deep well system and all are served by a water borne sewerage system.

11:40 AM Left Kandahar via ~~Ariana~~ and arrived in Herat at 1:30 PM where the team was met by the Provincial Medical Officer and members of his staff.

The medical and dental staff consists of the following:

Dr. Mohammad Ali, Provincial Medical Officer,
a Radiologist and Internist

Dr. Mohammad Esa Safe, Surgeon

Dr. Saayed Maroof, Pediatrician

Thursday, July 25, 1963, Continued

Dr. Mohammad Amin Azad, Ophthalmologist

Dr. Abdul Kaduz, Obstetrician

Dr. Haidar Nazir, Gynecologist

Dr. Ahmed Jan Popal, Dentist

Dr. Rabim Arjomand, Unit Malaria Officer

The first visit in Herat was to the provincial hospital for male patients which has thirty-five beds, fifteen for general surgery, five for eye surgery, and fifteen for internal medicine. There is an operating theater, laboratory, pharmacy, medical depot, store room for powdered milk, dental office and X-ray department. The latter is equipped with a 25 KV generator to supply power for the X-ray machine, a fluroscopy unit, and an X-ray therapy machine used for the treatment of skin and scalp lesions.

There are polyclinic facilities in the hospital building as well as an office for the Malaria Eradication Program staff.

In another compound about two miles distant from the hospital for male patients, there is a general hospital for women patients, a maternity hospital and a building which houses the polyclinic, the pharmacy and an office for the smallpox vaccinator.

The general hospital for women has ten beds. At the time of the visit there were two patients in adjacent beds, one of whom had been diagnosed as having pulmonary tuberculosis and the other under treatment for a badly infected and crippled arm, the result of a burn which was at least a year old.

The maternity hospital also has ten beds, but on the day of the visit, only one patient. The delivery room in this hospital has a gas anesthetic machine provided by UNICEF which has never been used. Toilet facilities are not available in either the maternity or general hospital or in the polyclinic area. Water is obtained from a well by means of a bucket.

The paramedical personnel working in the hospitals and polyclinics of Herat include four nurses (three males and one female) and four midwives.

Thursday, July 25, 1963, Continued

The provincial medical staff visited the team at the hotel later in the evening. The Provincial Director was host at a dinner party. Following dinner there was a lively discussion concerning the health problems and needs of the Province. The consensus was that a program to obtain environmental improvements, such as a safe water supply and proper disposal of human and other wastes, would pay large dividends in reducing the incidence of the diseases which represent the heaviest load in hospitals and polyclinics.

Friday, July 26, 1963 - Herat

The morning was spent visiting points of interest in Herat. The team was accompanied by Drs. Ali, Safe and Azad.

During the afternoon the same group visited Gazergah, where there was an opportunity to visit with the Mullah and to see some of his followers. As soon as word spread that there were doctors on the premises many people gathered around to ask for medical advice. At least six of these persons were identified by the ophthalmologist as trachoma victims and one as a glaucoma case.

Five members of the medical staff of Herat joined the team for dinner. Afterwards there was a discussion of the kinds of training that should be given to health personnel. The Herat staff believe that quality should not be sacrificed for quantity. Opportunities for refresher training would be appreciated.

Saturday, July 27, 1963, - Herat

Visited the Saadat Pharmaceutical Company and Dispensary, a privately operated organization. The owner made his car available for the team's use while in Herat. The health personnel assigned to Herat are without transport as the pickup truck assigned to them is non-operable.

A visit was made to the office of the Governor of the Province of Herat. The Governor, H. E. Abdul Karim Hakimi spoke of his interest in helping bring about health improvements in Herat Province and told of his plans to secure the active participation of the people in solving their problems.

Saturday, July 27, 1963, Continued

In an interview with the mayor of Herat, Mr. Atta Mohammad, it was learned that his chief interest is in getting a municipal water supply for the city. Two wells were drilled some years ago and some money collected through public subscription for pumps and pipe. Some of the money has been used for other purposes, but a substantial sum is still available. The mayor stated that he believes that plans for a water system for Herat are being prepared in Kabul.

The Governor of Herat entertained the team at dinner in his residence. All of the medical staff attended and three of these physicians were accompanied by their wives.

Sunday, July 28, 1963, - Herat

Visited the Welfare Society where they take in orphan boys, house and feed them, teach them to weave rugs and pay them 75 afghanis per square foot. After learning the trade, many of these boys set up their own rug weaving shop.

Left Herat for the airport at 11:30 AM. The plane did not take off due to bad weather and the flight was rescheduled for the following day.

Monday, July 29, 1963 - Kandahar

Left Herat via Ariana Airlines at 7:40 AM and arrived at Kandahar at 9:30 AM. A visit was made to the Afghanistan Construction Unit camp at Manzel Bagh, which was built originally by Morrison-Knudsen, Afghanistan. Located within the camp compound, there is a twenty bed hospital with operating room, laboratory and X-ray facilities, a diet kitchen, pharmacy, doctors' office and an outpatient department. Dr. W. S. Seyring, an employee of ACU has his headquarters at Chah-i-Anjirs, but comes to Manzel Bagh once weekly to run a clinic, check on supplies and supervise the two male nurses who are on duty throughout the week. The total unit is very well equipped, but except for the OPD treatment and examining room, is unused.

Later in the day a visit was made to the South Western Regional Office of the Malaria Eradication Program where the team had an opportunity to learn about the program from Dr. Ghulam Hushman, Director, and from the WHO Advisor, Dr. V. P. Jacob.

Monday, July 29, 1963, Continued

According to Dr. Hushman there are 1,000,000 persons at risk in the region served by his office. In 1952 the spleen rate was 15%, but by 1963 only 2%. A blood survey was taken in March 1963 and 10,000 slides collected, of these only sixteen were positive.

Tuesday, July 30, 1963 - Girishk and Lashkar Gah

Travelled from Kandahar to Girishk and Lashkar Gah by USAID car. Left Kandahar at 7:30 AM, arriving in Girishk at 9:30 AM.

Girishk is the historical center of government for the area and the Helmand Valley Authority initially had its headquarters here. These were later moved to Lashkar Gah.

A visit was made to the ten bed hospital in Girishk which is operated by the Ministry of Health. There are beds for male patients only, but both males and females are seen in the polyclinic.

The hospital has an operating room, laboratory, pharmacy, dental office and polyclinic facilities. The staff consists of one physician who is an internist, one dentist, one compounder, one dresser, and two untrained male nurses. The medical officer was in Kabul at the time of the visit, but the physician from Manpower (Labor Force) of the Ministry of Public Works is on call and helps with emergencies. He reported that the Manpower has a thirty bed hospital in area, but that he would not be able to arrange a visit to this institution since a request had not been made.

The hospital in Girishk has running water, flush toilets, but the building is in need of repair and refurbishing. The kitchen is in a separate building about fifty yards from the hospital. Cooking is done on an open wood fire and the room is smoke stained and dark.

Left Girishk at 10:15 AM, arriving in Lashkar Gah at 11:00 AM.

Visits were made to the Lashkar Gah Hospital and School for Auxillary Nurses.

Tuesday, July 30, 1963, Continued

This operation is financed by the Helmand Valley Authority (HVA). The physicians and other staff members are assigned by the Ministry of Health, but all are paid by HVA. The staff consists of Dr. Ghulam Hazrat Wahid, the Chief Medical Officer; Dr. Ghulam Mohammad, an internist; Dr. Gull Mohammad, an internist; Dr. Mohammad Habib, a surgeon and Dr. Mohammad Habib, a dentist.

There are fifteen beds for male patients, an operating room, laboratory, X-ray, pharmacy, dentist's office, and polyclinic in one building, and a five bed hospital for females in another building. Although the buildings are functionally inadequate and crowded, they are clean and the equipment appears to be adequate. A new building is under construction. It will be used for both male and female hospital patients and will house the polyclinic and the School for Auxillary Nurses.

The School which is in a separate building in the same compound was started two years ago. There are thirty students, with thirteen (ten male and three female) in the first class now in the second year of study; and seventeen (sixteen males and one female) in the second group now in their first year of training. The students have only six grades of basic education.

CARE-MEDICO has assigned two physicians (Dr. Robert Murphy a surgeon, and Dr. Donald McAuley an internist), a senior medical student and two nurses to the Lashkar Gah hospital-nursing school operation. The Helmand Valley Authority employs an American nurse, Mrs. Khaliki, as Director of the School. Mrs. Khaliki received her preparation in nursing in the U.S. and taught in AUB School of Nursing in Beirut for three years before coming to Afghanistan.

Elective surgery is not generally performed at the Lashkar Gah Hospital and as a result surgery is limited to acute conditions within the abdomen demanding immediate operation, strangulated hernias, compound fractures, wounds and other injuries. The medical cases seen are primarily those of intestinal parasitism, anemia, ~~avitaminosis~~, cardiac insufficiency, nephritis, gastritis and pulmonary tuberculosis.

avitaminosis

Tuesday, July 30, 1963, Continued

All of the houses provided for the officials of HVA stationed in Lashkar Gah have piped water from deep wells. Sewage is handled by septic tanks. Water taps have been installed in various sections of the town, but some people still obtain drinking water from the river and others from the canal.

A sanitarian, employed by HVA, works part time on the staff of the malaria program and the remainder on other environmental problems. He is organizing a garbage collection and disposal system and hopes to have public toilets and showers installed. Some work has been started on improving the conditions of the markets and other food handling establishments.

Later in the day a visit was made to the new hospital building which is nearing completion. This hospital will accommodate sixty patients and a polyclinic. It was built by HVA with USAID assistance. The operating suite is to be air-conditioned. Polyclinic and classrooms for the School for Auxillary Nurses are housed in the same structure. The original plans for the hospital underwent many changes to make it functional, but the setup is still pretty poor.

Wednesday, July 31, 1963 - Lashkar Gah, Marja, Nad-i-Ali and Chah-i-Angiers

7:15 AM Left Lashkar Gah to visit the health facilities in the area. The team was accompanied by Dr. Wahid.

The first stop was at Marja to see a polyclinic. When Marja was the headquarters for one of the Morrison Knudsen camps the building now used as a polyclinic was operated as a ten bed hospital and dispensary. When the MKA contract was completed the facility was dismantled. The HVA is now rehabilitating the structure as a polyclinic. One of the physicians from the Lashkar Gah hospital holds a clinic in Marja once or twice a week. This service was reinaugurated only recently. A male nurse, a compounder, and a sanitarian are on duty throughout the week. A majority of the patients seen in the Marja clinic are said to have problems such as diarrhea, anemia, intestinal parasites, tuberculosis, conjunctivitis, and disabilities resulting from old injuries.

Wednesday, July 31, 1963, Continued

A visit was made to a resettlement area located near Marja. The people in this area are dependent upon the water they take from the irrigation canals for their household requirements. The medical officer wished to discuss methods of supplying safe water for these settlers. According to him, many of those seen in the polyclinic in Marja have health problems which stem largely from the lack of safe water, from poor personal hygiene and from improper disposal of human wastes. The medical officer mentioned that one plan under consideration was to pipe water from a central reservoir. This would seem impractical since the settlers' homes are scattered over a large area and some are one-third of a mile or more from their nearest neighbor. The homes of some are in groups of from three to ten houses or more. Because of the settlement distribution pattern and the problems which have been encountered in finding sweet water in nearby areas, the medical officer was advised to consult with a competent public health engineer before recommending a plan to the HVA.

Visited the polyclinic at Nad-i-Ali which is housed in a portion of the Agricultural Building. This clinic is operated by the HVA and is staffed by a male nurse, a compounder and a sanitarian. One of the physicians from Lashkar Gah now holds a clinic once or twice each week and about 150 men, women and children are seen during these clinic sessions. Dysenteries, respiratory infections, intestinal parasites, conjunctivitis, tuberculosis, ringworm of the scalp, and anemias are said to be the problems which bring a majority to the clinic.

Within a short distance of the polyclinic there is a twenty bed hospital building which is nearing completion. Construction was started some five or six years ago, but was stopped when the plan to resettle a large group of people in this area had to be abandoned. It was intended originally that the hospital would be a general hospital and that it would be the medical center for a large population group. When the land proved too saline for agricultural development, the resettlement plan for the area had to be changed. It was then that the work on the hospital was shut down.

Wednesday, July 31, 1963, Continued

The HVA has been anxious to find a use for this facility inasmuch as their original investment amounted to approximately \$65,000. Sometime ago HVA decided to complete the construction work and AID agreed to support the effort by providing some building materials and equipment (\$30,000 obligated).

The present plan is to use one part of the facility as a polyclinic, another part for living quarters for staff and the remainder for a twenty bed isolation and treatment center for tuberculosis patients and patients with chronic illnesses. The polyclinic now used will be closed and the service transferred to the new building.

Staffing plans for the hospital have not been made, but the HVA hopes that the Ministry of Health will assign a physician.

Dr. Mohammad Habib entertained the team, the medical staff of Lashkar Gah, the American nurses and several officials at a luncheon in the Lashkar Gah Club.

During the afternoon a visit was made to the fourteen bed hospital located at Chah-i-Angirs. This facility is operated by the Afghanistan Construction Unit and the physician in charge is Dr. W. S. Seyring, who is a surgeon. The building was originally intended for another purpose, but has been remodeled to serve as a hospital. In addition to rooms for patient care, there is an operating room an X-ray unit and darkroom, a laboratory, a treatment room, a pharmacy and space for polyclinic services. The entire installation was immaculate and all available space well utilized.

This hospital and polyclinic is maintained to provide medical services and care for the foreign contract personnel of ACU. Care provided for Afghan employees is usually limited to the treatment of emergencies and the treatment and isolation of individuals having a communicable disease.

After visiting the installation, the team was entertained at tea by Dr. Seyring.

Left Chah-i-Angirs at 5:30 PM, but did not reach Kandahar until 9:30 PM. The delay was due to an accident.

Wednesday, July 31, 1963, Continued

Summary of information regarding health services in the Province of Girishk:

1. The HVA health operations include:
 - a. Lashkar Gah Hospital and Polyclinic
 - b. School for auxillary nurses in Lashkar Gah
 - c. Polyclinics in Marja, Nad-i-Ali and Darwasha

The HVA budgeted 3 1/4 million afghanis for its health services for the year which began March 21, 1963.

Other health services in the area are:

- a. the hospital in the municipality of Girishk which is operated by the Ministry of Health.
- b. the hospital in Chah-i-Angiers operated by ACU.
- c. the hospital near Girishk operated by the Ministry of Public Works to provide care for highway construction personnel, and
- d. the Malaria Eradication Program.

The malaria staff also vaccinates for smallpox and dust with DDT for typhus.

4. Treatment of illness is still the primary focus of the HVA health service. The Chief Medical Officer is aware of the need to develop preventive services and efforts are being made to do so. The health staff is hoping to initiate activities to deal with environmental sanitation problems. With the exception of the sanitarian who works in Lashkar Gah all of the others function as medical assistants not as sanitarians.
5. There is a hospital building in Kajakai which was operative at the time the MK group was in Afghanistan. It has since been dismantled, but consideration is being given to re-establishing it to serve a large population group now without medical service.

Thursday, August 1, 1963 - Kandahar

Visited the small clinic which serves the Americans assigned to Kandahar. It is operated by the U. S. Department of State and at present it is staffed by a nurse, Mrs. Sadie Rogers, who is in Kandahar on temporary assignment. The regular staff member for this clinic is on leave in Germany. When medical care is required, patients are either attended by Dr. Paita of AHC or are sent to Kabul.

Visited the Government House to meet H. E. Mr. Mohammad Sidique, Governor of Kandahar Province. Environmental health problems were discussed and the Governor told of his plans to acquire a safe water system for Kandahar.

The same subject was introduced later by the Mayor, H. E. Lalmohammad Karar when a visit was made to his office. The Municipality of Kandahar employs a sanitarian whose principal function is to encourage city clean up activities.

The team was entertained at a luncheon in the home of Dr. Zama-nuddin Aimry. The entire medical component of the Provincial Health Staff of Kandahar was present and an opportunity was provided for further discussions about the health problems and services of the area.

During the afternoon the team met with Mr. Philip Nalder, Assistant Director for the Helmand Valley Region of the USAID to discuss findings and suggest approaches for solving them.

Friday, August 2, 1963 - Travel from Kandahar to Kabul

Left Kandahar via Ariana at 1:00 PM and arrived Kabul at 2:50 PM.

Saturday, August 3 through Tuesday, August 6, 1963 - Kabul

The team remained in Kabul during this period. Work was begun on the survey report and a preliminary format was discussed with Ministry of Health and USAID personnel.

Wednesday, August 7, 1963 - Bamiyan

Left Kabul by USAID transport at 5:15 AM and arrived at Bamiyan at 5:00 PM.

Wednesday, August 7, 1963, Continued

Immediately after arrival a visit was made to the provincial hospital. The staff of the hospital consists of the chief medical officer, Dr. Abdul Majid, who is an internist, one compounder, one dresser, and one female nurse (untrained).

There are sixteen beds in the hospital, eleven for male and five for female patients. It is housed in a rented structure originally used as a residence. The hospital does not have an operating room, an X-ray, nor a laboratory. Patients requiring surgery must be sent to Kabul or Charikar.

From thirty to forty patients are seen daily in the polyclinic. A majority of the patients who seek care are said to have dysentery, intestinal parasites, tuberculosis, other respiratory infections, skin disease, conjunctivitis, a fracture or other injury resulting from accidents. There are many patients with respiratory infections probably due to or aggravated by the inhalation of smoke. The medical officer explained that in the Bamiyan area there is no wood for fuel, so the people use a brush which is available in the area. This gives off a great amount of smoke and the medical officer believes this accounts for the serious respiratory problems he encounters.

Formerly the Provincial Capital was in Panjao. When it was changed to Bamiyan the health staff of the Ministry of Health moved also. The Ministry has a hospital building in Panjao which is no longer used either as a hospital or as a polyclinic, leaving the people of that area without medical service.

The medical officer entertained the team at dinner at his home, after which there was further conversation about health problems in the area.

Thursday, August 8, 1963 - Bamiyan and Band-i-Amir

Left Bamiyan at 9:00 AM to make visits in the area. Returned to Bamiyan 5:30 PM. Travelled in AID jeep.

In Band-i-Amir the team was introduced to the medical officer of the Rural Development Project of Bamiyan Province. He was delivering powdered milk to the school.

Thursday, August 8, 1963, Continued

At dinner the team members were the guests of the Acting High Commissioner and his wife, Mr. and Mrs. Mohammad Anwar. Dr. and Mrs. Majid and daughter also attended.

Friday, August 9, 1963 - Travel from Bamiyan to Pul-i-Khomli

Left Bamiyan at 9:00 AM by AID jeep and arrived at Pul-i-Khomli at 6:00 PM where the team was received by Dr. Mir Mohammad Ali, Chief Medical Officer for Kataghan Province and by Dr. Mohammad Sharif, the Medical Officer for Pul-i-Khomli.

Saturday, August 10, 1963 - Pul-i-Khomli and Baghlan

Visited health facilities in Pul-i-Khomli and Baghlan area.

There are two hospitals in Pul-i-Khomli, one operated by the Ministry of Health and the other by the Afghanistan Textile Company.

The Ministry of Health hospital is located in a house rented from the Textile Company. The facility has ten beds for male patients, a pharmacy, a room for emergencies and dressings, a staff room, a kitchen, an office and an examining room for polyclinic patients. Men, women and children are received in the clinic, and there is an average daily attendance of seventy patients. Although the structure housing the hospital and polyclinic was never intended for these purposes, every room has been put to good use. The facility was immaculately clean and the fly population almost nil. The electric ice box was functioning and was well stocked with vaccines.

The Medical Officer, Dr. Sharif, is a surgeon. Since the hospital is not equipped for this service, the surgical cases are taken either to the textile company hospital or to the Ministry of Health hospital in old Baghlan.

Dr. Sharif's staff consists of one dresser, one compounder, two vaccinators and three practical nurses (two male and one female).

The hospital serves a population of 92,772, distributed as follows:

Municipality of Pul-i-Khomli	18,741
Danaha Huri	12,893

Saturday, August 10, 1963, Continued

Andarab	14, 122
Doshi	18, 641
Nabrien	21, 342

From March of 1963 up until the time of the team's visit, 133 patients had been admitted to the hospital for a total of 2, 321 days and 15, 672 patients had been attended in the polyclinic. Smallpox vaccinations had been given to 52, 008 people with 37, 073 primary reactions obtained.

During the same period, there were 568 cases of dysentery, four of smallpox, 130 cases of whooping cough, 144 cases of measles and a few cases of trachoma and leprosy. It was reported that during the winter months many upper respiratory cases are seen.

According to Dr. Sharif, tuberculosis still exists, but seems to be on the decline. He has an ample supply of three types of drugs for treating tuberculosis patients. He stated that among the patients he examines he believes that between 95% and 100% have intestinal parasites. There is no sanitarian on his staff but he has been working with some of the sanitation problems in Pul-i-Khomli. The water in this town comes from springs and wells. Water for use in the hospital and polyclinic has to be carried from one of the wells or from the river. The municipality does not operate a waste disposal service. Some farmers collect night soil from the open back latrines which do exist and use it for fertilizer.

In addition to the textile company, there are two other industries in the area. There are coal mines at Karkar and a cement factory in Pul-i-Khomli. Each of the latter employs a physician but neither operates a hospital.

A visit was made to the hospital and polyclinic of the Afghanistan Textile Company located in Pul-i-Khomli. The hospital, built in 1941, has a total of eighty beds with fifty for male and thirty for female patients. The staff consists of Dr. Amadi, an internist, Dr. Mohammad Anwar, an assistant doctor, a Czechoslovakian surgeon who was on leave at the time of the team's visit, one anesthetist, two nurses (one male and one female), one midwife, one dentist, one compounder, one laboratory technician, one

Saturday, August 10, 1963, Continued

X-ray technician, and other auxiliary personnel. Dr. Sharif is staffing the surgical department while the regular surgeon is on leave.

The hospital has an air-conditioned operating theater and X-ray section. There are two operating rooms, a delivery room and plaster room with a fracture table. The operating room suite is equipped with electric sterilizers and autoclaves and a gas anesthesia machine. The supply of instruments is varied and of good quality. X-ray equipment includes one fluoroscope and one machine with tilt-table and bucky mechanism.

The kitchen, laundry and sewing room are located in a separate building. The kitchen has a wood fire stove and running water. The laundry has electric current for boiling and ironing clothing and bed linens.

The hospital complex includes a large and well equipped laboratory section and a polyclinic unit.

The health facilities of the textile company serve its 5,741 employees and their dependents. Between 150 and 200 people attend the polyclinic each day. Pre-employment physicals are required. Those found to have tuberculosis or other communicable diseases are declared ^{unfit} ~~unfit~~ for employment. Mention was made that about 10% of the blood tests are positive.

The health problems of the patients seen in the polyclinic are similar to those of the patients seen in the polyclinic operated by the Ministry of Health.

Visited Baghlan, Capital of Kataghan Province, located twenty-five miles from Pul-i-Khomli. The Ministry of Health operates two facilities in this area; a hospital-polyclinic in new Baghlan and a hospital for surgical patients in old Baghlan. A new hospital building is under construction. This is adjacent to the hospital-polyclinic in new Baghlan. As soon as the hospital construction is completed, the existing facility in new Baghlan will be used solely as a polyclinic, and the hospital in old Baghlan will either be closed or used as a polyclinic.

The staff of the hospital-polyclinic in new Baghlan consists of twenty-two technical and twenty-eight non-technical workers.

Saturday, August 10, 1963, Continued

The Chief Medical Officer, Dr. Mir Mohammad Ali, also serves as provincial Health Officer. In addition to Dr. Ali, the medical group includes Dr. Mohammad Yunis, an internist, Dr. Ghulam Ali, a radiologist-internist, Dr. Abdul Karim, an internist and Dr. Abdul Rahman, a dentist. The paramedical staff is composed of eight male nurses, four untrained female nurses, two laboratory technicians, one X-ray technician, two compounders, one dresser, two vaccinators and two sanitarians. One of the sanitarians works under the direction of the Medical Officer and the other under the direction of the municipality.

The hospital has twenty beds for male patients, but no in-patient facilities for females. Both sexes will be cared for in the new hospital when it is completed. The present facility has a 50 millamp Seimans X-ray unit and a 25 KVA generator. There is a small laboratory, a pharmacy, a dentist's office, a store for drugs, a room for first aid and dressings and examining rooms for the polyclinic service. The entire building is orderly and clean. There are screens on the windows and screen doors to each patient ward.

The following statistics were available for the four month period which began March 21, 1963.

- a) number of males hospitalized - 127, with 110 recovering
- b) number of X-rays taken - 1, 155
- c) number of dental patients - 66
- d) number of patients given first aid - 632
- e) number of typhoid immunizations given - 4, 495
- f) number of smallpox vaccinations given - 16, 977
- g) number of patient visits to the polyclinic - 8, 788
(1, 914 children, 2, 543 women and 4, 331 men)

Water for Baghlan comes from wells. There is no distribution system. Open back latrines have been installed by some householders, but the municipality does not operate a collection system. Farmers collect the waste for use as fertilizer.

The Mayor of Baghlan, Mr. Ghulam Dastagir, met with the medical staff and the survey team. He stressed the need for developing a water supply system for the city.

Saturday, August 10, 1963, Continued

The Mayor and members of the health staff were guests of Dr. Mir Mohammad Ali at a luncheon served in the club.

During the afternoon a visit was made to the ten bed surgical unit located in old Baghlan. This is staffed by a surgeon, Dr. Abdul Hamid, a male nurse, dresser and compounder. This unit will be transferred to the hospital in new Baghlan as soon as construction is completed. The present facility, which is rented from the Sugar Company, is poorly equipped. There is no running water and the autoclave does not function. The Sugar Company wants the building to extend their silk worm operations, but Dr. Ali would like to retain it for use as a polyclinic.

Sunday, August 11, 1963, - Aibak and Tashkurghan

Left Pul-i-Khomli at 8:00 AM. Travelled by AID jeep to Mazar-i-Sharif arriving there at 8:00 PM. Enroute to Mazar visited health facilities and personnel in Aibak and Tashkurghan.

In Aibak the Ministry of Health operates a polyclinic which is staffed by a physician, Dr. Mohammad Yunis Mushrif, a compounder, a dresser and a vaccinator. The building is old and poorly constructed and the staff is further handicapped because they do not have laboratory facilities or even an autoclave. Some twenty to forty patients are attended daily and it was reported that a majority of them have dysentery, intestinal parasites, tuberculosis or ringworm of the scalp. Patients requiring surgery are referred to the hospital in Mazar-i-Sharif.

The people in Aibak obtain drinking water from the juey as there are no wells. This is the first area in Afghanistan visited by the team where pit latrines are used and where it is not the practice to use human waste as fertilizer.

Lunch was served at the hotel where the team members were the guests of the Medical Officer. The judge of the local court and the collector of internal revenue joined the group for lunch.

A stop was made in Tashkurghan. The medical officer, Dr. Jal-laudin, had arranged for tea to be served at Bagh Jahan Mowa, a palace built some eighty years ago by Amir Abdul Rahman.

Sunday, August 11, 1963, Continued

The Ministry of Health operates a polyclinic in Tashkurghan. Patients requiring hospitalization are referred to Mazar-i-Sharif. The health problems of those attended in the polyclinic are similar to those encountered in Pul-i-Khomli and Baghlan.

On the road from Tashkurghan to Mazar the team met Dr. Wenzel, WHO Malaria Advisor and Dr. Hassan, Director of the Northern Region, Malaria Eradication Program.

Arrived in Mazar-i-Sharif at 8:00 PM where the team was received by Dr. Mohammad Ayub, Chief Medical Officer for the Province.

Monday, August 12, 1963 - Mazar-i-Sharif

During the morning visits were made ^{to} of the office of the Governor of the Province and to the health facilities located in Mazar-i-Sharif.

The health needs of the province were discussed with the Governor, H.E. General Ghulam Rasoul Parmach. He described accomplishments and plans for improving conditions in the municipality of Mazar-i-Sharif and commented on the effectiveness of the malaria eradication effort. The development of systems for providing safe water and for the disposal of human wastes are given high priority by the Governor.

The team visited the hospital-polyclinic complex operated by the Ministry of Health and met with the following staff members:

Dr. Mohammad Ayub - Chief Medical Officer for the hospital and the province

Dr. Ismail Taheri - VD Specialist - Bacteriologist

Dr. Ibrahim Zamari - Internist

Dr. Haidar Ali Shafa - Pediatrician

Dr. Abdul Sattar Hasek - Obstetrician and Gynecologist

Dr. Ghulam Sideque Munir - Radiologist

Dr. Mir Aka Hesamie - VD Specialist

Monday, August 12, 1963, Continued

Dr. Mir Mōhammad Assam - Laboratory Specialist

Dr. Abdul Hamidula - Dentist

Dr. Mohammad Hashimi - Surgeon

Mr. Abdul Hazek - Sanitarian

Mr. Mohammad Humaun - Sanitarian

In addition to the above, the staff also includes five midwives (graduates of the Shararah School in Kabul), five male nurses, (graduates of the Ali Abad School in Kabul), laboratory and X-ray technicians, dressers and compounders.

The seventy bed hospital is divided into two sections which are housed in separate buildings. There are thirty-five beds in the male section, fifteen for surgery, fifteen for medical and five for skin. In this section there is an operating suite, a pharmacy, a medical depot, a laboratory, and an area used as the polyclinic for male patients.

There are thirty-five beds in the female section, five for surgical cases, five for tuberculosis patients, twenty for medical cases and five for pediatrics. It was reported that there are four to five deliveries per month, all with complications. It is customary for normal deliveries to be made at home. In the female section, there is an operating suite, delivery room, pharmacy, medical depot, and a polyclinic where women and children are attended.

Both the delivery room and operating room in the female section have a considerable amount of equipment which was supplied by UNICEF including stainless steel tables, a delivery table, an operating table, suction apparatus, a battery operated operating room light and primus burner autoclaves. Milk, vitamins and soap provided by UNICEF are distributed by the MCH service in the polyclinic. The director of this service uses a system of cards with photographs to identify those who have been determined to be eligible for these supplies.

The X-ray department which serves both sections of the hospital is located in the building which houses the facilities for women

Monday, August 12, 1963, Continued

and children. X-ray equipment consists of two X-ray machines, one with bucky, a fluoroscope and a machine for superficial therapy. A 20 KVA electric generator supplies the power for this equipment.

Water for the entire hospital-polyclinic complex is supplied from a deep well. There is a large elevated tank from which distribution is made. There is a central kitchen and laundry (new) to service both sections of the hospital. These service units are clean, airy and suitably equipped.

The staff is supplied with two vehicles, a pickup truck and a jeep, neither of which are operable.

The patients who come to the attention of the health personnel in Mazar have problems very similar to those reported by the Health staffs in other parts of the country. Dysentery, intestinal parasites, respiratory infections, diseases of the skin and scalp, tuberculosis, (human and bovine), measles and accidents constitute the largest number of cases. Out of 2,357 patients seen in the skin clinic during the past fourteen months, 3.7% had syphilis, 1% had leprosy and 6% had cutaneous leishmaniasis.

A visit was made to the Mazar Unit Office of the Malaria Eradication Program which is housed in the male section of the hospital. The Director, Dr. Ghulam Mohammad Husmain, described some of the problems encountered in the area and the measures taken to resolve them. In a recent survey during which the blood smears of 1,000 fever patients were taken there were eighteen positives. Of these, eight were vivax and ten falciparum.

Dr. Ayub entertained the team and the medical staff of Mazar at a luncheon. This provided an opportunity to become better acquainted with the staff and also to learn more about the health problems with which they are confronted.

The Ministry of Health has a seven bed hospital for male patients in Balkh, but with polyclinic services available to both sexes. The facilities and equipment in this institution are limited. There is neither a laboratory nor autoclave. The staff consists of Dr. Abdul Rahman, a trained male nurse, a compounder, and a dresser.

Monday, August 12, 1963, Continued

On the visit to the hospital-polyclinic in Balkh, the team was accompanied by H. E. Mr. Abdul Hakim Wahab, Deputy Governor of Mazar-i-Sharif and Dr. Ayub the Provincial Health Officer.

Following a tea, arranged by the Deputy Governor and served in a garden of the old city, the team returned to Mazar where they were dinner guests in the home of Mr. Wahab.

Tuesday, August 13, 1963 - Travel from Mazar-i-Sharif to Kunduz

Left Mazar-i-Sharif at 10:30 AM and arrived in Tashkurghan at 12:00 Noon. Left Tashkurghan at 2:00 PM and arrived Kunduz at 7:30 PM. Travelled in USAID jeep.

The weld of the right front shackle on one of the jeeps broke as the team was leaving Tashkurghan. As repair facilities were not available, the break had to be wired rather than welded. Fortunately, the makeshift repair held for the remainder of the trip to Kunduz.

Upon arrival in Kunduz the group was met by Dr. Mir Mohammad Ali, the Chief Medical Officer of Kataghan Province, and by Mr. Gull Nabi, Mayor of Kunduz. Dinner was served at the club where the team was introduced to H. E. Mr. Abdul Malik, Deputy Governor of Katagan Province, Dr. Ghulam Hassan, Director of the Northern Region, Malaria Eradication Program; Dr. Mir Abutrab Hashimi, Internist of the Ministry of Health, and Dr. Mohammad Isar, Internist employed by the Da Spinzar Cotton Company.

Wednesday, August 14, 1963 - Kunduz

Visited the ten bed hospital for male patients which is maintained by the Ministry of Health. The hospital is housed in a building rented from the Cotton Company for 1,000 afghanis per month. There is a pharmacy and medical depot, but there are no laboratory or operating room facilities. Surgical cases are referred either to Baghlan or to the hospital operated by the Cotton Company. The staff consists of a physician, a compounder, a male nurse (graduate of Ali Abad), three practical nurses and a dresser.

Wednesday, August 14, 1963, Continued

Connected with the hospital is a polyclinic which serves men, women and children and where an average of forty patients are seen daily. Dysentery, intestinal parasites, tuberculosis, anemia, skin and scalp disorders and accidents are the common problems.

A visit was made ^{to} of the office of the Northern Region of the Malaria Eradication Program. The Director of the region, Dr. Ghulam Hassan, has worked in the malaria program of Afghanistan since 1951.

A description of the activities carried out by Malaria Staff was given by Dr. Hassan and by Mr. B. N. Mohan, an entomologist assigned by WHO. There are 1,400,000 people at risk in the northern region. The spleen rate in Pul-i-Khomli, which was 76% in 1947, is now 0% and it has not been possible to find a vector for the past six years. Larviciding is used in Pul-i-Khomli, but residual spraying with DDT is used in the remainder of the region.

It was reported that in the early 1940s thousands of people who came to Kunduz to work in the textile mills died of malaria. The people had a saying "go to Kunduz and die". As a result the Cotton Company found it difficult to get the manpower it required. At present there are only a few cases found each year and people are no longer reluctant to settle in the area.

The Da Spinzar Cotton Company operates a thirty bed hospital in Kunduz. There are fifteen beds for males and fifteen for females, all housed in the same building. The company also operates a polyclinic and pharmacy which are housed in separate buildings.

Included on the staff of the hospital-polyclinic are three physicians, two female nurses, three male nurses, a pharmacist, an X-ray technician and a laboratory technician. Only two of the physicians, an internist and an assistant doctor, were on duty at the time of the visit. The third, a surgeon who is a contract employee from Czechoslovakia, was on leave in his home country.

The hospital is undergoing extensive remodeling. The new operating suite, which is almost ready for use, will have two operating rooms,

Wednesday, August 14, 1963, Continued

one for septic and the other for aseptic cases, a delivery room and a fracture room. There are two new scrub rooms equipped with knee operated faucets. The X-ray department is equipped with a 75 milliamp machine with bucky. There is a considerable amount of new equipment on hand both for the operating suite and for the kitchen and laundry units.

The Cotton Company provides free hospital and polyclinic service for its employees and their dependents. The facilities are available to others in the community on a fee basis. Hospital charges, exclusive of drugs, are 30, 40 or 100 afghanis per day depending on the type of accommodation provided. A charge of 30 afghanis is made for each polyclinic visit.

The hospital has running water and flush toilets, but there is no running water in the polyclinic building.

At the time of the visit those hospitalized included patients with diagnoses of tuberculosis, cardiac insufficiency, avitaminosis, tubercular peritonitis, arthritis, anemia, intestinal parasitic infections and dysentery.

The team, the medical staff of the area and the Mayor of Kunduz, were guests at a luncheon given by Dr. Mir Abutrab Hashimi.

During the afternoon a visit was made to the Da Spinzar Cotton Company installation where cotton seed is cleaned and pressed. The oil obtained from the seed is processed and packaged in both liquid and solid form. The company cuts and assembles tins for packaging the solid fat and uses large drums for the liquid oil. The empty drums returned to the company are scrubbed and then cleaned with hot water and steam before they are used again.

The team also toured the soap making, curing and packaging installation, the carpentry and machine shops and the porcelain factory.

The plant was constructed and equipped some twenty years ago. Safety precautions are minimal, but the company officials state that accidents are rare.

Wednesday, August 14, 1963, Continued

Mr. Hesamuddin of the Da Spinzar Cotton Company entertained the Deputy Governor of Kataghan Province, the Mayor of Kunduz, the medical staff and other officials and businessmen of the area at an early evening tea in the Cotton Company Club.

Thursday, August 15, 1963 - Khanabad and Talaqan

Left Kunduz at 8:00 AM and arrived at Khanabad at 9:00 AM.

Visited the ten bed hospital for male patients which is operated by the Ministry of Health. The existing hospital-polyclinic facility is poorly maintained and does not have running water. It is housed in an old building located on property which the municipality has appropriated for other purposes.

There is to be a new hospital built as a part of the Second Five Year Plan, but a suitable location has not been made available by the municipality.

The health staff includes Dr. Mohammad Sadeque Berna, a trained male nurse, two practical nurses, a dresser, a compounder and a vaccinator. Approximately thirty to forty patients (males and females) are attended daily in the polyclinic. The health problems of the people seen by the health workers in Khanabad are the same as those in other areas of the region.

The population of Khanabad is estimated to be 70,000. Water for drinking and household requirements is obtained from springs and jueys. Pit latrines are used for the disposal of human waste. Boys in Khanabad have twelve grades of schooling available to them while girls have only six grades.

A visit was made to the Malaria Unit Office which serves an area having 201,338 people at risk. In recent months the parasite rate among fever cases has been 0.001%. Dr. Mohammad Azam is the director of the unit.

Left Khanabad at 10:30 AM and arrived at Talaqan at 12 Noon.

Talaqan is a new province having been established only a year ago. The Ministry of Health has since opened a ten bed hospital for male patients. It is located in a building rented from the Cotton Company. Space is extremely limited, but well used and everything was clean and orderly. There is no running water in the building.

Thursday, August 15, 1963, Continued

Dr. Said Mohammad Anwar is the Medical Officer. His staff is small, but in addition to the hospital patients, some thirty to forty people (males and females) are attended daily in the polyclinic.

Dr. Anwar and his wife entertained H. E. Abdul Kayeum Ataie, Governor of Talaqan Province, Dr. Abdul H. Hashimi, Chief of the Malaria Unit Office and the team at a dinner served in the Talaqan Hostel. Following dinner, the health problems and needs of the Province were discussed. Water is the big problem as is the disposal of human waste. There are some wells in the municipality, but a majority of the people must depend on the juey to supply their needs. The latrines which have been installed are of the pit type. A few establishments and households have septic tanks.

Friday, August 16, 1963 - Travel Talaqan to Faizabad

Left Talaqan at 8:30 AM and arrived at Kishem at 11:30 AM. Plans did not include a stop at Kishem inasmuch as there are no health facilities in this municipality. Upon arrival, however, a delegation met the team. It included the Deputy Governor of Badakshan Province, the representative of the Finance Ministry, one of the physicians from Faizabad who was in Kishem on leave and several other officials of the area. The Deputy Governor had arranged for lunch to be served in a park area on the riverbank.

Left Kishem at 2:45 PM and arrived at Faizabad at 7:30 PM.

The Chief Medical Officer of Badkashan Province, Dr. Abdullah Halim, entertained the group at dinner.

Saturday, August 17, 1963 - Faizabad

The Ministry of Health operates two hospitals in Faizabad, a twenty bed hospital for male patients and a five bed hospital for female patients. Each facility has a polyclinic area. Both hospital buildings are in poor repair and neither has running water. A new building which will serve male and female patients is being constructed and it is estimated it will be ready for occupancy within a year. A visit was made to the construction site where the blue prints for the building were seen. There are

Saturday, August 17, 1963, Continued

to be beds for twenty-five patients, an operating suite, a laboratory, an X-ray department, a pharmacy, a kitchen, a laundry and examining rooms for the polyclinic area. Several units on the blueprint are identified as stores and one large area as a tea room. It appeared that with a rearrangement considerably more than twenty-five patients could be accommodated.

Visited the hospital for males. It has an operating room with a fair supply of instruments and an autoclave. There is a pharmacy and storeroom, but no laboratory. At the hospital for females, there are two rooms for patients, an examining room and a pharmacy.

The staff for the two hospitals consists of two physicians, Dr. Abdullah Halin, the Chief Medical Officer (surgeon), and Dr. Mohammad Rafique (internist), a vaccinator, a dresser, three compounders, two trained male nurses and four practical nurses (three males and one female).

Attendance at the polyclinic for males is thirty to forty per day while that at the polyclinic for females is around twenty to twenty-five per day. Among those admitted to the hospitals the surgical cases are chiefly bladder stones, bone tuberculosis, cervical adenitis, hernias and hemorrhoids. The medical cases consist of anemias, dysenteries, nutritional deficiencies, and intestinal parasites. These same medical problems along with measles and skin diseases are the ones seen most frequently among the patients attended in the polyclinics.

In addition to the hospitals and polyclinics in Faizabad, the Ministry of Health operates a mobile unit for the area. This is staffed by a V.D. Specialist, Dr. Amir Mohammad, a compounder and a dresser. The unit travels to various communities in the Province and is making a V.D. survey. Treatment is provided for the cases found. Of those who have been examined 16% have been positive.

A visit was made to the Faizabad Unit Office of the Malaria Program. The chief, Dr. Inodiddin, was in the field, so information about activities in the area could not be obtained.

The Rural Development Department has a project in the Province and the physician in charge of the health services is Dr. Mir Obidullah. It was not possible to contact him.

Saturday, August 17, 1963, Continued

Left Faizabad at 12:00 Noon and arrived at Talaqan at 7:30 PM.

Spent the evening with Dr. Anwar and his family.

Sunday, August 18, 1963 - Travel from Talaqan to Kunduz

Left Talaqan at 8:30 AM and arrived Kunduz at 2:00 PM.

Dr. Ghulam Hassan, Director of the Northern Region of the Malaria Eradication Program was host at a dinner given in the Da Spinzar Hostel. The guests included the Deputy Governor, the Mayor of Kunduz, the Medical Officer of the Province, the medical personnel of Kunduz, the executives of the Cotton Company and the WHO Malaria Advisor who is stationed in Kunduz.

Monday, August 19, 1963 - Travel from Kunduz to Kabul

Left Kunduz via Ariana Airline at 10:10 AM and arrived in Kabul at 2:20 PM after a one and one-half hour delay at the airport in Mazar-i-Sharif.

Wednesday, August 21, 1963 - Kabul - Tuberculosis Sanatorium for Women

Visited the women's tuberculosis sanatorium which is located in a large walled compound in the Darulaman section of Kabul. The sanatorium is operated by the Ministry of Health.

The staff includes:

Dr. Abaevi Sarwar, Director

Dr. Mohammad Akabar Sena, Internist

Dr. Pouskova, a female Czech physician, a graduate University of Prague Medical Faculty who was employed by Ministry of Health one month ago. Her husband is a radiologist and is working with the Ministry of Finance.

Five trained female nurses (rotated every six months)

Two assistant nurses

One X-ray technician

Wednesday, August 21, 1963, Continued

One laboratory technician

One sanatorium has fifty-two beds for women with pulmonary tuberculosis. Four of these beds can be used for pay patients who are charged thirteen afghanis per day. 60% of the patients admitted to the hospital come from outside Kabul Province. The duration of hospitalization is three months to two years with an average stay of five months. Treatment consists of bed rest, drugs (streptomycin, PAS, Isoniazid, vitamins), pneumothorax and pneumoperitoneum. No surgical collapse therapy is performed.

Only patients with positive sputums are admitted and as they become negative they are placed in separate wards. After three consecutive negative sputums taken at one month intervals, the patients are discharged. Upon discharge, the patients are given one month's supply of drugs and asked to return in three months for examination. There are no provisions for follow-up of discharged patients except in the Kabul area.

On the day of our visit to the sanatorium there were fifty-two patients, thirty-five of whom had positive sputums and seventeen with negative sputums. The ages of the patients ranged from fifteen to fifty-five years. There were fourteen patients on the waiting list for admission to the sanatorium.

Since the arrival of Dr. Pouskova, a rehabilitation program has been started. The daily regimen now includes instructions in reading, writing, and sewing; physiotherapy; psychotherapy and health talks with an occasional health film.

Sanatorium
The sanatorium has a 100 milliampere Siemens X-ray machine which can be used for fluoroscopy as well as chest films, and a laboratory equipped to perform routine blood and urine examinations as well as sputum examinations.

In addition to the fifty-two beds for patients with pulmonary tuberculosis, the sanatorium has an eighteen bed "Preventorium". Patients admitted range from seven to twelve years of age. Their average stay is three to eight weeks and they do not necessarily come from a sputum positive household. The impression is that they are admitted from the Tuberculosis Center or from pediatric clinics for physical buildup and weight increase.

Wednesday, August 21, 1963, Continued

The administrative section and preventorium are located in a building separate from the sanatorium. The sanatorium, a single storied building, is light and airy, screened and quite clean. The sanatorium has its own well with a piped water supply system, and a water borne sewage system which discharges into cesspools.

The sanatorium is an example of the fact that a good job can be done with little to work with if the will and desire is there to do the job.

Wednesday, August 22 through Monday, August 26, 1963 - Kabul

All government offices were closed from August 23 through 26 in celebration of Jeshyn (Independence). The team used this period to work on the report.

Tuesday, August 27, 1963 - Kabul

2:30 PM Visited the Minister of Health, H. E. Dr. Rahim. The team was accompanied by Dr. A. R. Hakimi, Director General of the Health Services of the Ministry of Health and Mr. James Cudney, Assistant Program Officer, USAID/Afghanistan.

The purpose of the meeting was to acquaint the Minister with the survey team findings and impressions and to discuss the final format for the survey report.

Wednesday, August 28, 1963 - Kabul

9:00 AM Visited the office of Dr. A. R. Hakimi, Director General of Health Services, Ministry of Health, to review the organizational structure of the Ministry.

Dr. Hakimi again explained for the team the relationships of the various departments and their functions. Three units, the Malaria Institute; the Rosantoon Society and the General Medical Depot, report directly to the Minister and six units report to him through the Deputy Minister. The latter include:

1. Health Services
2. International Relations
3. Institute of Public Health
4. Administration

Wednesday, August 28, 1963, Continued

5. Price Control of Drugs and
6. The Secretariat.

The General Directorate of Health Services is responsible for the following programs and services: communicable disease control, provincial health services, tuberculosis center, TB Sanatorium for Women, health legislation, X-ray and laboratory services, hospital services, dental services, sanitary engineering and hospital architecture and press and information.

The Institute of Public Health has three principal functions:

1. Training
2. Research and
3. Technical advice.

The Directorate of Administration is responsible for:

1. Maintaining records, including personnel files
2. Accounting
3. Payrolls
4. Inventories and
5. Local and foreign purchasing.

Within the organizational framework of the Ministry there are no technical bureaus or sections such as nursing and midwifery, environmental health, health education, hospital administration, etc.

2:30 PM

Rosantoon Society

Met with the President of the Rosantoon Society, Dr. Abdul Ghafar Aziz. The Society was started some years ago as a voluntary organization to provide and promote Maternal and Child Health services (MCH). It was financed originally by donations from the provinces, but when this system of financing proved to be inadequate, the Ministry of Health was asked to assist. Today the Ministry provides all of budget and the society functions as a section of the Ministry. The President reports directly to the Minister.

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The Society operates the Shararah Maternity Hospital, seven MCH clinics and two kindergartens in Kabul, as well as MCH clinics in Herat, Kandahar and Mazar-i-Sharif. Kindergartens take care of 300 children each, with a ratio of 150 children of poor families, 100 of school teachers, and 50 from the families of military personnel.

The Society has the responsibility of receiving, warehousing and distributing all of the equipment and supplies sent to Afghanistan by UNICEF. This includes those supplied for the malaria program as well as for the MCH clinics, kindergartens and day nurseries.

The Society has 600 employees.

August 29, 1963 - Kabul - Tuberculosis Sanatorium (Males)

Visited the Men's Tuberculosis Sanatorium, a section of Ali Abad Hospital. This sanatorium which was founded some twenty-two years ago by a Turkish physician, Dr. Rifqui, has 100 beds, including nine for children. It is a part of the Ali Abad Hospital complex, which is operated by the Ministry of Education.

The present Director, Dr. Mohammad Ibrahim Azim, has had two years post-graduate training in tuberculosis. Sanatorium staff consists of three doctors, including the Director, four trained and eighteen untrained nurses and the usual auxiliary personnel.

Ninety-five percent of the patients are referred to the Sanatorium from the polyclinic operated by the Ali Abad and Masturat Hospitals, and the remaining 5% from the Tuberculosis Center of the Ministry of Health. The polyclinic serving Ali Abad and Masturat Hospitals does not have a chest clinic, but the three physicians from the Sanatorium work in the polyclinic three days a week and arrange to see as many of the tuberculosis and other chest disease patients as possible. The polyclinic has no provisions for the domiciliary treatment of tuberculosis.

Most of the patients admitted to the Sanatorium come from the Kabul area. The remainder come from the nearby provinces. Treatment is limited to drugs including PAS, streptomycin, isoniazid, and vitamins. Pneumothorax, pneumoperitoneum and

Thursday, August 29, 1963, Continued

crushing of the phrenic nerve are also utilized, but since there are no chest surgeons in Afghanistan, chest surgery is not performed.

The Director reported that bed rest is difficult to maintain unless strict disciplinary measures are used. Patients usually gain 10-15 kilograms during the first six months of hospitalization. There is no program of rehabilitation or education.

The Sanatorium is located in a three-story building with wide open verandahs. It is supplied with central heating, a piped water supply and a water borne sewage system. Patients are placed in two to ten bed wards and food is brought from a central kitchen and served on the wards. The building itself is well maintained and clean.

The Sanatorium has a fluoroscopy machine to follow progress of patients, but no facilities for taking X-rays. There is a small laboratory equipped to do sputum examinations, and routine blood and urine examinations.

Only sputum positive patients are admitted to the Sanatorium. At the time of the team's visit 50 of the 110 patients had positive sputums. Patients are discharged after three consecutive negative sputums taken one month apart. At time of discharge the patient is instructed concerning the regimen to be followed at home and asked to return every month for a check-up. It is difficult to get patients to follow the regimen recommended and many return in a few months with their sputum again positive.

There is a regulation that patients cannot remain in the Sanatorium more than six months. However, if the sputum is not negative after six months the patient is discharged and then immediately readmitted and treatment continued.

Some patients develop resistance to the drugs used in their treatment, but there are no facilities available either in the Sanatorium or the Faculty of Medicine to determine to which drug their disease is resistant.

The Sanatorium does not maintain a tuberculosis register. It has no provisions for domiciliary treatment, nor is there a system

Thursday, August 29, 1963, Continued

for referral to the Tuberculosis Center of the Ministry of Health or to the provincial health officers. Examination of contacts is attempted, but only a small percent come into the polyclinic or the Tuberculosis Center.

Although the physicians occasionally discuss problems of mutual concern, there is no official connection between the tuberculosis treatment program of the Tuberculosis Sanatorium of the Ali Abad Hospital and the Tuberculosis Center of the Ministry of Health. The WHO Tuberculosis Advisor has called on the Director of the Sanatorium, but there is no official contact. There is no Tuberculosis Society in Afghanistan.

10:00 AM Ministry of Finance

Visited the offices and polyclinic of the Health Insurance Plan for Government Employees, Ministry of Finance.

The Plan had its beginning some ten years ago as an outgrowth of the government's desire to provide health services for its employees. To get the Plan started, the Ministry of Finance gave it two million afghanis, and has continued to contribute the same amount on an annual basis. Membership fees now amount to 400,000 afghanis annually.

Membership in the Plan is voluntary with fees pro-rated at the rate of 2% of the member's salary per month. The wife and one child of each member are entitled to receive the health services provided by the Plan and the member's dependents may be rotated yearly.

The Plan has 24,000 registered members made up of employees from fifty-two different governmental departments and agencies. At present all members are residents of the Kabul area.

The Plan's office and polyclinic are located in rented space, and its Director, Dr. Abdul Nabi Afzal, also serves as the dermatologist.

The polyclinic operates six days weekly. It is open from 12:30 to 2:00 PM for dependents and from 4:30 to 6:00 PM for the members.

Thursday, August 29, 1963, Continued

With the exception of the Director, the remainder of the medical staff is employed on a contract basis. This staff is made up of four internists, one ear, nose and throat specialist, one surgeon, one ophthalmologist, one gynecologist, and two pediatricians. The plan hires two midwives, an X-ray technician, laboratory technicians, a dentist, and seven full-time and five part-time trained nurses. The Plan also has on its staff a dentist and a radiologist supplied free of charge by the Government of Czechoslovakia.

Some 400 to 500 of the members and dependents visit the polyclinic daily. Examinations are made and medication given free of charge. Home care is available to those who cannot attend the polyclinic. The plan also has a midwifery service which handles eight to ten home deliveries monthly. Hospitalization in the Avicenna, Ali Abad or Masturat Hospitals is arranged for those requiring it. All members and their dependents are given vaccine received from the Ministry of Health. The polyclinic has a domiciliary tuberculosis treatment program which operates independently from that of the TB Center of the Ministry of Health. X-rays are now taken at the Avicenna Hospital, but the Plan's own X-ray service is to be opened shortly.

With the exception of narcotics, which are obtained from the Medical Depot of the Ministry of Health, the Plan purchases its drug requirements direct from various pharmaceutical houses.

2:30 PM

Ministry of Mines and Industry

Visited the office of the Labor Directorate, Ministry of Mines and Industry and discussed activities of the Directorate with its Director General, Mr. Mohammad Hafizullah, and his assistant, Mr. Fakir M. Baizay.

The Ministry of Mines and Industry was started in 1956. The Labor Directorate, with the assistance of ILO is preparing a revision of the Labor Law of 1946. In addition to dealing with methods for the recruitment of labor, working hours, vacations, employment benefits, regulation of the employment of women and children, unfair employment practices and compensation for injuries and deaths, the new law will have a section dealing with safety and hygiene.

Thursday, August 29, 1963, Continued

The Labor Directorate has no inspection service at present. For the solution of problems of "occupational health" it looks to the Ministry of Health for assistance.

3:30 PM Visited the office of the Drilling Section of the Geological Survey Department of the Ministry of Mines and Industry and discussed the operations of the section with its Director, Mr. Sajet.

The Geological Survey Department has four sections: Geology, Topography, Hydrology and Drilling. Geological maps of Afghanistan are being made with the assistance of a German Geological Mission. Topographic maps are being made by photogrammetric methods with the aerial photography being done by the USSR and the USA. Also with the assistance of a German technical mission, measurements of the flow of some main rivers have been started.

The Drilling Section, which was set up in 1957, has drilled a number of deep wells for the study of underground water resources, and for the supply of water for industrial and domestic uses. Two wells have been drilled in Kunduz and ten in Kandahar which are being used by industries in the area. Six wells have been drilled in the Pul-i-Tsharch and two in the Jeshyn grounds area of Kabul. These are for irrigation purposes. Two wells have been drilled in the Nangarhar Province near the Pakistan border and plans are underway to drill six wells in Paktia Province. These wells are for domestic uses.

The equipment of the Drilling Section consists of two rotary and four cable-tool percussion drilling rigs.

The Japanese have drilled two wells in Herat for a domestic water supply and the Russians are presently drilling in the Kabul area under a public works contract.

Monday, September 2, 1963 - Logar I, Logar II and Gardez

Left Kabul at 5:30 AM with Dr. A. R. Hakimi, Director General of Health Services, Ministry of Health and Mr. Robert L. Hubbell, Assistant Director for Development Planning and Mr. James Cudney, Assistant Program Officer of USAID.

Monday, September 2, 1963, Continued

Visited Logar I where the Ministry of Health has been constructing a hospital for the past five years. The new hospital is an L-shaped one-story building with a basement under the long leg of the L. It has a piped water supply obtained from a shallow well located in the hospital compound. All of the sanitary installations are western style. The hospital's sewerage system discharges into two cesspools which are located in the front of the building on either side of the water well and only about fifty feet distant. From casual observation it appeared that the discharge lines from the sanitary installations in the basement are below the level of the bottom of the cesspools.

Electric power for the hospital will be supplied from a generator. The first floor of the hospital will have space for twenty-five beds, X-ray and laboratory facilities, a pharmacy, a doctor's office, a polyclinic and a large conference room. The kitchen, laundry, stores and living quarters for auxiliary staff will be located in the basement.

The team left the main road at Pul-i-Alum to visit the Logar II project area of the Rural Development Department. Two health units were visited. Each is staffed by a doctor, a midwife, a dresser and a compounder. One unit occupies three rooms in a rented building. The other is in a building recently vacated by the Ministry of Health which operated a ten bed hospital in the structure. The equipment from the hospital is being transferred to the new building at Logar I although that hospital is not scheduled to open for some time.

Both of these health units operated by the Rural Development Department have office-examining rooms, a small pharmacy and a conference room which are used for weighing babies and for giving instruction and demonstrations in infant care. Some twenty to thirty patients attend each of the polyclinics daily. The majority are said to be suffering from diarrhea, anemia, malnutrition, conjunctivitis or upper respiratory infections.

Arrived in Gardez at 11:00 AM where the team was met by Dr. Mohammad Taher, the Chief Medical Officer of Paktia Province. The first visit was to the residence of H. E. General Faiz Mohammad, Governor of Paktia Province. Environmental

Monday, September 2, 1963, Continued

health problems were discussed and the Governor told of his plans to construct two new twenty-five bed hospitals in the Zurmat and Chamkani districts of the province, in addition to one now being built in Gardez. These hospitals are to provide care for both men and women.

The Governor also informed the team that until a few years ago there were no middle schools in the province except in Gardez and Khost. Now boys can obtain a twelfth grade education in both towns and education is available for girls through the fourth grade. Some one hundred sixth grade schools for boys are located throughout the province and there are some forty schools providing a ninth grade education for boys.

Lumbering is the principal resource of the province and sufficient wheat is raised to supply local needs. Plans are being made to establish a sawmill and a plywood industry in Gardez. Another plan is to prefabricate doors and window frames.

The team was entertained at luncheon by H. E. the Governor of Paktia Province.

During the afternoon the team visited the construction site of the new twenty-five bed hospital as well as the hospitals now used to care for male and female patients.

Construction started on the new hospital some six weeks ago and the walls are up to the second floor. The second floor will be occupied by the operating suite and twenty-five beds for both male and female patients. The first floor will be occupied by X-ray and laboratory services, doctors' offices and examining rooms, an emergency room, a pharmacy, the kitchen, a laundry and storage facilities.

The hospital now used for male patients has twenty beds. It is housed in a two-story building, whose maintenance has been somewhat neglected. There is an operating theater, a laboratory, a pharmacy, a room for first aid and dressings, a medical depot and a storeroom for supplies and foodstuffs. There are also polyclinic facilities in the building, and offices for the provincial health officer, his staff and the malaria eradication program staff.

Monday, September 2, 1963, Continued

There were ten patients in the hospital on the day of the team's visit: three with gunshot wounds, one with a scalp injury, two post-operative caes (a hernia and a bladder stone), another patient with an infected tooth, one with erysipelas and two with pulmonary tuberculosis.

A visit was made to the ten bed hospital now occupied by female patients. This is in a building which was formerly a residence and is across the street from the hospital for male patients. On the day of the team's visit there were three patients in the hospital all with a diagnosis of tuberculosis, two with pulmonary tuberculosis and the third with tubercular cervical adenitis. All were under drug therapy with the three types of drugs currently being used for the treatment of tuberculosis.

In addition to space for hospital beds, there is a room used as a clinic which is furnished with a table for the examination of female patients.

A visit was made to the Unit Office of the Malaria Eradication Program which is housed in the male hospital. The Director, Dr. Karim Nushin, was on leave, but the microscopist described some of the problems encountered in the area. During the twelve-month period ending March 1963 some 2,000 blood smears were taken from fever cases. Of these, twenty-six were positive, fourteen vivax and twelve falciparum infections.

Water for both hospitals is supplied from wells. The people of Gardez obtain their water supply from springs or individual wells. Some householders have open-back latrines, but the municipality does not operate a collection system.

The health problems which bring patients to the hospital and polyclinic in Gardez differ little from those reported by health staffs in other areas of Afghanistan. Tuberculosis, both human and bovine in origin, diarrheas, intestinal parasites, anemia, malnutrition, skin disease and accidents constitute the greatest number of cases.

In addition to attending hospital and polyclinic patients, the provincial health staff conducts a smallpox and typhoid-paratyphoid vaccination program for army and gendarmery personnel and other government employees.

Monday, September 2, 1963, Continued

The staff for the two hospitals in Gardez is composed of the following personnel: Dr. Mohammad Taher, an internist; Dr. Mohammad Yaya Najim, a surgeon; Dr. Ghulam Rasoul, an internist and four trained male nurses, one practical nurse midwife, one laboratory technician, two dressers and one compounder.

Wednesday, September 4, 1963 - Kabul - Ministry of Public Works, Ali Abad Hospital, Ali Abad School of Nursing

8:30 AM Visited the office of the Chief of Manpower (Labor Forces) of the Ministry of Public Works, Colonel Abdul Ahmad. The team was accompanied by Dr. Ghulam Haidar Usufi, Chief Medical Officer of Manpower.

With Dr. Usufi acting as an interpreter, Colonel Ahmad was informed of the events which led the Government of Afghanistan to request USAID to send a health survey team to Afghanistan; the activities of the team and some of the findings as they relate to current health activities, problems and needs of the nation. The Colonel gave particular attention to comments made concerning absenteeism among workers, and the disproportionate amount of money spent on the treatment and hospitalization of patients with preventable diseases, especially those resulting from unsafe water supplies and the improper disposal of human and other wastes. He agreed that there is a need for a central water authority which would control the utilization of Afghanistan's water resources, and interest itself in utilizing them to provide people with safe water. He felt that a health advisory council which would develop long range plans for health services and would effect coordination among the various agencies engaged in health programs would be useful.

The Colonel explained that most of the work sites of the Manpower construction projects are located at some distance from the towns which have hospitals and polyclinics. Hospitals and polyclinics, located in temporary buildings or tents, have been established at the principal camps of the Ministry of Public Works, to provide first-aid treatment for injuries, as well as treatment and care of ailments of short duration. The Colonel went on to say that laborers with injuries or illnesses requiring more than two or three days of hospitalization are referred to the Central

Wednesday, September 4, 1963, Continued

Manpower Hospital in Kabul. The Colonel suggested to the team that they visit as many of the Manpower health facilities as possible and said that he would appreciate receiving a copy of the survey report.

9:30 AM Visited the 100 bed Manpower Hospital of the Ministry of Public Works. The Hospital is located in the Darulaman section of Kabul at Tapi Taj Beeg in a three-story building which was constructed some thirty-five years ago as a palace. Dr. Usufi, Chief of the Manpower Medical Service and Director of the Central Hospital, informed us that occupancy of the present building was only temporary. It is not suited for a hospital since it has no operating piped water supply or heating system, and the sanitary facilities are inadequate for the number of patients hospitalized. Plans have been projected for the construction of a new hospital near the Tuberculosis Sanatorium for Women.

Patients admitted to the Manpower Hospital are referred to it from the eighteen hospital-polyclinic units located outside Kabul and one ten bed unit in Kabul. The units outside Kabul are located at the camps of the principal construction and road maintenance projects. The usual capacity is ten beds, but two units have twenty and another has fifty beds. The ten bed hospital-polyclinic units are staffed by an assistant doctor, a medical corpsman, and a compounder. The twenty and fifty bed units are staffed by doctors, corpsmen and compounders.

The staff of the Central Manpower Hospital consists of the Director who is an internist, two trained nurses, twenty nurse aides, and two compounders.

There are 100 beds in the Central Manpower Hospital, but usually only sixty of these are occupied. Some fifty beds are placed in one large ward and the remainder in smaller rooms having from six to ten beds each. At the time of the visit the beds in the smaller rooms were occupied with cases of pulmonary tuberculosis under drug therapy, but in one room there were three patients brought in from Ghazni to receive the fifteen-day course of anti-rabies vaccine. The patients in the large ward had been referred to the hospital with diagnoses of avitaminosis, dysentery, bronchitis, rheumatism and anemia.

Wednesday, September 4, 1963, Continued

The hospital has no facilities for surgery, X-ray or laboratory work. All fractures or cases requiring surgery or X-ray are sent to the Military Forces Hospital in Kabul. Fracture cases once reduced and placed in plaster are then sent back to the Central Manpower Hospital.

Approximately twenty to twenty-five patients are attended daily in the polyclinic which is operated in connection with the hospital. Their complaints vary, but a majority are suffering from dysentery, rheumatism, intestinal parasitism and respiratory infections.

Except for medical corpsmen, the entire medical staff (doctors, assistant doctors, compounders) of the Manpower medical service are members of the cadre of the Ministry of Health. They are assigned to the Ministry of Public Works on a two-year rotation basis, and during their period of assignment their salaries are paid by the Ministry of Public Works.

Drugs and other medical supplies required for the operation of the hospitals and polyclinics of the Manpower Health Service are delivered every three to six months directly from the General Medical Depot of the Ministry of Health. These drugs and materials are paid for by the Ministry of Public Works.

In addition to his duties as Director and Internist for the Central Manpower Hospital, Dr. Usufi is responsible for the supervision of all the outlying hospital-polyclinic units, and for checking and approving their drug and medical supply lists before they are sent to the General Medical Depot of the Ministry of Health.

2:00 PM Visited the Ali Abad Hospital. The team was received by Dr. Akhtar Mohammad Koshbin, Chief Medical Officer and Dr. Mohammad Anwar, a member of the Department of Internal Medicine.

Dr. Koshbin gave a short summary of the administrative, operational and staffing structure of the hospital and later Dr. Anwar took the team through several of the internal medicine wards, the pharmacy, the laboratory, the operating suite and the surgical recovery room.

Wednesday, September 4, 1963, Continued

Ali Abad Hospital is one of the two hospitals located in Kabul which provide the Faculty of Medicine with clinical facilities for the training of medical students, interns, and male nurses. In addition, the hospital is used for the post-graduate training of specialists and for refresher courses for paramedical personnel.

The Faculty of Medicine and the Ali Abad Hospital have separate operating budgets which are obtained from the Minister of Finance through the intermediary of the Ministry of Education.

The Medical Staff of Ali Abad is assigned to it from the cadre of the Faculty of Medicine. Those physicians who have teaching assignments as well as duties in the hospital receive part of their salary from the budget of the Faculty of Medicine and part from the budget of the hospital.

Ali Abad Hospital has provisions for 500 beds and admits only male patients. The patients are usually referred to the hospital from a central polyclinic operated and financed by the Ali Abad and Masturat Hospitals. However, patients may be sent directly to the hospital by any physician. In these instances, the hospital reserves the right of admission.

The 500 beds of the hospital are divided between the various services as follows: Internal medicine 110, General Surgery 110, Ear, nose and throat 26, Ophthalmology 26, Dermatology 38, Pulmonary Tuberculosis 110 and Mental Diseases 80. Practically all of the beds are free, but each service has two, two-bed wards for pay patients. The charge for the pay patients in the mental disease section is eight afghanis per day, in the tuberculosis sanatorium thirteen afghanis, and for the remaining services fifteen afghanis per day.

The hospital has two X-ray machines, one of which is equipped for fluroscopic examinations. The clinical laboratory is prepared to do routine blood, stool and urine examinations, direct smears and blood sedimentation rates. Blood chemistry examinations are done by the Department of Biochemistry of the Faculty of Medicine and blood serology is done by the Central Laboratory of the Ministry of Health.

Wednesday, September 4, 1963, Continued

General surgery, ear, nose and throat, and ophthalmology have separate operating suites. There is a gas machine for general anesthesia but none of the anesthetic gases are available for use. The Faculty of Medicine provides a neurosurgeon (French) but there is no one available to perform heart-lung surgery.

There are thirty-eight doctors, fifty-five graduate nurses (fifty males and five females), six laboratory technicians, two X-ray technicians and some 200 other auxiliary personnel on the staff of the hospital. The administrator is a doctor who received training in hospital administration in France.

The sections of the hospital which were visited had high ceilings, wide corridors, were light and airy and spotlessly clean.

3:30 PM

Visited the Ali Abad Nursing School.

Mr. Nurridin Ahmandy, Acting Director of the Ali Abad Nursing School and Mr. A. R. Bubb, the WHO Nurse tutor, gave the team a short history of the school including the number of graduates and where they are now assigned. They also provided information on the curriculum of the school and its course content.

The school was opened in 1943. At that time only a sixth grade education was required for admission and the three-year course which was given was divided into two years of formal classroom instruction and one year of practical training on the wards of the Ali Abad Hospital. During the period between 1943 and 1955 the school graduated 423 nurses. Of this number sixty-two are now working at the Ali Abad Hospital, fifty in military hospitals and 108 with the Ministry of Health. The whereabouts of the remaining 203 is unknown.

With the arrival of a WHO nurse tutor in 1956 the entrance requirement for admission to the school was raised to a ninth grade education. The curriculum was revised, and the course of instruction was enriched through the increased use of teaching aids, models and charts. Since 1956 the school has graduated thirty nurses. These graduates qualified for a diploma which is equivalent to a baccalaureate degree. Of the thirty recent graduates three are instructors in school, seventeen are working at the Ali Abad Hospital, one with the Rural Development Department,

Wednesday, September 4, 1963, Continued

three with the Ministry of Health and six with the Ministry of National Defense. Graduates from the Ali Abad School of Nursing who enter military service are given officer rank.

Sixty-five students are presently enrolled in the school: fifteen in their third year of study, twenty-nine in their second and twenty-one in their first. The students come from many parts of Afghanistan. A dormitory is provided for the students, and in addition to board and room they are given a small monthly stipend.

The school is housed in a building originally constructed as a dwelling place. It has sufficient space for offices, two large classrooms and a room for instruction in nursing arts. The team was impressed by the variety of teaching aids which are used. These include charts, models, a skeleton, manikins, hospital beds, and treatment trays.

The faculty is made up of three nurses who are graduates of the school and the WHO nurse tutor. After a six-month probationary period the students spend two and one-half days in the classrooms and three and one-half days of each week on the wards of Ali Abad Hospital. All courses of instruction included in the curriculum are taught by the nursing staff with the exception of Surgery, Ear, Nose and Throat, Ophthalmology, Communicable Diseases, and Medicine. These subjects are taught by members of the Faculty of Medicine. At present no instruction related to hospital housekeeping or food service is included in the curriculum. Subjects of the general curriculum and instruction in Persian, Pashtu, and English are required.

The third year students are now receiving practical experience (one month) in the rural health center at Shewaki which is operated by the Rural Development Department. This experience is supervised by Dr. D. Penman, Senior WHO Officer assigned to that Department.

The team was informed that the Central Military Hospital in Kabul operates a three-year school for the training of medical corpsmen, but the graduates are not permitted to sit for the examinations for the nursing diploma given by the Ministry of Education.

Thursday, September 5, 1963 - Kabul - Ministry of Public Works

8:30 AM Visited the Department of Canals and Dams of the Ministry of Public Works. The Director, Mr. Mohammad Bashir Ludin, explained that the development of Afghanistan's water resources for domestic use is not a primary function of this Ministry. Occasionally, however, the Ministry does design and construct systems to supply water for the construction and road building projects carried out by the Ministry of Public Works.

Mr. Ludin told the team that his department is concerned only with the planned use of the water resources of Afghanistan for irrigation, hydroelectric power, flood control and navigation, but that development of these projects often results in the storage of water. When this occurs, municipalities are advised that the stored water is available for a domestic supply. The actual utilization of the stored water for domestic purposes is the responsibility of the interested municipality since the Department has no authority to engage in such activities.

Mr. Ludin informed the team that a central authority for the assessment of the Water Resources of Afghanistan is being developed with the assistance of U. N. technical advisers. The new organization is the Afghan Water and Soil Survey Authority.

Saturday, September 7, 1963 - Kabul - Masturat Hospital and Masturat School of Nursing

9:30 AM Visited the Masturat School of Nursing where the team was received by Miss Aziza Amadi, Director.

The present school which was opened in 1952, is an outgrowth of a school of midwifery started about twenty years ago. After some years of operation, instruction in nursing was added to the midwifery program. When the present curriculum was adopted in 1952, midwifery training was eliminated. Some 250 women were graduated from the old school, but no records are available to indicate how many of them are now employed.

The school which opened in 1952, required a ninth-grade education for admission, and by the end of 1959 had graduated sixty-six nurses. These graduates received a diploma which is equivalent to a baccalaureate degree.

Saturday, September 7, 1963, Continued

In March 1961, when there were no candidates who met the entrance requirement, it was decided that either the entrance requirement would have to be lowered or the school would have to close. Two years ago the entrance requirement was lowered and now the school accepts candidates with sixth, seventh, eighth or ninth grade education.

Presently there are thirty-one students enrolled in the school. The first year class has twenty-five students, seven with a ninth grade and eighteen with a seventh grade education. The second year class has six students, two with a ninth grade and four with a seventh grade education. With this difference in educational background, nursing instruction has to be given at two levels. One course is designed for students with a seventh grade education and another for those with a ninth grade education.

The school is housed in one of the several structures making up the building complex of the Masturat Hospital. There are two large classrooms, a room for instruction in the nursing arts, an office for the director, an office for the teaching staff (five graduate nurses) and a small library. The nursing arts classroom is well equipped with teaching aids, such as charts, models, a skeleton, a hospital bed and a crib each with its manikin, sterilizing equipment and various treatment trays.

In addition to the regular nursing curriculum, instruction is given in secondary school subjects. Consideration is being given to increasing the training program from three to four years in order to bring all of the students up to at least a ninth grade level by the time they graduate.

The school has no dormitory facilities. Students are provided with uniforms, a small monthly stipend and a noontime meal.

10:30 AM Visited the Masturat Hospital for Women.

This hospital which was founded some twenty years ago as a teaching hospital for the Faculty of Medicine of Kabul University, is housed in a number of buildings located in a large compound in downtown Kabul.

Saturday, September 7, 1963, Continued

The team was received by Dr. Fateh Samim, Assistant Director of the Hospital and a specialist in obstetrics and gynecology. After explaining the configuration of the hospital Dr. Samim accompanied the team on ward rounds in the obstetrical and gynecological section of the hospital.

The hospital is generally considered to have a bed capacity of 200 beds, however, facilities are such that more patients can be accommodated when the need arises. On the day of the team's visit there were forty beds available for obstetrical and gynecology, fifty for pediatrics, thirty-eight for general surgery, forty for internal medicine, thirteen for ear, nose and throat, thirteen for ophthalmology, eleven for dermatology and eleven for neuropsychiatry.

The obstetrical and gynecological section of the hospital is located on the second floor of one of the buildings. Its forty beds are divided between three ten-bed wards and five two-bed wards. An operating room and a delivery room used exclusively by this section of the hospital are located on the same floor. During ward rounds the team was introduced to Dr. Mahmuda Nawabi, a woman physician, who is a graduate of the Fatima Jinnah Medical College for Women in Lahore, West Pakistan, and to Miss Dorothy Luketich, a Peace Corps Volunteer nurse who is working in this department of the hospital.

The ^{*gynecologic*} ~~gynecological~~ conditions which bring patients to the hospital are osteomalacia (softening of the bones due to vitamin deficiency), vesicovaginal fistulas, ovarian cysts, fibromas of the uterus, prolapse of the uterus and sterility resulting from tuberculous involvement of the fallopian tubes.

The obstetrical service has some 500 deliveries annually, but there is no nursery for the newborn.

Miss Luketich accompanied the team on a visit to the operating suite of the surgical section of the hospital where there is a room for minor surgery, one for major surgery, and another for fractures. The autoclaves and sterilizers are electrically operated. There is a gas machine for anesthesia, but use is limited to ether-oxygen inasmuch as none of the anesthetic gases are available.

Saturday, September 7, 1963, Continued

The pediatric section of the hospital was being painted so admissions were being held to a minimum. There are two ten-bed wards, four four-bed wards and seven two-bed wards. The two and four-bed wards have beds for the mother of the patients. The pediatrician on duty told the team that 90% of the admissions are cases of malnutrition, that diarrhea is the big problem during the summer months, and that upper respiratory infection accounts for the greatest number of admissions during the winter. Some ten to twelve cases of diphtheria are admitted annually.

The Hospital's Blood Bank was also visited. It was reported that there is considerable resistance on the part of people asked to give blood and that donors are generally relatives of the patients. Only a few professional donors are available. The bank has two modern refrigerators for the storage of blood, but one is inoperable because of a burned out motor.

The hospital is supplied water from an elevated tank and its sewerage system discharges into cesspools located within the hospital compound.

The administrative section of the hospital has living quarters for medical personnel on night duty, but there is no residence for staff or student nurses.

Thursday, September 12, 1963 - Kabul

2:00 PM Visited the office of the Afghan Water and Soil Survey Authority.

The President of the Authority, Mr. Mir. Mohammad Akbar Raza explained to the survey team that the objective of the Authority is to make an assessment of Afghanistan's surface and ground water resources. The amount of information presently available is limited, but more is being collected by a number of government agencies. The hydrology and drilling sections of the Geological Survey Department of the Ministry of Mines and Industry with the assistance of a German Technical Mission has started measurements on the flow of some of the main rivers and drilled a number of deep wells for the study of underground water resources, and that Russian and Japanese firms, have drilled some wells in the Kabul and Herat areas.

Thursday, September 12, 1963, Continued

The Second Five Year Plan of Afghanistan provides for the initiation of ground water surveys in the Kabul River Valley, and the river valleys of Ghazni, Kandahar and Farah Provinces. However, it will be many years before mapping of the ground water resources is completed.

Another concern of the Authority is the development of a comprehensive plan for the equitable use of the various water resources for irrigation and hydroelectric power. The Authority believes that as a by-product of these operations a supply of water for industrial and domestic uses may be realized. However, before embarking upon any such projects, feasibility studies should be carried out, including the analysis of the chemical as well as the bacteriological properties of the resource.

The President informed the survey team that as yet there is no central unit of the government that has the authority to develop, utilize or make an equitable distribution of Afghanistan's surface or ground water resources. He said, however, that the Afghan Water and Soil Survey Authority might well develop into such an organization, and if so, should concern itself with the development of water resources for domestic as well as for industrial and agricultural uses.

Saturday, September 14, 1963 - Kabul

Visited the new 100-bed hospital of the Ministry of Health.

This hospital, designed and constructed by the Hochtief Company under a contract with the Royal Government of Afghanistan, is essentially ready for occupancy.

Part of the furnishings and equipment were a gift from the USSR, but additional equipment was required and has been purchased from Czechoslovakia.

At the time of the team's visit the Ministry of Health was negotiating with the Government of Czechoslovakia to send a group of physicians, surgeons, hospital administrators and paramedical personnel to take over the administration and operation of the hospital.

Appendix

1. Individuals Contacted

Afzel, Dr. Abdul Ghani
Director, Tuberculosis Center
Ministry of Health
Kabul

Afzel, Dr. Abdoul Nabi
Director, Health Insurance Plan
for Government Employees
Ministry of Finance
Kabul

Ahmad, Colonel Abdul
Chief of Manpower (Labor Forces)
Ministry of Public Works
Kabul

Ahmad, Dr. Said
Surgeon
Provincial Hospital
Charikar

Ahmandy, Mr. Nurridin
Acting Director
School of Nursing
Ali Abad Hospital
Kabul

Akram, Dr. Mohammad
Chief Medical Officer
Shararah Maternity Hospital
Kabul

Ali, Dr. Ghulam
Radiologist-Internist
Provincial Hospital-Polyclinic
Baghlan

Ali, Dr. Haji Hasan
Chief Medical Officer and
Provincial Health Officer
Hospitals and Polyclinics
Jalalabad

Ali, Dr. Mir Ahmad
Director and Internist
Afghanistan Textile Company
Hospital
Gulbahar

Ali, Dr. Mir Mohammad
Chief Medical Officer
Kataghan Province
Pul-i-Khomli

Ali, Dr. Mohammed
Chief Provincial Medical Officer
Herat

Alifi, Dr. Nabiullah, Chief
Section of Haematology
Institute of Public Health
Kabul

Amadi, Dr.
Internist
Hospital-Polyclinic
Afghanistan Textile Company
Pul-i-Khomli

Amadi, Miss Aziza
Director of the School
Masturat School of Nursing
Masturat Hospital
Kabul

Amin, Dr. Mohammad
Surgeon
Provincial Hospitals and
Polyclinics
Jalalabad

Amiry, Dr. Zamanuddin
Internist
Provincial Hospital
Kandahar

Anwar, Dr. Mohammad
Radiologist
Provincial Hospital
Charikar

Anwar, Dr. Mohammad
Assistant Doctor
Hospital-Polyclinic
Afghanistan Textile Company
Pul-i-Khomli

Anwar, Dr. Mohammad
Member
Department of Internal Medicine
Ali Abad Hospital
Kabul

Anwar, Mr. and Mrs. Mohammad
Acting High Commissioner
Band-i-Amir

Anwar, Dr. Said Mohammad
Director
Provincial Hospital
Talaqan

Arjomand, Dr. Rahim
Unit Malaria Officer
National Malaria Eradication Program
Herat

Asadullah, Mr. Sayed, Chief
Section of Water & Sewage
(Chemical Aspect)
Institute of Public Health
Kabul

Asghar, Mr. Mohammad
Mayor
Kabul

Ashami, Dr. Mir Mohammad Azim
Senior Surgical Resident
Avicenna Hospital
Kabul

Asmat, Dr. Azim
Ophthalmologist
Provincial Hospital
Kandahar

Assam, Dr. Mir Mohammad
Laboratory Specialist
Provincial Hospital & Polyclinic
Mazar-i-Sharif

Ataie, H. E. Abdul Kayeum
Governor of Talaqan Province

Awa, A. Qadir, Chief
Section of Food Analysis
Institute of Public Health
Kabul

Axelrod, Dr. Robert
Internist, CARE-MEDICO
Avicenna Hospital
Kabul

Axelrod, Dr. Robert (Mrs.)
Internist, CARE-MEDICO
Avicenna Hospital
Kabul

Ayub, Dr. Mohammad
Chief Medical Officer
Mazar-i-Sharif Province
Mazar-i-Sharif

Azad, Dr. Mohammad Amin
Ophthalmologist
Provincial Hospital
Herat

Azam, Dr. Mohammad
Director
Malaria Unit Office
Khanabad

Aziz, Dr. Abdul Ghafar
President, Rosantoon Society
Kabul

Azim, Dr. Mohammad
Surgeon
Provincial Hospital
Kandahar

Azim, Dr. Mohammad Ibrahim
Director
Men's Tuberculosis Sanatorium
Ali Abad Hospital
Kabul

Aziz, H.E. Mr. Abdul Hai
Minister of Planning
Ministry of Planning
Kabul

Bahramy, Dr. Said Amamuddin
Surgeon
Provincial Hospital
Kandahar

Baizay, Mr. Fakir
Assistant to Director General
Labor Directorate
Ministry of Mines and Industry
Kabul

Bakhshi, Mr. Abdul Samad
Vice President of Technical Services
Rural Development Department
Kabul

Beaton, Mr., WHO Advisor
Section of Environmental Sanitation &
Industrial Hygiene
Institute of Public Health
Kabul

Berna, Dr. Mohammad Sadique
Director
Provincial Hospital
Khanabad

Bubb, Mr. A. R.
WHO Nurse Educator
School of Nursing
Ali Abad Hospital
Kabul

Burna, Dr., Chief
Section of Health Education
Institute of Public Health
Kabul

Dastagir, Mr. Ghulam
Mayor of Baghlan

Dix, Dr. H., WHO Advisor
Section of Health Education
Institute of Public Health
Kabul

Etemade, Mr. Aziz Ahmed
Manager
Kandahar International Airport

Fakiri, Dr., Director
Municipal Health Department
Kabul

Fazil, Dr. Abdul Kayeum
Pediatrician
Provincial Hospital
Kandahar

Firssova, Dr. V. A.
WHO Advisor
Tuberculosis Center
Kabul

Frohlich, Dr. Walter
WHO Advisor
Division of Microbiology
Public Health Institute
Kabul

Habib, Dr. Mohammad
Surgeon
Lashkar Gah Hospital

Habib, Dr. Mohammad
Dentist
Lashkar Gah Hospital

Habibullah, Mr.
Director General of Administrative
Services
Ministry of Health
Kabul

Haddi, Dr. Abdul
Physician
Tuberculosis Center
Ministry of Health
Kabul

Hafizullah, Mr. Mohammad
Director General
Directorate of Labor
Ministry of Mines and Industry
Kabul

Hakimi, H.E. Abdul Karim
Governor of the Province of Herat
Herat

Hakimi, Dr. A. Rahman
Director General of Health Services
Ministry of Health
Kabul

Halim, Dr. Abdullah
Chief Medical Officer (surgeon)
Badakhshan Province
Faizabad

Hamid, Dr. Abdul
Surgeon
Provincial Hospital (Surgical)
Baghlan

Hamidula, Dr. Abdul
Dentist
Provincial Hospital & Polyclinic
Mazar-i-Sharif

Hasamia, Dr. Mir Haidar
Physician
Tuberculosis Center
Ministry of Health
Kabul

Hasan, Mr. Mohammad
Dental Assistant
Provincial Hospitals & Polyclinics
Jalalabad

Hashimi, Dr. Abdul H.
Chief, Malaria Unit Office
National Malaria Eradication
Program
Talaqan

Hashimi, Dr. Ali Ahmad
Senior Medical Resident
Avicenna Hospital
Kabul

Hashimi, Dr. Mir Abutrab
Internist
Provincial Hospital
Kunduz

Hashimi, Dr. Mohammad
Surgeon
Provincial Hospitals & Polyclinics
Mazar-i-Sharif

Hassan, Dr. Ghulam
Regional Director, Northern Region
Malaria Eradication Program
Kunduz

Hazek, Mr. Abdul
Sanitarian
Provincial Hospitals & Polyclinics
Mazar-i-Sharif

Hasek, Dr. Abdul Sattar
Obstretician & Gynecologist
Provincial Hospital & Polyclinic
Mazar-i-Sharif

Hesamie, Dr. Mir Aka
VD Specialist
Provincial Hospitals & Polyclinics
Mazar-i-Sharif

Hesamuddin, Mr.
Manager
Da Spinzar Cotton Company
Kunduz

Hotaky, Dr. Mohammad Sarwar
Chief Provincial Medical Officer
Kandahar

Humaun, Mr. Mohammad
Sanitarian
Provincial Hospitals & Polyclinics
Mazar-i-Sharif

Hushman, Dr. Ghulam
Director
South Western Regional Office
Malaria Eradication Program
Kandahar

Husmain, Dr. Ghulam
Director, Unit Office
Malaria Eradication Program
Mazar-i-Sharif

Hussain, Dr. Said Kalum
Internist
Afghanistan Textile Company Hospital
Gulbahar

Inodiddin, Dr.
Chief, Unit Office
Malaria Eradication Program
Faizabad

Isar, Dr. Mohammad
Internist
Da Spinzar Cotton Company
Kunduz

Jacob, Dr. V. P.
WHO Advisor
South Western Regional Office
Malaria Eradication Program
Kandahar

Jallauddin, Dr.
Director, Polyclinic
Tashkurghar

Kaduz, Dr. Abdul
Obstretician
Provincial Hospitals & Polyclinics
Herat

Kahn, H.E. General Kahn Mohammad
Governor of Nangarhar Province &
Commander of the Armed Forces
of the Military Area
Jalalabad

Karar, H.E. Lalmohammad
Mayor of Kandahar
Kandahar

Karim, Dr. Abdul
Internist
Provincial Hospital - Polyclinic
Baghlan

Khaliki, Mrs.
Director
School of Nursing
Lashkar Gah

Koshbin, Dr. Akhtar Mohammad
Chief Medical Officer
Ali Abad Hospital
Kabul

Krishnam, Dr. K. V.
WHO Public Health Advisor
Institute of Public Health
Kabul

Krisp, Mr., WHO Advisor
Section of Environmental Sanitation
& Industrial Hygiene
Institute of Public Health
Kabul

Ludin, Mr. Mohammad Bashir
Director
Department of Canals and Dams
Ministry of Public Works
Kabul

Luketich, Miss Dorothy
Peace Corps Volunteer Nurse
Masturat Hospital
Kabul

Maher, Dr. M. Haidar
Director General of Public Health
Services for Kabul Province
Ministry of Health
Kabul

Majid, Dr. Abdul
Physician
Tuberculosis Center
Ministry of Health
Kabul

Majid, Dr. Abdul
Director and Internist
Provincial Hospital
Bamiyan

Malik, H. E. Abdul
Deputy Governor of Katagan Province
Kunduz

Malik, Mr. Abdul
President & Chief Engineer
Gulbahar Textile Mill
Gulbahar

Malikasgher, Dr. Mohammad Aziz
Radiologist
Provincial Hospital
Kandahar

Maroof, Dr. Saayed
Pediatrician
Provincial Hospital
Herat

McAuley, Dr. Donald
Internist
CARE-MEDICO
Lashkar Gah Hospital & Nursing
School
Lashkar Gah

Miakhail, Mr. Rasool, Chief
Division of Biochemistry
Institute of Public Health
Kabul

Mohammad, Dr. Amir
V. D. Specialist
Mobile Unit
Provincial Hospital
Ministry of Health
Faizabad

Mohammed, Mr. Atta
Mayor of Herat
Herat

Mohammad, H. E. General Faiz
Governor of Paktia Province
Gardez

Mohammad, Dr. Ghulam
Internist
Lashkar Gah Hospital
Lashkar Gah

Mohammad, Dr. Gull
Internist
Lashkar Gah Hospital
Lashkar Gah

Mohan, Mr. B. N.
Entomologist, WHO
Northern Region Office
Malaria Eradication Program
Kunduz

Mojaddidi, Mr. M. Azim, Chief
Section of Bacteriology & Virology
Institute of Public Health
Kabul

Mojaddadi, Mr. Y. M
Director General of Foreign
Relations Department
Ministry of Health
Kabul

Munirie, Dr. Ghulam Sidique
Radiologist
Provincial Hospital & Polyclinic
Mazar-i-Sharif

Murphey, Dr. Robert
Surgeon
CARE-MEDICO
Lashkar Gah Hospital & Nursing
School
Lashkar Gah

Murtaza, Dr. Abdul Said
Obstetrician & Gynecologist
Provincial Hospital
Kandahar

Mushrif, Dr. Mohammad Yunis
Director, Polyclinic
Aibak

Naki, Mr. Gull
Mayor
Kunduz

Najim, Dr. Mohammad Yaya
Surgeon
Provincial Hospital
Gardez

Nawabi, Dr. Mahmuda
Obstetrics and Gynecology
Masturat Hospital
Kabul

Nawaz, Madame Nazifa
Director, Shararah Maternity
Hospital
Director, Shararah Hospital
Nurse-Midwifery School
Kabul

Nazir, Dr. Haidar
Gynecologist
Provincial Hospital
Herat

Nissar, Dr. S. Mahmood
Chief of the Vaccine Center
Institute of Public Health
Kabul

Nushin, Dr. Karim
Director
Unit Office
Malaria Eradication Program
Gardez

Omar, Dr. Mohammad
President of the Public Health
Institute
Kabul

Paita, Dr. Ernesto
Director, Medical Services
Afghan Highway Constructors
Group (AHC)
Kandahar

Parmach, H. E. General Ghulam Rasoul
Governor
Mazar-i-Sharif Province
Mazar-i-Sharif

Penman, Dr. D.
Senior WHO Officer
Rural Development Department
Kabul

Petrovic, Dr. D.
WHO Advisor
Vaccine Center
Institute of Public Health
Kabul

Popal, Dr. Ahmed Jan
Dentist
Provincial Hospital
Herat

Pouskova, Dr.
Physician
Tuberculosis Sanitorium for Women
Ministry of Health
Kabul

Qadeer, Dr. Abdul
Vice President of the Malaria Institute
Ministry of Health
Kabul

Rafique, Dr. Mohammad
Internist
Provincial Hospitals
Faizabad

Rahim, H. E. Dr. Abdul
Minister of Health
Ministry of Health
Kabul

Rahim, Dr. Abdul
Internist
Provincial Medical Officer Parwan Province
Director Provincial Hospital
Charikar

Rahman, Dr. Abdul
Dentist
Provincial Hospital-Polyclinic
Baghlan

Rahman, Dr. Abdul
Hospital-Polyclinic
Ministry of Health
Balkh

Rasoul, Dr. Ghulam
Internist
Provincial Hospital
Gardez

Rassul, Dr. A. Qaum
Deputy Minister of Health
Kabul

Raza, Mr. Mir Mohammad Akbar
President, Afghan Water and Soil
Survey Authority
Kabul

Ribaux, Miss M.
WHO Laboratory Technician
Malaria Institute
Ministry of Health
Kabul

Roshan, Mr. S. M., Chief
Section of Environmental
Sanitation & Industrial Hygiene
Institute of Public Health
Kabul

Sadiq, Dr. Said
Director
Central Government Laboratory
Ministry of Health
Kabul

Safi, Dr. Mohammad Esa
Surgeon
Provincial Hospital
Herat

Saidi, Dr. Sayed Murtaza
Chief of Division
Division of Epidemiology &
Statistics
Institute of Public Health
Kabul

Sajet, Mr.
Director
Drilling Section of the Geological
Survey
Ministry of Mines and Industry
Kabul

Salimi, Dr. M. Aslam
Director General and Orthopedic
Surgeon
Avecinna Hospital
Kabul

Samin, Dr. Fateh
Assistant Director
Masturat Hospital
Kabul

Sarwar, Dr. Abaevi
Director
Tuberculosis Sanatorium for Women
Ministry of Health
Kabul

Sattar, Dr. A., Chief
Section of Immunology-Serology
Institute of Public Health
Kabul

Sekria, Dr. Ghulam
Director, General Medical Depot
Ministry of Health
Kabul

Sena, Dr. Mohammad Akabar
Internist
Tuberculosis Sanatorium for Women
Ministry of Health
Kabul

Seraj, Dr. A. Samad, Dean
Faculty of Medicine
University of Kabul
Kabul

Seraj, Dr. A. Satar
Director for Medical Legislation
& Sanitary Regulations
Ministry of Health
Kabul

Seraj, Dr. Aziz, Director
School Health Services
Ministry of Education
Kabul

Seyring, Dr. W. S.
Director, Medical Services
Afghan Construction Unit (ACU)
Manzel Bagh Camp
Kandahar

Shafa, Dr. Haidar Ali
Pediatrician
Provincial Hospital & Polyclinic
Mazar-i-Sharif

Shah, Dr. Mohammad Sharif
Radiologist
Provincial Hospital
Kandahar

Sharaf, Dr. M. Naim
Vice President
Institute of Public Health
Ministry of Health
Kabul

Sharif, Dr. Mohammad
Provincial Medical Officer
Ministry of Health
Pul-i-Khomli

Shifai, Mr. M. Nabi, Chief
Section of Biochemistry & Nutrition
Institute of Public Health
Kabul

Shohabzada, Dr. Nizamuddin, Chief
Division of Mother-Child Health (MCH)
Institute of Public Health
Kabul

Shokoor, Dr. Abdul
Internist
Provincial Hospitals and Polyclinics
Jalalabad

Sidique, H.E. Mr. Mohammad
Governor of Kandahar Province
Kandahar

Srinivasan, Dr. Sambamurti
Surgeon, CARE-MEDICO
Avicenna Hospital
Kabul

Suddin, Dr. Mirsham
Dentist
Provincial Hospital
Kandahar

Taber, Dr. Mohammad
Chief Medical Officer of Paktia Province
Gardez

Taher, Dr. Mohammad
Internist
Provincial Hospital
Gardez

Taberi, Dr. Ismail
VD Specialist - Bacteriologist
Provincial Hospitals & Polyclinic
Mazar-i-Sharif

Tahiri, Dr. M. Ismail
Chief of Division of Microbiology
Institute of Public Health
Kabul

Talb, Dr. Said
Director, Polyclinic
Ministry of Health
Sarai Khwaja

Tuli, Dr. R. L.
Senior WHO Representative
Kabul

Usufi, Dr. Ghulam Haidar
Chief Medical Officer of Manpower
Ministry of Public Works
Kabul

Wahab, H.E. Mr. Abdul Hakim
Deputy Governor of Mazar-i-Sharif
Province
Mazar-i-Sharif

Wahid, Dr. Ghulam Hazrat
Chief Medical Officer
Lashkar Gah Hospital
Lashkar Gah

Wahidi, Dr. Abdullah
President, Hospital Services
Faculty of Medicine
University of Kabul
Kabul

Waziri, Dr. M. Kasim, Chief
Section of Parasitology
(Protozoology & Helminthology)
Institute of Public Health
Kabul

Wenzel, Dr. W. S.
WHO Senior Malariaologist
Malaria Institute
Ministry of Health
Kabul

Yaqubi, Dr. Yahya
Internist
Afghanistan Textile Company Hospital
Gulbahar

Yunis, Dr. Mohammad
Internist
Provincial Hospital-Polyclinic
Baghlan

Zameri, Dr. Ibrahim
Internist
Provincial Hospital-Polyclinic
Mazar-i-Sharif

2. Health Facilities Visited

Afghan Highway Constructor's
Company Camp
Kandahar

Division of Vaccine Production
Public Health Institute
Kabul

Afghanistan Construction Unit
Camp
Manzel Bagh

Drilling Section of the Geological
Survey
Ministry of Mines and Industry
Kabul

Afghan Water and Soil Authority
Kabul

Faculty of Medicine
University of Kabul
Kabul

Ali Abad Hospital
Kabul

Fourteen-bed Hospital-Polyclinic
Chah-i-Anjirs

Ali Abad Hospital
Ministry of Education
Kabul

General Hospital for Women
Patients
Herat

Avicenna Hospital
Kabul

General Medical Depot
Kabul

Central Laboratory
Ministry of Health
Kabul

Gulbahar Textile Company
Gulbahar

Central Office and Polyclinic
School Health Services
Ministry of Education
Kabul

Hospital
Afghanistan Construction Unit Camp
Manzel Bagh

Clinic
Afghan Highway Constructor's
Company Camp
Kandahar

Hospital-Polyclinic
Ministry of Health
New Baghlan

Dental Clinic
Kandahar

Hospital (surgical patients)
Ministry of Health
Old Baghlan

Department of Canals and Dams
Ministry of Public Works
Kabul

Hospital (under construction)
Ministry of Health
New Baghlan

Hospital for male patients. Balkh	Hospital & School for Auxiliary Nurses Lashkar Gah Hospital Lashkar Gah
Hospital for female patients Faizabad	Hospital (under construction) Lashkar Gah
Hospital for male patients Faizabad	Hospital (under construction) Ministry of Public Health Logar I
Hospital (under construction) Faizabad	Health Units Rural Development Department Logar II
Hospital for female patients Paktia Province Gardez	Hospital and Polyclinic Mazar-i-Sharif
Hospital for male patients Paktia Province Gardez	Hospital Ministry of Health Pul-i-Khomli
Hospital (under construction) Paktia Province Gardez	Hospital-Polyclinic Afghanistan Textile Company Pul-i-Khomli
Hospital Ministry of Health Girishk	Hospital-Polyclinic for males Sarikhoja
Hospital Gulbahar Textile Company Gulbahar	Hospital Ministry of Health Sarai Khwaja
Hospital-Polyclinic for female patients Jalalabad	Institute of Public Health Kabul
Hospital-Polyclinic for male patients Jalalabad	Labor Directorate Ministry of Mines and Industry Kabul
Hospital for female patients (under construction) Jalalabad	Malaria Institute Kabul
Hotel-Hospital Unit Kandahar International Airport Kandahar	Malaria Unit-Office Khanabad

Manpower Hospital Ministry of Public Works Kabul	Polyclinic Avicenna Hospital Kabul
Masturat Hospital Kabul	Polyclinic Balkh
Maternity Hospital Herat	Polyclinic Bamiyan
Men's Tuberculosis Sanatorium Ali Abad Hospital Kabul	Polyclinics Faizabad
Midwifery School Shararah Maternity Hospital Kabul	Polyclinic Gardez
Ministry of Health Kabul	Polyclinic-Hospital Ministry of Health Girishk
Ministry of Planning Kabul	Polyclinic Provincial Hospital for male patients Herat
Ministry of Public Works Kabul	Polyclinic Health Insurance Plan for Government Employees
Mobile Unit Ministry of Health Faizabad	Ministry of Finance Kabul
Municipal Health Department Kabul	Polyclinic Provincial Hospital for male patients Kandahar
Northern Region Office Malaria Eradication Program Kunduz	Polyclinic Provincial Hospital for women patients Kandahar
Office of the Mayor Kabul	Polyclinic Da Spinzar Cotton Company Kunduz
Polyclinic Aibak	Polyclinic Kunduz

Polyclinic Marja	School of Nursing Masturat Hospital Kabul
Polyclinic Nad-i-Ali	Shararah Maternity Hospital Kabul
Polyclinic Taskqurghan	South Western Regional Office Malaria Eradication Program Kandahar
Provincial Hospital Bamiyan	Ten-Bed Clinic. Avicenna Hospital Kabul
Provincial Hospital for males Charikar	Ten-Bed Hospital Ministry of Health Khanabad
Provincial Hospital for males Herat	Ten-Bed Hospital for males Kunduz
Provincial Hospital for males Kandahar	Ten-Bed Hospital for males Ministry of Health Talaqan
Provincial Hospital for females Kandahar	Thirty-Bed Hospital Da Spinzar Cotton Company Kunduz
Rosantoon Society Kabul	Training and Demonstration Center Rural Development Department Shewaki
Rural Development Department Kabul	Tuberculosis Center Ministry of Health Kabul
Saadat Pharmaceutical Company and Dispensary Herat	Tuberculosis Sanatorium for Women Kabul
Said Kheal Rural Development Project Headquarters Said Kheal	Twenty-Bed Hospital (under construction) Nad-i-Ali
School for Training of X-ray Technicians X-ray Department Avicenna Hospital Kabul	
School of Nursing Ali Abad Hospital Kabul	

Unit Office
Malaria Eradication Program
Faizabad

Unit Office
Malaria Eradication Program
Gardez

Unit Office
Malaria Eradication Program
Herat

Unit Office
Malaria Eradication Program
Jalalabad

Unit Office
Malaria Eradication Program
Mazar-i-Sharif

Welfare Society
Herat

WHO Office
Kabul