INSTITUTE OF CURRENT WORLD AFFAIRS

GJ-9
Rural Health

15 December, 1970
Box 21262
Nairobi, Kenya

Mr. R. H. Nolte
Institute of Current World Affairs
535 Fifth Avenue
New York 10017

Dear Mr. Nolte:

There are approximately 1100 doctors in Kenya. Computed on a population figure of 11 million, the ratio of doctor to patient is approximately 1:11,000. With the knowledge that the ratio in the States is less than 1:1,000, the enormity of this doctor-patient imbalance somewhat shocked me. I called this fact to the attention of some Kenyan medical friends assuming that they too would share my concern, but they replied that if this ratio actually represented a uniform picture of the whole country they would be pleased at this point in Kenya's development. Quoting a recent survey report prepared for a medical conference in Uganda, they informed me that the doctor-patient average in the rural areas of Kenya is 1 to over 40,000. When I now travel to the up-country regions of Kenya, I am no longer surprised when people tell me that they have never seen a doctor.

In spite of these facts, however, the people of Kenya in all geographical areas are experiencing an increase in medical services. The rural areas especially are experiencing this growth, not so much because of an increase in the number of doctors coming to their locales, but because of an increased emphasis on the training of paramedical teams. Not surprisingly, because of their emphasis on rural medicine, these preprofessionals have been found to be more effective than the general practitioner. In short, it can be said that the delivery of services in rural areas no longer rests solely with the doctor, but is shared by a team who work under the direct and indirect supervision of medical officers. The team usually consists of the following personnel: medical assistant, enrolled nurse, enrolled midwife, and health assistant.

In many health centers the medical assistant assumes the administrative responsibilities of the organization, including the coordination of the activities of the staff, community and other major medical facilities in the area. As a practitioner, he is found in the out-patient part of the clinic treating cases which are not severe enough to admit to the hospital. During crises when the "professional" cannot be summoned in time he has been known to administer complete treatment, including appendectomies and tooth extractions. In those cases where hospitalization is indicated and time is in his favor, the medical assistant generally makes the referral.

After completing seven or more years of formal education and having passed the East African Certificate of Education Examination, a person is eligible to begin the medical assistant's training. The program lasts for three years. Coursework includes anatomy and physiology, microanatomy, physiology, pathology, microbiology, parasitology, medicine, surgery, maternal and child health, and public health. I was surprised to see that courses in administration have been omitted, since a great portion of the medical assistant's time is spent in this area. Course content is evaluated each year by the medical authorities of Kenya.

The program for the midwife and the enrolled nurse lasts less than that of the medical assistant. In order to qualify for entry, one should have completed Standard VII and passed the Certificate of Primary Education Examination.

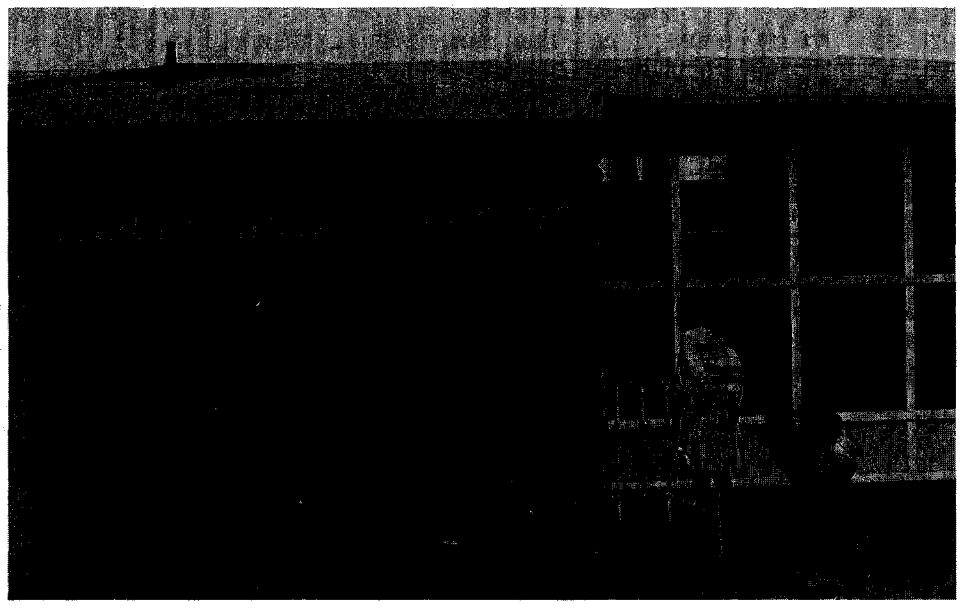
The enrolled nurse is said to be the most important member of the medical team, especially in the area of patient follow-up and home care. Nurses are the key people who maintain contact with the patient, who most likely is overwhelmed by all the demands associated with getting well. In addition, enrolled nurses are often called upon to diagnose and treat in the clinic and assist the medical assistant during emergencies. In special cases the unpleasant job of disposing of contaminated refuse is added to her activities. The sterilization of all medical equipment also falls under her purview.

The focus of the enrolled midwife, contrastingly, is on the well-being of mothers and babies. Her attention is directed to prenatal and postnatal care, as well as the delivery. Over 80% of the babies born in Kenya are born in a hospital facility--a considerable change which has taken place over the past five years. This rising percentage may account for the decrease in infant mortality which heretofore has been very high in comparison to other countries. In addition to her work around the birth process, the midwife gives minor assistance in the treatment room. Stressing a preventive type approach to medicine she also holds educational classes both for prospective mothers and for new mothers. Her training is much broader and more extensive than that of the enrolled nurse.

The health assistant, in contrast to the other members of the health center group, is concerned mainly with the environmental aspects of health. The cleanliness of the environment and subsequently immunization problems are his challenges. He is interested in seeing that germ-free food and water are available to the people. I couldn't help but think about the Mound Bayou project (GJ-1) as I watched the health assistants function. Because he comes in contact with the general public to a greater extent than the rest of the team, the health assistant becomes a valuable resource towards making referrals to the different clinics--this is especially true of cases of T.B. and leprosy.

In order to see this team in action, I spent considerable time in rural Nairobi at different health centers. The most impressive and best staffed health center operating on a team basis is the Karuri National Reference Health Center. Karuri is fortunate to have a well-trained medical officer in charge--Dr. J. Kaggia. Dr. Kaggia graduated from the medical school at Makerere in Uganda. After receiving his degree, he trained and worked in advance medicine in England and Scotland for a considerable period. He has been with the program at Karuri since its inception in 1963.

The original idea of the Center, according to Dr. Kaggia, is threefold: to promote research, to treat on an outpatient basis, and to offer a teaching atmosphere for prospective medical personnel. The Center was built with funds from the Kenyan Government supplemented by funds from the Rockefeller Foundation and UNICEF. The Service Unit, which is most prominent in the current affairs of the Center, was built by money from the Kiambu County Council, a local legislative body. The Center's operational funds now come solely from the Government.



The staffing at Karuri approaches an almost ideal situation; it currently has a medical officer, a health inspector, a medical assistant, two enrolled nurses, a health visitor, an enrolled midwife, a hospital administrative assistant, two clerks, four drivers, and two cooks. The Karuri Health Center is in actuality a clinic's clinic: other health centers when faced with organizational and functional problems are encouraged to present them to Karuri for assistance or resolution. This Center is the only one of its kind in Kenya.

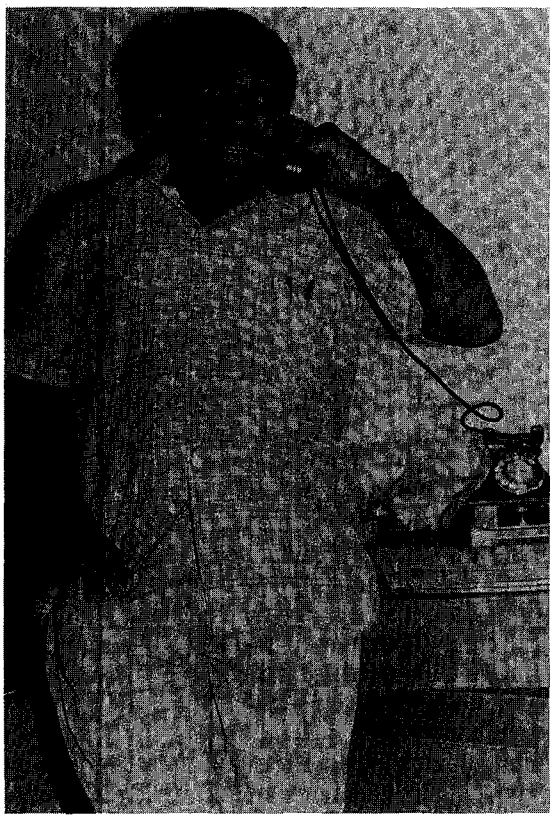
The Center is open six days a week--Monday through Friday from 8:30 a.m. until 4:30 p.m. and Saturdays from 8:30 a.m. to 12:00 p.m. Emergencies are seen at any time, since the medical officer and student personnel live on the grounds. Special clinics for handicapped children, antenatal care and tuberculosis are interspersed throughout the week.

Unlike many clinics in the rural areas, Karuri's building has been designed specifically for the delivery of health services. The problem which they constantly face, however, is the lack of space. Under the extenuating circumstances, the clinic seems to be more service oriented than it had originally planned to be. The research aspect especially has not developed to the magnitude of the original plans.

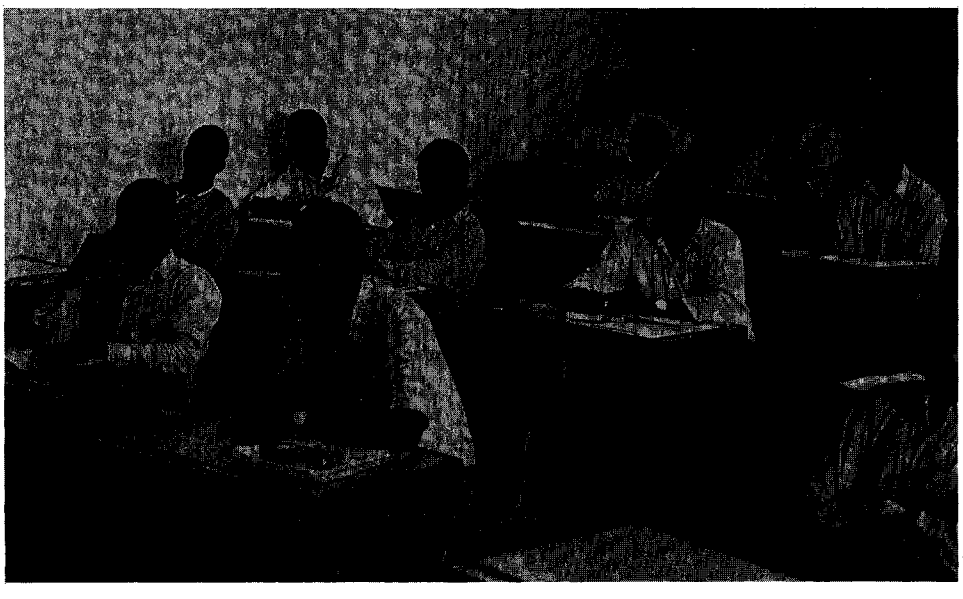
The teaching load of the Center routinely includes student nurses, health visitors, health inspectors and medical assistants. They are required by government regulation to spend a designated time period at the Center learning about the operation of a clinic as well as to garner practical experience working with the "wananchi" from the country.

I have been able to learn a great deal from just being an observer in many of the clinics around rural Kenya. Driving to the centers very early in the morning I usually find women with infants strapped to their backs and frequently accompanied by toddlers walking gingerly to the clinics in hopes of getting quick service by being one of the first in the queue. Some of the ladies walk as much as nine miles (one way) to receive service for themselves and/or their children. On one particular occasion a lady wearing a white (original color) cloth tied around her leg secured by odd pieces of string casually strolled into the clinic, waited several hours and when her time came presented her problem to the medical assistant. Although a very casual scene on the surface, the medical assistant later described the situation as being very serious. This woman was suffering from a panga cut which had gone quite deep into the skin, severing a few blood vessels in the process. In addition to the loss of blood, there was danger of infection. It was amazing that she had been able to walk as far as she had without collapsing. The patient, not in the least excited, explained that the local healer had already taken care of her--the real reason for her visit was to bring her child who had been coughing quite severely.

Sickness in the rural areas has been as much of a social and economic problem as it has been physiological. Young men, for instance, rarely frequent the Center--the patient is usually the "mzee" who complains of a backache, but who more or less enjoys sitting around and conversing with people from surrounding areas whom he doesn't get to see too often.



Dr. Kaggia



Health Assistants attending a refresher seminar

Young men come only when seriously ill or when injured. The possibility of their losing a job by being absent gives sickness a secondary priority. In the past, mothers have been reluctant to visit the Center, but as their knowledge and familiarity of the clinic increases the hesitancy abates.

As I asked about the health problems of the different age groups I found them not too different from those ailments found in any rural area of the States. Children between the age of 0 and 1 suffer mostly from congenital coughing, diarrohea and vomiting. The next group between the ages of 1-5 seem to be affected by kwashiorkor (malnutrition), worms, accidents and skin infection (ring worms). The school-age child is generally plagued by coughs, colds, and abdominal pain. The total group has its share of eye trouble--conjunctivitis--ear trouble and tonsillitis. During puberty and adolescence there are no significant areas of complaint. There has been a noticeable increase in gonorrhea and other venereal diseases as people are frequenting the urban areas more. Many victims of venereal diseases remain unaware of its source. Karuri has recently launched a program of sex education in conjunction with the local high school in hopes of increasing the knowledge of these future city visitors.

Of the many disconcerting problems faced by Karuri, malnutrition is one of the most perplexing. The number of underfed children whom the clinic sees is constantly large. Frequently, when children are being seen for something such as immunizations or a general checkup, the problem of malnutrition is detected. During the coffee bean harvest the problem is at its highest peak in the area surrounding Karuri. The work cycle of the mother is the key variable associated with nutritional neglect of the children. Mothers, who generally have to walk a considerable distance to their jobs, leave home at a very early hour, with the result that breakfast is most often meagre--sometimes nil. The work-day lasts until around five in the evening, which results in a late preparation for the evening meal. Subsequently, in order to quiet the very hungry children who have not eaten all day, the mother often stops at the local shops and picks them up some bread and tea for a snack. After getting water and wood necessary for preparation of the meal, and finally after preparing the food, the time is almost nine. The children, exhausted from lack of food and general activity are too tired to eat and thus have missed the only opportunity for a substantial meal. This procedure continues daily until the child is noticed by someone familiar with the symptoms of kwashiorkor. This same living pattern is echoed repeatedly at all the centers I visit.

In addition to the logistical factors, ignorance is an important element contributing to malnutrition. Many mothers feel that the importance lies in feeding the child something he enjoys--usually sweets--instead of maintaining this novel practice of a "balanced meal". Consequently children may be limited to one source of food.

Poverty has also been one of the contributing factors in the malnutrition syndrome. There are many "wananchi" who are compelled to exist daily on a "hand-to-mouth" basis. The three shillings ($.45) per day they earn is barely enough to see that the children get anything to eat, let alone a well-rounded cuisine. This especially holds true for those people who have children in school. School fees and quite often uniforms must be budgeted for during the course of the year.

To the casual observer the problem of malnutrition might appear minor in the face of the many other exigencies of a developing country. Malnutrition nevertheless has been singled out as one of the top three killers of children in East Africa. The priority now given by clinics like Karuri is well founded. In order to motivate and teach different styles of preparing as well as to encourage the use of new foods, the Center gives some families a stock of basic ingredients monthly. It consists of five pounds of bulgar wheat (cooked like a rice), 2½ pounds of milk, and a pint of oil. The amount given is based on the number of children in each household. Although everyone recognizes that this gesture is but token, it does serve to give momentary relief and some idea of the goal of proper nutrition to many needy families.

One of the newer programs to be incorporated into many health centers around Kenya has been Family Planning. During the course of my travels, Family Planning has been the one specific program which I have followed with continued interest. Three of the clinics I visited are in different stages of progress with respect to their Family Planning program. At Karuri, the program is well established and functioning very smoothly. The program at Tigoni, a health center in the rural area, but within commuting distance of Nairobi, has been functioning for several months. A shortage of staff has limited its effectiveness. The newest clinic to which I traveled (on its opening day) is located in Kamae Forest, approximately fifty miles from Nairobi in the bamboo forest region of the highlands.

The Nutritionist

The desire to learn is very strong.

"How long have you had this pain"

Family Planning has not only been a methodological challenge to the medical authorities, but has also had many philosophical obstacles --mainly because of a lack of full understanding of the basic idea behind planning. Many people, including those who will ultimately be responsible for instituting the program, felt family planning to be a method strictly to keep people from having children; because the land space of Kenya as a whole is by no means over-populated these sceptics questioned the necessity of such a program. The burden of selling the Family Planning program as well as the actual teaching process involved has fallen mainly on the shoulders of expatriate doctors--for the most part doctors under contract with UNICEF and the International Planned Parenthood Federation. Once such doctor playing a major role in bringing family planning information and skills to the rural health centers is Dr. Fitzroy Joseph. Dr. Joseph, an English and American trained physician, is responsible to fourteen health clinics where he practices family planning. He also has numerous classes where he expresses the philosophy behind the planning process and also teaches techniques, depending upon the level of experience of the personnel. Thus far I have attended lectures given to nurses in training, high school students, and medical assistants. Dr. Joseph is also called upon to meet with visiting physicians from different parts of Kenya who want to be kept abreast of the latest techniques and supplies connected with Family Planning.

Kenya is going through a natural evolution in its attempt to adopt Family Planning on a national basis. However, at this point in development, it appears that the "selling" has preceded the implementation by a great margin. Whenever I visit the health centers with Dr. Joseph, we often find hundreds of women waiting to be served. Sometimes I think the rush is because of fear that newly persuaded husbands will change their minds. At Kamae forest, for example, the men kept a constant vigil outside the clinic. Whenever a wife would appear outside the gate, she would be immediately escorted by her husband and seemingly bombarded with questions. Very often because of an eagerness to see if "it" really works, females find themselves pregnant--only because they have not heeded the caution that the pill, especially, operates on a cycle basis: one has to initiate the process at a certain time period.

The whole question of preference for the pill, the I.U.D. and the injection as contraceptive means has been most interesting.

Right & Below

Dr. Fitzroy Joseph

"Many miles to go..."

Above & Left

Treating the the ladies of Kamae Forest

The monthly injection appears to be the most popular of the methods, but because of a lack of follow-up on a regular basis, it is being offered only to women in the urban areas. (The "needle" and its attraction to the people here in East Africa would be a very interesting study. Many feel that nothing is really accomplished until they have been stuck--the harder the better.) The pill ranks second on the priority listing. It does, however, have its drawbacks--the heavy work schedule and erratic daily patterns of the women make the routine of taking them somewhat difficult. In order to compensate for the errors associated with stopping and starting during the month, placebos are added which means a pill is taken every day.

The I.U.D. is becoming popular only as women have experience and then pass the word on to their friends. Usually it is the more adventurous woman who asks for the loop. The simplicity of its use is countered only by the bleeding which sometimes occurs during the initial stages of use. The assurances, however, of the doctor and midwife have dispelled much of the anxiety associated with this occurrence. It is obvious that Family Planning is still in its infancy--hopefully with the attention it is now receiving, great gains will be experienced in the not-too-distant future.

The whole topic of rural health has been an interesting pursuit for the past number of months and one which is never quite complete. Each trip I make is filled with new and interesting information. I shall certainly continue to explore its many facets. Hearing of my concern and interest, the Flying Doctors Association of Kenya has invited me to accompany them next month on one of their round-the-horn missions to the bush. After stocking a good supply of Dramamine pills and mosquito repellant I shall eagerly sieze upon this opportunity.

Sincerely,

George Jones

George Jones

Received in New York on January 12, 1971.