IMPRESSIONS ON A VISIT TO SOME HEALTH SERVICES IN THE CHINESE PEOPLE'S REPUBLIC

Dr. Abraham Drobny, M.D., M.P.H.  

An old Chinese proverb says "It is better to see once than to hear a hundred times." The following piece presents Dr. Drobny's recollections of what he saw during a recent visit to the People's Republic of China.

Introduction

During a May 1973 visit to China, Dr. Shie-Hua, one of the Assistant Ministers of Health, informed the author about some of the basic principles of China's health policy and described the general organization of health services in the country. He noted that the Ministry is at the top of the health structure and is primarily concerned with laying down general guidelines for other elements in the system. The Provincial Health Department, which constitutes the next level of authority, applies and adapts these guidelines; it also oversees the activities of the province's medical education institutions, provincial hospitals, and district health services. Nationwide there are more than 2,400 of these district health services, whose function is to operate local hospitals and health centers serving the country's rural population. Each of China's communes (population groupings that generally contain between 5,000 and 10,000 persons) receives the services of a hospital and one or more health centers, the number of centers depending on the size of the commune. There are also "central clinics" run by "medical brigades," which provide mobile teams and other personnel who work directly with the communes.

According to Dr. Shie, the Ministry has assigned high priority to vaccination and environmental measures for disease prevention. In this regard, he said that strict regulations govern construction of factories, water supply systems, and disposal systems for solid and liquid wastes; that the Government is engaged in afforestation activities; and that it is trying, as many writers have noted, to exterminate the so-called "four plagues"—rats, flies, mosquitoes, and bedbugs. He also referred to a major health education effort which stresses the importance of proper hygiene of wells, kitchens, animal pens, latrines and other disposal systems, etc. Because 80 percent of China's population is rural, this program concentrates primarily on rural matters.

Dr. Shie also described China's active family planning effort. This program was said to operate throughout the country and to utilize all known control methods, though the device most commonly used was the IUD. The program also seeks to limit population growth by recommending that couples marry late (at or above 30 years of age) and by using the concept of sexual equality to counter the tradition of having children until a son is born. The official goal for 1980 is a yearly population growth rate of 15 per thousand inhabitants in rural areas and 10 per thousand in the cities. Reflecting the generally slower growth rates of urban areas, the 12,000,000 population of Shanghai, China's largest city, is reportedly growing at a yearly rate of 5.4 per 1,000 inhabitants.

1 Also appearing in Spanish in Boletín de la Oficina Sanitaria Panamericana.
2 Public Health Adviser, Inter-American Development Bank.
Acupuncture and Traditional Medicine

The Government's official policy is to integrate China's traditional medicine with modern medicine. The best-known example of this traditional medicine is acupuncture, which is used as an anesthetic and to treat deaf mutes, various rheumatic conditions, and many other diseases; besides being used as the principal treatment, it is employed as a supplement to other treatment measures. Traditional medicine also provides a number of herbs and other medicinal products, many of which have been used in China for thousands of years.

Acupuncture only began to be used as an anesthetic in Chinese hospitals in 1958, but its use has become widespread since the Cultural Revolution. The hospital we visited had been using it since 1969. We were told that Chinese surgeons prefer acupuncture for reasons of simplicity, economy, efficacy, and safety. However, some patients do feel pain when it is used, which is one reason why the method is the subject of continuing research.

Health Manpower and Medical Education

Chinese health authorities say there are roughly 840,000 physicians serving the rural population, 140,000 of them working in fixed units and 700,000 operating as "mobile" physicians serving the nation's communes. There are also 1,300,000 auxiliaries or "barefoot doctors" and 170,000 medical students working in rural zones.

China has tried to avoid patterning its medical training after courses, teaching systems, and other practices of developed countries which require large investments of scarce human and material resources. In particular, relatively little attention is given to preparing specialists, and emphasis is placed on assuring that training programs are geared to the available opportunities for using particular trainee skills.

Physicians

During the Cultural Revolution the nation's medical schools and other institutions of higher learning were closed. Their reopening in 1969 and 1970 was accompanied by important changes in the structure of Chinese medical education. Among other things, the teaching centers known as "advanced medical colleges" and some "intermediate" colleges now operate independently of the universities, and are linked instead to the health services of each province. In addition, formal examinations have apparently been abolished. At present, physician trainees receive three years of academic instruction and practical training, followed by two to three years of community practice.

Health authorities say considerable effort is made to keep the initial three years of training as practical as possible, and to reduce unnecessary theoretical instruction. The basic concept now being stressed is that the physician is simply one member of the health team and should not be regarded as part of a professional elite.

Auxiliaries

China's well-known barefoot doctors do roughly the same sort of work as the medical auxiliaries now emerging in the United States and those operating in some countries of Asia and Africa. They are prepared in the field, first through courses lasting three to six months and then by inservice training over a three-year period. The barefoot doctors deal with simple illnesses, routine deliveries, and most often with immunizations and other preventive activities such as sanitation and health education. They are usually natives of the village or region in which they work.

The Advanced Medical College

During our trip we visited a Shanghai educational facility called "Advanced Medical College No. 2," which was founded in 1952. Among the many other things that impressed us was the college's large and excellent collection of anatomy specimens.

According to our hosts, this college is
generally similar to other advanced medical colleges throughout the country. It has what is termed a "Department of Basic Studies" through which all students are required to pass, and which provides instruction in surgery and obstetrics as well as some specialized training. There are also three branches within the college—one for general medicine, another for pediatrics, and a third for dentistry.

The college makes use of four hospitals with a total of 3,000 beds. At the time of our visit 500 students were enrolled; but since the college reopened in 1970 with a smaller number of students than usual, this total was deemed likely to rise. In all, 130 physician trainees were expected to complete the three-year course of instruction in 1973.

It is interesting to note that these medical colleges do not award degrees to their graduates. The latter simply go back where they came from, unless they are assigned elsewhere, and the college informs the communes or district hospitals where they are assigned about their newly acquired knowledge and general training.

The colleges do not prepare barefoot doctors, but do contribute indirectly to their preparation by sending supervisory physicians into the field. These physicians visit recent medical college graduates, and generally assist with and supervise community practice. Furthermore, barefoot doctors with sufficient experience can become full-fledged physicians by going to the college for a year to attend theoretical courses. At the time of our visit 120 barefoot doctors were enrolled in this one-year program.

Commune Health Services

We also had an opportunity to observe the health services of several communes. Besides farming the land, these communes make light industrial products for their own use and often market their own produce, run their own schools, and assist national authorities in training military personnel.

Official figures indicate that China currently has about 70,000 of these communes. Though most of them contain 5,000-10,000 persons, some have larger memberships that reach and even exceed 50,000 people. One or more towns or villages are included in each commune, which is subdivided into "production brigades" composed of about 1,000 persons. These "brigades" in turn are subdivided into "production teams" generally having between 150 and 200 members.

Among the places we visited was the agricultural commune of "Kuan Tu Gan" on the outskirts of Peking. Its population of roughly 35,000 makes it one of the largest communes. The equipment and facilities of Kuan Tu Gan were said to include 64 trucks; 93 tractors; 600 horse-drawn carts; 600 electrically operated irrigation wells; 54 small workshops; and 30 schools, including 24 primary and six secondary schools with a total of 45 teachers and roughly 1,000 students. There were also 12 health centers or polyclinics with 30 physicians and 240 barefoot doctors.

While touring one of the brigade health service facilities, we were told that it served 20 production teams and employed four physicians and 40 barefoot doctors. Patients can come directly to the brigade health center; in addition, medical personnel—especially the barefoot doctors—take turns making visits in order to provide check-ups and various sorts of health education—including instruction on hygiene and advice about family planning.

We also saw the homes of some commune members. Here water was obtained by means of hand pumps drawing from wells in the courtyards, and excreta was deposited in removable earth-covered tanks sunk into the ground. These latter were periodically emptied and disinfected, their contents being used as fertilizer. Despite this waste disposal system, no flies at all were observed.

In Shanghai we visited a factory operated by a large urban industrial commune having 60,000 members. Our hosts said the commune was served by 60 physicians and 16 health centers. As at Kuan Tu Gan, they indicated that
medical personnel attend patients at the centers and also make home visits. Some of the visits are made upon request, while others are made to carry out preventive measures and provide family planning advice.

The health center that we visited at this factory was open eight hours a day; since the factory operates around the clock in three shifts, some medical personnel were on duty to deal with emergencies during the remaining 16 hours. The clinic was said to handle an average of about 800 patients a day.

Also in Shanghai, we observed a factory making medical implements. These ranged in size from forceps and scalpels to operating tables, X-ray machines, and other pieces of heavy equipment. This factory operates 16 hours a day. We were informed that its health clinic stays open during these 16 hours and is manned by shifts of seven physicians and auxiliary medical personnel.

Operation of a Major Hospital

In Peking we visited the Friendship Hospital, built in 1957, which is a general hospital of the municipal type. It is said to have 610 beds and to employ 1,043 people—including 262 physicians, 231 nurses, and 96 technical personnel. Serving a reported 2,500-2,800 outpatients per day, this hospital acts as a referral center for two district hospitals and for nearby local hospitals, and as a teaching hospital for students at Peking's Advanced Medical Institute No. 2. It also has a nursing school which provides a two-year course of instruction.

Apart from work done on the premises, the hospital bears responsibility for all preventive medical activities at schools and factories within its area of jurisdiction. It has one medical team for factory visits and another, including barefoot doctors, for visiting nearby communes (particularly commune hospitals) to help with preventive measures and family planning activities.

The hospital treats about 9,000 inpatients a year; we were told that it has an occupancy rate of 87 per cent and that the average hospital stay lasts 15.3 days (its role as a referral facility probably has a significant effect on the latter figure).

SUMMARY

Chinese health policy at the present time seems oriented toward preventing disease through vaccination and environmental sanitation, using family planning programs to limit population growth, and integrating acupuncture and other practices of "traditional" Chinese medicine with modern methods.

Medical students appear to receive relatively little specialized or theoretical training, most of their advanced education being practical in nature. Nor do their training colleges award degrees per se. Instead graduates simply go to the facility where they are assigned and the college informs this facility of their qualifications.

China's large corps of auxiliaries or "barefoot doctors" are not prepared at the major medical training centers but in the field. This is done first through courses lasting three to six months, and then through inservice training spanning a three-year period.

The primary function of these barefoot doctors is to administer vaccines, provide health education, treat simple illnesses, and oversee routine deliveries. Large numbers of them are employed in China's communal health centers, several of which the author had an opportunity to observe at first hand.