DECENTRALIZATION WORKS: CHINA AND MEXICO MAKE IT HAPPEN IN HEALTH CARE DELIVERY

Paul Villas, Janet L. Lile, and Hector Perez-Coronado*

Resumen

Este estudio compara la política nacional del cuidado de la salud en China con las políticas iniciales para la salud en México. Los esfuerzos de China en dar protección a la salud para su nación son paralelos a la política de México y viceversa. En China el progreso ha sido hecho debido a los efectos creativos de tener programas de salud y doctores con unidades movibles. México también tiene una actitud positiva para mejorar la salud de su gente. El secreto es una regla de descentralización en donde las comunidades locales deciden lo que es mejor para ellos. En ambos países, la demistificacion de médicos y de utilizar a personal sin ser médicos al nivel local fue necesario a fin de poder brindar el cuidado básico de la salud para todos y cada uno de ellos.

Ejemplares para el cuidado de la salud en China y en ciertas partes de México pueden ser modelos para otras regiones donde el cuidado de la salud en unidades movibles es inadecuado.

*Paul Villas, Ed.D., CHES is Assistant Professor in the Department of Health Sciences, New Mexico State University, Las Cruces, NM

*Janet L. Lile, MSN, RN is Assistant Professor, Department of Nursing, New Mexico State University, Las Cruces, NM

*Hector Perez-Cornado, M.D., Coordinador Medico Servicios Coordinados De Publica En El Estado de Chihuahua, Cuidad Juarez, Chihuahua, Mexico.
The “Sick Man of Asia” phrase attributed to China is no longer true. After liberation in 1949, giant steps were taken by the Chinese government to provide better health and well being for its people. Health and health care delivery were established as top priorities of the People's Republic of China and great strides were made to assure a high health status for every citizen (Ying & Davis, 1985). This was accomplished by developing a system which directly paralleled the societal organizations, thereby insuring that each commune or factory had at least an elemental health facility to deliver primary care to the workers.

Innovative strategies to build health resources were crucial. An essential component in the delivery of health care in China was the decentralization of governmental policies and mass health education campaigns combining Chinese traditional and Western medicines. In addition, China demonstrated that keeping people healthy did not depend on some mystical power bestowed on a select group of physicians. Emphasis was on prevention of disease and provision of accessible care for the masses of workers.

Mexico, on the other hand, which by many estimates should have been a leader in health care in Latin America, actually resembled an underdeveloped country. The health signature of Mexico was one of a third world country with respiratory illness as the principal cause of death and high child mortality rates from diarrheal causes (Ellis, 1987). However, the poor health status was not shared by everyone. The nation's capital “boasted lavish hospital facilities, a prestigious cardiac research institute and a high doctor/patient ratio” (Horn, 1985). Other large, wealthy cities were equally blessed. Recognizing that Mexico's morbidity and mortality patterns were a function of poverty and inequity, the nation elevated the right to health care to a constitutional level. The goal was to promote, prevent, maintain, and restore health for all by providing equitable services of increasing quality (Perez- Coronado, 1990). Decentralization with less direction and input from the Federal District in Mexico City allowed individual states and communities more autonomy and self-direction in the delivery of health care. This allowed communities to be innovative in using...
material and human resources not traditionally used in the dispersement of health care. Results of these efforts in both countries could be seen in the changing health patterns of the people.

**Changes in People's Health**

The health of the Chinese people has changed dramatically over the past few decades. This becomes apparent when analyzing the principal causes of death (Sidel & Sidel, 1981). A health care system was created which resulted in the elimination of many of the deadly infectious and nutritional diseases that once plagued the Chinese people (Ying & Davis, 1985). Studies in Shanghai Country have shown that the health status of the people improved to the level of more developed countries. Malignancy, heart disease, and cerebrovascular disease became the leading causes of death (Xing Yaun & Mai-Ling, 1982). On the surface, the change seems merely the substitution of one type of death for another. However, it was evident that the Chinese people were dying at progressively higher ages. Sick children and ailing adults, once a commonplace sight, were replaced by young and old appearing to be in excellent health (Sidel & Sidel, 1981).

How did the Chinese accomplish this with their limited resources? The liberation from shorter lives, crippling diseases, and a miserable way of life began with the people themselves. Huge “mass campaigns” were launched to eradicate venereal diseases, drug addiction, rats, mosquitoes, and lice (Langmuin, 1976). Learning to purify water and dig latrines was associated with increased health and prosperity that people could see. The arrival of mobile health teams in the villages to give inoculations and other preventative health services was greeted with open arms. Local clinics were established to encourage preventative health measures (Langmuin, 1976). The transformation of China's health system was made possible by carefully constructed principles to guide the health services development, to encourage active participation of the people, and to build effective leaders.
As in China, an increase in vaccine coverage and the improvement of general health standards brought about a decrease in preventable illness in Mexico, most notably in the northern border states (Chavira & Olaiz Fernandez, 1990). In 1970, measles was the eighth leading cause of death in Mexico. Although there has been a significant reduction today, malnutrition and poverty, the underlying reasons for the measles deaths, have not received as much attention as the vaccinations (Horn, 1985). Providing a potable water supply and proper sanitation have brought about better health since these determinants accounted for much of the parasitic and diarrheal diseases. Twenty years ago, only 17.3% of rural Mexico was reported to have potable water in their homes and rural disposal of sewage was practically nonexistent (Horn, 1985). Within ten years, according to the Pan American Health Organization (PAHO), piped water was easily accessible to 32% of rural Mexican residents although still less than one percent had access to proper sanitation (PAHO, 1978). Today, through a policy of decentralization, these basic health needs are given priority (Perez-Coronado, 1990).

Demographic population shifts took place in the country of Mexico. More and more rural inhabitants migrated to the cities. With a vast daily influx of new arrivals, Mexico City became the largest city in the world. Because of their proximity to the United States and the development of the Maquiladora industry, the northern border cities attracted the jobless, the sick, and those who sought to improve their standing in life. Since these cities grew at such rapid rates, they simulated both urban and rural environments. A Mexican commitment to provide health care for all of its citizens should become evident in the rural areas around and close to the urban setting.

Making Health Care Available

In bringing better health to one billion Chinese people, individuals had to be instilled with a sense of responsibility for preventing disease and maintaining good health. China had to make health care available by providing huge numbers of health care workers that the people could trust. China's achievement in
transforming the delivery of health care showed an interviewing of three main threads: decentralization, demystification, and continuity with the past (Sidel & Sidel, 1981). Both politics and cultural nationalism play important roles in determining health policy directions. The three threads illustrate this. Since centralization of all services was the status quo, it seemed like the route to follow until it was realized that to decentralize health services was to provide easy access of services to multitudes. The second thread was to demystify the position held by health care deliverers. This led to the democratization of health knowledge among the population. People learned about their bodies, and patients were better informed about their particular diseases and treatments. The third thread was to combine Chinese traditional medicine and Western medicine. China, with a rich medical heritage dating back to 2500 B.C., placed great pride and trust in traditional methods that included the concept of “natural” balance between yin and yang, acupuncture, herbal medicine, massage, and other therapeutic modalities (Dornbusch, 1990).

The Chinese planned for health resources to reach the most rural areas of the country where 80% of the population lived. However, the implemented measures did not meet the tremendous health care needs in these areas. During the Cultural Revolution in which all social institutions were significantly revamped, a second revolution in the Chinese health system began (Christiana, 1984). Physicians began to delegate some of their diagnostic and therapeutic responsibilities to non-physicians. This resulted in a new kind of allied health worker called the “barefoot doctor.” A member of a community, this worker received relatively short periods of training outside the community and came back to provide health care to his or her friends, neighbors, and fellow peasants (You-Long & Li-Min, 1982). The basic activities of barefoot doctors responsible for health services were outpatient consultations, home visits, preventative health and anti-epidemic work, maternal and child health and family planning, health education, maintenance of adequate drug supplies, and other administrative duties (You-Long & Li-Min, 1982). Medical education was drastically
reformed to shorten the curriculum and to stress primary care training rather than specialized medical sciences.

Mexico also began to disseminate health care services in order to reach the masses. Urban health care centers were established in 1943 when the Department of Public Health and the position of Secretary of Assistance were fused to create the position of Secretary of Health and Assistance. During the 50s, the first Urban Primary Health Care Centers were constructed as part of a medical assistance infrastructure. From 1964 -1970, more that 2000 health centers were constructed both in urban and suburban areas with some attention given to the rural areas. In 1981, programs were developed to focus on the right to health protection of marginal populations in large urban and rural areas with the purpose of extending health care by means of prevention. In 1983, the protected right to health care was elevated to constitutional status. In 1984, the general law of health was published which established the equal access of services and initiated decentralization of programs. In 1985, as a result of the authority established by law, a Secretary of Health was appointed with the objective of consolidating standard health care and decentralizing the operation of health services. To strengthen these ends, an open model of attention to health care signaled the organization of primary care of all Mexican citizens (Perez- Coronado, 1990).

The Secretariat of Health became responsible for the provision of health care to the rural population and the formerly rural who were crowding into over-taxed and over-burdened cities and establishing “colonias.” For example, the state of Nuevo Leon, in fulfilling the constitutional mandate that all Mexican citizens should have access to the national health systems, provided health care services in rural clinics and hospitals. Because it was difficult to find specialized health care delivery personnel, Nuevo Leon instituted a rural rotation system for resident physicians during the last year of their specialization training. The physicians rotated into the rural areas for three months at a time and thus made it possible for rural residents to have access to specialized care. In addition, primary health care personnel also rotated in the same manner
(Garza, 1989). In Ciudad Juarez, Chihuahua, for example, massive immunization campaigns were carried out in effect to include what was termed the “open population.” These are the fringe area residents of the colonias. Both the World Health Organization (WHO) and the Pan American Health Organization (PAHO) cooperated in the preventive health effort through the Extended Immunization Program (EIP) (Chavira & Olaiz Fernandez, 1990).

**Making Health Care Work**

In China, each person was expected to be part of a network of health services at every level of community organization. Figure 1 describes the organization in the countryside. It consisted of production teams (about 150 people with one to three health aides and one barefoot doctor), production brigades (about 1800 people or 12 production teams with a health station consisting of four barefoot doctors and one midwife), communes (a self-governing political and economic unit with out-patient hospital facilities, a lab and x-ray machines) and counties with specialized and general hospitals with both Western and traditional practitioners (Sidel & Sidel, 1981).

![Figure 1: Chain of Health Care Services in the Chinese Countryside](image)

In the cities, people were organized according to work and housing. Groups of those who worked in factories choose
a member to be released from the job to get health care training. This person would then return to work at the factory but at certain times would go on rounds, hold clinic hours or provide first aid. This “worker doctor” received the same salary as fellow workers with similar qualifications (Langmuin, 1976). Figure 2 describes the city organization. It started with courtyards consisting of a few families whose main function was looking out for each other. Blocks or lanes consisting of about 400 families were next with medical stations manned by housewives who are called “red health workers” or “street doctors.” Their responsibilities included dispensing primary care services, providing birth control counseling and distributing contraceptives, and administering immunizations. The following level was neighborhoods which had approximately 50,000 people. Each neighborhood had a general hospital with a staff of 90 people including seven Western-trained physicians. Districts were the next level with 400,000 people and included both research and general hospitals. Several districts made up a city (Sidel & Sidel, 1981).

Figure 2

CHAIN OF HEALTH CARE SERVICES IN THE CHINESE CITIES

In both counties and cities, from the initial point of contact, a clearly organized system of referral led level by level
up to a plateau of sophisticated medical specialization. The patient with a problem that could not be handled at one level of this decentralized structure moved on to the level above. The system has been an efficient and low cost one. Moreover, it has advantages of building social cohesion and local self-reliance by emphasizing neighborliness and service of others from the lowest point to the upper level.

In Mexico, if the decentralization of governmental health policies are to work and the constitutional status granting the right to health care to the population is to be realized, there needs to be a shift from a curative mindset to one of health promotion and prevention. There have been some encouraging signs. The government, committed to demographic control, has integrated family planning into welfare and social security programs (Horn, 1985). In addition, the National Health Department's budget was 30% larger this year than last year's, totaling close to one billion dollars (El Paso Times, 1990). Mexican health journals have reflected the preventive position WHO and PAHO hold as well as recommending social medicine. Different social agencies began to include information about child and infant welfare, programs on nutrition and feeding, and training of paraprofessionals and midwives (Taylor, 1974).

Dr. Hector Perez-Coronado (1990), the physician in charge of public health services for the state of Chihuahua in Ciudad Juarez, wrote that in meeting the health goals for the nation and following the decentralization process of providing primary health care, Mexico has established various state responsibilities which include:

- Detecting and referring cases not treatable at the first point of contact to a different level of health assistance;
- Promoting basic health practices;
- Promoting community participation for health action;
- Informing and enabling the population to care for their own health;
- Identifying and encouraging the training of non-medical individuals.

An example of decentralization, promotion efforts, and prevention has occurred in the colonias surrounding Ciudad
Juarez. The Coordinated Public Services for the State of Chihuahua Agency in Ciudad Juarez supervised 14 community centers (basic health care clinics) under the Secretariat of Health. The centers are strategically located to serve as many people as possible with primary care and primary and secondary prevention. Health education, vaccinations, consulting, medication distribution, and basic examinations take place in these clinics. The physicians staffing these clinics are graduates from the University of Juarez Medical School. They have completed their residency at some local hospital and are serving the state for one year under the social security system. The clinics also have a director, health educators, nurses, coordinators, and other support personnel. The clinics desire to fulfill the health needs of the majority of the people through health promotion and primary and secondary prevention. Those persons who cannot be treated at the clinics are then referred to more specialized services at the General Hospital. The educational thrust the clinics promote is self-responsibility and community concern.

Conclusion

China's health care delivery model, which uses concerned citizens to provide health education, referral services, consultations and family planning, is working. Recent evidence suggests that the system is adapting to current social changes and exhibits viability and vitality. Mexico, which has a national directive to deliver health to all its citizens, could innovatively include some of China's emphasis on health care. An organization including smaller groups at the pre-clinic level should be established to furnish more individualized attention. Lay people in roles such as the barefoot doctor could be involved in order to encourage preventative measures as well as provide early detection of health problems requiring special attention. The current struggling economy of Mexico has influenced the dissemination of health care. Yet with a decentralization policy already in place, Mexico could easily do what China has done—develop a system that delivered so much to so many for so little.
A system of decentralizing state public health departments and recruiting other “health workers” might be the mechanism that can positively affect the health of our country. Could the principle of empowering and involving people to care for their own health be applied and implemented in poor and rural areas of the United States—especially along the U.S.-Mexico border? An expansion of lay health worker programs in on-going prenatal clinics in Arizona and migrant health clinics in other parts of the U.S. could serve as additional models for border areas (Meister & Guernsey de Zapien, 1990; Watkins, et. al., 1990).

Works Cited


