Health Care Reform in China

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I. History

Post-1949

Since the founding of the People's Republic of China, the goal of health programs has been to provide care to every member of the population and to make maximum use of limited health-care personnel, equipment, and financial resources. The emphasis has been on preventive rather than curative medicine. The health of the people has been dramatically improved as reflected by the remarkable increase in average life expectancy from about thirty-two years in 1950 to sixty-nine years in 1985. [1]

After 1949 the Ministry of Public Health was responsible for all health care activities and established and supervised all facets of health policy. Along with a system of national, provincial-level, and local facilities, the ministry regulated a network of industrial and state enterprise hospitals and other facilities covering the health needs of workers of those enterprises. In 1981 this additional network provided approximately 25 percent of the country's total health services. Health care was provided in both rural and urban areas through a three-tiered system. In rural areas the first tier was made up of barefoot doctors[2] working out of village medical centers. They provided preventive and primary care services, with an average of two doctors per 1,000 people[3] . At the next level were the township health centers, which functioned primarily as out-patient clinics for about 10,000 to 30,000 people each[4]. These centers had about ten to thirty beds each, and the most qualified members of the staff were junior doctors[5]. The two lower-level tiers made up the "rural collective health system" that provided most of the country's medical care. Only the most seriously ill patients were referred to the third and final tier, the county hospitals, which served 200,000 to 600,000 people each and were staffed by senior doctors who held degrees from 5-year medical schools[6]. Health care in urban areas was provided by paramedical personnel assigned to factories and neighborhood health stations. If more professional care was necessary the patient was sent to a district hospital, and the most serious cases were handled by municipal hospitals. To ensure a higher level of care, a number of state enterprises and government agencies sent their employees directly to district or municipal hospitals, avoiding the paramedical, or barefoot doctor, stage.

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[1] Annual Statistics of China's Health Care(1986), the Ministry of Health, China, page 156.
[2] "Barefoot doctors" are paramedics living in the rural area who see patients in their households.
[3] Annual Statistics of China's Health Care(1980), the Ministry of Health, China, page 234.
[4] Ibid., page 305.
[5] In China, some medical schools offer two year degrees. These students will work in clinics or hospitals in the rural areas that lots of four (five or more) year graduates do not want to work for due to the poor living standards.
[6] Annual Statistics of China's Health Care(1980), the Ministry of Health, China, page 86.

An emphasis on public health and preventive treatment characterized health policy from the beginning of the 1950s. At that time the party began to mobilize the population to engage in mass "patriotic health campaigns" aimed at improving the low level of environmental sanitation and hygiene and attacking certain diseases. One of the best examples of this approach was the mass assaults on the "four pests"--rats, sparrows, flies, and mosquitoes--and on schistosoma-carrying snails. Particular efforts were devoted in the health campaigns to improving water quality through such measures as deep-well construction and human-waste treatment. Only in the larger cities had human waste been centrally disposed. In the countryside, where "night soil" has always been collected and applied to the fields as fertilizer, it was a major source of disease.

As a result of preventive efforts, such epidemic diseases as cholera, plague, typhoid, and scarlet fever have almost disappeared. The mass mobilization approach proved particularly successful in the fight against syphilis, which was eliminated by the 1960s[7]. The incidence of other infectious and parasitic diseases was reduced and controlled. Relaxation of certain sanitation and anti-epidemic programs since the 1960s, however, may have resulted in some increased incidence of disease, such as schistosomiasis.

Post-1970s

In the early 1980s, continuing deficiencies in human-waste treatment were indicated by the persistence of such diseases as hookworm and schistosomiasis. Tuberculosis, a major health hazard in 1949, remained a big problem in the 1980s, as did hepatitis, malaria, and dysentery. In the late 1980s, the need for health education and improved sanitation was still apparent, but it was more difficult to carry out the health care campaigns because of the breakdown of the collective system. By the mid-1980s, China recognized the acquired immune deficiency syndrome (AIDS) virus as a health threat but remained relatively unaffected by the deadly disease. Following a 1987 regional World Health Organization meeting, the Chinese government announced it would join the global fight against AIDS, which would involve quarantine inspection of people entering China from abroad, medical supervision of people vulnerable to AIDS, and establishment of AIDS laboratories in coastal cities. Additionally, it was announced that China was experimenting with the use of traditional medicine to treat AIDS.

In the mid-1980s the leading causes of death in China were similar to those in the industrialized world: cancer, cerebrovascular disease, and heart disease. Some of the more prevalent forms of fatal cancers included cancer of the stomach, esophagus, liver, lung, and colon-rectum. The frequency of these diseases was greater for men than for women, and lung cancer mortality was much greater in higher income areas. The degree of risk for different kinds of cancers varied widely by region. For example, due to the difference of living habits and types of food that people eat, nasopharyngeal cancer was found primarily in south China, while the incidence of esophageal cancer was higher in the north.

To address concerns over health, the Chinese greatly increased the number and quality of health care personnel, although in 1986 serious shortages still existed. In 1949 only 33,000 nurses and 363,000 physicians were practicing; by 1985 the numbers had risen to 637,000 nurses

[7] Rao Keqin, "The Public Health Reform in China", The Health Economics, 2006 (8), page 65. Mr. Rao serves as Director General of Statistics and Information Center of the Ministry of Health of P.R.C.

and 1.4 million physicians. Some 436,000 physicians' assistants were trained in Western medicine. Official Chinese statistics also reported that the number of paramedics increased from about 485,400 in 1975 to more than 853,400 in 1982. The number of students in medical and pharmaceutical colleges in China rose from about 100,000 in 1975 to approximately 160,000 in 1982. [8]

Efforts were made to improve and expand medical facilities. The number of hospital beds increased from 1.7 million in 1976 to 2.2 million in 1984, or to 2 beds per 1,000 compared with 4.5 beds per 1,000 in 1981 in the United States. The number of hospitals increased from 63,000 in 1976 to 67,000 in 1984, and the number of specialized hospitals and scientific research institutions doubled during the same period. [9]

The availability and quality of health care varied widely from city to countryside. According to 1982 census data, in rural areas the crude death rate was 1.6 per 1,000 higher than in urban areas and life expectancy was about 4 years lower. The number of senior physicians per 1,000 populations was about 10 times greater in urban areas than in rural ones; state expenditure on medical care was more than ¥26 per capita in urban areas and less than ¥3 per capita in rural areas. There were also about twice as many hospital beds in urban areas as in rural areas.

In 1987 economic reforms were causing a fundamental transformation of the rural health care system. The decollectivization of agriculture resulted in a decreased desire on the part of the rural populations to support the collective welfare system, of which health care was a part. In 1984 surveys showed that only 40 to 45 percent of the rural population was covered by an organized cooperative medical system, as compared with 80 to 90 percent in 1979.[10]

This shift entailed a number of important consequences for rural health care. The lack of financial resources for the cooperatives resulted in a decrease in the number of barefoot doctors, which meant that health education and primary and home care suffered and that in some villages sanitation and water supplies were checked less frequently. Also, the failure of the cooperative health care system limited the funds available for continuing education for barefoot doctors, thus hindering their ability to provide adequate preventive and curative services. The costs of medical treatment increased, deterring some patients from obtaining necessary medical attention. If the patients could not pay for services received, then the financial responsibility fell on the hospitals and commune health centers, in some cases creating large debts.

Although the practice of traditional Chinese medicine was strongly promoted by the Chinese leadership and remained a major component of health care, Western medicine was gaining increasing acceptance in the 1970s and 1980s. For example, the number of physicians and pharmacists trained in Western medicine reportedly increased by 225,000 from 1976 to 1981, and the number of physicians' assistants trained in Western medicine increased by about 50,000. In 1981 there were reportedly 516,000 senior physicians trained in Western medicine and

[8] Ibid., page 45.
[9] Ibid., page 67.
[10] Ibid., page 70.

290,000 senior physicians trained in traditional Chinese medicine. The goal of China's medical professionals is to synthesize the best elements of traditional and Western approaches. [11]

In practice, however, this combination has not always worked smoothly. In many respects, physicians trained in traditional medicine and those trained in Western medicine constitute separate groups with different interests. For instance, physicians trained in Western medicine have been somewhat reluctant to accept "unscientific" traditional practices, and traditional doctors have sought to preserve authority in their own field. Although Chinese medical schools that provided training in Western medicine also provided some instruction in traditional medicine, relatively few physicians were regarded as competent in both areas in the mid-1980s.[12]

The extent to which traditional and Western treatment methods were combined and integrated in the major hospitals varied greatly. Some hospitals and medical schools of purely traditional medicine were established. In most urban hospitals, the pattern seemed to be to establish separate departments for traditional and Western treatment. In the county hospitals, however, traditional medicine received greater emphasis.

Traditional medicine depends on herbal treatments, acupuncture, acupressure, moxibustion (the burning of herbs over acupuncture points), and "cupping" of skin with heated bamboo. Such approaches are believed to be most effective in treating minor and chronic diseases, in part because of little side effects. Traditional treatments may be used for more serious conditions as well, particularly for such acute abdominal conditions as appendicitis, pancreatitis, and gallstones; sometimes traditional treatments are used in combination with Western treatments.

Although health care in China developed in very positive ways by the mid-1980s, it exacerbated the problem of overpopulation. In 1987 China was faced with a population four times that of the United States and over three times that of the Soviet Union. Birth control programs implemented in the 1970s succeeded in reducing the birth rate, but the figure is still growing.

II. Today

The Chinese government still faces a huge task in trying to provide medical and welfare services adequate to meet the basic needs of the immense number of citizens spread over a vast area. Although China's overall wealth has grown dramatically since the mid-1980s — per capita income has increased over 10 times, and caloric intake has become comparable to that for Western Europe--a great many of the people live at socioeconomic levels far below the national average. The medical system, moreover, labors under the tension of whether to stress quality of care or to spread scarce medical resources as widely as possible.

At the same time, the medical establishment also more or less has been affected by this major influence: along with 1980s initial period people's commune disintegration, the original rural cooperatives medical service system rapidly disintegrated in the majority of areas. In the cities scope, the public health services system and the labor insurance medical service system also gradually declined. But the medical service relates to national economy and the people's

[11] Zhou Dongbo, "the delivery of China's Health Service", the Health Economics, 2005(2), page 124.
[12] Ibid., page 98.

livelihood and the social stability, and the related problems are extremely complex, the establishment of this new system is slower continuously, compared to other professions.

Primary Care Reform

China has no national primary care system, in particular general practice. The introduction of general practice in parts of urban China began in 1999. Acceptance of general practice has been slow against the background of a strong urban tradition of hospitals as primary care providers, the widespread belief that specialists are more skilled than generalists even for minor diseases, and the perceived right of the individual to use the provider of their choice. But these attitudes are changing slowly. In east-coast cities, such as in Zhejiang, Jiangsu, and Guangdong provinces, general practitioners (GPs) are acquiring a good local reputation and are attracting large numbers of patients.[13]

Now there are several important problems facing health policy-makers. First, a system that keeps basic wages low, but allows doctors to make money from prescriptions and investigations, leads to perverse incentives and inefficiency at all levels. Second, as in many other countries, to develop systems of health insurance and community financing which will allow coverage for most people is a huge challenge when the population is ageing and treatments are becoming more sophisticated and expensive.

Chronic diseases are now the main cause of death and disability worldwide, and China is experiencing the same health problems as western countries. The difference is that the problems occur in a country with the largest population in the world yet relatively limited health resources. To tackle the challenge posed by chronic diseases, a robust primary care system has been called for as necessary. This is the weakness of China's health system, as, especially in big cities, health care is almost entirely hospital-based and people with minor illnesses prefer to be seen by doctors in large hospitals. The qualification and professional competence of general practitioners is always questioned because of lack of training and appropriate regulation. General practitioners therefore fail to function well as gatekeepers. In such a situation, it is very common that doctors in large hospitals see about 30–40 patients within the first 4 hours each day. Doctors hardly have any time to talk with patients, getting to know what they really need, and seldom give advice on diet, physical activity, etc, which is the key to high-quality care for chronic diseases. When the patient is a passive recipient, optimum outcomes cannot be expected.

The Basic Medical Insurance for Urban Employees (BMIUE)

Prior to 1990s, China had a health insurance system that provided virtually free coverage for people employed in urban state enterprises and relatively inexpensive coverage for their families. The situation for workers in the rural areas or in urban employment outside the state sector is far more varied. From the mid-1990s, along with the introduction of the market economy, Chinese government started to establish a new medical insurance for the urban employees, called the Basic Medical Insurance for Urban Employees (BMIUE). BMIUE is a system not only the state-owned enterprises employees can enroll. It is available to any other

[13] Ibid.

pattern of enterprises employees and also to government employees. Most of the funds come from the contribution of the employers and the employees. At present, the average contribution rate of the whole nations is 8% of the whole wages (6% comes from the employers, 2% comes from the employees), there is a little difference between different provinces. All of the employees' contribution and 30% of the employers' contribution goes to an Individual Account, which can be used for outpatient expenditure; the remainder goes to a social pooling, which are used for inpatient expenditure. The government subsidizes the system via tax deduction, that is, the contribution of the employers and the employees are free of income taxation. In the year of 2007, there are nearly 180 million people enrolled in this system.

The New Rural Cooperative Medical Care System (NRCMCS)

New Rural Cooperative Medical Care System is a new system which was started from the year of 2005. Any rural resident is eligible to enroll, but you must enroll in the unit of family. It intended to make health care more affordable for the rural residents. The most prominent characteristic of the system is that 80% percent of the funds come from the government. At present, the annual amount of the contribution is 100 Chinese Yuan (US$15). Of that, 40 Yuan is paid in by the central government, 40 Yuan by the provincial government and a contribution of 20 Yuan is made by the farmer. As of the end of 2007, over 80% of the whole rural population had signed up (about 726 million people).

The Basic Medical Insurance for Urban Residents (BMIUR)

From the year 2007, Chinese government set up another new medical insurance, named the Basic Medical Insurance for Urban Residents (BMIUR). This new system is open for any urban citizens who are ineligible to enroll the BMIUE system, including senior residents, children, students from primary school to college, etc. Similar to NRCMCS, the government also subsidizes the BMIUR enrollees. The amount is just the same as the NRCMCS. But under the BMIUR, the individual contribution is greater than the farmer under the NRCMCS, due to the much higher cost in cities than in rural areas. At the end of the year 2007, 25.8 million urban residents enrolled the BMIUR system.

The Medical Assistant System (MAS)

The Medical Assistant System is a totally public-funded system which began in 2003 in rural areas and from 2005 in urban cities. The MAS's intention comprises two parts: one is to support the poor rural/urban residents whose income is below the local Minimum Living Standard to enroll the NRCMCS/BMIUR system, the other is to subsidize these poor people who cannot afford the amount which should be paid by themselves.

Performance and Challenges

The health of the Chinese populace has improved considerably since 1949. Average life expectancy reached 73 in 2005, which has increased by about three decades and now ranks nearly at the level of that in advanced industrial societies. The infant mortality went down from 200 per thousand in 1949 to 15 per thousand in 2007, and the pregnant mortality went down from 15,000/mil in 1949 to 366/mil in 2007. The average staffs and hospital beds for every 1,000 persons of the populace are 3.68 and 2.63 in 2007. Many communicable diseases, such as plague,

smallpox, cholera, and typhus, have either been wiped out or brought under control. And at the same time, the percentage of the health care expenditure of GDP is relatively low (5.55% in 2004, while in the US, it was around 16%, world average was 6.3%). [14]

Meanwhile the health care system in China is facing a lot of challenges. In recent years, the health care system was complained about by most of the country's population, and also focused on by the international society, especially after SARS. According to the third medical service survey which was held by the Ministry of Health of China in 2003, the percentage of patients who need to get a medical service but actually do not receive went up from 36.4% in the year of 1993 to 48.9% in 2003； the percentage of patients who need to be hospitalized but actually not reached 29.6%. In rural areas, the percentage of farmers who were led to poverty because of illness went up to 33.4%. At the same time, the unfairness of health care is getting worse, the gap of the health care between the urban and rural area, east and west area, are getting larger and larger. In the year of 2005, the mortality rate of the infants in urban area is 9.1‰, but in rural area is up to 21.6‰, the mortality of children under 5 years old in urban areas is 10.7‰, but in rural areas is up to 25.7‰, the mortality of pregnant women in urban area is 25/100mil, but in rural area is as high as 53.8/100mil. In the year of 2000, according to the health care performance evaluation which was held by the WHO, among the 191 member countries, China ranked at 144. As to the fairness of the health care system, China ranked at 188. All of these problems led the health care system of China to an awkward situation, so--called "kan bing nan, kan bing gui", which means it's very difficult to see a doctor, and also very expensive to utilize the health care service. [15]

III. Problems of and Comments

Problems

1. The amount of the government expenditure on health care is relatively low. In the year of 2004, the government expenditure on health care of China was only 17% of the total health care expenditure, using the comparable method with other countries, put the medical insurance expenditure into government expenditure, the percentage will be 38.5%, and it's also a relatively low number.

2. The health care providers are inefficient, due to that the providers lack of competition. According to the Ministry of Health of China, over 90% of the health care resource (including hospitals, clinics, public health facilities, etc) is publicly funded. This forms a monopoly in the health care market, which will inevitably lead to inefficiency.

3. The medical insurance system has a lot of defects. Although a framework of medical insurance system according to different groups of people has been set up, it still has a lot of defects: First, the coverage is relatively low, many people have no medical insurance at all. Now, the three basic systems-- BMIUE, BMIUR, NRCMCS, covered only a little more than 900 million people, nearly 400 million people are without any medical insurance. Second, the benefit level is rather low, the percentage of individual payment is rather high. According to the

[14] Annual Statistics of China's Health Care(2005), the Ministry of Health, China, page 247.
[15] Rao Keqin, "The Public Health Reform in China", The Health Economics, 2006, page 65.

Ministry of Health of China, in the year of 2007, nearly half of the total health care expenditure was paid out-of-pocket. As for the NRCMCS, the system pays only about 30% of the total expenditure, most of the cost is paid individually. Third, the insurance authorities are totally public-funded, they have little effect on the cost control.

4. The public health system is rather weak. In China, public health was ignored for a long time. The government paid not so much on public health program, such as public health education, the prevention and control on certain chronic diseases, especially in rural areas.

5. Lack of a Basic Medicine System (BMS). BMS is international experience to ensure the access of basic medicine, as well as to control the cost. The WHO recommended BMS catalog comprises 312 different medicines. But in China, there is not a BMS. The production and circulation of medicine is in a situation of out-of-order.

Comments

In the year of 2006, the government of China set up a working group to research new measures on health care reform. The group consists of 16 government departments related to the reform, such as the Ministry of Health, the Ministry of Finance, the National Committee on Development and Reform, the Ministry of Manpower resource and Social Security, etc. But due to the complication of the big topic, even up to now, the new policy has not been released.

In order to solve the problems, the Chinese government must push forward the health care reform as soon as possible. The reform policy should contain at least 5 points:

1. To increase the amount of public funding. In the future years, along with the rapid increase of government revenue (the annual increase rate is over 20%), the government of different levels should put much emphasis on health care and invest more money on this area. The central government should enlarge the subsidization to the underdeveloped areas by transfer payments. Much of the incremental investment should go to the rural area, to improve the public health system, to improve primary care, and to subsidize the vulnerable group enroll different health care programs.

2. To introduce competition to the health care providers. In the health reform, the Chinese government must highlight the providers' reform. One important step is to privatize a certain amount (e.g. 50%) of the public-funded resource, or encourage the private sector to invest in health care service, especially on primary care service. At the same time, it is necessary to establish a referral system, in which the patients must at first go to primary care clinics otherwise they cannot go to hospitals. The referral system will alleviate the pressure on the hospitals to some extent. To do this, an important premise is to improve the quality of the health care service in primary care otherwise the referral system will doom to be a failure.

3. To consummate the medical insurance system. The first thing to do is to enlarge the coverage of the three basic insurance systems, to let every person covered by according system. The second thing is to increase the government subsidy, especially to the vulnerable, so as to lift the benefit level of each system, and minimize the percentage of individual payment. It will alleviate the patient's pressure greatly if individual payment percentage drops to 20%--30%. The third thing is that, in the long run, the insurance authorities should be privatized, and should

achieve to control the health care cost through introduction of new payment approaches, such as capitation.

4. To strengthen the public health. Public health can play a crucial role on the control of the morbidity. The government should invest more funds on public health. It is necessary for the government to set up a public health package, defining the detailed public health programs which all the residents can access for free. Meanwhile, education on public health is very important. The government should let the populace know more information about health care, form healthy habits, turn away from smoking, drugs, etc.

5. To set up a Basic Medicine System. It is an urgent task for the Chinese government to set up its own BMS, which must be approved by experts. The price of the medicine contained in the BMS must be controlled by the government. In order to control the cost of medicine, the government also should carry out related policies to encourage the production and utilization of domestic medicines, and confine the import of high-tech or patent medicines.