Lessons from the past

Poverty and market forces combine to keep rural China unhealthy.

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The outbreak of severe acute respiratory syndrome (SARS) in China in 2003 and its subsequent spread to 30 other countries caused great alarm worldwide, and opened China to a new level of public scrutiny. After the outbreak, the Chinese government and the global community began to look at China's current health infrastructure and its leadership in more detail. China also faces a projected AIDS epidemic, which could infect up to 10% of the population by 2015. Sadly, as China has got richer, the inequalities of its health system have grown worse. And although the Chinese government and its Ministry of Health are now taking steps to rectify this, more emphasis must be placed on the health of the poor in rural areas, and new ways to fight greed and corruption are needed.

Despite these tremendous difficulties, we are optimistic that China can revitalize its collapsing public health system. We must not forget that between 1950 and 1970 China achieved much more in public health — with far fewer resources. Today, China is one of the world's largest economies, and thus has the capacity to face its public health challenges — if it decides to do so. The Chinese response to SARS shows that the government can respond swiftly and effectively to critical health needs, especially if persuaded to do so by external or internal public opinion.

The past: glorious beginning

After the formation of the People's Republic of China in 1949, the Chinese government created a highly efficient public health system using very limited resources, which was designed to be in harmony with Chinese health practices. The system involved practitioners of both traditional and western medicine. The national health policies of Chairman Mao Zedong resulted in several highly successful campaigns, which made China a role model for other developing countries to emulate¹.

The quality of health care in urban areas of China usually far surpassed that available in rural areas. To correct this inequity, from 1949 to 1980 China attempted to provide equitable distribution of adequate health care to all. A 'cooperative medical insurance system' was introduced into rural China to support three tiers of health care². At the first level, the government provided six months to one year of training for 'barefoot doctors'. These health care providers worked in village health centres,

Life's lottery: urban Chinese expect western-style health care, whereas the rural poor rely on cheaper clinics.

applying basic medical knowledge relevant to common diseases. At the second level were township hospitals and health centres. These facilities usually had 10–40 beds with qualified staff and a few doctors, who had trained for 3–5 years in medical schools. Only the most seriously ill patients were referred to the third tier, the state enterprise hospitals, which were supplied with the best equipment and staffed with doctors who had spent a minimum of five years at medical schools.

In addition, the government introduced systematic 'prevention first' health campaigns against specific diseases. As a result, public health in China improved dramatically. Many epidemic diseases, such as plague, cholera, typhoid, scarlet fever and syphilis, were brought under good control, or totally eradicated³. Sexually transmitted diseases (STDs) were so rare in China in the early 1980s that this topic was dropped from the medical school curriculum. The average life expectancy increased from 35 years in 1949 to 70 years in the early 1980s. Consequently, the Chinese experiment became the envy of the world, as no other large population had been so effectively, and so quickly, brought under the protective umbrella of a health-care system for all.

The present: tragic price

The transformation of China's economy from a 'social system' to a 'market-oriented system' began in 1978. Since then, China

has achieved remarkable economic development. The total poverty-stricken population, as defined by the government, decreased dramatically from 250 million in 1978 to 42 million in 1998. Yet the disparity between the rich and the poor has widened and despite ongoing economic growth, total government expenditure on public health has remained at the very low level of 5% of GDP (see graph, overleaf)^{4,5}.

Worse still, although spending on health, (as a percentage of total government expenditure) decreased from 28% to 14% between 1981 and 1993, allocation to the rural 'cooperative medical-insurance system' decreased from 20% to 2% (ref. 6). The health system has essentially collapsed in rural areas, and lack of financial support has forced many doctors out of health care altogether or into private practice, working on a fee-for-service basis. Low-income families in urban areas are now not covered by any insurance. The focus of 'prevention first' campaigns has been diverted. Infectious diseases that had been brought under control, such as tuberculosis and STDs, have re-emerged. Furthermore,

HIV/AIDS seems to have reached epidemic status in parts of China, although good epidemiological data are lacking.

In some rural areas HIV/AIDS is common because poverty forced many villagers to sell their blood to make a living, and they were infected from the replacement of mixed blood products and contaminated needles used during collection. About 800,000–1,000,000 HIV-positive people are now believed to live in the most poverty stricken rural areas of China. In addition to HIV/AIDS, hepatitis and liver cancer are also prevalent, and the scant attention paid to them increases their burden and toll. Because many low-income families have no health insurance or resources to purchase expensive medicines, such diseases are a premature death sentence.

Conflict of interest among doctors, hospitals and patients makes the situation even worse. Clinics and hospitals often prescribe excessive amounts of drugs, which are sold at high prices — a practice that has increased healthcare costs tremendously in the past decade. The corrupt practice of collecting a personal bribe or 'little red bag' has become routine among many doctors, especially in larger hospitals. Therefore Chinese citizens in most rural areas and low-income families in urban areas have difficulty gaining access to a doctor, are 'afraid' to get ill, or just do not seek treatment, even if they have a serious disease.

Contributing to this worsening picture are unhealthy lifestyles in China, exemplified by heavy smoking and poor diets. Such habits, together with bad industrial planning, such as siting residential housing next to substantial environmental pollution, have contributed to a dramatic rise in chronic diseases, including cancer, cardiovascular disease, hypertension and diabetes⁷.

Finally, most high-quality hospitals, health care facilities and staff are located in urban areas and focus on disease treatment rather than prevention. According to the *World Health Report 2000* (ref. 8) the rural poor usually cannot receive quality health care, and in 'fairness of financial contribution' in terms of health spending relative to income, China was ranked 188 out of 191 countries. Corruption plays a big part in creating these inequities. In 2003, the Corruption Perception Index published by Transparency International placed China 66 out of 133 countries⁹. Today, corruption is found not only in health systems, but has become a major 'social disease' in China.

The future: rebuilding

There are not many reasons to admire Mao's economic policy, but his slogan "Give priority to prevention and provision of medical and health care in rural areas" was correct then and remains useful today. Rebuilding a primary health system for the 800 million people who live in rural areas

should be an immediate priority for the Chinese government, and there are signs that top government leaders are finally recognizing this. For example, in 2004 the People's Congress made 'three rural matters' (rural areas, rural agriculture, and rural populations) the country's highest priority, with health care being an important component in each. And in December 2004, the Ministry of Health announced a scheme in which, during the next three years, 10,000 urban doctors will be sent to rural areas to help with training and medical services⁵.

These plans will build on new strategies, outlined by the ministry in 2004, which include developing a response system for

emerging public health events and emphasizing the control of major infectious diseases, as well as establishing a "new type of cooperative medical care system"⁵. In the past year, around 333 counties in 30 provinces, with rural populations of about 107 million, joined the new insurance system⁵. In this, the central government contributes 10 Chinese Yuan (US\$1.25) for each person a year, with another 10 yuan requested from the local government and from individual farmers. The government hopes this system will go countrywide by 2010. Unfortunately, few local governments in the poorest areas, or rural populations themselves, can afford their share of the costs. According to a 2004 Ministry of Health report⁵, some local governments have simply increased general local 'taxes', or made fraudulent claims and falsified the number of participants. Such practices make the future of the project uncertain.

Since 2004, hepatitis-B vaccines became available to newborn children at no cost through a national vaccine programme. Considering that China has the largest hepatitis-B-infected population in the world (approximately 100 million people), such a prevention programme should soon produce results. But if the Chinese government is serious about addressing major infectious diseases — such as HIV/AIDS, tuberculosis and schistosomiasis, it needs to introduce more 'prevention first' policies.

As much as we welcome these changes, more is needed. Although the government is now increasing its spending on public health, the amount is still too small to meet the needs of 1.3 billion people. According to the World Health Organization, the per capita government expenditure on health in China was only \$18 in 2001 (ref. 4). This number is significantly lower than those of other developing countries with comparable incomes during the same period of time, such as Argentina at \$679, Chile at \$303, Brazil at \$222, Cuba at \$185 and Malaysia at \$77. Continuing to dramatically increase investment in public health is critical for China's continued economic growth and social stability.

Reform from within

One cannot expect China's public health system to thrive without simultaneously conducting an anticorruption campaign that prevents the over-pricing of medical care and pharmaceuticals, while guarding against preferential treatment for those with better finances and a 'little red bag'. Medical ethics in China is in its infancy, but training medical students, clinicians, public-health officers and government officials in the fundamentals of medical ethics is essential for successful reconstruction of the system. The Chinese government is finally starting to pay attention to this problem. In 2004 they reported that 229 doctors and 1,587 people were 'punished' for collecting 'red bags' and overpricing medical care, respectively⁵. Sadly, corruption exists in almost every professional activity in China, as well as most levels of government. An effective campaign to end these practices must extend to fields beyond health care.

None of these goals is easily accomplished. But the key to solving the immediate problems of China's public health is now in the hands of the Chinese government. Ignoring the public-health crisis will eventually lead to other socio-political problems and will ultimately limit economic growth. Initiating a comprehensive, prevention-focused programme today will mean a healthy and prosperous China tomorrow. ■

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