

HEALTH AND DEVELOPMENT POLICY BRIEF

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THE NEED FOR EFFECTIVE GOVERNMENT INTERVENTION TO REDUCE RURAL AND URBAN HEALTH DISPARITIES IN CHINA

Many countries in the Asian and Pacific region have a wide gap in health outcomes between rural and urban areas. While such disparity seems to be a part of the common development pattern, the gap can be narrowed by effective Government intervention in the health sector before the situation worsens to the detriment of socioeconomic development. This policy brief uses a case study of China to underline the health-care challenges faced by many countries in the region and possible remedies to address them.

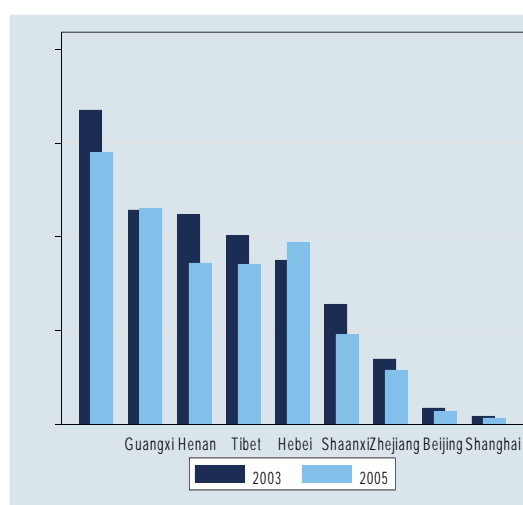
China's economy has experienced a rapid transformation and record growth over the last three decades since the start of economic reforms in 1978. With almost 8 per cent annual growth in GDP for the last 30 years, millions of Chinese people have been lifted out of poverty. Despite China's resounding economic success, a significant number of people in rural areas are not benefiting fully from the country's high economic growth, resulting, inter alia, in increasing health disparities and their relatively poor health outcomes.

According to the China Human Development Report (2005), China's national Gini coefficient for income distribution rose from 0.30 in 1982 to 0.45 in 2002.¹ It is easy to imagine how widening gaps in incomes can translate into increasing health disparities. However, beyond income, insights into the other driving forces behind health disparities could help further identify how China and other countries in the region can appropriately deal with resolving the health challenges they face.

Significant health disparities

Striking patterns on spatial disparity can be observed from Figure 1. The percentages of underweight children in Qinghai and Guangxi provinces, hosts to large proportions of rural populations, are seen to be significantly higher than those in developed urban areas such as Beijing and Shanghai. Furthermore, uneven progress in different provinces/ municipalities in decreasing the share of underweight children was found between 2003 and 2005.

Figure 1: Percentage of underweight children in selected provinces/ municipalities



Source: Centre for Statistics Information, Ministry of Health, *China Health Yearbook* (2006).

Table 1 also illustrates spatial disparities: health outcomes for rural residents were much worse than their urban counterparts. Overall, the maternal mortality ratio (MMR) has dropped in both urban and rural areas in China. However, the gap in MMR between rural and urban areas widened from 1.8 times in 1994 to 2.4 times in 2004. Regarding infant mortality, China has made significant progress in reducing the number of deaths per thousand infants from 46.3 to 26.1 in cities and from 100 to 63 in rural areas between 1991 and 2004. Nevertheless, infant mortality rates remained two to three times higher in rural than in urban areas. Similar patterns of disparities for under-five child mortality were also found over the same period².

² Data source: China Health Yearbook (2006).

¹ UNDP and China Development Research Foundation, (2005). *China Human Development Report*, Beijing. http://hdr.undp.org/reports/detail_reports.cfm?view=902 (Accessed on 27 July 2007).

Table 1. Rural-urban differentials in maternal mortality ratio

Year	Urban	Rural	Rural/urban ratio
1994	44.1	77.5	1.8
2001	33.1	61.9	1.9
2004	26.1	63	2.4

Source: Centre for Statistics Information, Ministry of Health, *China Health Yearbook* (2006).

Note: The maternal mortality ratio (MMR) is maternal deaths per 100 000 live births in the surveillance region. The MMR before 1949 was 150 per 100 000 live births.

- Fiscal decentralization
- Medical cost escalation
- A lack of the right incentive structures for medical personnel and accountability mechanisms.

Collapse of the rural cooperative medical system.

The poor record in health in rural areas coincided with the collapse of the rural cooperative medical system, which began with economic reforms in 1978³. By the end of the pre-reform period (1952-77), “bare-foot doctors”⁴ and non-profit clinics were set up in almost all villages. The number of hospital beds and health-care personnel per thousand residents in rural areas rose considerably between 1952 and 1980, from 0.08 and 0.95 to 1.48 and 1.81, respectively. Benefiting from widely available health care, the life expectancy of Chinese people was much higher than those in most developing countries and even many middle-income countries, by the end of the pre-reform period.

Understanding the driving forces behind disparities

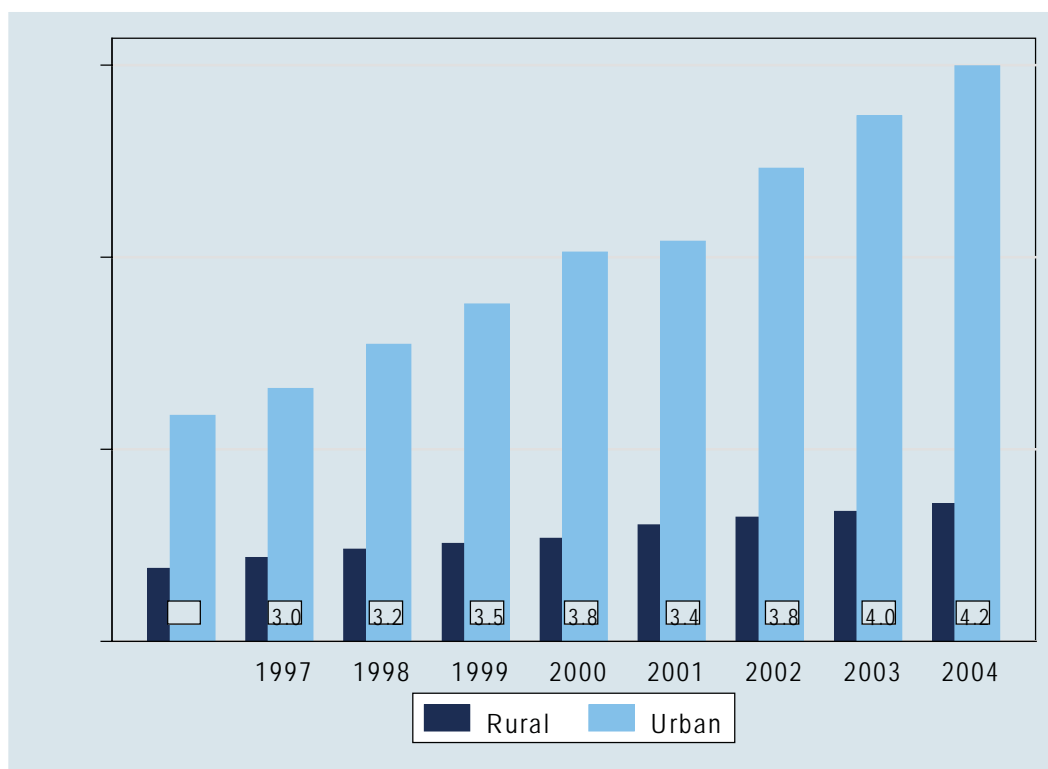
China has not been successful so far in sufficiently bridging the health gap between the health status of the rural and urban population. Besides income, other driving forces behind the disparities should also be well understood and policy responses should be put in place to address the challenges they pose. Other than income, the main reasons behind such disparities include:

- The collapse of the rural cooperative medical system, and consequent lack of insurance coverage

3 Zhang, X., and R. Kanbur, (2005). “Spatial Inequality in Education and Health Care in China.” *China Economic Review* 16: 189-204.

4 Barefoot doctors were farmers who got basic medical training and worked in rural villages in China to bring health care to areas where urban-trained doctors would not settle. The barefoot doctor system was indigenous and low-cost, but came to an end in 1981 with the termination of the commune system of agricultural cooperatives.

Figure 2: Widening gap in public resource allocations: Government expenditure on health per capita, 1996-2004



Note: value in box is urban/rural ratio, 1 Yuan = US\$6.8 (July, 2008 rate).

Source: Centre for Statistics Information, Ministry of Health, *China Health Yearbook* (2006).

Nevertheless, together with urban economic reforms, rural reforms brought market modalities into the ‘health-care businesses’. To enhance economic efficiency and dynamism, medical care became no longer ‘free’ or ‘low-cost’ in villages. In 2003, just over two decades after the beginning of the economic reforms in 1978⁵, some 79 per cent of the rural population, which previously was, de facto, covered by the old rural cooperative medical system supported by the state, was not covered by any kind of insurance. Compared to the poor coverage in rural areas, residents in urban areas had better coverage of health insurance. Therefore, during the industrialization and urbanization process, rural migrant workers as well as the elderly, women and children who had been left behind in villages became more vulnerable to growing health costs.

Fiscal decentralization. Fiscal decentralization along with the reform process has further limited direct help from the Central Government toward rural health care. Without the Central Government’s continued support, lower levels of Government spending in poor rural regions led to budget cuts on health and other social services. As a consequence, public spending became biased toward urban areas and against the welfare of the rural poor. Increased subsidies by wealthier local governments toward public hospitals often primarily benefited the non-poor residents in large modern cities and rich provinces. The urban-rural government health expenditure ratio increased from three in 1997 to more than four in 2004 (Figure 2).

Insufficient funding of lower levels of government in poor rural areas has led to not only insufficient facilities and health professionals to cure diseases, but also fewer resources for education and early prevention of major diseases. Thus, there is a lack of 1) health education of the targeted population, resulting in young people having little knowledge of issues such as cardiac risk, HIV/AIDS and injuries, among others; 2) public support for regular preventive health screenings and immunization; and 3) public interventions for minimizing risk factors for chronic conditions and diseases, such as smoking and poor nutrition. Widening differences in resource allocation to health care appear to be a major contributing factor to the disparities in health outcomes between rural and urban residents in China.

Escalating medical costs. While a large proportion of the rural population is not yet covered by any kind of health insurance, escalating medical costs create an increasingly vulnerable situation. Table 2 illustrates that

Table 2. Medical costs over time

Year	Health expenditure per patient (Yuan)	
	Out-patient	In-patient
1990	5.0	218.7
1995	10.1	420.2
2000	19.8	710.5
2005	27.3	1004.6
1990-2005	Medical cost growth rate (%)	
	443.1	359.3
1990-2005	CPI growth rate (%)	
	214.4	

Note: health expenditure per patient at constant 1978 Yuan, the authors’ calculation. Source: China Health Yearbook (2006); growth rate of Consumer Price Index (CPI) from 1990 to 2005, source: China Statistical Yearbook (2006).

between 1990 and 2005, China’s health expenditure per out-patient rose from 10.9 Yuan to 59.2 Yuan (constant 1978⁶ prices). Hospital costs escalated by 443 per cent, more than twice as fast as the Consumer Price Index (CPI) which increased 214 per cent over the same period. In stark contrast to high and rising medical costs, disposable income per capita grew by only around 150 per cent during the aforementioned period. In 2005, health expenditure per in-patient visit was nearly twice as much as rural disposable income per capita throughout the year.⁷ Growing post-reform privatization and commercialization of health services together with the collapse of the rural cooperative medical system were likely causes of escalating medical costs and the ‘tightening’ of the relationship between income and health outcomes over time.⁸

Incentive structures and accountability mechanisms.

While the market mechanism was introduced into aspects of health-care provision, there is still a lack of the right kinds of incentive structures and accountability mechanisms in the public health sector. In China, some doctors’ salaries are related to prescription targets. In the absence of government funding, hospitals rely on income from drug sales and diagnostic tests. The profit motive has become a major factor in over-prescribing medicines. This is frequently exposed by the media. A recent study found that more and more child pneumonia patients were resistant to drugs used to treat the disease because of overuse of antibiotics. Such problems have become more worrisome in rural areas since there are few rural health insurance organizations to monitor and

5 Chinese economic reform has been undertaken through a series of phased reforms. It has involved a wide range of reforms: from the agricultural to the industrial sector, from the control of the macroeconomy to the ‘open door policy’, from the development of non-state sectors of the economy to the legal and educational systems. For instance, in the agricultural sector, it assigned land to each farm household and allowed farmers to keep all the products in excess of the amount required by the procurement quota, rather than practising collective farming.

6 The year economic reforms began.

7 Derived from national data.

8 Tandon, A. and J. Zhuang, (2007). “Inclusiveness of Economic Growth in the People’s Republic of China: What Do Population Health Outcomes Tell Us?” ERD Policy Brief No. 47, Asian Development Bank.

control health-care costs. In addition, physicians serving rural health institutions generally have relatively low levels of education and as a consequence the quality of health care provided suffers. Hence, more needs to be done, including incentives to develop the health system in rural areas and enhance its quality.

Recommendations and conclusions

There is an acute need to increase access to health care in China, especially in rural areas, in order to achieve true improvements in people's health. Four recommendations are highlighted below.

First, increase insurance coverage and fill the vacuum through the new government scheme as soon as possible. In fact, a new cooperative medical system was established in rural China in 2003. This combines insurance contributions from the Central Government, the local government and individuals. The overall government contributions come to 80 per cent of the total annual cost of 100 Yuan per person, with the individual paying the remaining 20 per cent of the premium.⁹ In the long run, only deeper and more far-reaching reforms will be able to expand this new rural cooperative medical system to fully cover the rural population.

Second, increase central subsidies and spending on health of local governments in rural areas. More funding targeted to rural areas available directly from the Central Government will reduce the financial pressure on hospitals, and consequently reduce the financial burden and out-of-pocket health-care payments made by the rural poor.

Third, better develop medical cost controls and regulations. The high price of drugs is a major reason for high household expenditure on health care. The key to address this issue is to set up a system ensuring access to affordable medicines. The system could include a catalogue of necessary drugs produced and

distributed under government control and supervision. Furthermore, new mechanisms that separate the income of doctors and hospitals from prescription targets could be set up in order to replace profit-driven incentives. Since price controls and tight regulations would reduce incomes of hospitals and doctors, the Government should implement this policy together with increasing subsidies to them.

Fourth, enhance the capacity of the health-care service system. In order to improve equity, the health-care infrastructure in rural areas in China, especially in the middle and western parts of the country, should be upgraded. Higher education, continuing education and on-the-job training, need to be reinforced and improved. In addition, the capabilities of the rural health-care administrative workforce need to be enhanced. An incentive system that facilitates the development of the rural health workforce, and encourages qualified medical personnel to work in poor and remote areas should be established.

Providing better health-care services and insurance coverage could reduce the need for 'precautionary' savings for future health expenditure, hence promoting consumption and enhancing sustainable economic development.

In short, there is an urgent need to increase the accessibility and affordability of health care, especially in rural areas. To narrow the gap between rural and urban health outcomes, the Government needs to play a larger role. The challenges cannot be met without increased Government commitment, and deeper and more far-reaching reforms targeted at the rural population. With the continuation of China's reforms and the adoption of recent initiatives like the 11th Five-year Plan (2006-2010), there are positive future prospects for inclusive economic growth in the country. Moreover, other countries in the Asia-Pacific region wishing to attain more satisfactory health outcomes may find lessons from China useful.

This issue of the Health and Development Policy Brief has been prepared with substantive contribution from Mr. Wei Liu, Statistics Division and Mr. Marco Roncarati, Social Development Division, ESCAP.

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9 Ying, X., (2008), "Essential Health-care Provision in China". Report prepared for UNESCAP.