

Written by Administrator

Monday, 16 August 2010 00:00 - Last Updated Friday, 29 October 2010 11:55

The Administrator Vol. 51 No. 1 January - June 2010

COMPARING HEALTH SYSTEMS IN CHINA & INDIA: LESSONS FOR HEALTH POLICY IN LOW INCOME COUNTRIES

Alok Kumar*

Abstract

Health policy makers in developing, low income countries are often faced with difficult choices and tradeoffs in allocating the rather limited resources at their disposal. This paper analyzes the varied approaches taken by the Governments of China and India which resulted in differential levels of gain in health indicators. An attempt has been made to synthesize policy implications for health policy analysts in developing countries that would optimize the health outcomes for a given budgetary allocation.

Introduction:

Health policy makers in developing, low income countries are often faced with difficult choices and tradeoffs in allocating the rather limited resources at their disposal. It is therefore imperative to get these allocation decisions right since any inefficiency on this count is likely to have a detrimental effect on achievements of health goals.

China and India faced similar situation as they embarked upon their endeavour to rebuild their national health systems following their liberation from colonial rule in late 1940s. However the approaches followed by them were radically different. China, at least in the initial years, opted for an egalitarian public health focussed approach relying on a government organized, managed and financed health care delivery system. India's approach to organizing its health system, on the other hand, placed a far greater reliance on market forces with a focus on curative medical services. The outcomes have been decidedly in favour of China (see Table 1 Appendix), though the gap has been narrowing down of late. What is even more remarkable about the Chinese performance is that the impressive health

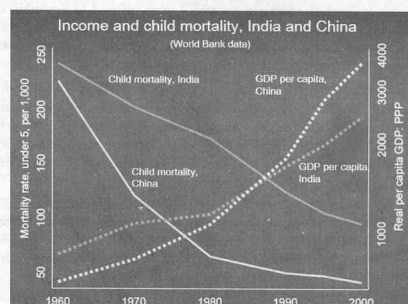
* IAS officer from Uttar Pradesh Cadre and currently posted at LBSNAA, Mussoorie as Deputy Director Senior.

The Administrator | 017 |

gains were registered despite starting from a lower base and having a lower per capita GDP of the two. Deaton (2004) has offered a vivid pictorial description of this phenomenon, which I reproduce below (Figure 1). Though the figures are till 2000 only, they surely indicate the pattern.

What can explain this phenomenon? Was it because of the dominant role played by the government in one and the free interplay of market forces on the other? Why has the gap been narrowing down in the recent years? This paper seeks to draw generalized lessons for possible design approaches to an effective health system capable of achieving population health goals in developing low income economies.

Before we proceed further, a caveat is in order. Admittedly, the health outcomes are a function of health care systems as well as non-medical determinants of health (such as education levels, culture, nutrition, lifestyles etc.). However, for the purpose of the present paper, we shall restrict our focus to the principal policy levers of the health care system, which can be altered in the short and medium term to influence health outcomes. Specifically, we shall consider the aspects relating to financing, organization, regulation, payment incentives and behaviour and the manner in which they have a bearing upon the health status of a nation.



(Source: Deaton, 2004, slide 25)

Written by Administrator

Monday, 16 August 2010 00:00 - Last Updated Friday, 29 October 2010 11:55

| 018 | The Administrator

This paper is organized as follows. Section 2 will dwell upon the evolution of health systems in India and China from 1950 to the early years of the millennium. In Section 3, we shall make comparative assessment of the two health systems on parameters such as financing, protection from financial due to ill-health, access, equity and efficiency. In Section 4 we draw policy lessons borne out the discussion in the previous sections. Finally we conclude.

Evolution of the Chinese and Indian Health Systems

China (1950- 1979):

The evolution of the Chinese health system can be divided into two distinct phases. The first phase (1950-1979) is characterized by the classic government owned, managed and funded health care system. Private practice was completely banned and all providers were employees of the state. The health care delivery system in the rural areas was organized and delivered through a Cooperative Medical System (CMS) which was an integrated part of the overall collective agriculture production system and social services. It was designed as a bottom up three-tier system. The lowest rung comprised of the village health posts manned by the so called "Barefoot Doctors" who provided basic preventive and rudimentary curative care. Patients in need of additional treatment were referred to Township or Community Health Centres (CHCs). Finally, county/ district hospitals provided specialized care to only the most sick patients. In rare cases, the patient was referred to tertiary facilities in urban areas.

The financing of the CMS generally took the form of a pre-payment health plan with contributions from members', the commune collective welfare fund' and subsidies from the upper level governments (Hsiao et al., 1995). In the urban areas, access to health services was ensured through government run facilities that charged a very nominal "registration fee" for treatment (Ma et al., 2008)

Health care practitioners with a very elementary level of health care training. They were paid for their work at the village health posts out of the commune revenues

The annual premium was very low, about 4- 8 Yuan (0.5-2% of the peasant family's annual income).

A portion of the income from the collective agriculture was kept aside for the commune's Collective Welfare Fund. The subsidy from the government was largely for equipment support and drugs.

The Administrator | 019 |

The strong political commitment to health goals, the near universal availability and access to health services combined with mass movements and information campaigns to disseminate public health knowledge led to astounding results. The life expectancy almost doubled (35 to 68 years). Infant mortality dropped dramatically from 200 to 34 per 1000 live births (Blumenthal et al., 2005). By 1980, China was already experiencing the epidemiological transition common in many developed countries, though its per capita GDP was well below those standards (Ma et al., 2008)

China (1980 onwards):

However, following the launch of economic reforms and the introduction of the individual responsibility system in agriculture, the main source of financing the CMS namely the welfare fund supported by the community farming system - disappeared. As a result, villages were forced to dissolve their CMSs. Within a decade, the percentage of villages covered by CMS fell down from a level of 90% to 4.8% in 1989. The Barefoot doctors either took up alternate farming jobs or opted for private practice (Hsiao et al., 1995). The collapse of the CMS due to abolition of communes, the consequent drying of resources from social financing coupled with reduction of government budgetary support to health resulted in the proportion of out of pocket expenses (OOP) zooming up from 20% in 1978 to 58% in 2000 (Ma et al., 2008).

Though the ownership still continues to be predominantly public' and the pricing of health services are tightly controlled by the Government, the pressure on the hospitals to raise a substantial portion of their budgets through user fees implies that the incentive faced by the health providers is the same as that of a for profit entity. Hence it would be fair to say that while the organization of health delivery system is public in form, the incentive structure makes it private in spirit. Predictably, the focus of care shifted from preventive to the curative.

Thus, during this phase even as people became wealthier, there were definite signs of deceleration in health gains. As Lindelow et al., 2005 aptly summarize:

"China's legendary performance on child mortality appears to have started unravelling. The annual rate of decline has fallen

^{*} A study by Liu et al., 2006 reveals that in 2002 only 12% of the hospitals and 4% of the health professionals were in the private sector

Written by Administrator

Monday, 16 August 2010 00:00 - Last Updated Friday, 29 October 2010 11:55

| 020 | The Administrator

dramatically, despite the fact that other East Asia countries some of whom have achieved similar low rates have seen accelerations in their rates of decline... There are concerns over communicable diseases, including HIV/AIDS and SARS. Whether utilization of services among the sick has fallen is unclear from the studies to date. Overall utilization levels of providers seem to have fallen in the 1990"

India:

Like China, India adopted a similar 3 tier health system for their rural population. At the lowest level, Sub Centres (SC) was entrusted with the responsibility of public health related knowledge dissemination services. The next level Primary Health Centres (PHCs) manned by qualified doctors were envisaged to provide an integrated curative and preventive health care to the rural population. The top tier of Community Health Centres (CHCs) /District Hospitals offered specialized care. This system was funded fully by the government and operated by government appointed health functionaries.

However there were important differences. Private sector was allowed to coexist, and over the years has expanded its services so that it now plays the dominant role in health care delivery. Secondly, it laid a much greater emphasis on curative aspect of health services. Thirdly, unlike the leadership role played by the Chinese Government in organizing the health system delivery in China, the Indian government adopted a hands-off approach to regulation of this sector.

Despite the ambitious goals to provide inexpensive public health care to the people, the resources provided by the government (about 1% of the GDP up to 2000) were inconsistent with the level of commitment. As a result, the public health facilities were left chronically under-resourced, under-staffed and overcrowded (Mullan, 2006). The problem was further compounded by poor management, rampant absenteeism, low quality of service, overly centralized and inflexible planning and poor logistics in supply of medicine and drugs (Peters et al., 2002). Although the public sector provision of health care is almost free, utilization levels have remained extremely low with 20% outpatient and 45% inpatient care being availed of in these facilities (Mavalankar et al., 2006).

The Administrator | 021 |

That there was a neglect of public health is reflected by the fact that public health services, which existed as a separate department prior to independence, was merged with the medical services in the 1950s. Further the elite succeeded in diverting a substantial proportion of the health budgets for expanding subsidized medical training and high-end tertiary medical services (Das Gupta, 2005). The focus on curative services meant that the curative specializations were given a higher priority over public health specializations. Consequently, the demand for as well as the supply of public health professionals atrophied. The atrophy was further fuelled by declining budgetary support for public health positions and activities¹, while expanding the curative services for which there was stronger electoral demand².

The inability of public institutions in fulfilling the need for health care services has resulted in a large number of profit driven private providers with an inherent preference for high potential curative over low margin basic care services- occupying that space. The private sector now dominates the health system with 70% of all hospitals, about 75% of the qualified doctors working in this domain, capturing 77.4% of all health expenditure (Ma et al., 2008). Despite such a vast array of private sector health facilities, the state has largely adopted a *laissez faire* approach towards their regulation. This market anarchy has led to an extreme heterogeneity in providers' pricing and quality of service.

On the one end of the spectrum are an extremely heterogeneous group of rural medical practitioners (RMPs)³ - dabbling in systems of medicine that go well beyond their levels of qualification and training. They are prepared to work in rural areas and urban slums where qualified doctors are unwilling to set up practice. Hence their services are accessible, affordable, and acceptable; even if the quality of their advice may be suspect. On the other

¹For instance, see Quadeer (2000) quoted in Ma et al.(2008), p9. The spending on the control of communicable diseases declined as a proportion of total budgetary allocation on health from 17% to 4% between 1950s and 1990s.

²Since in preventive health, success by definition, is more intangible and therefore difficult to sell to the electorate. Das Gupta points out that East Asian countries with authoritative regimes have been much more successful in harvesting health gains by directing their scarce resources to public health efforts.

³Indian counterparts to the "barefoot doctors". Some of them are trained in traditional systems of medicine. Others are traditional healers and herbalists. Unlike China, their services have been hitherto ignored by the Government.

Written by Administrator

Monday, 16 August 2010 00:00 - Last Updated Friday, 29 October 2010 11:55

| 022 | The Administrator

end are for profit corporate hospitals that provide health care services that can meet most international quality benchmarks but the prices are such as to exclude virtually all but the richest section of the population. Unable to ensure full occupancy, these five star medical facilities are promoting "medical tourism" by attracting foreign patients for treatment. This is nothing short of being tragic, given the widespread unmet demand for medical services within the country.

Further the political commitment shown by the top political leaderships to health related issues in China was largely non-existent in India. Unwillingness on the part of the Government to wield any coercive power (even for legitimate causes) ensured that the private and public health systems remained largely disparate and un-integrated. Freedom of choice for citizens meant that referral system was observed more in its breach.

A combination of these factors has resulted in relatively modest health gains in India. Although the epidemiological transition has begun to take place here as well, communicable diseases still account for over 40% of deaths. Even in the very recent past, the immunization rates were at a dismal 62% (much below that China 93%) and an estimated 7% Disability Adjusted Life Years (DALYs) are lost on account of vaccine preventable diseases. (Ma et al., 2008)

A Comparative Analysis

Financing:

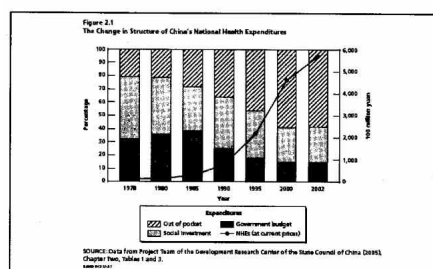
The current levels of health expenditure at 4.5% and 3.6% of GDP for China and India respectively are quite low not only by the high income country benchmark (10.3% of GDP) but also compares unfavourably against emerging economies like Mexico (6.5%) and Brazil (8.6%). On a per capita basis, this amounts to \$112 for China and \$35 for India which is pitifully low by the standards of \$4752 for high income countries*. (All figures are from Mass, 2009)

As discussed earlier, the predominant source of financing health care in pre-reform China was from government budgets and social insurance spending, accounting for about 80 % of total health expenditure. Both these sources

*Incorporating corrections for the Purchasing Power Parity the figures are \$236, \$95 & \$4112 for China, India and High income countries respectively.

The Administrator | 023 |

have been declining in the post reform period with the dissolution of CMS in rural areas and the reduction in the level of government budgetary support to health facilities in general¹. This has led to higher burden of health expenditure on individuals with OOP expenses zooming up over two and half times, from a level of 20% in 1978 to about 58% by 2002



On the other hand health care in India has largely been financed by OOP private spending in the absence of any form of social insurance spending and the meagre governmental spending on health. Public spending on health in India gradually accelerated from 0.22% in 1950-51 to 1.05% during the mid-1980s, and has stagnated at around 0.9% of the GDP during the later years (Sujata Rao et al., 2005). Government spending as a proportion of GDP has hovered around 2025 percent during the past two decades, of which the level of spending on preventive/ promotive health care is only 4% - the rest is spent on public curative care (Yip et al., 2008). However, the fact that over 90% of this is spent in recurring expenditures such as wages, pension liabilities, drugs and other consumables greatly constrains the Government's course of action.

¹As a proportion to the total health expenditure, Government has permitted hospitals to charge high user fee to ensure that a large part of the expenditure is recovered, thereby limiting fiscal commitment on the part of the Government

Written by Administrator

Monday, 16 August 2010 00:00 - Last Updated Friday, 29 October 2010 11:55

| 024 | The Administrator

As a result of low priority accorded to health, which has been treated as consumption good rather than a productive good, the Governments have under invested in the health sector. As a result households have to bear more than a fair share of health expenditure, which is predominantly financed through the highly regressive OOP expenses¹¹. This is high not only relative to OECD countries¹² but also in comparison to some of the developing economies¹³. This not only exposes their population particularly the sickest and the poorest among them to financial shocks arising out of health expenses but also results in serious inequities in access to health care, since access to care in such a financing mode is determined by the ability to pay.

Financial protection against risks of catastrophic illness:

The overall impact of financial burden of illness remains very high and this is all the more for the poor since their spending on healthcare tends to be a much higher proportion of their incomes. For instance, the poorest quintile spent 40% of their income on health care in India where as the richest spent only 2.4% of theirs (Varatharajan et al, 2003). In rural China, the poorest quintile spends 27% of their income on medical expenses as compared to 7.7% by the richest quintile. (Yip et al, 2008).

Yip et al. (2008) have cited studies showing how medical expenses are responsible for pushing people below the poverty line (US\$1.08 per day). Health expenditures were responsible for increasing the percentage of people below the poverty line by nearly 20 percent in China, from 13.7 percent to 16.2 percent. In India, the corresponding figure is about 12%, but that is not much of a solace since the poverty rate base at which this is calculated is alarmingly high at 31.8%.

Access:

Although the stated goal of both governments is to ensure universal access to health services regardless of individual financial status, their chosen strategies have been largely ineffective in achieving this goal¹⁴. The barriers to access of health services include physical (timely availability of care) as well as financial obstacles. On the physical side the access has been limited on account of shortage of health care infrastructure and availability of trained manpower, particularly in rural areas. For instance Liu 2004 points out that

¹¹ The extent of reliance on OOP as a percentage of health expenditure in China is 54.7% and India 74.6% [Mass, 2009]

¹² This figure for UK is 10%, for US it is 13% [Pauly et al. 2006]

¹³ For instance the OOP as a % of total health expenses was 29% for Thailand and 15% for Mozambique (WHO 2006) as quoted in Ma et al., 2008

¹⁴ In China, this statement is true for the post 1979 period.

The Administrator | 025 |

over the period 1980-2000, the number of township clinics in rural China declined by 14% while the number of large city based hospitals increased by 56%. Similarly, between 1980 and 1989, the number of health care professionals in the urban facilities increased by 235%, while primary health care workers in the rural areas declined by 36% (Liu, Hsiao et al 1999). Likewise in India, there is a serious shortage of public run primary health care infrastructure in rural areas with a shortfall of 16% on a normative basis in the number of PHCs/ SCs and a whopping 58% in case of the CHCs (Mavalankar et al, 2006). De Costa et al. 2007 report that while 72% of India's population is rural, over 75% of the doctors are based in urban areas.

Since the access to health services has been rationed by the ability to pay, there are considerable inequalities in consumption of health inputs by income class. Prima facie, the situation in China appears to be worse on this metric than India. Of those reporting an illness in the lowest income group in China, roughly 22% did not seek outpatient care in 2003 due to financial difficulties up from around 14% in 1993 (Yip et al., 2008, Appendix 2A). By contrast, in India this proportion was about 10% in 2004 up from about 8% in 1995-96. In addition to 36% patients who sought early discharge from hospitals due to lack of affordability, about 27% percent of low income respondents in China cited financial hardship as the reason for not seeking in-patient care despite being advised by a physician to do so.

Equity:

The financing mix of health care results in inequities in access by income, urban rural residency and by region. The inequities in access are also reflected in outcomes. For instance, the overall health outcomes in China and India mask considerable regional inequities, as would be apparent from the following table:

	Poorest Province		Richest Province		Best Performing province	
	IMR ¹⁵	LEB ¹⁶	IMR	LEB	IMR	LEB
China	60	<40	5	75	5	75
India	80	40	40	65	12	73

Source: (Yip et al. 2008, Exhibits 2 & 3, p 925)

¹⁵ The extent of reliance on OOP as a percentage of health expenditure in China is 54.7% and India 74.6% [Mass, 2009]

¹⁶ This figure for UK is 10%, for US it is 13% [Pauly et al. 2006]

¹⁷ Infant Mortality Rate: Infant deaths per 1000 livebirths

¹⁸ Life Expectancy at Birth [years]

Written by Administrator

Monday, 16 August 2010 00:00 - Last Updated Friday, 29 October 2010 11:55

| 026 | The Administrator

Data suggests that the raw measures of inter provincial inequalities have increased over 1980-2000 for China, where as it remained unchanged for India. The gap in urban rural health infrastructure has been discussed earlier. China National Health Survey 2003 found that 55.9% of their urban residence had insurance coverage, while for rural areas this was only 21.4% (Yip et al., 2008). Within this, the distribution of coverage is skewed in favour of the rich. In India, the IMR is 41.3% lower in urban areas as compared to rural areas. Besides, the health indicators of the disadvantaged social groups are considerably poorer than national averages (Mavalankar et al., 2006, Tables III & IV). Evidence of the extent of the inequitable access to facilities in India has been analyzed in a report by Mahal et al., 2001 where they report that the poorest 20 percent of the population are only able to access about 10 percent of the total net public subsidy on health.

Efficiency:

The inefficiencies in the health system of both countries arise out of market failures, but even more so on account of government failures. The fee for service (FFS) is the predominant mode of paying for health care in both countries. As the decider (doctor), is not the purchaser (patient), one source of inefficiency arises out of the perverse incentives of the provider to indulge in over prescribing the use high cost new technology interventions and expensive medication. This not only drives up the cost of health care, it sometimes may be deleterious from the point of long term health of the patient. Poorly informed patients being oversupplied with antibiotics and steroids by obliging doctors have long term adverse consequences for the whole system.

As mentioned earlier, China's public providers face private incentives. With reduced government subsidies and increased emphasis on meeting revenue targets¹⁹ through user fees, they function akin to for profit providers. This is further complicated by the insistence of the Government upon a distorted price schedule in which basic services are charged below cost and allows hospitals to make a higher margin on high tech interventions and drugs. The providers therefore have perverse incentives for over prescribing costly procedures and medicine. Not surprisingly, Meng et al., 2005 have found that 52% of the Chinese health care spending goes to purchase of drugs as compared to 19% for the OECD countries. Caesarean sections account for 40-50% of child births in China as compared to 25% births in US and Canada

¹⁹Yip et al., 2008 point out that government subsidies now contribute to less than 10% of the hospital revenues

The Administrator | 027 |

(Anderson 2004). Similar behaviour is exhibited by the private providers in India, who face similar incentives. While systematic studies of the extent of overuse of medicine and interventions are not available, case studies do suggest that private practitioners prescribe more medicine than their public sector counterparts²⁰.

A major source of inefficiency in India arises out of the poor incentives received by the government providers. Since the salary paid to health professionals is independent of the number of patient or their visits, this payment mode provides no economic incentive for the providers to service their client. This gets worsened by poor monitoring, with little or no chance of being punished for laxity. Thirdly, the lack of organized "voice" on the part of the poor patients and their inability to hold an errant provider responsible means that there is a complete lack of accountability on the part of the public health providers. Thus the vast network of public remains grossly underutilized (Mavalankar et al., 2006)

Fragmentation in the decision making in health systems among the national, provincial and local governments is another source of technical and allocative inefficiencies in both these countries. For instance, in the absence of any central directive regarding the respective roles, many provinces have tried to develop equivalents of the US Centre for Disease Control and Production (CDC) resulting in undue replication. In India, the disconnect between the provisioning of basic health care services and the central government's intervention in vertical disease control programmes (such as Polio eradication) or Family Planning has often led to disruptions in routine immunizations and routine health services (Devadasan et al., 2007).

Policy Lessons:

*"Focusing on clinical services while neglecting services that reduce exposure to disease is like mopping up the floor continuously while leaving the tap running"*²¹. The first lesson that emerges from the successes in improving the health status of the population in pre-reform China is that focussing on public health pays. There is a very high return on investments in preventive services such as vector control, immunization and public health knowledge dissemination to bring about desirable changes in behaviour. By reducing the communicable disease burden, which has a higher incidence among the poor more than the rich, it is also equity enhancing. Therefore, the first charge on health

²⁰Mean cost of drugs dispensed or prescribed by private doctors was two times as much as the public sector doctors, some of which may have been due to over-prescription (Bhatia et al., 2004)

²¹Paraphrased from Garrett, Laurie Betrayal of Trust

Written by Administrator

Monday, 16 August 2010 00:00 - Last Updated Friday, 29 October 2010 11:55

| 028 | The Administrator

expenditure in a country with limited resources should be on preventive/promotive health care.

Pre-reform China shows the catalyzing role that a centralized planning mechanism within the Government can play in organizing, regulating and integrating the key elements of a health system. In particular, it could help direct the resources financial, physical and human -to priority areas. But it is also true that the government needs to be sufficiently authoritarian to enforce compliance.⁷⁹ Perhaps, this may be more difficult to achieve in democratic regimes. But democracy cannot be an excuse to justify the market anarchy created due to India's *laissez faire* approach to regulation of private providers. This has led to a complete break down of the referral system, overloading the tertiary facilities and rendering the basic care facilities almost redundant. There is complete lack of integration between the preventive and the curative set-ups. The highly uneven quality of service provision in India also highlights the need for effective regulation to control quality standards, even when private providers are permitted to play a dominant role in service provision.

Reliance on market exchange to dictate the allocation of health resources is likely to be biased in favour of costly curative medical care rather than low cost but highly effective preventive care. Owing to the public good characteristics of many aspects of preventive care approach, market would tend to under provide such goods as sanitation and hygiene, vector control, dissemination of public health knowledge and safe drinking water. This would limit the possibility of health care gains as is amply reflected by the experience in India and post-reform China. Hence, in view of the potential for market failures in the health sector, it is important to underline the need for a Centralized planning mechanism within Governments to prioritize allocations, particularly when there is a severe resource crunch

Government's role in the health system does not necessarily imply government control. The procurement and provisioning functions of health services can and should be separated and entrusted to different entities. While operational management of health facilities can be left to the private sector, managed care organizations could be entrusted to procure services at competitive rates. The Government funding could be spent on the principle of "money follows the patient" that would give the right incentives to the providers -public or private to provide services to the satisfaction of the client.

⁷⁹Yip et al., 2008 point out that government subsidies now contribute to less than 10% of the hospital revenues

The Administrator | 029 |

The fifth key lesson that emerges is that developing economies have limited public resources which are grossly insufficient in financing the total expenditure in health services. Thus communities shall be called upon to share some- perhaps a large - proportion of the burden of health expenditure. Chinese success with the prepaid CMS, despite its limitations⁸⁰, provides an important lesson that a mechanism of risk-pooling for redistribution of benefits between the rich and the poor, between the healthy and the sick is necessary if the goal of equitable access to health care regardless of their ability to pay is to be achieved. The conditions of "social solidarity" are unlikely to emerge from a free play of market forces and have to be government mandated. Therefore, there is an imperative for the government to play a catalyzing role in developing some form of social insurance for health financing, if the commitment to an egalitarian health system is not merely a rhetorical one. If communist China can achieve a near universal coverage (howsoever rudimentary it may have been) at a per capita PPP level of \$500, there is no reason why financial constraints can be cited as a pretext for not implementing such a scheme.

Another key lesson to draw is that both the systems need to urgently consider the inefficiencies arising out of the misaligned payment incentives to the providers, both in the public and the private sector. As disease burdens shift more and more from communicable to non-communicable diseases and the demand for more costly curative medical services goes up, it would become increasingly difficult to contain rising health costs and dislodge the vested interests from milking the system. It is, therefore, imperative to take a close look at inefficiencies arising out of payment incentives and other causes.

Conclusion:

China and India - with over a third of the world's population between them- have recently experienced rapid economic growth. But increasing growth rates have also been accompanied by growing income inequalities that have caused concern among the top political leaderships of the two countries. The ever-widening socio-economic gap between high- and low-income households poses challenges to achieving the societal goal of equal health status and access to health care. Both the Chinese and Indian Governments are committed to infusing sizeable additional funding (about 1-2% of the GDP) in the health sector. Both countries now have to decide how best to channel the additional funds and which services to use them for. But money alone will not be sufficient to deliver effective, high-quality care nor achieve

⁸⁰A small risk pooling base, poor managerial skills at the village level and abuse by corrupt officials.

Written by Administrator

Monday, 16 August 2010 00:00 - Last Updated Friday, 29 October 2010 11:55

| 030 | The Administrator

gains in health outcomes unless accompanied by explicit policies to ensure that the increased funding is utilized efficiently. It needs to be channelized through appropriate financing and risk pooling mechanisms to increase access and cater to the needs of the poor and the rural segments of the population. Unless careful thought is given to reforming the delivery systems, strengthening regulatory systems and evolving the right payment incentives,

Appendix: Table1

Parameter	China	India
Population (Billion)	1.32	1.12
GDP per capita (\$)	2432	1046
Expenditure on Health as% of GDP	4.5	3.6
Per Capita expenditure on health (of which Government share) in \$ at Official Exchange Rate	112	35
Life Expectancy at Birth [years]	(51)	(9)
CMR age <5yrs/ 1000 persons	72	62
MMR (per 100,000 women)	31	85
Underweight babies proportion (%)	56	540
Death rate per 100,000 persons	6.8	43.2
(a) Communicable diseases/ Maternal/ Perinatal or Nutritional Conditions	701.5	988.8
(b) Non Communicable diseases	83.7	401.9
(c) Injuries	541.4	486.9
Immunization rates	76.3	100
Access to Sanitation facilities	93%	62%
Hospital Beds per 10,000 Population	65%	28%
Births Attended by skilled personnel (%)	22	3
	98	47

(Source: Mass 2009 and Ma et al., 2008)

the cost effectiveness of additional spending would remain doubtful.

References:

- Anderson, G. M (2004): Making Sense of Rising Caesarean Section Rates, *British Medical Journal*, and Vol. 329, September 2004, pp. 696697.
- Bardhan Pranab, The State Of Health Services In China And India: A Larger Context, *Health Affairs*, 27, no. 4 (2008): 933-936 doi: 10.1377/hlthaff.27.4.933
- Bhatia, Jagdish & Cleland, John (2004): Health care of female outpatients in south-central India: comparing public and private sector provision *Journal of Health The Administrator* | 031 |
- Policy and Planning*, 2004 November, Vol 19 Issue 6, 402-409
- Blumenthal D and Hsiao W (2005), Privatization and Its Discontents)The Evolving Chinese Health Care System, *New England Journal of Medicine* 353, no. 11 (2005): 1165-1170.
- Das, Jishnu and Hammer, Jeffrey S., Strained Mercy (2004): The Quality of Medical Care in Delhi (February 25, 2004). World Bank Policy Research Working Paper No. 3228. Available at SSRN: <http://ssrn.com/abstract=610269>.
- Das Gupta, Monica (2005), Public Health in India: An Overview. World Bank Policy Research Working Paper No. 3787. Available at SSRN: <http://ssrn.com/abstract=873895>.
- Deaton, Angus (2004) : Fighting World Poverty- Growth, Health & Policy available at <http://www.nyu.edu/africahouse/forresearchers/africana/MDG091505Deaton.pdf> accessed 01/09/2010)
- De Costa, A., and V. Diwan(2007): Where Is the Public Health Sector? Public and Private Sector Healthcare Provision in Madhya Pradesh, India, *Health Policy*, Vol. 84, No. 23, December 2007, pp. 269276.
- Devadasan, Narayanan Ranson, Kent Van Damme, Wim Acharya, Akash and Criel, Bart (2006): The landscape of community health insurance in India: An overview based on 10 case studies, *Health Policy*, Vol. 78, Issue 2-3 October 2006)pp 224-234
- Devadasan, N., M. Boelaert, B. Criel, W. Van Damme, and B. Gryseels (2007): The Need for Strong General Health Services in India and Elsewhere, *Lancet*, Vol. 369, No. 9562, February 2007, pp. 638639
- Hsiao, William, Li Qing, Liu Xingzhu, Liu Yunali and Ren Minghui (1995): Transformation of China's Rural Health-care Financing, *Social Sciences Medicine*, 41(8), 1085-1093
- Hu S, Tang S, Liu Y, Zhao Y, Escobar M-L, de Ferranti D (2008). Reform of how health care is paid for in China: challenges and opportunities. *Lancet* 2008; 372: 18465.3
- Lindelow M and Wagstaff A (2005), *China's Health Sector Why Reform Is Needed Rural Health in China: Briefing Notes Series (Washington: World Bank)*.
- Liu, Y., P. Berman, W. Yip, H. Liang, Q. Meng, J. Qu, and Z. Li (2006) :Health Care in China: The Role of Non-Government Providers, *Health Policy*, Vol. 77, No. 2, July 2006, pp. 212220.

Written by Administrator

Monday, 16 August 2010 00:00 - Last Updated Friday, 29 October 2010 11:55

| 032 | The Administrator

Liu, Y., W. C. Hsiao, and K. Eggleston (1999) Equity in Health and Health Care: The Chinese Experience, *Social Science & Medicine*, Vol. 49, No. 10, November 1999, pp. 1,3491,356.

Ma, Sai & Sood, Neeraj & Rand Corporation (2008) *A comparison of the health systems in China and India*, Santa Monica, CA http://www.rand.org/pubs/occasional_papers/2008/RAND_OP212.pdf

Mahal, A., Singh, J., Afridi, F., Lamba, V., Gumber, A. and Selvaraju, V. (2001): Who Benefits from public health spending in India?, Washington DC: Health,Nutrition and Population, Human Development Network, World Bank.

Mass Lena (2009)- *Global Data Health Report: The Emerging Markets Symposium [Health Issues in 'Emerging Market Countries]*, University of Oxford

Mavalankar Dileep and Ramani KV (2006) Health System in India: Opportunities and Challenges for Improvements, *JHOM* , Vol 20, Issue 6, 2006 available at

<http://www.emeraldinsight.com/insight/ViewContentServlet?Filename=/published/emeraldfulltextarticle/pdf/0250200607.pdf>

Meng, Q. Y., C. Gang, L. Silver, X. Sun, C. Rehnberg, and G. Tomson (2005), The Impact of China's Retail Drug Price Control Policy on Hospital Expenditures: A Case Study in Two Shandong Hospitals," *Health Policy and Planning*, Vol. 20, No. 3, 2005, pp. 185-196.

Mullan, F (2006) Doctors For the World: Indian Physician Emigration, *Health Affairs*, Vol. 25, No. 2, March/April 2006, pp. 380-393.

Peters, D. H., A. Wagstaff, L. Pritchett, N. V. Ramana, and R. R. Sharma (2002): Better Health Systems for India's Poor: Findings, Analysis and Options, New Delhi: World Bank Publications.

Pauly,M (2006): *Private Health Insurance in Developing Countries*, *Health Affairs* Vol 25 No. 2, pp 769-779

Sujata Rao KS, Sakthivel S, Somil Nagpal & Selvaraju S(2005): Financing of Health in India

http://www.whoindia.org/LinkFiles/Commission_on_Macroeconomic_and_Health_Financing_of_Health_in_India.pdf accessed 01/10/2010

Varatharajan, D., R. Thankappan, and J. Sabeena (2003) :Assessing the Performance of Primary Health Centres under Decentralized Government in Kerala, India, *Health Policy and Planning*, Vol. 9, No. 1, January 2004, pp. 41-51.

Yip Winnie and Mahal Ajay (2008) The Health Care Systems Of China And India: Performance And Future Challenges, *Health Affairs*, 27, No. 4 (2008): 921-932