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# A Comparative Evaluation of the Health Care Systems of China and India: Progress and Challenges

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ABSTRACT:

*The heath care services in India and China are subject to functioning of structural aspect of economies in their respective countries. Considering the political economy in these countries, there are some parallels and variations with varying outcomes. Over the past 25 years, both nations have seen impressive economic progress, but this hasn't always coincided with better health for the underprivileged. China used to have an egalitarian health care system in the early years of socialist revolution, but over the past 25 years, the system has grown quite unequal due to the breakup of communes and the establishment of fee-based health care under a decentralized public finance structure. Within the context of the commune system, healthcare services were decentralised during Mao Zedong's time and made available to rural areas. The state would have needed significant financial and technological resources to offer healthcare in the rural areas had the decentralisation drive not been implemented. China used its different healthcare stations, barefoot physicians, and the establishment of community health insurance where peasants used to pay a nominal charge for treatment as part of its drive to overhaul its healthcare system. However, after economic reform in China the decentralised heath facilities in rural areas weakened. The heath system in India was not equitable and skewed towards urban areas and to rich people. In the past, India's health initiatives were developed using suggestions from different committees and five-year plans. Public-private collaboration to attain universal health was made possible by liberalism. In order to satisfy the demands of a greater population, this is also necessary. Effective state regulation and governance are expected in health policy and governance to recalibrate the system. After comparing these two countries, Article suggests that mass awareness heath campaigns, civil society participation and decentralisation are crucial to ameliorate the health care system in both the countries.*

Key Words: Governance, Health Education, Health Policy, Public Health, Barefoot Doctors, Decentralisation, Public Health Campaigns and Civil Society.

## Introduction

During the early phase of development, the average per capita level of income was more or less equal but there was a noticeable difference in the health status of these two countries. Both China and India had similarities in terms of health status indicators during1940s. China attained its human resource development indicators as a middle- or high-income country but India remained the prototype of a developing country. The life expectancy of the average Chinese was 28 per cent longer than that of an Indian (Malenbaum, 1959:5)

Initially, during the early phase of nation building programme the difference in health status was because of availability in China of healthcare service in rural and urban areas, government policies and how effectively these policies are implemented, distribution of

income, and institutional and organisational effectiveness. China's healthcare system was more decentralised and health services reached even to remote rural areas. During Mao Zedong's rule in China, healthcare services were owned by the state and private health facilities were non-existent; hence it was an obligation for the government to provide health facilities in every corner of the state. However, after the economic reform in China the heath care system became inegalitarian due to privatization. India tried to ameliorate its health care system by enhancing civil society engagement, community medicine and awareness heath campaigns by heath care professionals but these efforts get short of its goals in the wake of regional imbalances, rampant poverty, poor nutritional level and gender disparity.

**Assessing healthcare system in China**

China has prioritised four fundamental principles while imparting the heath care services to its citizens. First, nation prioritised prevention. Secondly, bring traditional and Western medicine together. Third, integrated mass movements with health and finally, Paid attention to remote areas to provide heath care facilities to rural areas. During Mao Zedong's period, healthcare service was decentralised and reached to the rural areas within the framework of the commune system. Without the decentralisation drive the state would have otherwise needed huge financial and technical resources to provide healthcare services in the rural areas. During China's drive for reforming its healthcare system it utilised its various healthcare stations, barefoot doctors and establishment of collective health insurance where peasants used to pay minimal fees for treatment. The system of 'co-operative medicine and 'barefoot doctor' schemes in the healthcare system was adopted and it was presumed that these decentralised techniques would provide generic medicine (based on Chinese and western medicine) and better healthcare facilities. Sydney D. White, whose research is based on the Tiger Spring Village, noted that "Both co-operative medicine and the barefoot doctors, it was believed, reflected an approach to healthcare which was focused on rural areas, and which was decentralised, deprofessionalized, grassroots-based, egalitarian, 'low-tech,' economically feasible, and culturally appropriate." (white,1998;480). Barefoot doctors oversee public health workers in the hierarchy of medical services. Using radio or newspapers, thirteen provinces or regions have reported the number of public health professionals. These numbers suggest that the population-to-public health staff ratio is 1:265 (Hu,1980:238).

Healthcare programmes in China were under public control and it established a three-tier system of hospitals situated at county level, township level and village level. Along with this, a multilevel health education system was introduced at village level. Local healthcare workers were trained e.g., midwives, barefoot doctors and local healthcare workers were trained for three months for general curative measures. They were trained at the township hospitals to provide basic health facilities to local populations at the level of the commune. Doctors for township level were given training under three college programs. At the county and city level, university medical schools gave training to doctors in western and Chinese medicine. Three-tier systems of doctors increased the ratio of doctors to the population and that created improvement in the medical facilities. Furthermore, the number of healthcare institutions increased manifold during the 1950s (Biswas, 1971: 86).

The hospitals at county level underwent the task of technical work in communes and brigade hospitals were engaged in research and teaching work. Besides this, hospitals were also providing essential medical services to the rural areas. Rural communes were centres for delivering and funding healthcare facilities whereas in urban areas, state-owned public

enterprises were held responsible for providing these services. District clinics undertook the responsibility of controlling communicable and infectious diseases, maternal and child care services. Furthermore, they also took care of family planning services and training healthcare professionals for primary healthcare centres. Production brigade clinics were engaged in treating 60-70 per cent out-patients (Bhalla,1995:224). These healthcare units have staff like midwives, part time medical aides those were accompanied by barefoot doctors. The 'barefoot doctor' scheme accentuated the need to provide medical assistance to the masses. Through labour-saving strategies, fewer working days, and shorter travel and wait times for medical care, this program boosted the economy. According to an estimate, "The monetary value of these savings is estimated at about 1353 million yuan, which, for 1974, amounted to about 0.5% of GDP and about 2% of the total value of agricultural output" (Hu,1980:242).

Healthcare system in China was based on egalitarian principles and an effort was made to transfer healthcare services from urban to rural areas to ensure equality. For this purpose, urban healthcare workers and staff were transferred to rural areas through mobile teams. Secondly, large and expensive cities like Shanghai and Beijing charged half prices for hospital rooms for impoverished peasants staying in non-urban geographical settings. Third, facilities in the rural healthcare system were amalgamation of traditional Chinese and western medicines. Fourth, in order to address the issue of the scarcity of healthcare professionals, medical schools shortened their academic programs by three years. Fifth, in order to provide basic healthcare facilities in isolated rural areas, the government provided additional and supplemental funding (Ibid: 243).

The amalgamation of the healthcare system and its linkages with the collectivization in agriculture was a decisive factor to ensure healthcare facilities to rural areas. Mass mobilisation was encouraged for collective organisations, community development programmes and participations were encouraged for preventive health programmes that led to beneficiary health benefits for the rural population. During the early phase of healthcare reform, national health campaigns were launched to get rid of the "four pests" these were flies, rats, mosquitoes, bed bugs and heath policies were aimed to control malaria and schistosomiasis. In the initial year of healthcare reforms, the state strongly launched its agenda to cure communicable diseases. Consequently, many infectious diseases were kept under control and the health of people improved. In the urban areas, employment-based medical insurance schemes were launched. In short, those medical facilities were also decentralised. After Mao, there was de-collectivisation in the rural areas which led to the resurgence of some infectious diseases during 1980s.

Healthcare insurance schemes for China's rural and urban population are credited with the better performance of healthcare facilities. During the Mao Zedong's rule, the three vital health insurances were prevailed in China, first, mendatory public medical insurance that covered students and state cadres, second, compulsory labour medical insurance meant for state-owned factories' workers and staff members and third, rural voluntary co-operative medical insurance prevailed at county level.

During the early phase, healthcare policies were self-reliant and based on the mass mobilisation of manpower of those who were engaged in preventive health measures. The finance expenditure of healthcare services in rural areas was based on mobilising money and manpower. The beneficiaries of the preventive health benefits scheme in rural areas were bore by themselves. The state budget endowed health services at the county level; that

included training of all healthcare staff, providing grants for infrastructure and vaccination and contraceptive methods for birth control. Commune health centres got their funding through agriculture revenue and therefore any fluctuation in agricultural production had a direct bearing on healthcare expenditure.

According to an estimate, between year 1957 to1971, the expenditure on the social welfare schemes that includes health, education and well-being were almost doubled as compare to previous numbers. Before the Culture Revolution, two third of total heath expenditure was incurred on urban areas, later this number was reduced to 40 percent in 1970s (David, 1971:42).

After economic reform in China public health policy underwent drastic change. The rural health services failed with the de-collectivization of 1978-1979. There was no systematic way to compensate paramedics, who were formerly engaged in work at team levels and the production brigade as well. Their population soon dropped to less than 25% of what it was in the 1970s. Less than 10% of rural residents had access to cooperative health services by the middle of the 1980s. consequently, the finances of government were curtailed in rural area due to local finance were collapsed. Even the curative services decreased; in 2003, there were almost half as many hospital beds per thousand rural residents as there had been twenty years before the economic reform period (Bardhan, 2008:934).

After reform most of the public health care system got privatised, especially in non-urban areas. Formal-sector workers in the cities have health insurance of some kind, but patient premiums and costs have also increased significantly there. Even in non-rural areas, the majority of the uninsured population, especially migrants and those in the unorganized sector had to face hardships regarding incurring health care facilities. According to an observation 76 percent of people belonging to the lowest income group in urban areas and 80 percent of poor in rural areas do not have health insurance that underlined the fact people did not avail medical care in wake of financial hardships (Yip & Mahal,2008:927).

The remarkable shift in China's public health system happened due to decentralized derive after economic reform. Local and rural industry thrived under local government and collectives. There is significant cumulative growth due to local industry flourishment.The remarkable industrial expansion in China during the economic reform period driven by the township and village companies, which have been privatized for the most part in the last ten years. The growth in economy coincided with improvement in overall health care system. The basic public health indicators continued to improve, but at a slower rate than previously, especially for females living in rural regions. While newborn mortality rate for boys decreased from 40 to 25.8 per thousand between 1981 and 2000, it only decreased from 38.1 to 36.7 per thousand for girls (Zhang and Kanbur, 2005:192). Thus one can see regional and gender disparities increased after economic reform, before that public heath care system was expanding in the rural areas at a rapid rate. China now became a prototype of middle range country in terms of development in human resource development due to overall improvement in the growth rate.

**Healthcare System in India**

The organisational structure and administrative measures in India resemble the Chinese. The Central Government allocated and authorised the states for implementation and formulation of health-related schemes. The states through municipal hospitals provide health services at

urban level. The rural healthcare system is composed of a three-tier structure that includes districts, blocks and villages in which health related services are provided through medical institutions like health centres. Similar to the barefoot doctor scheme, India also has community health workers who are trained at least for three months in hygiene, first aid and basic training for fighting infectious diseases within village communities with a population of one thousand. Furthermore, certain services performed by midwives are out of the ambit of government-sponsored schemes. Though there are many similarities at the structural and organisational level, the outcome was different because of different political and administrative organisation. The infrastructure which was available for sub-centres, primary health centres and rural dispensaries only reached a fraction of the population at the village level. The mass mobilisation which was prevalent in the Chinese healthcare system was absent in India. There was much absenteeism in the hospitals and that encouraged people to opt for private healthcare services (Lincon,1981:41). The situation in China was quite a contrast with India because of mass health campaigns that coincided with popular participation and healthcare centres at the level of commune.

Since independence, India has achieved significantly in heath and improving life span. Nearly the past 50 years, the life expectancy of an Indian at birth has increased to around sixty years. However, compared to the majority of emerging nations in Latin America and East Asia, where life expectancy rates are getting closer to those of industrialized nations, the rate at which India improved is not satisfactory. Furthermore, morbidity from common communicable and nutritional deficient disorders was still high, whereas morbidity from non-communicable diseases was gradually rising due to changes in lifestyle and increased lifespan. The significant disparities between and within states, as well as the ongoing vulnerability of some population segments, are concealed by the national level health achievements.

In certain states, health indices are on par with those of middle-income nations, while in other areas, mortality rates are on pace with those of sub-Saharan Africa's poorer regions. Gender differences, caste and class distinctions among demographic groups, and differences between rural and urban areas are all quite apparent. Certain features of the development process have a negative impact on the population's health. despite increasing media attention. For a significant portion of the population, health remains an unattainable goal (Chaturvedi,2011:297).

The Medical Education Conference suggested in 1955 that medical colleges across the country create departments of preventive and social medicine. That was another name for its community medicine. It is a crucial component of all medical schools and is tasked with introducing medical students to the fundamentals of public health. In both urban and rural settings, medical interns and students were tasked with preventative and health-promoting duties. The goal of this mandatory rotation is to foster a sense of community among trainee doctors. In an effort to enhance public health education across the country, the Mudaliar Committee suggested in 1961 that public health schools in every state train medical officer, nurses, maternity and child welfare health workers, public health experts and sanitarians, nutritionists, epidemiologists, malariologists, and field workers.

In 1977, the same initiative was taken during the ROME (Re-Orientation Medical Education) program with the goal of involving medical institutions nationwide in community development blocks by promoting the use of preventative and medicinal healthcare which eventually extended to all of the district. By connecting health care delivery and referrals for

the community and giving medical schools a chance to familarise medical graduates with rural population, this was intended to establish the relationship between communities and medical colleges, benefiting both parties. However, the initiative had inconsistent outcomes in a few selected universities where it could instruct medical students about rural health (Reddy KS, 2006: 3229).

In order to assess the present and projected national health personnel needs at the primary and intermediate level health care programs, an Expert Committee for Health personnel Planning, Production, and Management was established in 1985. Additionally, the committee was tasked with recommending the necessary facilities and educational institutions required to facilitate the creation of appropriate types of health workers. The Expert Committee on Public Health Systems was founded in 1996 by the Indian government's Ministry of Health and Family Welfare. In 1997, the Independent Commission on Health of the VHAI (Voluntary Health Association of India) was established. Both suggested enhancing public health education. Further, in attempts to improve the current public health schools, the latter emphasized the necessity of establishing new ones. Thus, during the nation building process in India, many efforts were made to engage civil society for the pursuit of better health care facilities.

In 2015, the National Health Policy was introduced by the government to establish a connection between health status and economic growth following liberalization. The main goal is to clarify, inform, prioritise and strengthen the government's role in forming health systems in all of their aspects, including financial protection plans, health laws and regulations, investing in health, planning and financing healthcare services, preventing illnesses and promoting good health thru multisectoral action, gaining access to technologies, developing human resources, promoting medical pluralism, and creating the body of knowledge necessary for improved health.

In Indian case since independence, life expectancy at the time of birth has been doubled during last fifty years. At the time of independence, it was just 30 years later, between 1992-1996 it grew to 60 years. Between 1970 and 1996, India's life expectancy at birth rose from 49.7 to 60.7 years. In rural regions, it rose to 11.4 years and in urban regions by 7.4 years. Consequently, the rural-urban divide, which was earlier rampant, decreased from 10.9 years to 6.9 years. During this period, women's life expectancy at birth increased from 49 to 61.4 years, while men's increased from 50.5 to 60.1 years (NHDR, 2002:69).

Mortality rate is a significant feature of health indicator. According to the 1981 census, the infant death rate was 115 per thousand live births, with 122 males and 108 females. The infant mortality rate dropped to 77 infants per thousand lives in 1991. Further it declined to 58 in 2005 (GOI's economic Survey, 2006-07:70, NHDR, 2001). However, if we compare mortality rate of India with China of under five years age one can observe stark differences. As per UNDP report China's infant mortality rate under the age of five year was 49 as compare to 123 per thousand lives for India in 1991. In 2005, it reduced to 23 for China and for India it was 56 per thousand lives (UNDP's HDR's 1990& 2007-08:73). It accentuated the fact that India has significantly improved over time but compared to China its performance was slow and overall quality of human development was not very impressive. Besides this, the health care system in India faces serious regional imbalances, some states have shown remarkable achievements Others, however, fall behind in terms of health care services and per capita income.

In legislative list, health is a state subject. Poorer states have to depend on Central funds and consequently, curative and preventive healthcare schemes suffered in poor states as compared to rich states. For instance, Maharashtra, Gujarat, Punjab and Haryana are among the states that have performed not only economically well but have also performed reasonably well in terms of education and health, while Bihar, Uttar Pradesh, and Madhya Pradesh are among the worst performers in these areas and fall into the low per capita income (Chaturvedi,2011:305). The total expenditure on the healthcare system during the first Plan was 3.3 per cent of the total development budget. During the second Five-Year Plan (1956-61), The percentage of overall health spending in rural primary health centers and dispensaries in rural areas significantly declined due to the focus on heavy industrialisation (Parker, 1987:57)

Healthcare initiatives in India include family planning, research, education, health centers that provide basic services, a minimal need program, and the prevention and control of communicable diseases. There was no separate programme for rural and urban health schemes. Primarily, minimum need programme and heath care services at primary centres constitute the rural health schemes. In India unlike China, healthcare system is financed by public as well as private sources. According to a survey, some of the villages in Punjab were beneficiary of Green Revolution and those villages spent more resources on westernised healthcare system than traditional one and very small and partial expenditure is done on government healthcare services (Ibid). Hence, healthcare services in India are an amalgamation of public and private partnership and skewed towards rich and dominating class. There is absence of particular health insurance scheme. The government schemes such as, Central Government Health Scheme and labour insurance scheme give benefit to the urban population.

**India and China: A Comparison in the Healthcare Sector.**

During the 1950s, both nations had the same life expectancy at birth but it rose to 67 years in 1981 for China and remained comparatively low for India i.e., 52 years. As a consequence of control over communicable diseases in China and other health measures adopted by India and China there was a significant decline in crude death rate and infant mortality rate between 1949 to 1985. During this period IMR declined in both the countries. China's rate of decline was 5.4, whereas India remained confined to the figure of 1.3. Infant mortality rate, per 1000 lives declined to 49 in China's case. In India, it remained slightly high i.e., 121. In China the crude death rate per 1000 turned down from 24 to 8, whereas the number in India slightly declined from 22 to 13(World Bank,1983: 198).

Similarly, decline in death rate for China stood at 2.9 and for India it was 2.3. One can observe that difference in death rate in both the countries is lesser as compared to birth rate. In the year 1984, the death rate was higher for men than women because of much improvement in the maternal healthcare system (Young, 1985:33). However, in India, it was just the opposite because gender discrimination remained high within households in relation to allocation of medical treatment, health and food services (Visaria, 1985).

In India's case there was wide regional variation in the mortality rate in the north-western states especially Punjab, Haryana and Rajasthan vis-a-vis eastern states where paddy is grown. The worth and prestige of women is more in eastern states (Sen, 1998). There are also steep differences of life expectancy across the state that shows regional disparity among states. Kerala has the longest life expectancy at birth (73 years), followed by Punjab (67.4)

however, life expectancy remained low in the states like Assam, Bihar, UP and Rajasthan (NHDR, 2001:69)

During the decade of the1940s the healthcare indicators of both the countries were more or less similar; however, China managed to improve its healthcare system and that enhanced its global image. It was comparable to middle- and high-income nations at the level of human development index.

China achieved phenomenal growth in healthcare services during 1957-65. The number of China's hospital and healthcare centres was 2,600 in 1949 which was raised to 42,711 in 1965. Total number of health institutions and beds in China from 1949-65 varies from 3,670 to 24,266 (Acharya, Baru and Nambissan, 2001:229). From 1965 and further, China had an amazing bed-to-population ratio when compared to India. The Indian ratio in rural areas remained constant but the ratio in China was constantly improving. It was 0.51 in 1965 which rose to 1.41 by 1978 (Bhalla,1995:241). The availability of hospital beds in urban as well as rural area differed in China during 1957-1984 it increased by four times in urban areas whereas number leaped seventeen times. In the case of ratio of doctors versus population, China outperformed India. This difference was primarily because of the barefoot doctor scheme. (Maru, 1976)

## Conclusion

There is significant difference in terms of health status, healthcare access and maximization of healthcare services in India and China. In China healthcare services are better or evenly balanced between rural and urban areas whereas in India, there is vast disparity. Consequently, in China the beneficiaries of the healthcare system from among the poor number more than in India. The policies and programmes were more efficient in China because of spending a greater portion of GNP on health-related services than India. During the early phase of development, mass mobilisation under collective organisation and community initiatives and participation was more significant in China. The commitment of the Communist party and leadership to provide healthcare services in rural areas was a decisive factor behind the success of healthcare services in China.

As mentioned above, China's healthcare services were coincided with land reform. Its funding and healthcare services were provided by communes. The commune provided material security through rice bowl, public accumulation fund and welfare fund. So, a vibrant civil society was involved in the country's healthcare reform. India too adopted a comprehensive healthcare policy but it fell short of impressive investment in the healthcare sector. China's healthcare sector was nationalised and was under public sector control whereas Indian reform in healthcare has involvement of public-private partnership which is skewed in the interest of the powerful and dominant class.

However, after economic reform one can observe steep changes in the health care system in China, especially in the rural areas. Earlier egalitarian system of communist regime was replaced with growth-oriented development in health care system, consequently that brought regional, gender and rural-urban disparities in China. If China aspires for global status of a developed nation human resource development, especially heath care system should be given due importance.

The heath care system in India should coincided with awareness health campaigns, giving training to health care professionals in rural areas, decentralisation of heath care system and making Panchayati Raj system more accountable for implementing efficient heath related policies. India aspires to achieve Millennium Development Goals and achieve faster growth in the economy, for that reason the health care system should be reinvigorated. The heath care system should be prioritised in the development discourse and efficacious to meet the challenges of regional disparities, gender discriminations and spatial inequalities. The governments of both nations are currently making a fresh attempt to increase funding for public health services and enhance their delivery. Governance should be efficient to implement these policies and meeting various challenges arising out of these concerns. Effective state regulation and committed bureaucracy are expected in health policy and governance.

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