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DETERMINANTS OF PRIVATE HEALTHCARE UTILISATION AND EXPENDITURE PATTERNS IN INDIA

Debasis Barik and Sonalde Desai

Healthcare Expenditure in India in The Global Context

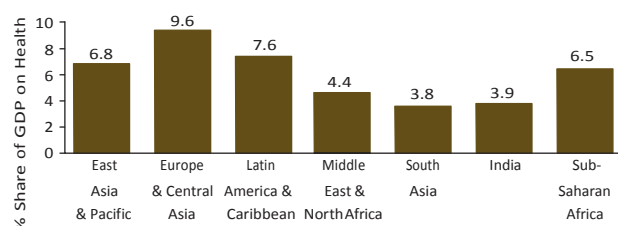
As nations progress along the epidemiological transition, the nature of healthcare expenditure changes drastically. Communicable diseases are containable through simpler public health strategies and when requiring intervention, require urgent and short-term treatment. In contrast, non-communicable diseases (NCDs) require longer-term and more expensive treatment, which may include laboratory testing as well. Different regions of the world are in different stages of epidemiological transition process. The World Health Organisation (WHO) estimates of the causes of death in 2008 indicate that in the 'more developed regions, excluding Eastern Europe', a majority of all deaths (80 per cent) were attributable to NCDs (UN 2012). Together with the high life expectancy at birth, the pattern of deaths by cause reveals that this group of countries as a whole is in the advanced stages of the demographic and epidemiologic transitions. In stark contrast, death due to communicable diseases as well as maternal, perinatal and nutritional conditions continue to be responsible for a large proportion of mortality in several regions, where life expectancy at birth is also substantially lower than in the more developed regions. In Africa, the region of the world with the lowest life expectancy at birth of 55 years, the majority of deaths in 2008 (61 per cent) was due to communicable diseases as well as maternal, perinatal and nutritional conditions.

While coping with each of either communicable or NCDs poses considerable challenges, India is confronted with both simultaneously. India is in the middle stage of this epidemiological transition with a dual burden of diseases—communicable diseases among younger age population and NCDs among population of age 45 years or more. Growing importance of NCDs will only rise as the population continues to age. Healthcare systems in India are ill-equipped to address these challenges.

Health expenditure around the world is highly asymmetrical in nature. Developed countries in the Europe and Central Asian region have the highest healthcare expenditure, 9.6 per cent of the gross domestic product (Figure 5.1). Healthcare spending (as a per cent of gross domestic product [GDP]) is also higher in the Latin America and Caribbean region (7.6 per cent) and East Asia and Pacific region (6.8 per cent). In contrast, countries in the South Asian region spend barely 3.8 per cent of the GDP on healthcare. In spite of a rapid economic growth in the last two decades, healthcare spending in India has not gone up significantly. Healthcare spending in India (3.9 per cent) is slightly higher than the average spending of her South Asian neighbours, but considerably lower than the developed nations.

Even compared to other middle income nations, per capita spending on health in India is the lowest among the BRICS (Brazil, Russia, India, China and South Africa) countries as reflected in the World Bank World Development Indicators (Table 5.1). All other countries in this group spend higher share of their GDP

Figure 5.1 Healthcare Expenditure as a Percentage of GDP by World Regions and India, 2011



Source: World Development Indicators (2011).

on health than India. Health outcome in terms of life expectancy at birth (LEB) also reveals India in a relatively disadvantageous position, just higher than South Africa. The poor LEB in South Africa is largely attributable to the loss of life years due to opportunistic infections, mainly tuberculosis due to HIV/AIDS since the 1990s.

What makes Indian healthcare pattern unique is the importance of household out-of-pocket (OOP) expenditure. A majority of the illnesses are treated by private healthcare providers and with the exception of Rashtriya Swasthya Bima Yojana (RSBY) health insurance coverage is negligible, a majority of spending tends to be out of pocket. In spite of the higher prevalence of poverty, 61 per cent of total healthcare expenditure is met through OOP spending by the households (Table 5.1). This OOP health spending is the key source of healthcare financing in India and this leads to catastrophic level of spending for healthcare to many households and push them into poverty (Ghosh 2011, Pal 2010, Berman et al. 2010). The proportion of households facing catastrophic OOP health payments during 2004–05, as measured by Ghosh (2011) was 15.37 per cent. This varied widely among states, from 3.46 per cent in Assam to 32.42 per cent in Kerala.

Twelfth Five Year Plan on Health: Some Rays of Hope

The Eleventh Five Year Plan (2007–12) made only minor progress on achieving service provision goals. During the Eleventh Plan, funding for health by Centre and state together has increased from earlier 0.94 per cent of GDP to 1.04 per cent of GDP in 2011–12 (Planning Commission 2013). Healthcare facilities are still inadequate and the Eleventh Plan has failed to achieve the desired levels. Despite considerable improvement in recruitment of health personnel the gap between need for health personnel and availability remains large (ibid.). Underperformance in creating resources and inefficient management has contributed in widening the gap in actual and desired levels of health outcome during the Eleventh Plan period.

However, the Twelfth Five Year Plan (2012–17) contains a lot of promise and hope. The Twelfth Plan strategy has been set up based on a comprehensive discussion by a High Level Expert Group (HLEG) formulated by the Planning Commission of India. The Twelfth Plan is set to roll out Universal Health Coverage (UHC) to achieve the long-term health goals. The HLEG has defined UHC as, ‘... ensuring equitable access for all Indian citizens, resident in any part of the country, regardless of income level, social status, gender, caste or religion, to affordable, accountable, appropriate health services of assured quality (promotive, preventive, curative and rehabilitative) as well as public health services addressing the wider determinants of health delivered to individuals and populations, with the government being the guarantor and enabler, although not necessarily the only provider, of health and related services’. Due to financial constraint, the HLEG has recommended the prioritisation of primary healthcare, while ensuring that

Table 5.1 Life Expectancy at Birth, GDP Per-Capita and Share of Healthcare Expenditure on GDP among BRICS Countries, 2011

BRICS Countries	LEB (Years)	ftCHE (current US \$)	GDft per capita (ftft US \$)	HCE as % of GDft	OOft as % of total HCE
Brazil	73	1,121	11,634	8.9	30.6
Russia	69	807	22,408	6.2	31.4
India	65	59	3,714	3.9	61.2
China	73	278	8,408	5.2	36.6
South Africa	53	689	11,028	8.5	16.6

Note: LEB: Life Expectancy at Birth, PCHE: Per Capita Health Expenditure, OOP: Out-of-pocket, ppp: Purchasing Power Parity, HCE: Healthcare Expenditure

Source: World Development Indicators (2011).

the Essential Health Package (EHP) includes essential services at all levels of care. Government allocation (both central and state) on healthcare, broadly defined, has been set to achieve 2.5 per cent of GDP by the end of the Twelfth Plan. At the same time, it emphasises the need to refocus the financial and managerial system to ensure more efficient utilisation of available resources. Public-Private Partnerships (PPPs) have been encouraged to provide efficient care to people in reasonable price.

Below, we examine empirical data on use of healthcare services and healthcare expenditure by households to see how experiences of households on-the-ground varies by their socio-economic conditions and availability of healthcare.

Morbidity Scenario in India: Prevalence of Diseases and Treatment Rate

The asymmetric demographic transition among Indian states has contributed to the co-existence of communicable as well as non-communicable diseases NCDs across wide geographic region. Poor and inadequate supply of public health services, including safe drinking water and sanitation, along with broad base of younger age population particularly in the high fertility states have contributed to the higher prevalence of communicable diseases. Again, states in the southern part of India and some other states, who are leading in the demographic transition process, are burdened with long-term chronic morbidities, such as diabetes, cardiac ailments, etc. Both types of morbidities have different healthcare needs. The minor morbidities such as fever, respiratory infection and diarrhoea are subject to frequent out-patient visit, which although inexpensive per visit, can be cumulatively onerous with higher frequency of occurrence and are mostly not covered by the insurance schemes. On the other side, with major morbidities, people require long-term intense care, which may be less frequent but expensive when encountered.

The prevalence of various minor and major morbidities and treatment seeking behaviour, as noted in the India Human Development Survey-I (2004–05), are depicted in Table 5.2. IHDS-I is a nationally representative, multi-topic survey of 41,554 households in 1503 villages and 971 urban neighbourhoods across India. Along with the rich content on education,

employment, income, it has collected information on reproductive health, and broader health and health beliefs of the Indian population with an intention to follow them up over time.

The survey reveals that, as many as 124 per 1,000 people in India suffered from fever, cough and cold or diarrhoea during the 30 days prior to the survey (Table 5.2). Fever is the most frequently observed among all minor morbidities. Almost half (45 per cent) of all Indian households had someone who suffered from one of these minor illnesses. The prevalence of any long-term morbidities in the last 365 days prior to the survey was half that of the prevalence of minor morbidities with a 30 day reference period. The most frequently reported long-term illness was the unspecified 'other' category (23 per 1,000), which mostly includes accident. Prevalence of high blood pressure (14 per 1,000) is the second highest among all long-term morbidities. Among the other long-term morbidities, diabetes, asthma, cataract and heart disease share a fair prevalence. Multiple morbidities were reported by 14 per cent of these populations. Twenty-seven per cent of the Indian households had at least one person suffering from any long-term illness. However, these reported prevalence rate are lower than the actual prevalence, mainly because the survey collected information from the members of the household, who were present during the interview and the morbidities include the diagnosed ailments only (Desai et al. 2010).

People often seek treatment for minor morbidities (or fail to report a minor illness for which no treatment is sought), but non-treated ailment is higher for the major morbidities. Nearly 6 per cent of the minor morbidities are not treated compared to 9 per cent of the long-term morbidities. 42.5 per cent of the polio cases, reported in the IHDS survey, were not treated in the year prior to the survey. One in every four patients suffering from mental illness was not treated. Non-treatment was also higher in case of cataract (20.7 per cent), paralysis (18.2 per cent) and epilepsy (14.7 per cent).

The statistics on source of provider for the patients, who sought treatment, gives a gloomy picture about the use of public facilities for both minor and major illnesses. In spite of higher treatment cost, people overwhelmingly prefer to use private healthcare providers rather than public facilities. Three-fourth of the patients visited private facilities for treatment for both type of illnesses. Visit to public facilities were comparatively higher for long-term illnesses than short-term illnesses.

Table 5.2 Treatment Rate for Short- and Long-term Morbidities in India, 2004–05

	Prevalence ('000)	Treated in (in percentage)			Percentage not treated	Numbers
		Government	Private	Other		
<i>Any short-term morbidity</i>	124	16.2	73.2	10.6	5.7	25,505
Fever	107	16.4	74.6	9.1	4.7	21,848
Cough	86	15.3	75.5	9.2	5.6	17,585
Diarrhoea	30	12.2	76.3	11.5	5.5	6,140
<i>Any long-term morbidity</i>	64	20.2	74.9	4.9	9.0	12,704
Cataract	6	31.5	63.3	5.2	20.7	1,243
Tuberculosis	4	22.3	74.5	3.2	12.2	722
High BP	14	21.5	74.4	4.2	3.7	2,728
Heart disease	5	22.2	74.4	3.4	8.7	1,085
Diabetes	8	24.3	72.1	3.7	3.2	1,554
Leprosy	1	20.1	76.0	3.9	9.7	143
Cancer	1	18.3	73.0	8.8	2.7	143
Asthma	7	16.8	78.7	4.5	4.7	1,363
Polio	1	17.5	75.1	7.5	42.5	241
Paralysis	2	20.2	73.5	6.3	18.2	308
Epilepsy	1	15.7	73.1	11.3	14.7	245
Mental illness	2	21.5	69.5	9.0	25.0	304
STD or AIDS	1	18.5	76.2	5.3	13.8	128
<i>Other long-term</i>	23	16.5	78.3	5.2	6.0	4,518

Source: India Human Development Survey (2004–05).

While long-term illnesses are more devastating, short-term illnesses are more prevalent. Short-term morbidity accounts for substantial time loss from usual activities. A person suffering from any short-term illness was incapacitated, or unable to perform his or her usual activities for four-and-a-half days in 30 days prior to the survey. Although short-term illnesses are more common for children, days lost per illness increases with age, somewhat counterbalancing the lower prevalence at younger ages. A person who was ill with a long-term disease was, on an average, unable to perform his or her normal activities for almost 60 days during the previous year. The elderly were more affected than others. They lost 71 days of normal activity if sick with one of these diseases. Across the entire population, long-term illnesses accounted for about four days (per person-per year) of lost activity, compared with seven days for short-term illnesses. This difference is due to the lower prevalence of long-term than short-term morbidity (ibid.).

The working age adults (15–59 years) lose about 5.5 days per year because of fevers, coughs and diarrhoea, school-age children lose seven days, and the elderly lose

10 days per year respectively. On the other hand, long-term illness results a loss of four days for working age adults, one day for school-going children and 15 days for elderly. Days lost in long-term major morbidities are more pronounced than short-term morbidities for the older population as both the prevalence and days incapacitated due to long-term illnesses are higher among this age group.

Healthcare Expenditure and Financing

As discussed earlier, healthcare in India is dominated by the private healthcare providers. Over two-thirds of the patients, suffering from either type of morbidity seek private care. But, private healthcare is subject to large OOP expenditure since health insurance coverage is negligible.

At the same time, in spite of the ostensibly free nature of government healthcare, substantial costs are involved in the form of medication costs or tips. Average treatment cost of minor morbidity in government

facilities was Rs 319 and in private it was Rs 350 (Table 5.3), not a large difference. The difference between public and private facilities is larger when it comes to major illnesses. Average annual cost of treatment for long-term illnesses is Rs 4,569 in public facilities and Rs 6,139 in private. Both of these are substantially higher than minor illness related expenditure.¹ Heart disease, cancer, paralysis are the few among the long-term diseases noted in IHDS-I survey, which demands for a huge spending on treatment.

Our observation of a small difference between government and private healthcare during minor illnesses may be partly due to a huge variation in the quality and the cost of private healthcare. The private medical sector in India is extremely heterogeneous in nature. People usually go to traditional healers for minor illnesses, who prescribe relatively cheap ayurvedic or homeopathic medicines. However, when it comes to major illnesses, the difference in doctors' costs between public and private providers is greater, possibly because this is where patients visit more qualified and expensive private doctors (ibid.).

Since the cost of treatment of both minor and major illnesses is not exceptionally lower in government facilities than private, people opt for private treatment over government, mainly for easy access and flexible visiting hour. Moreover, the cost of treatment was significantly lower while using some provider, such as pharmacist (ibid.).

Indian households spend a surprisingly large proportion of their income on medical care and medical expenses are an important reason to push them into poverty trap. Table 5.4 provides a comprehensive picture of the toll of healthcare expenditure on household income. The share of short-term morbidities is higher in the share of total health expenditure on household income.

The IHDS survey data shows that, about 6 per cent of the monthly household income is spent on healthcare, out of which 4.4 per cent is spent for minor illness and 1.6 per cent is for long-term illness. Higher share of household income is spent on healthcare in rural areas than urban areas. Again, among the urban dwellers, share of income spent in healthcare is lower in metros than their other counterparts. This finding is probably attributable to the fact that healthcare expenditure is more or less constant across various income groups, while the income varies; the poor spend a greater

Table 5.3 Average Healthcare Expenditure in Government and Private Facilities by Type of Illness, 2004–05

	Average Health Expenditure (in Rs)			Sample size	
	Govt.	Pvt.	Total	Govt.	Pvt.
<i>Any short-term morbidity</i>	319	350	294	5,235	17,111
Fever	330	356	308	4,626	15,246
Cough	345	331	287	3,521	12,213
Diarrhoea	348	357	304	875	3,594
<i>Any long-term morbidity</i>	4,654	6,139	5,053	3,369	8,412
Cataract	4,068	5,254	3,482	384	648
Tuberculosis	4,608	6,973	5,477	210	387
High BP	3,023	4,610	3,930	883	2,091
Heart disease	7,770	10,018	8,179	345	762
Diabetes	4,226	6,286	5,439	434	1,195
Leprosy*	7,777	5,175	4,445	31	81
Cancer*	14,578	19,670	15,399	47	99
Asthma	4,156	4,528	4,016	350	843
Polio*	7,949	6,677	3,761	41	110
Paralysis*	7,351	11,515	8,073	81	206
Epilepsy*	10,544	7,077	5,874	47	158
Mental illness*	7,920	7,531	6,036	74	169
STD or AIDS*	6,150	3,925	3,574	23	68
<i>Other long-term</i>	5,860	7,083	6,181	1,067	3,081

Note: The reference period for short-term morbidity is 30 days prior to the survey and for long-term morbidity is 365 days prior to the survey. * Figures not reliable due to small sample size.

Source: India Human Development Survey (2004–05).

percentage of their income on healthcare. The higher availability and easy access to health facilities in the urban areas make the healthcare cost cheaper in urban areas than rural. The rural people, more often, have to leave their local areas for treatment and are slightly more likely to be hospitalised, which raise costs (ibid.). Lower treatment cost along with higher household income in the urban areas lead to spend lower share of household income on health compared to the rural households. Poor households spent 14.5 per cent of their monthly income on healthcare expenditure, compared to 0.7 per cent among the richest households. The Adivasis and the Muslims spent a lower share (3.9 per cent and 4.8 per cent respectively) of their monthly income on healthcare. On the other hand,

¹ Reference period for short-term morbidity expenditure is 30 days while that for long-term illnesses is 12 months.

Table 5.4 Share of Total Household Income, Spend on Healthcare in India, 2004–05

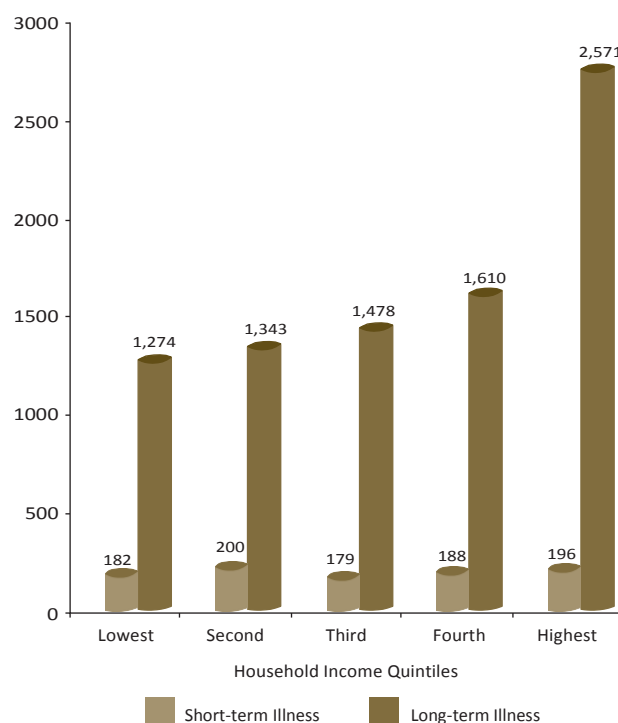
	Healthcare spending (%) on monthly household income		
	Any morbidity	Short-term	Long-term
All-India	6.02	4.43	1.59
Place of Residence			
Metro	1.13	0.67	0.46
Other Urban	3.57	2.42	1.15
More developed village	7.73	5.72	2.01
Less developed village	6.87	5.18	1.69
Income			
Lowest quintile	14.53	11.15	3.38
2nd quintile	4.53	3.27	1.26
3rd quintile	2.44	1.74	0.70
4th quintile	1.44	1.02	0.42
Top quintile	0.65	0.37	0.28
Social Groups			
High caste Hindu	5.13	3.65	1.48
OBC	7.59	5.66	1.93
Dalit	5.32	4.06	1.26
Adivasi	3.88	2.78	1.10
Muslim	4.84	3.88	0.96
Other religion	9.19	4.36	4.83

Source: India Human Development Survey (2004–05).

a larger share (9.2 per cent) of household income of people, belong to other minority religious communities were spent on healthcare during 2004–05. The prevalence of short-term as well as long-term morbidity is lowest among the Adivasi group. This may be due to under-reporting of ailments among Adivasis. Again, a higher proportion of sick Adivasis were treated in government facilities, which resulted into a lower treatment cost. The median treatment cost incurred by Adivasis for any short-term and long-term morbidities are Rs 80 and Rs 600 respectively, which are far less than the national level (Rs 120 for short-term and Rs 1,900 for long-term).

The healthcare spending by household income category gives an interesting picture (see Figure 5.2). When it comes to minor illnesses, the rich and poor spend about the same. But the treatment cost for long-term illnesses vary substantially, with a range of Rs 1,274 in the lowest income quintile to Rs 2,571 in the highest income quintile, and a sharp increase between the fourth and fifth quintile. Since, primary costs for short-term illnesses are related to medicine, these are unlikely to vary by household income. However, major

Figure 5.2 Median Medical Spending (in Rs) for Short- and Long-term Morbidities by Household Income Quintiles in India, 2004–05



Source: Authors' calculation based on India Human Development Survey (2004–05)

illnesses require more expensive tests and treatment options, which physicians may hesitate to recommend to poor patients, and poor households may be less likely to undertake, even if recommended (ibid.). Whatever may be the reason, Figure 5.2 reveals that the healthcare expenditure variation across income groups is not very large. Consequently, it implies a larger proportion of income among the poor is spent on healthcare.

WHY do People Use Private Care?

The above analysis indicates that, despite a higher treatment cost, average Indian patient opts for private healthcare services. There are two main components—(1) structure of government healthcare, and (2) quality of care.

Structure of Government Healthcare

In spite of attempts in every Five Year Plan to improve public healthcare infrastructure, the shortfall remains significantly high. While urban residents generally have a choice of public or private providers, rural residents face far fewer choices. Currently, a sub-centre covers an average

radial distance of about 2.59 kms, whereas primary health centres (PHCs) and community health centres (CHCs) cover 6.42 kms and 14.33 kms respectively (MoHFW 2013). This shows a relatively higher access to sub-centres to the rural Indian population.

A CHC is supposed to provide minimum specialist services to the rural population. As per minimum norms, a CHC is required to be manned by four medical specialists, i.e. surgeons, physicians, gynaecologists and pediatricians supported by paramedical and other staff. It is mandated to have 30 indoor beds with one operation theatre, X-ray, labour room and laboratory facilities. It serves as a referral centre for 4 PHCs and also provides facilities for obstetric care and specialist consultations. One CHC is to cover a population of 80,000 in hilly/tribal/difficult areas and 1.2 lakh in plain areas. As of March 2012, 16 states/UTs are serving more than 1.2 lakh population and the situation in Bihar is the worst. A CHC in Bihar is serving 13.2 lakh population, 11 times higher than the specified norm (ibid.).

PHCs are the cornerstone of the rural healthcare delivery system. This is the first contact point between village community and the medical officer. The PHCs were envisaged to provide an integrated curative and preventive healthcare to the rural population with emphasis on preventive and promotive aspects of healthcare. The activities of PHC involve curative, preventive, promotive and family welfare services. One PHC is to cover a population of 20,000 in hilly/tribal/difficult areas and 30,000 in plain areas. As per minimum requirement, a PHC is to be manned by a medical officer supported by 14 paramedical and other staff. Under National Rural Health Mission (NRHM), there is a provision for two additional staff nurses at PHCs on contract basis. It acts as a referral unit for 6 sub-centres and has 4–6 beds for patients. The latest statistics reveals that, PHCs in 14 states/UTs are serving a population higher than the limit suggested by Indian Public Health Standards (IPHS). PHCs in most of the major states are serving more than 30,000 population (ibid.).

A health sub-centre in India usually covers a population of 5,000 in plain area and 3,000 population in hilly/tribal/difficult area. Each sub-centre is required to be manned by at least one Auxiliary Nurse Midwife (ANM)/Female Health Worker and one Male Health Worker. Under NRHM, there is a provision to have one additional ANM on contract basis. Sub-centres are assigned tasks relating to interpersonal communication in order to bring about behavioural change and provide services in relation to maternal and child health, family welfare, nutrition, immunisation, diarrhoea control and

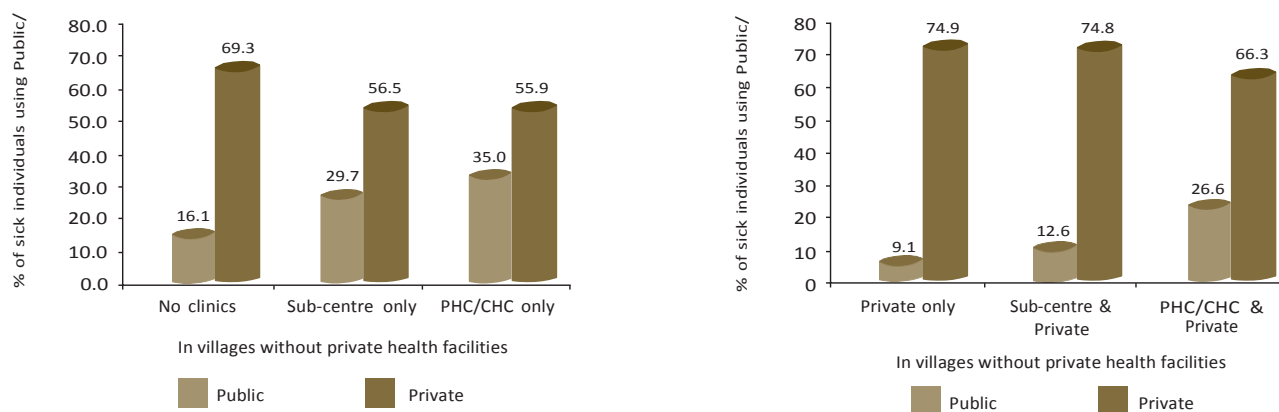
control of communicable diseases programmes. The sub-centres are provided with basic drugs for minor ailments needed for taking care of essential health needs of men, women and children. Sub-centres in the rural areas of 13 states/UTs are serving more than 5,000 population, the limit suggested by IPHS (ibid.).

The Twelfth Five Year Plan (2012–17) has put a strong emphasis on a very broad range of preventive, promotive and curative care to be made available at the sub-centre and PHC level, with more than 70 per cent of the total healthcare investment expected to flow at this level (Planning Commission 2013). A strict gate-keeping at the sub-centre-level has been prescribed to ensure that more than 95 per cent of the patients are fully cared at this level (Mor 2013). A number of researchers have expressed their doubt if the central or state budget will be able to support the huge expenditure required to enhance the existing healthcare system (Rao and Singh 2005, Rao and Choudhury 2012). Moreover, if the money were to become available, bringing about all the changes will take a great deal of time and manpower.

However, access to a sub-centre is not enough to encourage the use of a government facility for short-term care, particularly if a private facility is also present (Desai et al. 2010). In the absence of any health facilities, 16 per cent of the sick individuals go outside the village for treatment in public facilities against a huge 69 per cent in private facilities (Figure 5.3). In spite of having a sub-centre in the village, 57 per cent go out of the village for private treatment. The use of sub-centre is less by 17 percentage points and that of PHC/CHC by 8 percentage points, when any private medical facility co-exists.

Accredited Social Health Activist (ASHA) works as a bridge between ANM and the community. The mandated qualification level for an ASHA worker is formal education up to class 8. The criterion is also relaxed if person with suitable qualification is not available. But, whether education upto class 8 is sufficient for the tasks ASHA workers are expected to perform is not clear. Since ASHA workers are expected to keep records and advice patients about appropriate care, their ability to read instructions is important to their ability to perform their job. Keeping aside educational qualification, the performance of the community health workers like ASHA is highly dependent on the on-the-job training received by them. Studies reveal that a huge lack of introductory as well as regular training of these low-educated ASHA workers has aggravated the situation further which often results into a low level of knowledge to perform the job efficiently. A study by Bajpai and Dholakia (2011) provides qualitative

Figure 5.3 Use of Public/Private Facilities (in percentage) by Availability of Facilities in the Village, 2004–05



Source: India Human Development Survey (2004–05).

findings on the recruitment, responsibilities, training, incentives and supervision of ASHA workers, in a few states, using cross-sectional, mixed-method surveys and focus group discussions. They found that nearly half of the ASHA workers in Assam could not specify their job responsibilities, whereas ASHAs in Bihar receive less than 10 of the 23 days recommended training. Again, most of these 'barefoot' community workers have received their on-the-job training from ANMs, who are not officially recognised as the supervisor or trainers of the ASHAs. These translate into very poor health knowledge among these workers, and evidence suggests that many ASHAs lack essential knowledge to perform their jobs well (Bajpai et al. 2011).

Quality of Care

Judging by the overwhelming preference of Indian consumers for private sector health services, we might be tempted to assume that private providers offer far superior care than public providers. However, this appears not to be the case.

The Indian medical system is mainly managed by three types of providers—trained (MBBS) public sector doctors, trained (MBBS) private sector doctors and untrained private sector doctors. The public sector is vast, but is sorely underfunded and not nearly large enough to meet the growing health needs of the country. Moreover, it is overly centralised and rigid in planning, politically manipulated, and poorly managed and governed. However, private sector providers are not significantly better. The mushrooming private sector is undirected and unregulated. It rarely meets the standards of care populated by many unqualified practitioners, and provides too many inappropriate treatments (Preker et al. 2002).

A vast majority of private medical practitioners in India are unqualified and lack proper training, especially those in the rural areas (Rao 2012). IHDS (2004–05) documented that 86 per cent of government doctors had an MBBS (Bachelor of Medicine and Bachelor of Surgery) degree, but only 60 per cent of the private providers are so qualified. Das et al. (2008) pointed out that the quality of medical advice, delivered by a medical practitioner in low income countries including India is very low. They measured the variation in quality of medical advice in a combination of variation in *competence* (defined as what doctors know) and variation in *effort* (defined as how hard doctors work). The gap between knowledge and practice is stark among Indian health practitioners. The study reveals that private doctors without an MBBS degree know only 20 per cent of the essential tasks, but they do pretty much all they know to do. The performance of this set of doctors is restricted by competence. The private doctors with an MBBS degree know 40 per cent of the essential tasks, but in practice, they use 25 per cent of them. The constraint of their performance is effort. The gap between competence and practice is even higher among public sector doctors. These set of doctors knew 30 per cent of their essential tasks but execute only 8 per cent in practice. Here also, effort is the constraint in performance.

This suggests that, although most of the public health facilities (PHCs/CHCs) are equipped with MBBS doctors, their competence as well as efforts to put knowledge into practice is negligible. The private sector, dominating the health market is also poorly equipped. Private hospitals are over-crowded by huge volume of patients, mostly due to the weak government healthcare delivery system and poor quality of care offered by it

(Rao 2012). Homan and Thankappan (1999), based on a study in Kerala showed that private city hospitals had higher occupancy rate than public hospitals. Again, the competence of private doctors need not be taken for granted. Using vignettes, coupled with direct observation of practice, Das and Hammer (2004) observed that the competence necessary to recognise and handle common and dangerous conditions is quite low among private medical practitioners in Delhi. They also commented that urban India pays a lot of 'Money for Nothing' in the private health sector as there is a lot of expenditure on unnecessary drugs (Das et al. 2007). A number of other studies also noted poor health system and medically unnecessary procedures in the private sector (Nandraj et al. 1999).

However, this tends to disadvantage some sections of Indian society who cannot afford high quality private care and end up relying on poorly qualified and motivated private providers. For example, IHDS data records that households spend far less on women's healthcare than they do in men's healthcare; for minor illnesses, expenditure for men is Rs 126 compared to Rs 105 for women, for major illnesses expenditure for men is Rs 2,100 compared to Rs 1,700 for women (Desai et al. 2010). Thus, higher quality government services could be particularly important for the disadvantaged populations. The role of government services also remains important in control of vector-borne diseases such as malaria and in screening services such as organising dental and eye examination camps.

It is a well-established fact that India is lacking required health infrastructure and the supply side gaps need to be fulfilled to make the system efficient. There has been an increase in the number of public health facilities over the 2007–11 period. Sub-centres have increased by 2 per cent, PHCs by 6 per cent, CHCs by 16 per cent and district hospitals by 45 per cent. Yet, shortfalls remain by 20 per cent for sub-centres, 24 per cent for PHCs and 37 per cent for CHCs, particularly in Bihar, Jharkhand, Madhya Pradesh and Uttar Pradesh. Though most CHCs and 34 per cent PHCs have been upgraded and operationalised as 24×7 facilities, at least in theory, and First Referral Units (FRUs) have doubled, yet the commitment of the Eleventh Plan to make all public facilities meet IPHS norms, and to provide emergency obstetric care at all CHCs have not been achieved. Access to safe abortion services is not available in all CHCs, and this gap is likely to contribute to maternal mortality, as abortion becomes essential during some pregnancy complications. Though

Mobile Medical Units (MMUs) have been deployed in 449 districts of the country, their outreach medical services are not enough to meet the need. Availability of healthcare services from the public and private sectors taken together is quantitatively inadequate. This is starkly evident from the data on doctors or nurses per lakh of the population. At the start of the Eleventh Plan, the number of doctors per lakh of population was only 45 against the desirable number of 85. Similarly, the number of nurses and ANMs available was only 75 per lakh population against the desirable number of 255. The overall shortage is aggravated by a wide geographical variation in availability across the country with the rural areas being poorly served in particular (Planning Commission 2013). Today, rural India needs specialists on a priority basis (Deo 2013). Seventy per cent posts of specialists (surgeons, physicians, paediatricians, gynaecologists, etc.) at the CHCs are lying vacant and the shortfall has widened against 46 per cent in 2005 (MoHFW 2013).

But, one should also look into the demand side factors of preference of private healthcare facilities over public. Whatever may be the cause, the higher reliance on private sector and the high expenses of medical treatment lead to higher OOP expenditure, further leading to middle and lower middle income people into poverty trap. The Government of India is experimenting with different aspects of healthcare financing to protect households from health trap. The Rashtriya Swasthya Bima Yojana (RSBY) is one among them, which is beyond the scope of this present paper. However, the mechanism of the RSBY scheme has been criticised on a number of grounds (Mor 2013, Krishnaswamy et al. 2011).

Conclusion

Health policy in India has implicitly and often explicitly envisioned a healthcare system dominated by the public sector. Public policies have tried to live up to these expectations. A vast network of PHCs and sub-centres, as well as larger government hospitals has been put in place, along with medical colleges to train providers. Programmes for malaria, tuberculosis control, and immunisation are but a few of the vertically integrated programmes initiated by the government. A substantial investment has been made in developing community-based programmes, such as Integrated Child Development Services (ICDS), and networks of village-level health workers. In spite of these efforts, growth utilisation of government services has failed to

keep pace with the private sector, particularly in the past two decades. The results presented in this paper show that Indian families, even poor families, receive most of their medical care from private practitioners. Maternity care is a partial exception here. For most other forms of care, however, the public sector is dwarfed by the reliance on the private sector, even though the quality of private sector providers and services remains highly variable (Desai et al. 2010).

One of the principles of Indian public health philosophy, as outlined in the Bhore Committee Report in 1946, emphasises that services should be placed as close to the people as possible, in order to ensure their maximum use by the community, which they are meant to serve (Gangoli et al. 2005). This focus on community-based services has been further amplified in the recent years, particularly in the NRHM. Recent policy discussions continue to emphasise the need to strengthen service-delivery points located close to the patients, for example, the use of sub-centres as first referral point is emphasised in the HLEG Report. Given the shortage of medical personnel and costs involved in providing almost door-step service delivery, attempts are being made to use community health workers to guide and motivate patients and nurses and paramedics to provide some of the basic services. For example, the allocation for ASHA workers has been substantially increased in recent budgets.

These observations present an interesting paradox. The data presented above indicate that despite the government's efforts to deliver healthcare services at the door-step, the utilisation of public health services is far from the norm. People rush to private facilities for both short-term as well as long-term illnesses, irrespective of the availability of any government health facility in the locality. This suggests that presence of *any* public facility is not sufficient; however, when a somewhat better equipped facility like PHC or CHC is present, patients are more likely to use them. The use of sub-centres as the FRU is emphasised in the HLEG Report. However, we suggest that sub-centre facilities may not be adequate to attract patients. We may need

better equipped facilities with qualified doctors. This may require a totally different approach to medical care. Instead of door-step care, we may need to focus on more centralised and well-equipped facilities. Will patients travel to these centralised facilities to obtain better quality care? We think they will. Striking increase in hospital delivery rate, from about 50 per cent to over 70 per cent following the implementation of Janani Suraksha Yojana (JSY) suggests that distance is less of a concern than is typically assumed to be the case.

Another advantage of focusing on centralised service delivery is that these facilities will be located in slightly larger towns and hence will be attractive to doctors and health technicians. Doctor absenteeism is a serious problem in rural India and setting up facilities where doctors may be willing to reside would reduce this problem. Deo (2013) has pointed out that doctors are reluctant to serve in the villages. Since, studies suggest that the government facilities lack the effort rather than competencies, any system that increases—or at least does not decrease—provider motivation deserves serious attention.

The ongoing demographic transition of the country provides a further justification for moving away from a door-step-based delivery system. With rising proportion of the elderly and decline in communicable diseases, the NCDs are increasingly emerging as the leading causes of morbidity and mortality. Most of these NCDs are not curable through simple interventions and require long-term care and access to diagnostic and monitoring facilities. These require more laboratory tests and specially-trained doctors. So, India has little choice but to invest in training of more doctors and strengthening public health delivery system.

Our arguments should not be taken to mean that we move away from government services towards private services. We actually argue the opposite; we suggest that poor quality of government services drives patients towards equally poor private services. Provision of higher quality government services may help redress this low-level equilibrium.

References

- Bajpai, N., and Ravindra H. Dholakia. 2011. 'Improving the Performance of Accredited Social Health Activists in India'. *Working Paper No. 1*. Mumbai: Columbia Global Centers.
- Berman, P., Rajeev Ahuja, and Laveesh Bhandari. 2010. 'The Impoverishing Effect of Healthcare Payments in India: New Methodology and Findings'. *Economic and Political Weekly* 45 (16): 65–71.
- Das, J., J. Hammer, and K. Leonard. 2008. 'The Quality of Medical Advice in Low-income Countries'. *Journal of Economic Perspectives* 22 (2): 93–114.
- Das, J., and J. Hammer. 2007. 'Money for Nothing: The Dire

- Straits of Medical Practice in Delhi, India'. *Journal of Development Economics* 83 (1): 1–36.
- _____. 2004. 'Strained Mercy: Quality of Medical Care in Delhi'. *Economic and Political Weekly* 39 (9): 951–61.
- Deo, Madhav G. 2013. 'Doctor Population Ratio for India—The Reality'. *Indian Journal of Medical Research* 137 (4): 632–35.
- Desai, S, A. Dubey, B. L. Joshi, M. Sen, A. Shariff, and R. Vanneman. 2010. *Human Development in India: Challenges for a Society in Transition*. New Delhi: Oxford University Press.
- Gallup, J. L., and Jeffrey D. Sachs. 2001. 'The Economic Burden of Malaria'. *American Journal of Tropical Medicine and Hygiene* 64 (1, 2): 85–96.
- Gangolli, Leena V., Ravi Duggal, and Abhay Shukla. 2005. 'Review of Healthcare in India'. *Centre for Enquiry into Health and Allied Themes*, Mumbai, India.
- Ghosh, S. 2011. 'Catastrophic Payments and Impoverishment Due to Out-of-Pocket Health Spending'. *Economic and Political Weekly* 46 (47): 63–70.
- Homan, R. K., and K. R. Thankappan. 1999. 'An Examination of Public and Private Sector Sources of Inpatient Care in Trivandrum District, Kerala (India) 1999'. Achuta Menon Centre for Health Services, Trivandrum.
- Kingdon, Geeta G. 2007. 'The Progress of School Education in India'. *Global Poverty Research Group*, Working paper series GPRG-WPS-071.
- Krishnaswamy K., and R. Ruchismita. 2011. 'Performance Trends and Policy Recommendations: An Evaluation of the Mass Health Insurance Scheme of Government of India'. *RSBY Working Paper No 11*. New Delhi: Department of Labour.
- Ministry of Health and Family Welfare. 2013. *Rural Health Statistics in India 2012*. Delhi: Government of India.
- Mor, Nachiket. 2013. 'State Level Strategies for Health Insurance and Health Care'. *Health System Research India Initiative*.
- Nandraj, S., A. Khot, and S. Menon. 1999. 'Accreditation of Hospitals: Breaking Boundaries in Health Care'. Centre for Enquiry into Health and Allied Themes, Mumbai.
- Pal, R. 2010. 'Analysing Catastrophic OOP Health Expenditure in India: Concepts, Determinants and Policy Implications'. *Working Paper No. Wft-2010-001*. Mumbai: Indira Gandhi Institute of Development Research.
- Planning Commission. 2013. 'Twelfth Five Year Plan (2012–17) Social Sector', vol. 3. New Delhi: Government of India.
- Preker, Alexander S., David H. Peters, Abdo S. Yezbeck, Rashmi S. Sharma, G. N. V. Ramana, Lant H. Pritchett, and A. Wagstaff. 2002. 'Better Health Systems for India's Poor' (eds.), World Bank Publication, ISBN 9780821350294.
- Rao, M. G., and M. Choudhury. 2012. 'Health Care Financing Reforms in India', *Working Paper No. 2012-100*. New Delhi: National Institute of Public Finance and Policy.
- Rao, M. G., and N. Singh. 2005. *Political Economy of Federalism in India*. New Delhi: Oxford University Press.
- Rao, P. H. 2012. 'The Private Health Sector in India: A Framework for Improving the Quality of Care'. *ASCI Journal of Management* 41 (2): 14–39.
- UN (United Nations). 2012. 'Changing Levels and Trends in Mortality: The Role of Patterns of Death by Cause'. Department of Economic and Social Affairs, Population Division United Nations publication, ST/ESA/SER.A/318.
- World Development Indicators. 2011. World Bank Online Database, <http://data.worldbank.org/data-catalog/world-development-indicators>, accessed on 2 March 2013.