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Utilisation of Health Care Facilities and Insurance Coverage among Urban Poor: A Study of Three Cities in India

S. K. Singh[$], Sanjay Pandey[#], P. Chokhandre[*], G. C. Kashyap[*], & A. Siddhanta[*]

Abstract

This paper analyses the source of health care facilities, focusing on under-utilization of public health facilities and insurance coverage among the urban poor. It used data from 5720 households from three Indian cities of Bhubaneswar, Jaipur and Pune. Urban poor are highly deprived in health insurance coverage as the adjusted effect portrays that slum residences in Jaipur and Pune are 0.57 ($p<0.05$) and 0.63 ($p<0.05$) times less likely to be covered by any health insurance despite a considerable proportion of them visiting private health facilities for general health and for maternal, new born and child health services. Only one-fifth of the households in the three cities have at least one member in the family covered under any health insurance scheme. The proportion is lower among slum dwellers as only one in every tenth household reported having at least one member covered in it.

Key words: Urban poor, health care facilities, insurance coverage

I. Background and rationale

Being home to the largest slum in Asia and having one-third of its population living below the poverty line (BPL), India is constantly struggling against the inexorably increasing poverty and for the health and development of its people. Every year, around 15-18 per cent people living in low-income slums are further sinking to the BPL level merely due to the burden of out of pocket expenditure on health care (NSSO, 2004). The financial burden of health care is a universal phenomenon, traversing different socio-economic and cultural settings (Chowdhury, 2009) but the implications are more pronounced among urban poor who do not enjoy coverage of state sponsored programme like National Rural Health Mission (NRHM). Given that good health is the most basic of all necessities, such high levels of out-of-pocket spending by the households have adverse implications. While for some people access to health care is reduced considerably, for others who opt for treatment face catastrophic burden of expenditure and are in consequent danger of becoming impoverished (Chowdhury, 2009). In the context of urban poverty, self-sponsored treatment can be potentially burdensome and even catastrophic, particularly amongst urban poor as the cost of their treatment is substantial and a large majority of them do not find the public health care facilities efficient enough and attractive.

In recent years India has witnessed an increasing pace and volume of urbanization. It is the first time in 2011, in the history of Indian population census, that the absolute increase in urban population during 2001-2011 has been larger than the absolute increase in rural population. Level of urbanization in India increased from 27.81 per cent in 2001 to 31.16 in 2011 (Census of India 2011). As a result, there has been a sizeable proportion of the population living in slums. Urban slums typically have lesser access to hygiene, sanitation and safe drinking water, in addition to a

[$] S.K. Singh, Professor, Department of Mathematical Demography & Statistics, International Institute for Population Sciences, Govandi Station Road Donor Mumbai, 400088, India. Email: sksingh1992@yahoo.co.in

[#] Sanjay Pandey, Director, Population Foundation of India, B-28, Qutub Institutional Area, Opposite Rockland Hospital, Katwaria Sarai, New Delhi 110016. Email: spandey@populationfoundation.in

[*] P. Chokhandre, G. C. Kashyap & A. Siddhanta are Ph.D. students at International Institute for Population Sciences, Govandi Station Road Donor Mumbai, 400088, India. Emails: praveenchokhandre@gmail.com; statskashyap@gmail.com; ankita.siddhanta@gmail.com. Corresponding author: G.C. Kashyap.

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number of other socio-economic odds having adverse implications for the health related quality of life. The increasing slum population is seen as an indication of worsening living conditions and increasing poverty in Indian cities. In the view of Sustainable Development Goal on improving the lives of slum dwellers, health of urban poor has emerged as a crucial development indicator which demands a synergistic approach in all the programmes and services relating to health of urban poor. With the recent plunge in Indian economy coupled with the rapidly growing proportion of poor, meeting the basic needs of this group (especially health care) has emerged as an issue of acute challenge for the state. Data from the National Sample Survey Organization (NSSO) indicate that between 1986-87 and 2004, the share of ailments not treated due to financial reasons has increased from around 15 per cent to 28 per cent in the rural India. A part of this increased financial burden arises from the fact that the proportion of visits to private health facilities has increased in recent years (Rao & Choudhury, 2012).

In view of continuously increasing medical poverty among urban poor, this paper aims at developing a background using patterns of health care service utilization among urban poor for the need and enhanced coverage of health insurance for urban poor. Against this backdrop, it aims to analyse the source of health care facilities and insurance coverage of the urban poor. It also examines the reasons of under-utilization of public health facilities by urban poor for their health in general and Maternal, New born and Child Health (MNCH) related services in particular.

II. Data and methods

The basic data used in this paper have been collected from Bhubaneswar (Odisha), Jaipur (Rajasthan) and Pune (Maharashtra) as a part of USAID funded intervention to improve the health related quality of life of urban poor, commonly known as ñHealth of Urban Poorò in 2011-12. The data have been collected using a combination of qualitative and quantitative research methods in both slums as well as non-slum localities in the three cities. The concerned states are at different level of urbanisation and hence their cities have been considered. Using suitable statistical weights, the data provide representative estimates for slums, non-slums and total city population for all the indicators included in the survey in each of the three cities.

Sampling

Sample size for the survey was determined based on scientific principles taking expected value of key behavioural indicator, confidence level based on relative standard error, and design effect. A two stage systematic random sampling design was used at both the levels, i.e., NSSO blocks (UFS) were selected using systematic random sampling and on an average 22 households (HHs) in the selected UFS were again selected by systematic random sampling after completing the house listing. 100 UFS are selected using random systematic sampling to cover approximately 2200 households from each city. Further, in order to maximize the representation in terms of size, distribution and characteristics of the sample, two types of weights have been used in the analysis of the data.

Sample description

Following the above sampling protocol, a representative probability sample was drawn from slum and non-slum localities in each of the cities. The findings of this paper are based on information collected from a total of 1839 households and 1322 ever married women from Bhubaneswar, 1996 households and 1614 ever married women from Jaipur, and 1884 households and 1418 ever married women from Pune.

Poverty as a concept is highly politicised and has a fluid definition. Hence, in order to overcome any definitional ambiguity this study has categorised urban poor with a combination of both slums and non-slums as their place of residence and also the Standard of Living Index (SLI)

was computed with a combination of 33 items/assets present within the household using factor analysis.

Profile of selected three cities and states

The slum and non-slum population for the three cities have been presented. Table 1 shows the slum proportion and slum population including (total households and total population by male and female) in each city. The proportion of population is found to be 11 per cent for Jaipur, 18 per cent for Bhubaneswar and 22 per cent for Pune.

Table 1: Slum population in the selected three cities according to census, 2011

Cities	Slum proportion	Total households	Slum population		
			Total	Male	Female
Bhubaneswar	18.5	42,277	1,63,983	86,326	77,657
Jaipur	10.6	61,858	3,23,400	1,69,751	1,53,649
Pune	22.1	1,51,278	6,90,545	3,53,156	3,37,389

Source: Census of India (2011).

Table 2: Demographic, socio-economic and health profile of Rajasthan, Odisha and Maharashtra

Item	Rajasthan	Odisha	Maharashtra
Total population (Census 2011) (in crores)	6.86	4.19	11.2
Decadal growth (%) (Census 2011)	21.44	13.97	15.99
Urban population (%) (Census 2011)	24.9	16.7	45.2
Crude birth rate (SRS 2013)	25.6	19.6	24
Crude death rate (SRS 2013)	6.5	8.4	8.7
Infant mortality rate (SRS 2013)	47	51	16.5
Maternal mortality rate (SRS 2010-12)	255	235	6.2
Total fertility rate (SRS 2012)	2.9	2.1	10.2
Sex ratio (Census 2011)	926	978	925
Child sex ratio (Census 2011)	883	934	883
Total literacy rate (%) (Census 2011)	67.06	73.45	82.91
Male literacy rate (%) (Census 2011)	80.51	82.4	89.82
Female literacy rate (%) (Census 2011)	52.66	64.36	75.48

Source: MoHFW (2012), *RHS Bulletin.*

III. Results and discussion

Profile of selected households

Table 3 portrays profile of the households selected for the study. Almost 87 per cent of households in Bhubaneswar and Pune have an adult member attaining 10 years and above education and this percentage is 70 per cent in Jaipur. The per cent distribution of households by their SLI shows that the proportion of households with low SLI is 30 to 32 per cent in Bhubaneswar and Pune whereas it is around 38 per cent in Jaipur. The profile of the households also portrays that 10 to 15 per cent households in Bhubaneswar and Pune have Scheduled Caste/Scheduled Tribe (SC/ST) population, whereas this percentage is more than double in Jaipur where the proportion of households with ‘others’ caste is 44 per cent as compared with 60 to 65 per cent in the other two cities. As high as 96 per cent of the households in Bhubaneswar and 85 per cent households in Jaipur and Pune belong to Hindu religion. One-third of the households in Jaipur are from slums compared with almost one-fifth in Pune and only 8 per cent in Bhubaneswar.

Table 3: Socio-demographic profile of households in the three cities

Background characteristics	Bhubaneswar	Jaipur	Pune
Highest years of schooling by any adult member in the household			
< 5 years	0.9	2.9	1.6
5-9 years	11.7	27.4	11.1
10 years & above	87.4	69.7	87.3
Standard of living index			
Low	29.5	37.9	32.0
Medium	35.3	33.9	33.6
High	35.2	28.2	34.4
Caste of household			
Scheduled caste/ Scheduled tribe	10.5	32.4	14.7
Other backward castes	24.0	23.2	24.5
Others	65.5	44.4	60.8
Religion of head of HH			
Hindu	96.2	85.5	84.0
Muslim	2.5	12.9	7.8
Christian	0.9	0.7	2.4
Others	0.4	0.9	5.8
Type of locality			
Slum	7.8	33.9	18.2
Non-slum	92.2	66.1	81.8
Total (N)	1839	1996	1884

Utilization of healthcare facilities by urban poor

The healthcare system in India is more focused towards the rural areas and has an organisational structure from grassroots to tertiary care which is managed by dedicated staff. However, there is a huge deficiency of any such healthcare structure in the urban areas. The rapid growth of urban population has overburdened the existing health care system (Kantharia, 2010). A disaggregation of data by economic status reveals the sharp disparities which exist between the urban poor and the better-off sections in urban areas. In fact, slum dwellers in cities suffer from adverse health conditions which are sometimes worse than those living in rural areas (Agarwal et al., 2007). Although slum residents often live close to many health care providers, they generally have little access to high-quality care. Care-seeking patterns show that although less expensive and higher-quality government clinics may be available, slum residents who do seek care tend to choose more expensive private providers (Agarwal & Srivastava, 2010).

Utilization for general health needs

Health care utilisation in terms of type of health facility used at the time of sickness of any family member clearly brings out the stark preference of private facilities among urban poor. Overall results show that private medical sector is the primary source of health care for urban poor households in both slum and non-slum areas in the three cities with a large majority of people reporting use of private facility at incidence of sickness (Table 4). Even among the households from low SLI, a large proportion of them opted for private health facility (40 per cent in Bhubaneswar, 62 per cent in Jaipur and 77 per cent in Pune). In each of the three cities, the proportion visiting public health facilities declines sharply with increasing SLI except in Jaipur. It is believed that an important factor contributing to Indiaôs poor health status is its low level of public spending on health, which is one of the lowest in the world. In 2007, according to WHOôs

World Health Statistics, India ranked 184 among 191 countries in terms of public expenditure on health as a percentage of GDP (Rao & Choudhury, 2012).

Table 4: Percentage of households by the source of health care in time of sickness by background characteristics in the three cities

Background characteristics	Bhubaneswar			Jaipur			Pune		
	Public health facility	Private health facility	Other health facility*	Public health facility	Private health facility	Other health facility*	Public health facility	Private health facility	Other health facility*
SLI									
Low	74.5	39.8	2.6	47.7	62.3	2.5	30.0	77.2	0.3
Medium	54.7	65.4	1.2	49.1	56.4	2.7	22.3	83.2	0.8
High	41.3	76.2	1.0	42.2	64.1	2.6	12.9	89.5	1.4
Caste									
SCs/STs	73.5	41.0	2.6	42.6	64.3	2.3	31.7	74.7	0.7
OBCs	63.7	49.1	1.4	46.1	60.6	3.3	26.4	78.9	0.7
Others	51.4	68.7	1.5	49.1	58.9	2.3	17.3	87.1	1.0
Type of locality									
Slum	79.1	27.4	1.8	42.3	62.4	2.4	30.5	77.5	0.5
Non-slum	53.0	66.5	1.6	48.0	60.3	2.7	19.4	84.8	0.9
Total	55.0	63	1.6	46.5	60.6	2.6	21.2	83.7	0.9
Number (N)	1839	1839	1839	1996	1996	1996	1884	1884	1884

* NGOs, Trust hospitals and traditional healers.

In the slums, four-fifths of households in Bhubaneswar, more than two-fifths in Jaipur and a little less than one-third in Pune go for public health facilities. Analysis also brings out the evidence reinstating the bearings of other individual and household socio-economic factors on facility utilisation preference as non-SC/ST and non-OBC groups in Bhubaneswar and Pune are less likely to visit public health facilities as compared with their counter-parts.

The adjusted effect of locality of residence on type of heath facility used shows that the slum dwellers in Bhubaneswar are 1.65*** times more likely to visit public health facilities than those living in non-slums. However, this adjusted effect of slum and non-slum differentials is not significant in the other two cities (Table 5). Adjusted effects of SLI in visiting public health facilities is more pronounced in Bhubaneshwar and Pune where households with high SLI are 60 to 70*** per cent are less likely to go for public health facilities. Compared with the Hindus, the Muslims in Bhubaneswar (OR=0.5**) are less likely and those in Pune (OR=1.6**) and Jaipur (OR=1.4*) more likely to avail of public health facilities.

Table 5: Logistics regression analysis for users of public health facility by standard of living index and type of locality in the three cities.

Background characteristics	Bhubaneswar	Jaipur	Pune
Standard of living index			
Low ®			
Medium	0.580***	1.178	0.760*
High	0.320***	0.845	0.431***
Type of locality			
Non-slum®			
Slum	1.649***	1.022	1.059

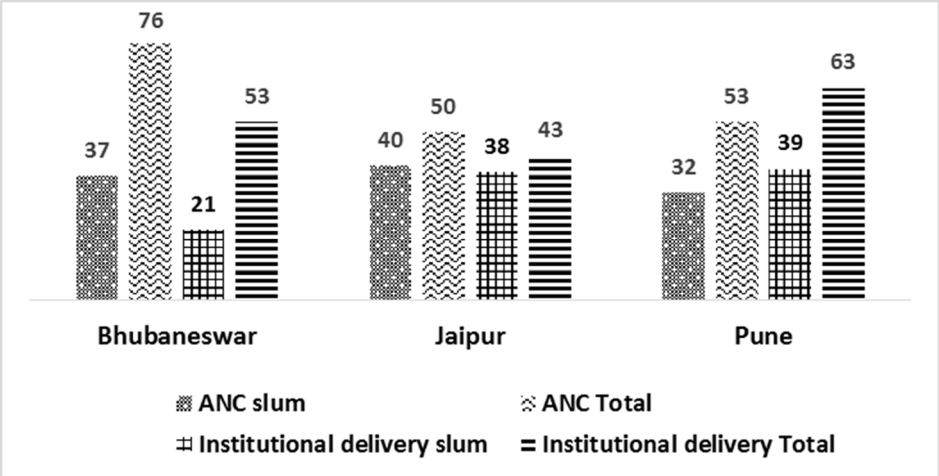
® Reference category, ***P<0.01, **P<0.05 and *P<0.10.
Results are adjusted for religion, castes and educational attainment by adult member in households.

Utilization for MNCH

More than half of Indiaôs urban poor children are underweight and/or stunted. In most states under-nutrition among the urban poor is worse than among rural areas (Agarwal, et al., 2007). Although Indiaôs maternal mortality rate reduced from 212 deaths per 100,000 live births in 2007 to 167 deaths in 2013 (UNICEF India, 2013), the rate is still high. That is why it is important to assess utilization of health facilities by urban poor for maternal health, new born care, and child health related services in the three cities using few core indicators. Results from this section are critical as they can be treated as proxy of both the demand as well as supply of health care in terms of availability, accessibility and acceptability of services. In the three cities, recent mothers i.e. married women in the age group of 15-49 years who reported giving at least one live birth in the three years preceding the survey were asked about their access to and utilization of some of the critical reproductive and child health care services. They were also asked about the extent to which they had availed of services such as ANC check-ups, immunization during pregnancy, delivery and post-natal phase.

Overall, the proportion of women taking ANC services from the private sector varied from 50 to 76 per cent. Even among women living in slums, 32 to 40 per cent reported availing of private facilities for ANC. A similar enquiry about the type of facility for institutional delivery reveals that 43 to 63 per cent women opted for private facilities for institutional deliveries. This proportion was 21 to 39 per cent among slum dwellers and 46 to 68 per cent among non-slum urban poor women. It is interesting to mention here that the government facilities remain highly underutilised for institutional deliveries, especially among those who reported staying in non-slum areas (Figure 1).

Figure 1: Recent mothers using private health facility as a source for receiving ANC and institutional delivery for the most recent birth in the three cities



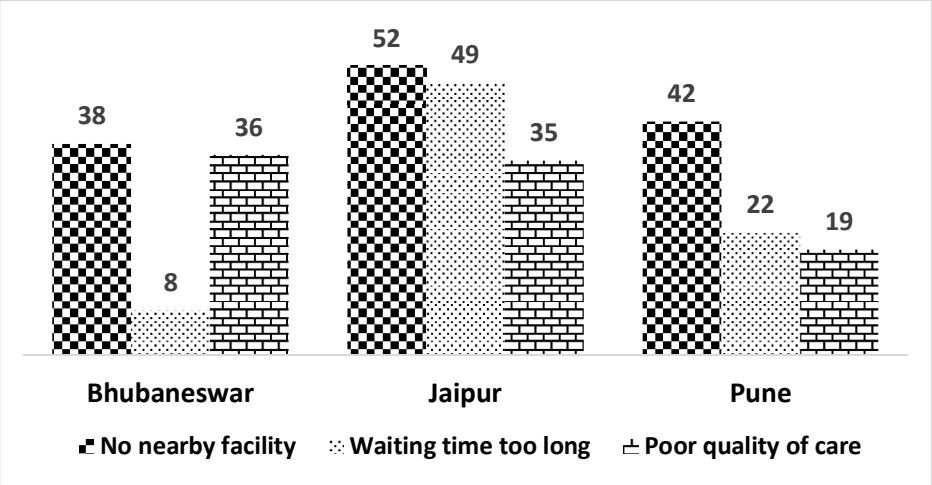
In terms of child health facilities, private sector again is a more popular choice even for basic needs like vaccinations and management of common childhood illnesses. Results clearly brings out the preference as a substantial proportion of children aged 12 to 23 months, i.e., nearly 50 per cent in Pune, 41 per cent in Bhubaneswar and 21 per cent in Jaipur got vaccinations from private health facilities despite free services available in state run facilities. Use of public health facilities for vaccination among children is twice as high in the slum areas in the three cities compared with the non-slums, particularly in Bhubaneshwar and Pune. The slum and non-slum differential in the treatment of diarrhoea, the most common childhood illness, shows that all the children in slums of Jaipur and Pune are taken to a private health facility. Considering the fact that India has an elaborate national programme for childhood diarrhoea management, these results portray a gross under-utilization of public health system even among urban poor.

Reasons for underutilization of state run health facilities

In this paper, an attempt was also made to explore the underlying reasons for gross underutilisation of state run health facilities despite the massive out of pocket expenditure in private medical facilities. The main reason is the distance from the facility as non-availability of the facility around the residence was reported as the main reason by 38 per cent, 53 per cent and 41 per cent respondents in Bhubaneswar, Jaipur and Pune respectively (Figure 2). Proximity is the key reason for opting private facilities over public facilities despite the financial burden it brings on the family and surprisingly the proportion of people reporting this reason is high among slum households as compared with non-slum households. Another reason for the non-utilization of public health facilities is poor quality of care. Over one-third of respondents in Bhubaneswar and Jaipur reported it as the reason for their opting for private care. Yet another was a longer waiting time at the facility.

However, most state governments face two potentially competing challengesï strengthening urban health delivery system despite severe shortage of funds and skilled manpower and rolling out of state-run health insurance schemes focusing at urban poor. Moreover, despite the availability of state-run facilities, poor especially in urban areas are often resorting to expensive private health facilities. This may be either due to lack of faith in public health system or accessibility to facilities.

Figure 2: Specific reasons for not utilizing government health facility in the three cities



IV. Health insurance for urban poor

Rationale of health insurance coverage to minimize out of pocket expenses for urban poor

Health expenditure as a proportion of gross domestic product of a country is a strong indicator in accordance with human development and public expenditure on health as a proportion of total health expenditure which is a more crucial indicator of the Governmentôs commitment to the health of its citizens. In India, despite expansion of public health system, illness among poor people is an important reason for human deprivation, especially in unorganized sectors having over 90 per cent of the labour force. Health spending, especially in private sector, puts many poor families in heavy debt, selling of household assets and cutting of essential expenditures including expenses on education of children. Self-sponsored treatment brings with itself catastrophic burden of health care expenditure and in consequent danger of becoming impoverished.

Health insurance coverage

Economic implications of the existing patterns of healthcare utilization among urban poor result in a substantial out of pocket expenditures. However, results portray a weak coverage of health insurance among the urban poor (Table 6). About only one-fifth of the households in all the three cities have at least one member in the family covered under any health insurance scheme. The proportion of such households is further lower among slum dwellers as only one in every tenth household reported having at least one member covered in it. Further, the adjusted effect of SLI of household on coverage of health insurance pronounced in all the three cities (Table 7) where households in medium and high SLI are more likely to be covered by health insurance (Bhubaneswarï OR=1.7** & 4.5***, Jaipurï OR= 2.4*** & 5.5***, and Puneï OR= 1.6*** & 5.6***). The adjusted effects of slum/non-slum residence are also pronounced in Jaipur (OR= 0.57**) and Pune (OR= 0.63***) where slum households are significantly less likely to have any member of their family covered under any type of health insurance despite a considerable proportion of them visiting private health facilities (Figure 4). It is also evident from the study that urban poor are unable or unwilling to take health insurance due to lack of knowledge about the perceived benefits. The study on urban health by Agarwal and Srivastava (2010) confirms that a contributing factor to poor health among the slum dwellers is the low awareness and practice of recommended behaviours as well as of the services that may be available.

Table 6: Percentage of households with at least one member in the family covered under any health insurance scheme by background characteristics in the three cities.

Background Characteristics	Bhubaneswar		Jaipur		Pune	
	Slum	Non-slum	Slum	Non-slum	Slum	Non-slum
Standard of living index						
Low	9.4	10.2	4.0	8.3	8.8	15.0
Medium	25.0	17.9	18.8	17.7	17.6	23.3
High	20.0	33.9	19.6	42.7	27.8	52.7
Total	11.2	22.0	11.0	24.9	12.4	33.2
Number (N)	279	1544	367	1618	447	1437

® Reference category, ***P<0.01, **P<0.05 and *P<0.10.

Table 7: Logistics regression analysis for health insurance coverage by standard of living index and type of locality in the three cities.

Background Characteristics	Bhubaneswar	Jaipur	Pune
Standard of living index			
Low ®			
Medium	1.660**	2.462***	1.659***
High	4.457***	5.595***	5.614***
Type of locality			
Non-slum®			
Slum	1.310	0.567**	0.631***

® Reference category, ***P<0.01, **P<0.05 and *P<0.10.
Results are adjusted for religion, castes and educational attainment by adult member in households.

V. Conclusions and recommendations

In a nutshell, the public sector urban health delivery system, especially for poor, has so far been sporadic, far from adequate, limited in its reach and further constrained due to social exclusion of slums, weak social fabric and lack of coordination among stakeholders. Another finding of this study is that slums typically form a disadvantageous sub-group among the larger category of urban poor both in terms of availability of public health facility as well as coverage

under health insurance. Slums that characteristically start as the undocumented dwellings formed in the urban or peri-urban areas are often not identified as parts of the cities. Further, these unauthorised tenancies are many times denied to set up physical public health facility to ensure that they are not included in urban areas to restrict their expansion to city administrative limits. Rapid urbanization and extending city boundaries witnessed in India of late has made this a political issue along with a public health challenge. The study advocates the actualization of two pronged strategies under universal health coverage, i.e., full spectrum of good quality essential health services and protection from impoverishment due to out of pocket expenditure which can be effectively achieved through universal and free comprehensive primary health care provided by the Government with publicly financed insurance schemes to pay for secondary and tertiary care services with private sector partnership to close the critical gaps. Clearly, these findings suggest widening coverage of health insurance, especially for urban poor through promoting public-private partnership with a provision of administrative quality control with vertical accountability. To effectively address this issue, health facilities should be organized and expanded irrespective of notified or non-notified slums with a humanitarian approach so that those living at outskirts of cities may have access to basic health facilities. All urban health posts should have a provision of mobile clinics to enhance the reach and coverage of MNCH services among urban poor and ensuring equitable access to affordable health facilities. There is also a need to widen the coverage of Rashtriya Swasthya Bima Yojana (RSBY, 2007), a national state-sponsored health insurance scheme among urban poor in order to minimize their out of pocket expenses on health problem. Above all, suggestions should be considered on strengthening the existing healthcare services focusing on the affordability and availability of services.

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