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Research Brief

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Catastrophic Health Care Payment: how much protected are the users of public hospitals?

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Background

Every year an estimated 25 million households — more than 100 million people — are plunged into poverty when they or their relatives become ill and they must struggle to pay for health-care services out of their own pockets.[1] Indian health care market demonstrates it well where a health shock often implies an enormous burden of treatment to an affected household consequently leading to significant erosion of its pre-shock endowment. One conservative estimate shows that one-quarter of hospitalized Indians slip below the poverty line due to hospital expenses.[2]

The present research brief presents some recent evidences on the incidence of catastrophic financial shocks experienced by the users of public vis-à-vis private hospitals in one Indian state (West Bengal). The scenario is especially interesting in West Bengal, where public sector plays a dominant role in providing inpatient care. The findings presented below would therefore help understand whether and to what extent a strong presence of public sector is an adequate instrument for financial protection.

Data and method

The research brief is based on a household survey recently carried out by Institute of Health Management Research (IIHMR) in three districts of West Bengal under a research programme titled “Future Health System: Innovations for Equity”. The survey covering 3152 households was conducted in three districts of West Bengal (Malda, Bankura, and North 24 Porgonas). The present brief is based on the data on out of pocket payments for inpatient care which included all treatment costs (consultancy, drugs, tests, etc.), travel costs, and board and lodging costs (for the attendants) for those who were admitted in a hospital in the last one year.

To link out of pocket payments with poverty, households were categorized according to self-rated poverty status; this was derived by asking the respondent about the state of the household's overall annual expenditure in relation to income. Accordingly, households were categorized in three groups: (1) the "low status" households (those which were running in deficit always), (2) the "medium status" (those that were in a state of occasional deficit), and (3) the "high status" (those which had no deficit or had surplus). This self-assessment tool has been applied in several researches especially in the context of rural Bangladesh.[3]

The out of pocket spending on health care is usually defined as *catastrophic* when it exceeds some "threshold", defined normally in relation to the household's 'pre-payment' ability to pay. There are several ways to quantify this threshold. The study has used the household's annual non-food expenditure (i.e., total household expenditure net of expenditure on food) as the proxy of household's ability to pay. Thus, households spending more than 40 % of their non-food expenditure on medical care would be catastrophically impacted if the threshold is assumed to be 40 %.[4]

Results

Figure 1 shows the degree of out of pocket payment by households on inpatient care in terms of its share in non-food expenditure. As expected, the households which used private hospitals for inpatient care spent an exorbitantly high percentage of their ability to pay on hospitalization. The burden was disproportionately higher on the poorest households. The inequality of the burden was less sharp for public clients although the affected households in low-income group, on average, spent higher fraction of their ability to pay on inpatient care,

Figure 1: Mean percentage of non-food expenditure spent on inpatient care (West Bengal, 3 districts), by economic status

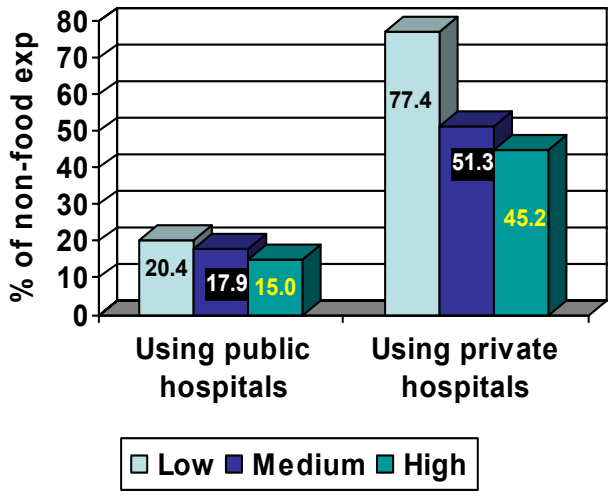


Table 1 presents the catastrophic impact of inpatient care on affected households estimated at three different levels of thresholds – 20%, 30%, and 40% of annual non-food expenditure being spent on medical care for the inpatients. The survey found 567 households which had at least one member hospitalized in the last one year. About 81 % of these households used public hospitals for inpatient care. According to the present study estimates, about 21 % of affected households and 3.78 % of all households paid more than the catastrophic threshold of 40 % of non-food expenditure for inpatient care. The catastrophic blow was heavily biased towards the private users especially in the poorest group – 71.4% of households compared to 14.6% of public users. Lower incidence of potential health related poverty among the public clients indicates a high social benefit (or, low social cost) generated by the state funded health system.

The distribution of shock was more or less even across all households who used public hospitals. On the contrary, a poor household ("Low" category) using private facilities was much prone to shock compared to its richer counterpart. The public facilities apparently reflect equality in risk-spread (or, shock distribution) but, effectively, it is inequitable since a poorer household is expected to face more disaster when it pays more than 40% of its non-food expenditure. Clearly, it is still far from the ideal and equitable situation where poorer households would bear lower risk.

Table 1: Percentage of households crossing the catastrophic threshold for inpatient care, by different thresholds

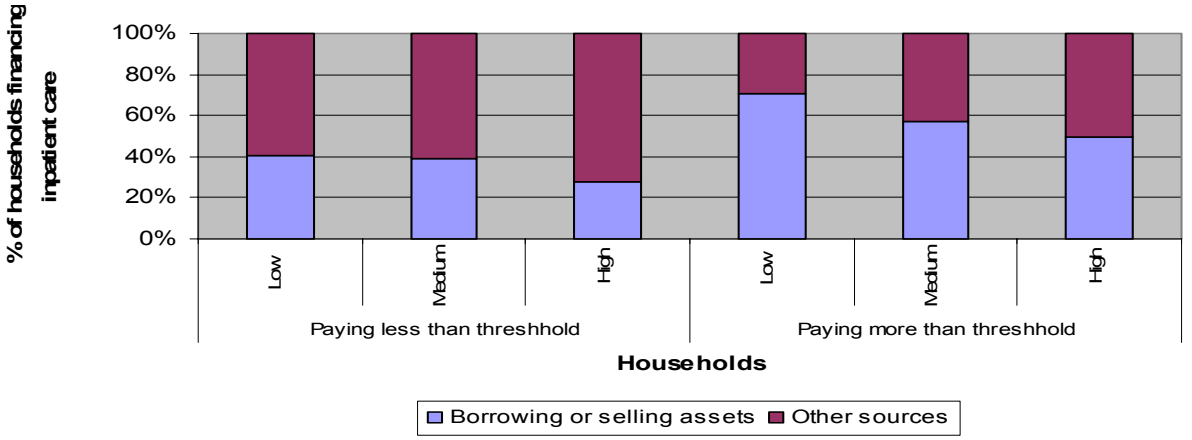
Self-perceived economic status of households	N	% of households crossing the threshold		
		>20% of non-food Expenditure	>30% of non-food expenditure	>40% of non-food Expenditure
		Public hospitals		
Low	82	24.4	19.5	14.6
Medium	227	29.5	20.7	15.4
High	151	29.1	19.9	14.6
Total	**460**	**28.5**	**20.2**	**15.0**
		Private hospitals		
Low	14	85.7	78.6	71.4
Medium	41	78.0	63.4	48.8
High	52	67.3	51.9	40.4
Total	**107**	**73.8**	**59.8**	**47.7**

N = Number of households which had at least one member seeking inpatient care in a year

One way to gauge the catastrophic impact on the affected households is to assess how they had financed the payments for health care. It is a common phenomenon that the poorer households usually try to cope with the shock initially by using liquid resources under direct command or entitlements (e.g., regular income and / or savings), and then, if the mobilized resources are inadequate, by drawing upon their extended and non-liquid entitlements (e.g., borrowing and/or selling assets). In other words, financing health care through borrowing or selling assets could be taken as a reflection of a powerful shock to the household economy which may catastrophically affect it in the longer run.

Figure 2 presents the coping mechanism adopted by the sample households when at least one member was admitted in a public hospital. The catastrophic threshold was defined as more than 40 % of non-food expenditure. The positive correlation between out of pocket payments (as a % of non-food expenditure) and dependence on extended entitlements is quite evident across all types of households. While 60 % of those poorest households with which had paid less than the catastrophic threshold managed with readily available resources (income or savings), only 30 % of the others (who had paid more than the threshold) in the same category could do so. As expected, the poorer households were much more likely to draw upon extended entitlements (70%) compared to their richer counterparts (50%).

Figure 2: Percentage of households using public hospitals and coping with inpatient care expenditure though selling assets or borrowing (with interest)



Policy Implications

Indian policy makers have started acknowledging the need to protect the poorer households from the catastrophic impact of hospitalization. Consequently, several states (including West Bengal) have recently embarked on adopting tailor-made and subsidized medical insurance packages for poor population. These initiatives are encouraging; however, it is still not clear how the public hospitals, which already supply highly-subsidized services, could fit in an insurance-driven market. In other words, this approach risks double burden of public subsidy especially in a state like West Bengal where public facilities overwhelmingly dominate the inpatient care market. The present brief argues that in such a scenario a well-governed and pro-poor public health care system can achieve the same objective in a more cost-efficient way.

The above argument leads to two implications for the health policy makers of West Bengal as well as of India. First, to translate *some* into *adequately high* protection especially for the most vulnerable and poor households, targeting mechanism must be strengthened and made effective. The public facilities provides some protective shield, but still fail to protect "15%" of their clients (households) from paying catastrophic amounts. The Rogi Kalyan Samitis (the autonomous societies at the facility level) can play an important role to track down those potentially vulnerable patients based on selected indicators (e.g., complicated cases, surgical cases, etc.) and provide special support to further subsidize the high-cost items.

Second, an effective way to control the out of pocket payments is to focus on the medicine bills of inpatients since about two-thirds of out of pocket payments in case of inpatient care in the public hospitals are spent on medicines and diagnostic tests [5]. A large section of the users of public hospitals – irrespective of their economic status – are compelled to purchase medicines and diagnostic services from private sources. This requires urgent attention and correction by better governance of drug prescription and delivery system. A voucher scheme for the poorer households to obtain cashless services from private pharmacies may also be tested by the Rogi Kalyan Samitis.

Notes

[1] "Countries test new ways to finance health care". *Bull World Health Organ*, Vol. 84, No. 11, 2006.

[2] Peters D, Yazbeck AS *et al.* Better health systems for India's poor: Findings, analysis, and options. The World Bank, Washington DC, 2002.

[3] Ahmed S M, Tomson G, Petzold M *et al*. Socioeconomic status overrides age and gender in determining health-seeking behaviour in rural Bangladesh. *Bull World Health Organ*, Feb 2005, 83(2).

[4] Several researchers used 40% of non-food expenditure as the catastrophic threshold. For example, see Xu Ke. Distribution of health payments and catastrophic expenditures. WHO, 2005.

[5] Health, equity and poverty: Exploring the links in West Bengal, India. FHS working paper, IIHMR, 2008

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