Catastrophic Health Expenditures: Why Leave Out the Non Users?

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Abstract:
Illness represents a loss of well-being and medical care, does not come free of cost. Healthcare may be financed through coverage of insurance schemes or by the public sector or otherwise, by paying for it directly. The latter, called out-of–pocket (OOP) payments for healthcare may have catastrophic consequences for a household, especially if current consumption has to be sacrificed to finance them. The methodology for calculating incidence of catastrophic health expenditures involves the setting of a critical threshold, a proportion of the household's income or capacity to pay beyond which if the healthcare expenditures exceed, they are referred to as catastrophic. The present paper questions this methodology as it underestimates the extent of the problem by not including households who sacrifice healthcare in order to maintain their current levels of consumption, given that they ate two sides of the same coin.

Keywords: *Catastrophic health expenditures, Out-of-Pocket, Non-users*

1. Introduction

The importance of health and healthcare for an economy as well as for the quality of life of individuals within the economy is unquestionable. A healthy population is essential for economic growth and development, and therefore availability and accessibility of quality healthcare is an important concern for any government. Whether provided privately or publicly, healthcare does not come free of cost and someone has to bear the cost. This "someone" could be the government (when healthcare is subsidised), or the insurance company, or the users themselves. When health expenditures are borne privately by individuals through direct payment, they are referred to as **out-of–pocket** (OOP) payments for healthcare. Sometimes, even after availing healthcare at subsidised rates or having received insurance payments for certain components for healthcare, some costs are left to be borne by individuals/households themselves. All these are then called out of pocket payments and it is these expenses that we will concern ourselves with in this paper. There are certain indirect costs of healthcare too, which do not emanate directly from payments for healthcare but confront households as opportunity costs or overhead costs. Loss of income of the patient or caretaker for instance is an example of the former and transportation costs are an example of the latter. These are referred to as indirect or implicit costs of healthcare and do not represent out of pocket expenditures as such. By out of pocket expenditures we mean explicit "payments" made in the form of user charges, cost of medicines and diagnostic tests. Since these payments are neither paid up through insurance nor covered under any government scheme, they have to be borne out of the users' own pockets, hence the term, "out-of pocket" expenditures. According to NSSO, almost 70 percent of the total expenditure on healthcare in India is done out of pocket (NSSO 2006).

2. "Catastrophic" Consequences of OOP Payments and the Concept of "Medical Poverty"

The last decade has seen a growing concern for the financial consequences of out of pocket healthcare payments on households both in the developed countries like the US and the developing countries like India and Vietnam. (World Bank 1997, Narayan et al. 2000, World Bank 2000,

Burtless 2001, Whitehead 2001). They are perceived to be the most regressive instrument of health finance, especially in the low or middle income countries (Whitehead et al., 2001, O. O'Donnell et al 2008.) Unanticipated illness along with uninsured healthcare is shown to have a major impact on consumption and severely disrupt the economic condition of the households, worldwide (Gertler 2002, Waters 2004). The concern stems from the fact that a household may have to cut current or future consumption, in order to finance healthcare. When health expenditures are so large for a household that it has to sacrifice its current consumption to fund them, they are referred to as **catastrophic health expenditures**. The term "catastrophic" brings out the centrality and importance of the problem. Healthcare is as basic a necessity as food and clothing. It is essential for survival and for quality of life, but if its consumption interferes with the consumption of other basic necessities which are also equally essential, then the situation is truly catastrophic and cannot be ignored (Berki 1986, Xu et al. 2003).

Another concept that has come into picture recently is that of **"medical poverty".** This is a more severe condition wherein a household is pushed below the poverty line due to large heath expenditures. This means that in order to pay for health services out of pocket, the household has had to cut down current consumption so much that it is unable to consume even as much as the minimum required for it to remain above poverty line. (Wagstaff and Doorslaer 2003, Xu et al. 2003)**.** The consequences of out of packet expenditures for health are therefore dire and need special attention. No problem however can be addressed before evaluating its magnitude and incidence, but to calculate the prevalence of households experiencing catastrophic health expenditures and those faced with medical poverty, the concepts needed to be defined more objectively.

3. Prevailing Methodology for Calculating the Incidence of Catastrophic Health Expenditures

Among the earliest attempts to measure economic burden of health expenditures was made by Berki (1986). According to him, mere cost of care need not represent its catastrophic nature. Expensive surgeries may not alter the well being of a household if they are insured or in a position to bear the cost without a dent on their consumption, However, low cost diseases may have disastrous consequences for a low income family without health insurance. What matters therefore, is the share of household income that is being spent on healthcare. According to Berki, catastrophic expenditures are those that constitute a "large" share of the household budget. However, he did not specify how large that share should be in order to be classified as catastrophic.

Later, Wagstaff and Doorslaer (2003), in a World Bank study defined catastrophic health expenditures as an overshoot of the healthcare budget of a household, beyond a critical threshold. Although they felt that the threshold could be set arbitrarily, they used in their study, a 10 percent cut off. Thus according to Adam Wagstaff and Eddy van Doorslaer, if a household's health expenditure exceeds 10 percent of its total expenditure or income then the household is said to incur catastrophic healthcare payments.

Xu et al. (2003) in a World Health Organisation (WHO) multi-country study contended that measurement of catastrophic healthcare payment incidence should be based on household's capacity to pay for healthcare rather than on its total income or budget. They defined household's capacity to pay as income left after accounting for food consumption, which they also called as the non-discretionary income. Thus, in their study, the critical threshold was taken as 40 percent of the household's capacity to pay or non-discretionary income.

The methodology for calculating incidence of this "medical poverty" was also developed by Wag staff and Doorslaer. According to this methodology, poverty headcount and poverty gap ratio can

be calculated by identifying the households that fall below the poverty line after payments for healthcare have been made (Wag staff and Doorslaer 2003).

4. Results based on Prevailing Methodology

Using data on out-of-pocket payments for health care in Vietnam from 1993-98 the World Bank study showed that in 1998, around 80 percent of health spending in Vietnam was paid out-of pocket. Only 12 percent of the Vietnamese population was covered by social health insurance, which too was concentrated in the higher income groups. The incidence of catastrophic payment was estimated to lie between 33.8 percent to 2.9 percent as the threshold was raised from 5 percent to 25 percent of the total household expenditure, while Xu et al., based on their capacity to pay approach estimated this incidence to be 10.5 percent (Wagstaff and Dooeslaer 2003, Xu et al. 2003). The prevalence of high OOP expenditures and their catastrophic consequences in Vietnam was explained by the rise in user fee for both public and private healthcare facilities in Vietnam between 1993 and 1998 (Wagstaff and Dooeslaer 2003).

After the pioneering work of Xu, et al. (2003) and Wagstaff (2003), many studies have used this methodology to develop indices that could capture the incidence as well as the intensity of catastrophic healthcare payments, and their impoverishing impacts if any (Chowdhury 2010, Doorslaer 2006, Joglekar 2008, Gupta 2009, Garg et al. 2005, Garg et al. 2009, Ghosh 2010, Xu, et al. 2007).

Estimates from India are drawn mainly from the NSS data. Soumitra Ghosh reviewed the health reform process in India from 1994-2004, and showed that like Vietnam, user fees in India had also risen. In fact, user fees was introduced in India during the eight five-year plan (1992-97), which was followed by a decline of government spending on health, especially at the state level. The new Drug Price Control Order (DPCO) of 1994, drastically brought down statutory price controls on common bulk drugs and the pharmaceutical sector was further liberalized in 2002 leading to a rise in the prices of drugs during 1994-2004 (National Commission on macro and health). All these developments increased out of pocket health payments for users of both public and private facilities in India (Ghosh 2010). Since OOP payments are the primary source of health financing in India, such fuelling healthcare costs were bound to have disastrous consequences on the well-being of the population at large. The study revealed that on an average, households spent Rs. 198 or 5.5 percent of total consumption expenditure on healthcare in 2004-05 compared to 4.4 in 1993-4. Drugs accounted for 61 to 88 percent of the total OOP payments across states, while hospitalizations accounted for only 13 percent of OOP at the all India level. The catastrophic healthcare expenditure incidence (OOP>10 percent) increased from 13.1 percent to about 15.4 percent over the health reform period, 1994-2004. Even at the highest threshold level (OOP>25%) the catastrophic headcount was more than 4 percent in 2004-5.

The impoverishing impact of the OOP payments could be seen from the fact that poverty ratio increased by 4 percentage points in 1993-94 and by 4.4 percentage points in 2004-05. Thus, 35 million people in 1993-94 and 47 million people in 2004-05 were pushed into poverty by the need to pay for healthcare services (Ghosh 2010).

Another study, Charu Garg et al. have shown through NSS data that on average, households spend 5 percent of their total budget on healthcare and 70 percent of this spending goes into the purchase of medicines (Garg 2009).

For any policy formulation with a view to reducing health expenditures and its catastrophic burden on families, it is essential to draw certain conclusions about the factors that determine household health expenditures net of insurance coverage. In this endeavor, studies have shown that

catastrophe due to health payments is considerably reduced by rising income, education and insurance coverage (Joglekar 2008, Pal 2010, Sen and Rout 2008). The numbers of children and elderly people in a family have been shown to increase the probability of a household to experience healthcare payment catastrophe (Joglekar 2008). Disaggregation by type of care has shown that choice of service provider (public or private) and component of care (hospitalization, OPD or drugs) are also potential explanatory variables (Chowdhury 2010).

Xu et al. (2003), from their data from 59 countries and showed that the proportion of households facing catastrophic payments from out-of-pocket health expenses varied widely between countries, from less than 0.01 percent in Czech Republic and Slovakia to 10.5 percent in Vietnam. Their argument was that low incidence of catastrophic spending in developed countries could be explained on the basis of their advanced social institutions such as social insurance and tax funded health systems (Xu et al. 2003). Considering the wide prevalence of catastrophic OOP payments in India and low incidence of health coverage (less than 10 percent) (Gupta 2009), researchers and policy makers are vehemently arguing that increase in the coverage of social insurance schemes is a must to protect Indian households from such catastrophic consequences. However, studies are still underway to examine the importance of insurance coverage as an effective instrument to reduce the catastrophic impact of healthcare expenditures. IGIDR, conducted a study using data from the World Health Survey in 2003, which was conducted in 6 states of India to show that medical insurance reduces the probability of incurring health expenditure by 10 percent and is more effective in urban areas (Joglekar 2008).

5. The Missing Households

The rationale for focusing on catastrophic health expenditures stems from the argument that such households may have to cut their consumption of other necessities in order to pay for healthcare, which represents a clear loss of well-being. It must be noted that this methodology includes only those who availed healthcare.

The cost of healthcare does not strike a household only when out of pocket payments are made; but the mere need for paying for healthcare out of pocket may discourage a household from availing it altogether and thereby preventing itself from cutting down current consumption. A household like that may reflect this as an inability to "afford" healthcare. Here inability to afford may not only mean not having the funds to pay but also an unwillingness to cut down current consumption in order to pay for healthcare.

This possibility is evidenced by the findings of the 60th round of NSS, which indicated that in 2004-05, on an average, about 18 percent of spells of ailment in rural areas and 10 percent in urban areas in India were untreated. Of these cases, about 68 percent cases in rural and 50 percent in urban medical care was avoided due to access and financial considerations (NSSO 2006).

Now, it can be argued that health is a basic necessity, just as food, clothing or shelter (Chowdhury 2010). Therefore, whether a household sacrifices expenditure on other necessities to buy health care or sacrifices healthcare to maintain the present level of consumption of necessities, it is facing a catastrophe. Such a household should also be included as one experiencing catastrophic health expenditures as it also forced to sacrifice a basic need due to cost of healthcare. This would mean that prevalence of catastrophe measured by considering actual health expenditures potentially underestimates the extent of the problem by excluding non users.

Another problem with the methodology is that it considers only the short term effects of healthcare expenditures (Xu et al. 2003, Wagstaff 2003, Joglekar 2008, Pal 2010, Chowdhury 2010), by looking at the curtailment of only current consumption. They tend to ignore households that

financed health expenses by borrowing. NSS 60th round data clearly shows that 60 percent of hospitalized treatments in rural and 42 percent in urban India were financed by borrowings and sales of assets. Borrowed funds need to be returned and may represent a curtailment of future consumption. This way this methodology ignores the long run impact of healthcare costs, especially when they are financed by accumulating debt or reducing savings.

6. Concluding Remarks

Studies attempting to calculate the incidence of catastrophic health expenditures are generally based on data collected using a questionnaire that calculates the total income of a household and of this, the percentage that was spend on healthcare during a given time period. If this percentage exceeds the critical threshold, the household is identified as one experiencing catastrophic health expenditures; otherwise it is classified as one not experiencing such consequences. Based on this methodology, a household that avoided treatment or discontinued treatment because it did not want to bear its cost or found the cost of treatment/medicines prohibitive is excluded from the estimate; not realizing the fact that if catastrophic consequences refer to the sacrifice of basic needs then they are equally catastrophic for both kinds of households, those which pay for healthcare and sacrifice current consumption and those that sacrifice healthcare to maintain current standards of living. By including only the former, the author feels that the prevailing methodology grossly underestimates the magnitude of the problem.

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