

Out-of-Pocket Health Payments, Poverty and the Impact of Health Sector Reforms in India

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Background

India's healthcare system has undergone considerable changes in the past one and half decades. Although, the central government has increased the health budget to some extent, the state governments which incur the bulk of public health expenditure are yet to reciprocate with an increased outlay. Hence, the stagnation in public spending has resulted in difficulties for public institutions to meet the growing health needs of the population (Berman, 2008). Moreover, as part of health care sector reforms programme, user charges for government health services were introduced in almost all the states during the eighth five year plan (1992-1997). Before the imposition of user-fees, the provision of services at public health facilities was free of cost. Nevertheless, there has been a spurt in the prices of drugs in the last one decade owing to the liberalisation of Indian economy (Vel, 2006). All these developments in the health sector are expected to push the cost of care significantly. Notably, India is among the few countries where the financing of health care services is largely private and Out-of-pocket payments (OOP) continue to be most important means of financing health care. OOP constituted as much as three-fourth of total health care expenditure in 2004 (Rao et al, NCMH, 2005).

Therefore, the objective of this paper is to understand the impact of health care reforms on catastrophic health expenditures by estimating the incidence of catastrophic expenditures and impoverishment due to household out-of-pocket (OOP) payments in India and its major states during the decade 1993-94 to 2004-05.

Data and Methods

Data has been taken from 50th (1993-94) and 61st rounds (2005) of National Sample Survey data on 'consumption expenditure'.

Methods

- i. OOPs: We define OOP payments (OOP) of households as share of total consumption expenditure being spent on purchase of health care services. Hence, if we define 'T' as OOP health payments and 'x' as total household consumption/expenditure, 'T/x' is defined as the 'share of OOP payments' (OOP) to total consumption expenditure (x) of a household.
- ii. Catastrophic Payments
 - a. *Extent and head count*: OOP payments are defined as catastrophic when OOP payments as a share of total household resources are in excess of some threshold. A household is said to have incurred catastrophic payments if $T/x > z$. Here z is arbitrary and results are presented for a variety of values for z (5, 10, 15 and 25 %). Accordingly, the headcount ratio of catastrophic payment is calculated as $H = 1/n \sum 1(T/x > z)$; where: 1(.) is an indicator function, which takes the value 1, if $T/x > z$ is true and 0 for otherwise; n is the number of persons making expenditure on health for various thresholds.

- Let us define the excess or 'overshoot' as $O_i = E_i ((T_i/x_i) - z)$, i.e., the amount by which the payment fraction T_i/x_i exceed the threshold z. then the gap is simply the average overshoot given by

$$G = \frac{1}{N} \sum_{i=1}^N O_i$$

- While H captures the incidence of any catastrophic occurring, G captures the intensity of the occurrence. We follow a number of authors in defining medical spending as 'catastrophic' if it exceeds some fraction of total household resources (wagstaff and Van Doorslaer, 2003; Xu et al., 2003; Russell, 2004).

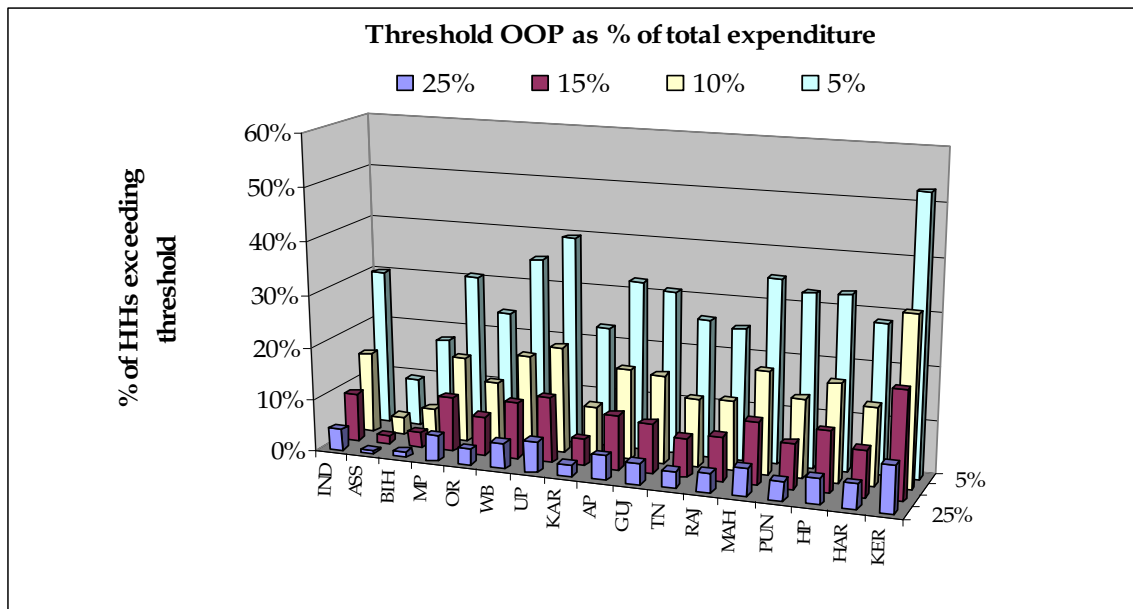
- iii. Poverty Impact

Poverty impact is defined as the average level of poverty in a country before and after health care payments. It is measured by comparing both the head-count ratio and the intensity of poverty before and after OOP health payments.

Results

The mean share of OOP health care expenditure to monthly household consumption expenditure significantly increased to 5.51% as per the estimates for 2004-05, from 4.39% in 1993-94. It is observed that the single most vital component of OOP is drugs and medicine as they account for a substantial part of household expenditures. The estimates reveal that spending on drugs account for more than 70 percent of OOP payments. The value of concentration index marginally increased in (0.1222) 2004-05 compared to (0.1062) 1993-94. However, this does not necessarily imply that health care payments have become more progressive during this period. However, the impact of the increase in the share of the out-of-pocket expenditure could be seen in the incidence of catastrophic expenditure. The catastrophic health care expenditure incidence (OOP>10%) has increased from 13 percent to 16 percent during this period. The proportion of households facing catastrophic payments from out-of-pocket health payments varied widely between states, from 3.46% in Assam to 32.42% in Kerala in 2004-05.

Figure2. Percentage of households incurring catastrophic expenditure at different thresholds, India, 2004-05



Further results, tables and figures are not provided due to space limitation. The analysis of this paper is still in progress and hopefully, the paper would be in a much better shape after the application of some improved statistical techniques.