RESEARCH LETTER

Out-of-pocket nonmedical expenses associated with out-patient treatment of common childhood illnesses

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SUMMARY

Background: Out-of-pocket expenses, medical and non-medical, have an impoverishing effect on the family.

Objective: Determine non-medical out-of-pocket expenses incurred during out-patient attendance for primary care services.

Methods: A descriptive survey was undertaken at a rural medical college using interviewer-administered questionnaire to parents of children <6 years over a period of 6 weeks. Seventy-six participants were interviewed for collecting demographic data and actual cost on travel and meals.

Results: Median expenditure for travel was Indian rupees (INR) 20 with inter-quartile range (IQR) 14–48 and on food it was INR 110 with IQR 40–155. Median total expenditure on the visit was INR 122 with IQR 61–220. Among those who travelled >5 km, 36% attendance was for respiratory complaints, 27% with fever and as many as 86% for vaccination.

Conclusion: Families in rural India have substantial costs incurred in OPD attendance, most of which is for preventive health care such as immunization.

KEYWORDS: out-of-pocket expenses, non-medical expenses, treatment cost of childhood illnesses, low-cost care of childhood illnesses.

INTRODUCTION

Globally 150 million people suffer financial catastrophe each year owing to health expenses and ~100 million are pushed into poverty because of out-of-pocket expenses (OOPE) [1]. In India, OOPE pushes 39 million additional people into poverty every year because more than three quarters of the financial burden of health care is met by households [2]. OOPE on health care is a development concern too. It encroaches upon spending on other basic needs [3]. It is estimated that 25–47% families borrow money to meet pregnancy/delivery-related expenses [4]. Impoverishing effect of OOPE is seen first on the households and subsequently on the entire economy [3]. This burden is felt not only when health insurance mechanism is not in place [3], but also when health insurance is a norm [5]. The burden of out-of-pocket payments is highest among
poor. The poorest households spend a third of their resources on health care payments each year compared with only 8% spent by the richest households [6]. It is necessary to protect poor households from catastrophic health expenditure. Offering effective and easy access to primary care is one way of doing it. It is likely that unacceptably low immunization rates or delayed presentation at a health facility for common childhood illnesses are partly a reflection of high OOPE incurred both, medical or non-medical.

This study aims to determine non-medical out-of-pocket expenses (NOOPE) incurred during outpatient attendance of children <6 years of age at a non-government medical college in a rural area. The services availed of fall in the domain of primary care, namely, immunization and treatment of illnesses such as fever, cough and diarrhea largely by the underprivileged stratum of the society because out – patient department services are free.

METHODS
Participants of this study were attending pediatric OPD of Maharashtra Institute of Medical Education & Research (MIMER), Medical College and Hospital, Talegaon, Dabhade during a period of 6 weeks between 1 August 2011 and 15 September 2011. OPD services are availed largely by the inhabitants of adjoining rural areas. The survey included basic demographic data and information on NOOPE. It was undertaken in the form of interviewer-administered questionnaire by one of the authors. It was not validated or pilot-tested. Seventy-six participants, every 15th attendee, were selected on the basis of sample size calculations. A face-to-face semi-structured interview was conducted with parent/s of children <6 years attending the OPD. Interview lasted for 5–7 min. There were no refusals. The actual incurred costs were computed. The information was collected on distance travelled and expenses incurred on travel and on food including that on accompanying persons. Distance travelled was categorized as <5 km, 5–10 km and >10 km. We did not study the opportunity costs associated with absence from work.

RESULTS
During the study period, 1140 patients attended OPD. Of these, seventy-six, i.e. every 15th attendee, participated in the study. Sixty attended for primary care services such as vaccination [7], treatment of respiratory ailments (25), diarrhea (2), fever (26) and 16 for other illnesses such as asthma, pain in abdomen or skin diseases. Median expenditure on travel was Indian rupees (INR) 20 with inter-quartile range (IQR) 10–94) and on food it was INR 110 (IQR 11–440). Median total expenditure on the visit was INR 122 (IQR61–220). Among those who travelled >5 km, 36% attendance was for respiratory complaints, 27% for fever and as high as 86% for vaccination. Only two patients attended OPD for diarrhoea. There was wide variation in incurred costs between individual families depending upon distance travelled and number of accompanying persons.

DISCUSSION
We found that families in rural India incur significant OOPE for routine outpatient visits for their children. NOOPE is very high, almost 70% of the revised daily wages assured under the right-to-work scheme run by the Government of India. The participants of our study incurred a median expenditure of INR 122 on food and travel during a hospital visit. Under Mahatma Gandhi National Rural Employment Guarantee Act (MGNREGA), right-to-work schemes run by the Government of India [6], the revised wages per day are INR 174 for the financial year 2013–14. NOOPE can hurt the poorer sections of the population that attends our OPD.

High NOOPE may be the reason why people ‘ignore’ non-serious illness or ‘underestimate’ the importance of immunizing a child [7]. National Health Mission, of which child health and immunization is an important component, guarantees free vaccinations and treatment of common childhood illnesses at public health facilities [8]. The expenditure incurred by our study participants is avoidable because similar services, when sought at a public health facility, are offered free of cost and a very low NOOPE. A visit to a nearby primary health centre may incur lower cost on travel and food. The public health sector is perceived by many to be of low quality and therefore, may be a second choice. Probable reasons for not accessing public health paediatric care may include inconvenient day and timing of immunization. OPD
attendance may be time-consuming if the only doctor available is pre-occupied with managing another emergency. Frequent transfers of the doctors are not perceived well by the community. These are some of the issues that need to be addressed urgently to enhance utilization of public health facilities.

Out-of-pocket components include expenses on consultation, medicine, transport and meals during in-patient or out-patient care. These household expenses on health are context-specific. They may differ with in-patient care vis-a-vis out-patient care; type of illness, serious and non-serious; and type of health facility, public or private. It also varies with investigation and treatment policy of the health centre. However, expenditure on travel, meals and communication is fairly constant feature of visits to health facility and it may be substantial. A study conducted in a paediatric intensive care unit, from a country where health insurance is mandatory, revealed that the families spent an average of 57 euros per day on travel, meals and communication costs. The expenditure was considered to be a ’very heavy burden’ [5]. The amount of earning loss ranged from 783 to 2231 euros during the hospital stay. Mishra and Chaudhari showed that the cost of OPD treatment per patient for a common illness was no more than INR 8.72 if generic drugs, recommended under Integrated Management of Neonatal and Childhood Illnesses, were used for their syndromic management and as per our treatment guidelines. There is no cost to the patient for vaccination at our hospital because the state government provides free vaccines to be administered. Thus, the cost for two important components of primary health care, the drug treatment cost per illness and immunization, can well be under INR 10. In contrast, NOOPE appears considerable. It would have been very high if losses of earnings are taken into consideration.

There are a few limitations to our study. It is difficult to verify reported NOOPE and our assumptions can introduce a bias. Secondly, our tool was not validated or pilot-tested.

In summary, our study re-emphasizes the need for making public health services user-friendly. Easy access to primary paediatric care can reduce NOOPE and risk of catastrophic health expenses on common childhood illnesses can be minimized. Timely vaccination against measles costs much less than treatment of complicated measles and, early treatment of cough, cold and fever can avoid high expenditure on treatment of a severe pneumonia.

REFERENCES