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Original Article

A Study on Out of Pocket Expenditure in Rural Area of Jammu Region

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ABSTRACT

Background: Out of Pocket health spending is leading many families especially belonging to rural households towards poverty. The information on healthcare expenditure at household level will provide input to planners at government level for necessary actions.

Materials: 100 households were selected bymultistage random sampling. Of these, 366 individuals availing any health service were studied. Information on expenditure incurred onhospitalization, OPD visits, follow up for chronic diseases and preventive services was calculated.

Results: The median expenditure incurred on hospitalizations was INR2700. The average expenditure per visit for OPD visits, follow ups and preventive services was INR 6.6, 56, and 10.8 respectively. Nearly two thirds (63.2%) using govt. facilities belonged to lower socioeconomic status and out of 170 utilizing private facilities; majority (78.2%) belonged to upper, upper middle and middle class. Utilization of public sector for OPD visits, follow up visits for chronic diseases and hospitalization were significantly more ($p<0.05$) among those belonging to low socioeconomic status.

Conclusion: Increase in percentage of health spending by the Government may help people to cut out of pocket expenditures, need for debt and prevent them slide below poverty line. Health care insurance schemes needs to be introduced and strengthened.

KEYWORDS: Health care, Preventive health services, Out of pocket expenditure, Rural households.

INTRODUCTION

Inequalities in health status are an end result of multitude of factors, some operating at macro or population level and some at micro or family. Income, education, caste, gender, race, access to health care &out of pocket (OOP) payments influence inequalities in health status.One of the fundamental functions of health system is to put in place a health financing system that protects the population against the financial risks associated with ill health. Such risks lead to catastrophic health expenditure and impoverishment from medical expenses. Catastrophic health expenditure is defined as out-of-pocket spending for health care that exceeds a certain proportion of a household's income with the consequence that households suffer the burden of disease. A household is said to have been impoverished by medical expenses when health-care expenditure has caused it to drop below the poverty line.[1,2]According to National Health Accounts Report 2004-05, about 71% of health expenditures are financed by households through out of pocket expenditures,20% by government (centre, state and local bodies), 6 % by firms and 2 % by external flows.[3]In 2003 about 39·0 million (30·6 million in rural areas and 8·4 million in urban areas) Indian people fell into poverty as a result of out-of-pocket expenditures.[4] In 2004–05, about 14% of rural households and 12% of urban households spent more than 10% of their total consumption expenditure on health care.[5] Nearly 30% rural and 20% urban households, who did not seek health care for a recent self-reported morbidity, cited financial reasons for not having sought medical care[6]and a third of costs paid by borrowing money.[7]These aggregate figures obliterate the difference in health care spending in predominantly public or private Health care systems. Non availability of information in Jammu region prompted the investigators to study out-of-pocket expenditures on health care in rural area of Jammu where health care is predominantly public funded.

MATERIALS AND METHODS

An exploratory study was conducted in 2015over a period of two months. The study area was randomly selected village of Primary Health Centre Miran Sahib

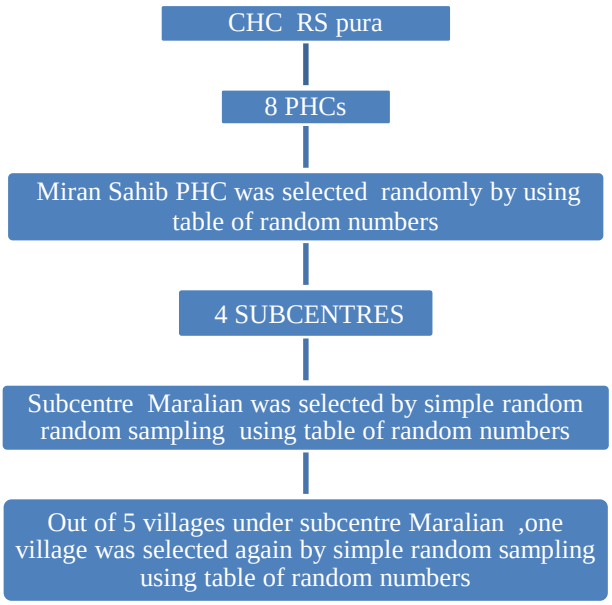
which falls under Community Health Centre RS Pura which is the field practice area Government Medical College Jammu. Multistage random sampling scheme was employed to select sampling units which comprised of 100 households in a randomly selected village. After obtaining consent, head of the household or the eldest adult present was taken as respondent.

Socio demographic data regarding age, gender and income was collected. Socioeconomic status was assessed using UdaiPareek scale.[8]Besides this, information on expenditure incurred during OPD visits, follow up, preventive services and hospitalization was collected using a pre designed questionnaire. Expenditure was collected as practitioner fees, medicines including nutritional supplements, immunization, transportation, investigations, hospital stay including room rent and food. Data on wages lost was also gathered. A period of three months was considered for collection of data regarding OPD visits, follow up for chronic diseases and preventive services. Hospitalization history was collected for the past year.

Data analysis

The results were expressed as median, mean and standard deviation. Chi square test was used to evaluate statistical significance. P value of <0.05 was considered as statistically significant.

Sampling scheme



RESULTS

A total of 366 individuals availing health care service in public or private facility belonging to 100 households were studied which comprised of 40 %(n=146) males and 60% (n=220) females. Male to Female ratio was 0.66:1. Nearly 56% of population belonged to upper, upper middle and middle class where the rest belonged to lower middle and lower class as per UdayPareek scale. 6.8 % hospitalizations were reported in the past one year. Median duration of hospitalization was 5 days. 75.6%individuals made OPD visits including 7.3% visits for chronic diseases while 10% made visits to health facilities to avail preventive services. The common conditions for OPD visits were acute gastroenteritis, stomach pain, respiratory tract infections, fever and headache. Majority made follow up visits for hypertension, diabetes and eye care. The median expenditure incurred on hospitalizations was INR2700. The average expenditure per visit for OPD visits, follow ups and preventive services was INR 6.6, 56, and 10.8 respectively. The expenditure incurred for preventive services including nutritional supplements, ultrasonography and routine blood investigations. Government facility were utilized by 53.5% (n=196). Nearly two thirds (63.2%) using govt. facilities belonged to lower socioeconomic status and out of 170 utilizing private facilities; majority (78.2%) belonged to upper, upper middle and middle class. Utilization of public sector for OPD visits, follow up visits for chronic diseases and hospitalization were significantly more ($p<0.05$) among those belonging to low socioeconomic status.

Table 1: Age Distribution of Study Population

Health service availed	Mean age±SD
Hospitalizations	45.2± 12.7
OPD visits	35.8± 21.7
Follow ups	52.3± 8.75
Preventive services	41±20.3

DISCUSSION AND CONCLUSION

The present study aimed to estimate health expenditure in rural area of Jammu. We observed more episodes of ailments and hospitalizations in population under study as compared to figures reported from Puducherry in 2014[9] and60th round of National Sample Survey done in 2004.[3] These studies reported lower figures for ailment (88/1000) and hospitalizations (23/1000 population). The discrepancy in frequency of ailments and hospitalization observed could be due to geographical variation, time period of data collection and sampling error. We might have observed higher figures as the period July to September is known to have higher incidence of acute gastrointestinal related morbidities. Chance probably explains higher proportion of individuals reporting hospitalizations. The average household expenditure on hospitalization, OPD visits, chronic diseases, and preventive services were low compared to findings by other investigators.[3,9,10]Low figures probably reflect lack of established private health and advanced diagnostic set up in rural area of Jammu. Further, many services in government facilities are either provided free or comparatively cheap and further adding more than half of the population studied made use of government facilities.

Utilization of health services is influenced by socioeconomic status of people.[11-13]As far as calculation of out of pocket expenditure is concerned; Indrani[14] has highlighted some methodological issues. Different recall period may generate different estimates and therefore an operational rule to annualize the short recall period and reduce the long recall period estimates merits attention. Also treatment of expenditure from hospitalization needs to be handled with caution. Hospitalizations often have a more severe impact on poverty than OPD therefore its contribution in out of pocket expenditure needs to weigh carefully.

CONCLUSION: People were seen to make significant out of pocket expenditure for protection of their health. Increase in percentage of health spending by the Government may help people to cut out of pocket expenditures, need for debt and prevent them slide below poverty line. Health care insurance schemes needs to be introduced and strengthened.

LIMITATIONS: The study findings provide rough estimates on health expenditure. Prospective study design for a longer duration with larger sample size could have provided us a better approximation of annual health care cost. Recall bias might have affected the estimates.

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CONFLICT OF INTEREST: None Declared

Figure 1: Pattern of health service availedas pergender.

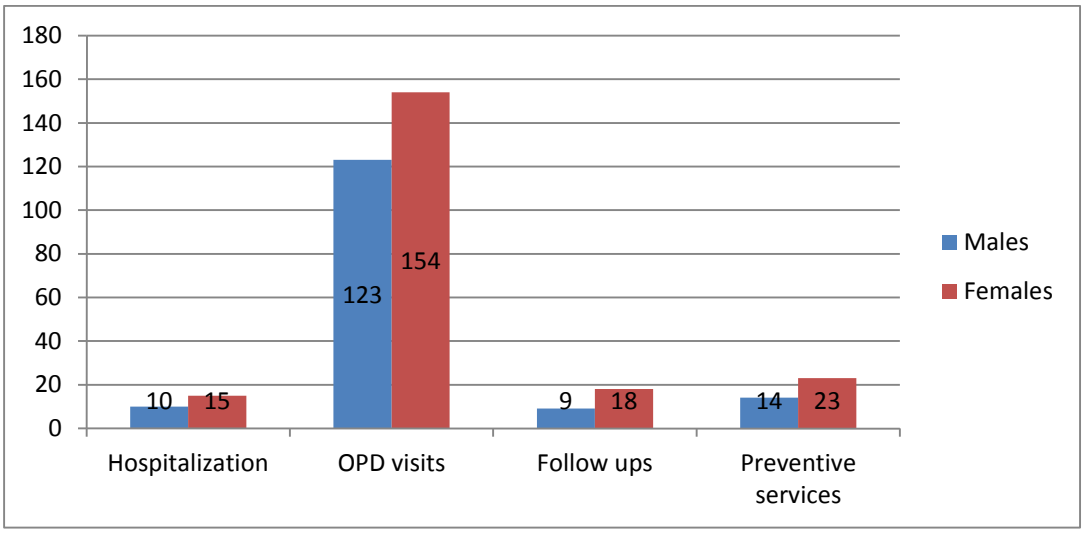

Figure 2

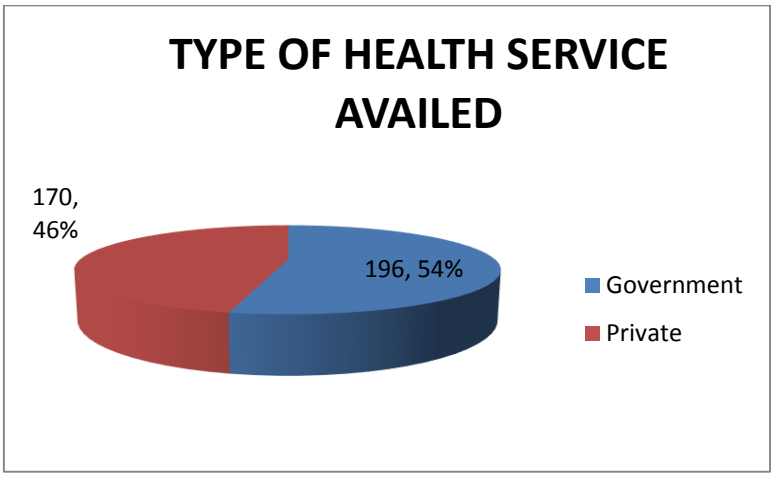

Table 2: Health care expenditure of surveyed population.

Reason for health care expenditure	Number	Median expenditure in rupees (Inter quartile range)(Q1-Q3)	Average wages lost
Hospitalizations	25	2700(2160-3000)	1000
OPD visits	277	1840(950-3240)	4666
Follow ups	27	1400(700-2250)	300
Preventive services	37	400(300-3500)	300

Table 3: Health Facility Utilized As Per Socioeconomic Status.

Reason for health care expenditure	High Socioeconomic status ¥	Low Socioeconomic status ǂ	Chi square	p value
Hospitalization(n=25)				
Public(n=15)	5	10		
Private(n=10)	7	3	3.23	0.07
OPD visit(n=277)				
Public(n=160)	60	100	52.36	<0.01 *
Private(n=117)	95	22		
Follow up visits(n=27)				
Public(n=12)	4	8	4.32	<0.05*
Private(n=15)	11	4		
Preventive services(n=37)				
Public(n=9)	3	6	4.2	<0.05*
Private(n=28)	20	8		

¥ For purpose of analysis upper , upper middle class and middle class of Udai Pareekh scale were clubbed as high socioeconomic status and ǂ Lower middle class and lower class of were clubbed as low socioeconomic status .
* Statistically significant.

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