OUT OF POCKET EXPENDITURE OF MAJOR MORBIDITY AND GENDER INEQUALITY IN INDIA

Introduction:

Out of pocket expenditure is any direct outlay by individual or household, including gratuities and in-kind payments, to health practioners and suppliers of pharmaceuticals, therapeutic appliances, and other goods and services whose primary intent is to contribute to the restoration or enhancement of the health status of individuals or population groups.

Out-of-pocket payments incurred by households for medical services received (excluding transportation spending and insurance payments and reimbursements) are estimated to account for 23% of total global health expenditure and 45% of health expenditure in the developing world. Within the latter, out-of-pocket health spending ranged from 1.6% of total health expenditure in Niue to 82.9% in Guinea in 2003[1].Health expenditure in India amounts to 4.8% of GDP[2]. India's reasonably high level of spending on health care is dominated by private expenditure, which accounts for 80% of health spending or 3.9% of GDP (note this figure included around 2% from external support sources)[3].Out of-pocket' payments (97%),is the major source of private expenditure on health leading to catastrophic conditions of the household[2] and putting a tremendous strain on the finances of many people. Public spending on health in India currently amounts to only 0.9% of GDP, or 20% of the country's total spending on health[3]. Although government is focusing on increasing the public health care expenditures but still private health expenditure especially out of pocket payments. Thus, in this era of rapid economic growth spending less public money on health and becoming increasingly reliant on private enterprises and private expenditures is a concern and a matter of vulnerability to any country..

In addition to vulnerability of population in India with respect to high health care expenditures the country is also experiencing a rapid health transition, with large and rising burdens of chronic diseases, which are estimated to account for 53% of all deaths and 44% of disability-adjusted life-years (DALYs) lost in 2005. Earlier estimates, from the Global Burden of Disease Study, projected that the number of deaths attributable to chronic diseases would rise from 3·78 million in 1990 (40·4% of all deaths) to7·63 million in 2020 (66·7% of all deaths)[4]. Gender inequality is an another important factor effecting health care reforms and health care expenditure in India. The discrimination against the girl-child is started before she is born. The life of the average Indian woman is one of deprivation in every sphere. The overall status of women in an Indian family is lower than that of men. The females gets less nutrition, biasness in treating giving them access to health care, and education: a lesser childhood than the boy-child. She has no say in any of these crucial events of her life, although they adversely affect her growth and development. Hence in this era of increasing burden of chronic diseases, discrimination against women and higher out of pocket expenditure in India it would be essential to associate these three major dimensions in the country and similarly analyzing the determinants of out of pocket expenditure is undoubtedly of primary importance considering the growing concern about health system financing. The major objective of this study is to explore the impact of gender inequality in out of pocket expenditure in India and also exploring the interplay of factors at different level of hierarchy with gender of a person.

Data

A comprehensive analysis of this issue would require detailed and reliable individual-level data on health care expenditure, along with a wide set of individual characteristics, including health status and health insurance type. The data from India Human Development survey is an appropriate data to get such in formations and explore the issues associated with health care expenditures. The India human development survey 2005(IHDS) is a nationally representative ,multitopic survey of 41,554 households in 1503 villages and 971 urban neighborhoods across India .The IHDS was conducted in all the states and union territories of India (with exception of Andaman Nicobar and Lakshadweep). IHDS was jointly organized by researchers from the University of Maryland and the national council of applied economic research (NCAER), New Delhi. The stratified sampling design was used for selecting the sample from all over the country. The sample contains 13,900 rural households interviewed earlier in 1993-94 survey and 28,428 new households.

Methodology

Data on treatment cost was collected in IHDS for the last 365 days prior to the survey for all those individuals who were suffering from any major morbidity like heart disease, diabetes, asthma, cancer and other long term chronic diseases.. The cost of treatment was computed including doctor fees, medicines fees and cost of transportation of the last 365 days for treating major morbidity. Mean cost of treatment was computed with respect to background characteristics and disaggregating by sex. And as the present data is structured in a hierarchal manner, with individuals clustering within households and households within states.The multilevel approach allows entangling the hierarchal data induced by the sampling design adopted in IHDS. A three-level random effect model which has provision to integrate variation in individuals within households within states the innermost to outermost levels in the hierarchy of analysis will be used to explore the gender differentials in out of pocket expenditure. The model will give us an opportunity is to explore the observed variation in the out of pocket expenditure explained by the independent variables at each level while the quantification of unobserved variation is facilitated by incorporating random intercept which explore the unobserved heterogeneity at the individual, household and state level.

Preliminary findings

The prevalence of major morbidity among males (59) is lower as compared to females (71). The prevalence of major morbidity increases with age both among males as well as females. The prevalence of major morbidity is higher among those consuming tobacco or alcohol, living in urban areas. The prevalence of major morbidity is interestingly higher among the individuals whose household income quintiles is lowest and the highest. Mean cost of treatment is higher among males (6463) as compared to females (5130).Mean cost of treatment increases with age among males from Rs.6967 (among 16-29) to Rs.7012 (60+).On the contrary among females the mean cost of treatment is lower among elderly women with highest prevalence and higher among

females with lower prevalence of major morbidity and age less than 30.Mean cost of treatment is higher in urban areas as compare to rural areas however female still suffers from some biasness because she is not spending adequate amount for her treatment.Although the prevalence of major morbidity is higher among males as well as females living in lowest income quintiles but the mean cost of treatment is highest among individuals whose household income quintiles is highest showing the unability of poorer households to pay less for their treatment.The vulnerablity is higher among females whose mean cost of treatment was more or less constant among living in the households of first four income quintiles(ranging between Rs.4399 to Rs.4872) except among females in the highest income quintiles the mean cost of treatment increases drastically to Rs.6704.Graphs 1 depicts the inequality by gender among different household income quintiles.

Table1: Prevalence and mean cost of treatment by selected background characteristics, 2005-06.

Background characteristics	Male		Female	
	Prevalence per 1000	Mean cost of treatment	Prevalence per 1000	Mean cost of treatment
Overall	59	6463.11	71	5130.72
Individual level characteristics				
Age				
16-29	23	6967.84	34	5374.54
30-59	95	6151.13	128	5132.61
60+	231	7012.60	217	4644.96
Occupation				
Working	55	5247.67	70	4412.95
Not working	68	7175.58	80	5259.49
Tobacco and alcohol consumption				
No	46	7629.85	67	5300.78
Yes	97	4891.48	138	3599.05
Household level characteristics				
Residence				
Rural	58	6353.60	68	5093.61
Urban	63	6726.01	79	5891.97
Household income quintiles				
Q1	66	5565.31	78	4872.91
Q2	59	6355.55	63	4399.35
Q3	58	6219.35	68	4591.67
Q4	52	5672.02	67	4548.58
Q5	62	8035.52	78	6704.07
Health Insurance				
Yes	59	6033.23	71	7458.89
No	69	6476.53	85	5060.48

Graph1: Mean cost of treatment by household income quintiles and gender,2005-06