Pattern and determinants of health care use and expenditures at the end-of-life in India

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Pattern and Determinants of Health Care Use and Expenditures at the End-of-Life in India

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BACKGROUND

Policy makers in India have not effectively addressed the issues of health and poverty. The burden of out-of-pocket expenditure on health care is unduly heavy on poor and vulnerable households. A national study shows that almost one quarter of households fall into poverty as a direct consequence of the medical expenses they pay after being hospitalized. Further, more than two-fifths of individuals who were hospitalized during the last year borrowed money or sold assets to cover the hospital expenses. Health and social insurance mechanisms in India have not been adequately developed to mitigate such adverse impact. The consequences on those households get elevated further when the hospitalization eventually results into a death event. One possible outcome could be pushing these families into a zone of permanent poverty.

The main objectives of the study are:

- to examine the type of medical attention received at the end-of-life
- to analyse differentials in the use of hospital care and expenditure on treatment at the end-of-life by socio-economic groups
- to compare financial burden of treatment (direct and indirect) on households reporting fatal and non-fatal outcomes.

MATERIALS AND METHODS

The analysis is based on the all-India household survey of utilization of health services for treatment of illness and injury undertaken by the National Sample Survey Organization. The survey included households reporting a case of hospitalization during the last 365 days along with the information on outcome (discharged from the hospital or deceased). The multi-stage sampling procedure was followed to select about 121000 households from rural and urban areas. The survey was spread throughout the year. Beside socioeconomic characteristics of the household, for each member of the household who was ill or injured during the reference period, information was collected on the type and duration of ailment, type of health agency contacted and services availed of, and the detailed cost of treatment and sources of finance to meet such expenditures

Table 1 Medical attention received and place of death

	Rural India	*Urban India*
Place of Death (%)		
At Home	79.6	66.4
During Transport	2.8	3.7
Government Hospital	7.8	12.8
Private Hospital	4.6	12.8
Others	5.2	4.3
Type of Medical Attention before Death (%)		
No Medical Attention	36.5	24.7
Medical Attention Received by	64.5	76.3
Institutional – government	20.4	25.0
Institutional – others	7.6	11.2
Registered medical practitioner	17.8	28.3
Other medical practitioner	17.8	10.9
Number of deaths	2268	1252
Number of fatal hospitalization episodes	926	824
Fatality rate in inpatient care (%)	7.6	7.0

RESULTS

Table 2 Non Receipt of Medical Attention at the End-of-Life

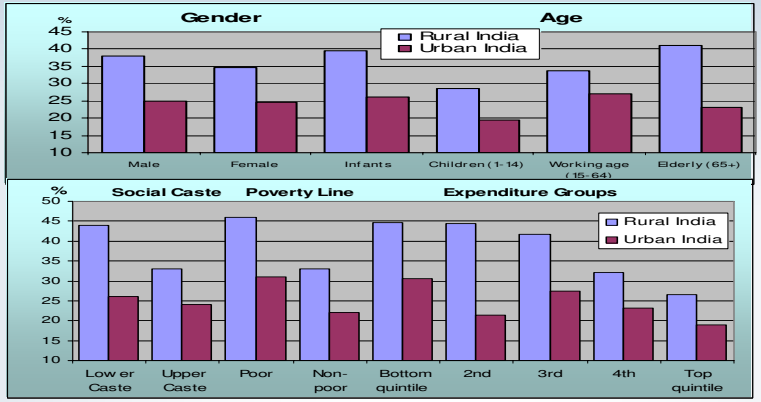
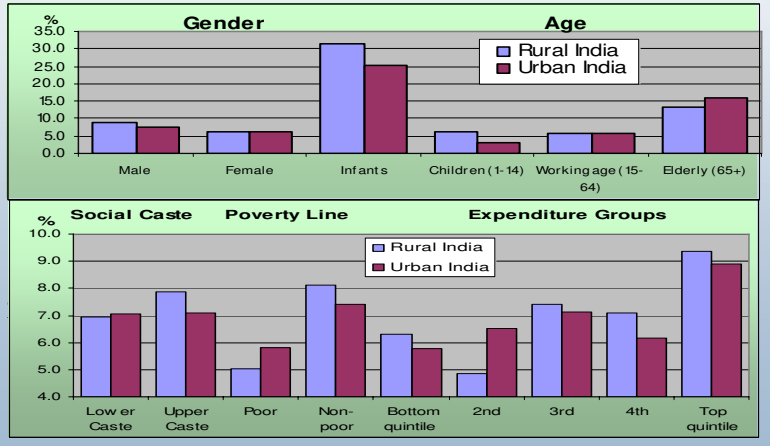


Table 3 Hospital Care Use by Fatal and Non-fatal Outcomes

	Rural India		*Urban India*	
Inpatient Care Use	*Fatal*	*Non-fatal*	*Fatal*	*Non-fatal*
Share of public hospital in treatment (%)	56.1	44.5	53.7	42.1
Share of inpatients received a free hospital bed (%)	51.2	42.4	44.9	38.8
Average duration of hospital care (days)	15.1	11.9	15.5	10.7
Broad disease groups				
1. Communicable & maternal	26.5	40.5	29.6	37.3
2. Non-communicable	41.5	27.0	46.9	30.5
3. Injury	3.9	7.4	3.6	7.2
4. Unclassified/others	28.1	25.2	19.9	25.1

Table 4 Fatality Rate in Inpatient Care



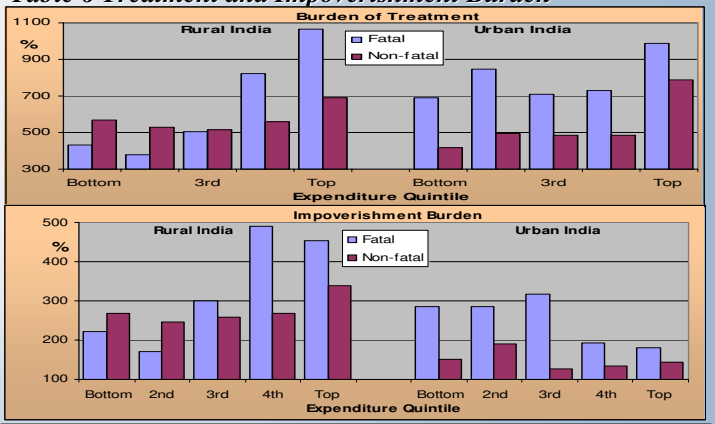
RESULTS

Table 5 Expenditure and Burden of Treatment

The mean expenditure on inpatient treatment was higher for fatal cases. Burden of treatment, income loss as well as impoverishment (expressed as % of monthly per capita expenditure) was heavy for fatal than non-fatal cases.

	Rural India		*Urban India*	
Expenditure and Burden of Care	*Fatal*	*Non-fatal*	*Fatal*	*Non-fatal*
Monthly per capita expenditure (MPCE) (Rs)	568	445	778	641
Total expenditure on treatment (Rs)	5672	3116	7638	4076
Burden of treatment (cost as % of MPCE)	832	598	820	549
Share of sources in meeting cost of treatment (%)				
Current income	8.2	10.4	10.7	12.4
Saving	42.0	33.5	50.6	45.7
Sale of assets	8.3	8.2	4.9	4.0
Borrowing	35.0	40.0	20.6	17.6
Reimbursement	0.3	0.8	6.4	6.6
Other	6.2	7.1	6.8	13.7
Income loss due to hospitalisation (Rs.)	937	553	707	561
Income loss as % of MPCE	141	128	126	98
Impoverishment level (asset sale & indebtedness)	43.4	45.4	30.4	24.0
Impoverishment burden (borrowing & sold assets amount as % of MPCE)	404	290	243	149

Table 6 Treatment and Impoverishment Burden



CONCLUSIONS

1. The poor and rural population persistently report lower levels of medical attention and use of hospital care at the end-of-life, thus pinpointing accessibility and equity concerns.
2. An incidence of hospitalization puts severe financial burden on a household and the burden becomes unduly heavy when resulting into death. In both rural and urban areas the burden rises with expenditure class, much sharply among fatal than non-fatal cases. Impoverishment burden is felt much more for rural than urban population.
3. There is need for a comprehensive health insurance coverage for poor and rural population to mitigate the adverse impact of meeting hospitalization costs.
4. To address the global agenda 'making poverty a history' further research is required to understand specific needs of population at the-end-of-life.