Sources of finance for hospitalized treatment in India: Evidence for Policy

And

Treatment with Respect to Medical Advice before and after Hospitalization in India

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Sources of finance for hospitalized treatment in India: Evidence for Policy

Plan of Presentation

- Agenda of the Paper
- Frame work of the Paper
- Outline of the Data Source
- Findings and Discussion
- Conclusions

Agenda of the Paper

- Affordability and Accessibility of Health care system in India.
- Dominance of private health care system over public health care system.
- Private health care is confined to states capital/big cities.
- NRHM….Further NUHM…objective is health infrastructure.
- Health care Burden on pocket of common man. Policy for Health care financing is Government priorities in India.
- Policy is possible through analytical studies/inputs. This paper may help for policy formulation as an evidence.

Frame work of the Paper

- What is the Sources of finance for hospitalized treatment in India?
- Evidence for policy……focus of the paper.
- Good Governance for Health is possible only through Policy.
- NSSO data of 71st round on “Social Consumption related to Health" has been used.
- Paper is based on the unit level data of survey and SPSS has been used for Analysis.
- Five Sources of finance and on different Indicators.

Frame work of the Paper….Contd.

The money needed to incur the expenditure by households on health is either reimbursed by medical insurance companies or borne by the household. The five best possible sources of finance

Household income/savings

Borrowings

Sale of physical assets

Contribution from friends and Relatives

Other sources

Frame work of the Paper….Contd.

- Study of the sources of finance for hospitalized treatment of an individual is based on following Indicators

  Level of Living (MPCE)

  Socio-economic-backgrounds (Social Group, Family Size, Occupation, Religion)

  Level of care (Public vs Private Hospital)

- The same study of sources of finance for hospitalized treatment of an individual has been analyzed at States level also.

Outline of Data Source

- The survey covered the whole of the Indian Union.
- Period of survey was of six months (1st January 2014 and concluded on 30th June 2014).
- Uniformity of the survey was taken care off.
- A stratified multi-stage design had been adopted for the selection of sample at different stages.
- The first stage units (FSU) were census villages (Panchayat wards in case of Kerala) in the rural sector and Urban Frame Survey (UFS) blocks in the urban sector.
- The ultimate stage units (USU) were households in both the sectors.

Outline of Data Source……..Contd.

- For the rural sector, from each district, the required number of sample villages was selected by Probability Proportional to Size With Replacement(PPSWR)(Size was population of the village)
- For the urban sector, from each district, FSUs were selected by PPSWR, where size indicated the number of households of the UFS Blocks.
- Both rural and urban samples were drawn in the form of two independent sub-samples.
- Finally, sample households were selected by Simple Random Sampling without Replacement(SRSWOR).
- A total of 8300 FSUs were surveyed at an all-India level.

Findings and Discussion

- Sources of finance for hospitalized treatment are related with level of living.
- Rural households primarily depended on their 'household income/savings' (72%) and 'borrowings' (22%) for financing expenditure on hospitalization.
- The same for Urban households is 77 percent and 17 percent.
- Household's income or saving as a source of finance for hospitalized treatment continues to increase, while borrowing shows a decline with an increase in level of living in urban India.
- which is not the case of rural India.

Findings and Discussion……..Contd.

- The contribution from friends and relatives as a source of finance to incur the medical expenditure is more than double in case of private treatment as compared to treatment in a government hospital.
- Household's income or saving is not sufficient for treatment in a private hospital because of affordability.
- Burden of private hospital treatment expenses over public hospital is clearly visible.
- Borrowings to meet the medical expenditure are very high for treatment from a private hospital in urban India.

Findings and Discussion……..Contd.

- Household's income or saving is inadequate for the treatment of chronic disease in both rural and urban India, as expenditure for the same is sourced mainly through borrowings.
- Contributions from friends & relatives as a source of finance for hospitalized treatment of chronic disease has been observed.
- Among the scheduled tribes in rural India, 78% depend upon the household's income or saving to meet the expenditure incurred for hospitalized treatment.
- The same figure for scheduled castes, other backward castes and other castes are 69.6%, 70.5% and 75.9%, respectively.

Findings and Discussion……..Contd.

- Borrowing is second significant source to meet the medical expenditure across the social groups in rural India.
- Similar pattern can be noticed in urban area also where, 70% depend on household's income or saving.
- Borrowing is followed by contribution from friends and relatives as the next significant source to meet the medical expenditure among the social groups in urban India.
- However, variation of different sources of finance for hospitalized treatment among the social groups and between the rural & urban sector is visible and one has to study the possible reasons behind this.

Findings and Discussion……..Contd.

- Family size has a positive association with the kind of sources of finance for hospitalized treatment.
- Family size increases, dependency on household's income or saving as a source of finance to meet the hospitalized expenditure also increases in both rural and urban India.
- This may be because of the systematic financial planning of a larger family in advance to face possible burden of medical expenditure.
- Occupation of family is yet another important economic indicator and presents a broad picture of family income.

Findings and Discussion……..Contd.

- Household's income or saving as a source of finance for hospitalized treatment decreases as family occupation moves from organized to unorganized sector.
- Substantial percentage of households engaged in casual labour borrow to fulfill their medical needs. This may be because of weak financial position of the family and uncertainty of job.
- However, families with regular salary and those that are self-employed also borrow significantly to meet the expenditure for hospitalized treatment in both rural and urban India.
- Borrowing by Muslim and Christian families is comparatively more in urban areas than rural, while it is found to be the opposite in case of Hindu families.

Findings and Discussion……..Contd.

- Buddhism and Others including Jainism have absolutely zero contribution toward meeting their medical expenditure from sale of physical assets.
- Household's income or saving as a source of finance for hospitalized treatment of member of family is more than 90% in four states in rural India.
- These states are Assam, Jammu & Kashmir, Uttaranchal and Delhi.
- Borrowing as a source of finance to meet the hospitalized expenditure is more than 20% among all the southern states, Odisha, West Bengal and Bihar.

Conclusions

Household's income or saving is not sufficient to meet the expenditure for hospitalized treatment in India.

People have to borrow or arrange for finance by other means for hospitalized treatment.

Significant rural-urban differences have been found in different categories of sources of finance, irrespective of the background of the family.

Within India, huge variation at states level has been observed.

So Multilevel analysis of above factors, may play an important role for policy formulation.

Treatment with Respect to Medical Advice before and after Hospitalization in India

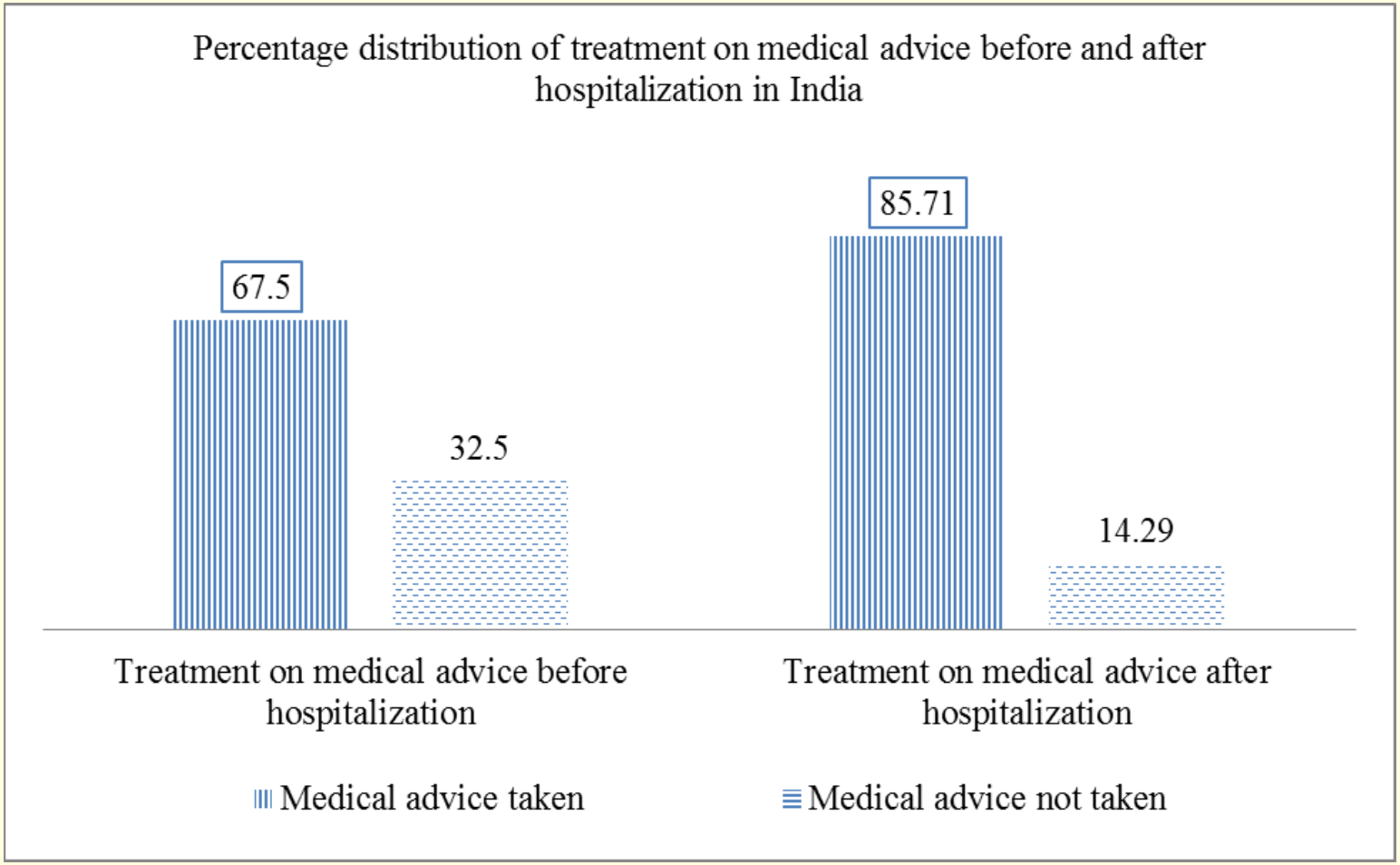
Agenda of the Paper

- Largest economy…High population growth & Disease burden.
- Health care system in India is a blend of public and private sector health providers.
- Existing health interventions are not matched.
- Inequality in health status due to varying economic, social and political causes.
- Poverty and the overall health environment makes medical care insufficient & Health outcomes are poor.

Agenda of the Paper……Contd.

- The expansion of the health care system has led to a situation where the poor have access to doctors, but the quality of the medical advice is so low that even common illnesses are not diagnosed and treated correctly.
- Availability, Quality and Affordability of health care is a serious problem for the vast majority of the population.
- Medical advice for treatment both, before and after hospitalization is an important step to measure the quality of health care system of the country.
- Maiden step to analysis deeper about the treatment on medical advise.

Treatment on medical advice in India



Objective of the Paper.

- To study treatment on medical advice before and after hospitalization in India.
- Authors have used two approaches to analyze the details in the paper at an all India level and also at the State level.
- In the first approach, discussion about the medical advice for treatment before and after hospitalization of family members has been initiated based on the descriptive analysis.
- In the second approach, a logistic regression analysis has been done to get the idea about the factors influencing the same.
- Study about treatment on medical advice before and after hospitalization for only hospitalized patients.
- An attempt to suggest policy input.

Frame work of the Paper

- Technique of Binary Logistic regression has been used in this study.
- Treatment of Medical Advice---Dependent (Response) variable (In both the case before and after hospitalization).
- Level of living, Age group, Marital status, Education level of hospitalized member of family, Relationship between hospitalized member of family and head of family, Sufferance from chronic disease and Location of household.
- Comparisons have been made w.r.t. reference category for each Predictors.

Methodology and Approach

- Fitting of Binary logistic regression model.
- Assessment of the Model and Independent variables through Significance tests---three steps of significance testing.
  - Assessing the goodness of fit of the model.
  - Testing the significance of individual predictors.
  - Testing the significance of different categories of individual predictors.

Discussion on results

- The fitted model is found to be significant.
- This indicate a existence of a relationship between the set of predictors and the response variable.
- The individual predicators are also found to be significant.
- This reveal the existence of statistically significant relationship between each predictor and the response variable.
- Regression coefficients associated with most of the categories of the predictors are also found to be significant.

Discussion on results…….Contd.

- The results of estimated logistic regression coefficient.
- All most all the coefficients of independent variables are found to be statistically significant (<0.05) at 95% level of significance.
- Members of families with rich level of living get treated on medical advice before hospitalization to a greater extent, as compared to members of families with poor level of living in India.
- This indicate that as the level of living goes up, treatment w.r.t. medical advice for hospitalized members of family is carried out to a greater extent, even after being discharge form the hospital.

Discussion on results…….Contd.

- Treatment w.r.t. medical advice before and after hospitalization is found to be influenced by the age of hospitalized members of family.
- The analysis reveals that children receive treatment based on medical advice before hospitalization to a much greater extent.
- Whereas old aged members of family seek treatment w.r.t medical advice after hospitalization.
- Medical advice for old aged members of family is important at any stage of illness.

Discussion on results…….Contd.

- The analysis further reveals that for unmarried family members, the Odds of treatment w.r.t. medical advice before hospitalization is less as compared to married family members.

- But the same is more in case of treatment w.r.t. medical advice after hospitalization.

- In the case of widowed or divorced family members, the Odds of treatment w.r.t. medical advice before and after hospitalization is less as compared to married family members.

Discussion on results…….Contd.

- Level of education of family members has a positive association with health care as the Odds of treatment w.r.t. medical advice before hospitalization increases with the increase in educational level.

- However, the impact of education level on treatment w.r.t. medical advice after hospitalization is not clearly visible.

- Head of the family is more conscious about the treatment of other members of his family with regard to medical advice before hospitalization in India, but the reverse trend is found in cases of treatment after hospitalization.

Discussion on results…….Contd.

- Odds of treatment w.r.t. medical advice before and after hospitalization is higher than the members of family not suffering from a chronic disease.
- Further, a comparison between rural and urban India reveals a reverse trend between the two wherein, as compared to rural India, the urban areas adopt a much casual approach with respect to seeking medical advice before hospitalization.
- But a more organized and serious approach is adopted when medical advice is sought after hospitalization.
- The odds of treatment on medical advice before hospitalization in Karnataka are 142% higher than in HP.

Discussion on results…….Contd.

- This does not apply to other southern states.
- For instance regression coefficients for Andhra Pradesh and Telangana are not significant.
- Maharashtra has the second largest (and positive) coefficient followed by Gujarat, West Bengal and Assam.
- Same in another two major hilly states, that is, in Jammu & Kashmir and Uttaranchal are also higher than in HP.
- Treatment w.r.t. medical advice after hospitalization" is largest (and positive) in case of Andhra Pradesh followed by Kerala, Punjab and Maharashtra.

Policy Implications

- Allocation of more budget is needed for health sector which is only 3.97% of GDP now.
- More IEC (Information, Education and Communication) activity is needed to educate people regarding the importance of taking a medicine under physician's prescription which in turn reduce morbidity and mortality
- Under medical advice reduces multidrug resistance.
- It is therefore necessary and of utmost importance, that the aspects of affordability, accessibility and quality of service reach the lowest strata of society who may indulge in self-medication or continue to be bereft of medical services.

Policy Implications…..Contd.

- In order to stem the viciousness of self-medication, an all-inclusive policy based on the ethos of equity and universality should be formulated and existing policies must be strengthened in order to remove financial hardships for the poor.

- Health insurance should extend to all strata of the society so that there is minimal fear for meeting health expenses.

- A model on the lines of Universal health coverage may be a good starting point where risk pool and cross-subsidization from the rich to the poor could be looked into to generate funds for those who cannot afford to pay.

End of Presentation

Thank you