# **Original Research Article**

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# Utilization, satisfaction, out of pocket expenditure and health seeking behaviour among the insured residents of rural field area: a cross sectional study

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## **ABSTRACT**

**Background:** Health insurance is also called as medical insurance offering coverage that pays for unexpected medical and surgical expenses to the policyholder. A health insurance plan is one of the most secured and safest way to provide financial coverage to the insured family. Objective of this study was to assess utilization, satisfaction, out of pocket expenses and to determine the health seeking behaviour of the insured residents of the rural field practice area of SSIMS and RC, Davanagere.

**Methods:** The study was done in the rural field practice area of the medical college, Davangere from January 2016 to December 2016. A sample of 600 families were studied by systematic random sampling and data was collected from the head of the family using structured questionnaire by house to house interview. Statistical analysis was carried out by SPSS v10, percentages, proportions and Chi-square tests were applied to find the association among the variables.

**Results:** The utilization of health insurance in the present study was 50.2% and satisfaction regarding the health insurance schemes was 93.4%.

**Conclusions:** The study reveals that the out of pocket expenses is high among the uninsured families compared to the insured families. The Insurance policies should be revived to do favour the patients so that more families will be encouraged to enrol and utilize so that the out of pocket expenses will be reduced.

**Keywords:** Health insurance, Health seeking behaviour, Out of pocket expenditure, Rural area satisfaction, Utilization

# INTRODUCTION

Health insurance is a medical insurance policy that offers financial coverage for medical expenses when the policyholder is hospitalized. It is one of the most secured and safest way to provide financial coverage to the insured family. Health insurance plans reimburse the policyholder for their medical expenses that include surgeries, treatments, hospitalization, and injuries, or a direct pay-out of some pre-determined amount to the insured. It covers the insured with the facility of cashless hospitalization at a network hospital or provide a reimbursement for the incurred expenses.<sup>1</sup>

India's public health expenditures are lower than those of other middle-income countries. In 2012, they accounted

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for 4% of GDP, which is half as much as in China with 5.1%. In terms of public health spending per capita, India ranks 184<sup>th</sup> out of 191 countries in 2012. Patients' remaining costs represent about 58% of the total. The remaining costs borne by the patient represent an increasing share of the household budget, from 5% of this budget in 2000 to over 11% in 2004-2005. On average, the remaining costs of poor households as a result of hospitalization accounted for 140% of their annual income in rural areas and 90% in urban areas.<sup>2</sup> This financial burden has been one of the main reasons for the introduction of health insurance covering the hospital costs of the poorest.

#### **METHODS**

The present cross-sectional study was a part of the authors research work undertaken previously from January to December 2016 in the rural field practice area of SSIMS and RC, Davangere. 4.5

The estimated sample size 600 houses were visited house to house and any responsible adult (>18 years) or head of the family was interviewed using as structured questionnaire by systematic random sampling method. The selected consented households residing at least for past six months in the study area were included in the study and the locked houses after 3 visits were excluded from the study.

#### Statistical analysis

Statistical analysis was carried out after entering the data in MS Excel and analysis was done by using SPSS version 16 and results were expressed as percentages, proportions and Chi-square tests were applied to find the association among the variables considering p<0.05 as statistically significant.

## **RESULTS**

In the present study, the mean age of the respondents was 48.62±12.29 years and majority constituting males about 92.5% as head of the families usually. Literates constituted about 44.3%.<sup>5</sup> Majority of them were farmers and labours (76.1%) and belonged to lower socioeconomic classes according to modified B. G. Prasad's' classification (83.2). Out of the studied households in our study area, 273 families i.e., 45.5% were insured by some form of health insurance schemes such as Yeshasvini co-operative farmers' health scheme, Rashtriya Swasthya Bima Yojana, etc.<sup>5</sup>

Table 1 shows that half of the families who had insurance have utilized it and majority of the families i.e., 93.4% were satisfied with the health insurance scheme.

Figure 1 depicts that all the 9 respondents who were not satisfied with the health insurance scheme because of the lack of comprehensive coverage i.e.,100% followed by

difficulty in availing services in the hospitals by 88.9% of the respondents and 77.8% of respondents said narrow policy options was the reason for non-satisfaction. The other reasons were high premium, inaccessibility of the linked hospitals, lack of reliability and other reasons.

Table 1: Utilization and satisfaction of health insurance among the insured families.

		No. of families	0/0
Utilization	Yes	137	50.2
	No	136	49.8
	Total	273	100.0
Satisfaction	Yes	128	93.4
	No	9	6.6
	Total	137	100.0

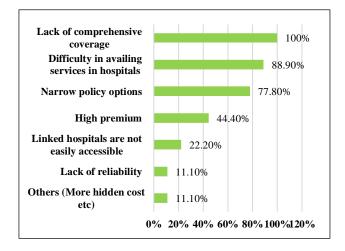


Figure 1: Reasons for non-satisfaction with the health insurance scheme (n=9).

Table 2: Out of pocket expenses among the insured and non-insured families.

Amount spent (INR)	Insured and utilized families (%)	Non-insured families (%)
<25,000	92 (67.2)	98 (30.0)
25,000-50,000	19 (13.8)	62 (19.0)
50,000-75,000	8 (5.8)	24 (7.3)
75,000-1,00,000	6 (4.4)	31 (9.5)
>1,00,000	12 (8.8)	112 (34.2)
Total	137 (100)	327 (100)

As depicted in the Table 2, among the insured families only 8.8% of the families have spent more than 1,00,000/rupees whereas among non-insured, 34.2% of the families have spent more than 1,00,000/- rupees. Likewise, 9.5% among non-insured have spent 75,000 to 1,00,000/rupees whereas it is only 4.4% among the insured families. This shows that the families which were not insured spent higher amount on healthcare compared to those families which were insured.

Table 3 depicts that the median out of pocket (OOP) expenditure for OPD visits and the hospitalization was Rs. 350.30±50.0/- and Rs. 2500±150.0/- respectively.

Table 4 represents that among the 172 patients who had been hospitalized, more than half i.e., 56.4% had health insurance and the rest of the inpatients did not have health insurance which was statistically significant.

Table 3: Out of pocket expenditure among the OPD and the hospitalized patients (n=600).

OOP expenses	Frequency	Median amount spent (INR)
OPD	428 (71.3)	350.30±50.0
Hospitalized	172 (28.7)	2500.00±150.0

Table 4: Relation of hospitalization with health insurance.

Hospitalization	Health insurance	Health insurance		2	J.C	Davolaco
	Yes (%)	No (%)	Total (%)	χ² value	df	P value
Yes	97 (56.4)	75 (43.6)	172 (100)			
No	176 (41.4)	252 (58.9)	428 (100)	11.54	1	0.00*
Total	273 (45.5)	327 (54.5)	600 (100)			

<sup>\*</sup>Significant at 5% level of significance.

In Figure 2, it is seen that 65.3% of the families sought health care from the government health facilities for minor ailments and only 25% for the major ailments. For major ailments more than half of the families (51.5%) sought healthcare from private compared to 27.2% who sought healthcare from government health facilities.

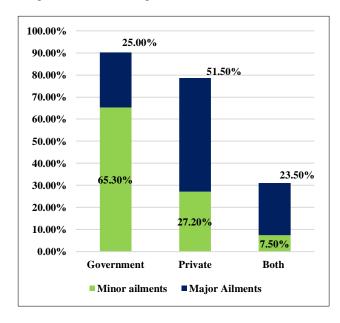


Figure 2: Health seeking behaviour for minor and major ailments (n=600).

Table 5 represents the direct and indirect expenses by the hospitalized patients. It was found that the median registration amount spent was Rs. 500/- with a range of Rs. 50 to Rs. 10000/- and the median amount spent on medicine is Rs. 3000/-, ranges between Rs. 550 to Rs. 65000/- likewise the other direct expenses were consultation cost, admission and the laboratory expenses. The other indirect or hidden expenses were transport expenses, phone bill, accommodation and the food expense. The highest expense spent was for food which ranges between Rs. 300 to Rs. 5000/- overall.

Table 5: The direct and indirect expenses by the hospitalized patients (n=172).

Expenses	Median (INR)	Range
Direct expenses		
Registration	500.00	50-10000
Consultation	1500.00	300-15000
Admission	1000.00	500-75000
Medicine	3000.00	550-85000
Laboratory	1900.00	350-30000
<b>Indirect expenses</b>		
Transport	500.00	250-15000
Food	300.00	300-5000
Phone bill	100.00	75-850
Fuel	200.00	150-5000
Accommodation	300.00	0-5000

#### **DISCUSSION**

In our study the utilization was found to be 50.2% and satisfaction was 93.4% among those who have utilized the health insurance. This finding was higher than the study conducted by Goud et al where the utilization rate was only 23% and almost nil in a study undertook by Chethana et al.<sup>6,7</sup>

In the present study 65.3% of the families sought health care from the government health facilities for minor ailments whereas only 25% for the major ailments. Likewise, only 27.2% sought healthcare from private for minor and 51.5% sought healthcare from private for the major ailments. This finding was similar to a study done by Kasirajan et al.<sup>8</sup>

In our study among the insured families only 8.8% of the families had spent more than Rs. 1,00,000/- whereas among non-insured, 34.2% of the families had spent the same. Likewise, 9.5% among non-insured have spent Rs.75,000 to 1,00,000/- whereas it was only 4.4% among the insured families. This showed that the families which were not insured spent higher amount on healthcare from

their pockets compared to those families which were insured. This may also be because the non-insured persons remember the out of pocket expenses better compared to insured.

The mean expenditure for OPD visits and the hospitalization was Rs. 350.30±50.0/- and Rs. 2500±150.0/- respectively. Our findings were found to be low compared to a similar study conducted by Archana et al, (OPD expenses=Rs. 413.6±272.6/-). But the mean amount spent for hospitalization was almost similar to their study i.e., Rs. 1565±1344/- for inpatients. 9 this variation can be subject to the severity of the conditions for which the patients were admitted to the hospitals and the type of treatment they sought.

Majority of the direct expenses for hospitalized patients was in the form of medication cost and food expenses which was similar to Sharawat et al in which the share of drugs was higher for outpatient (82) relative to inpatient visits (42).<sup>10</sup> Our findings were low compared to study done by Archana et al where majority of the expenditure was for transport and food.<sup>9</sup> The low expenses found in our study may be because of the less distance of the study area from nearest tertiary health facilities were usually the patients are referred.

#### CONCLUSION

The utilisation of health insurance in the present study was 50.2% and satisfaction regarding the health insurance schemes was 93.4% The study reveals that the out of pocket expenses is high among the uninsured families compared to the insured families and the health seeking behaviour was differential based on the type of ailments.

#### Recommendations

To enhance the utilization among the insured families, the procedures have to be made easy and understandable by the common people who lack knowledge regarding the same. Government has to enhance the share on percentage of GDP spending on health aspect so as to reduce the out of pocket expenditure.

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Institutional Ethics Committee

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