Original Research Article

Awareness and perception of health insurance among rural population in Kancheepuram district, Tamil Nadu

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ABSTRACT

Background: Health insurance awareness and perception is most preliminary and people are getting familiar of it. Still the utilization of health insurance has not reached the rural areas due to lack of awareness among rural population. The present study was done with an aim of assessing individual’s awareness and perception of the health insurance.

Methods: The study was a community based cross sectional study conducted for a period of 6 months among villages which is field practice area of a medical college in Kancheepuram district, Tamil Nadu. 310 houses were interviewed. Line listing of the houses was done and data collected through semi structured questionnaire either from the head of the family or the family member who was available in the house. Data collected was statistically analyzed by SPSS version 21.

Results: In this study, among 310 participants majority were females (62%), middle class (31%), nuclear family (83%). 51% were aware about health insurance, source of awareness was mostly from television (38.3%). 48% of study participants were aware of Chief Minister Health Scheme.

Conclusions: Majority of the people who were aware about the Chief Minister Health Scheme were not aware about the complete benefits and details of the scheme, which emphasis on the need for creating more awareness about health insurance to avoid unpredictable health expenses in case of illness and injuries.

Keywords: Health insurance, Awareness, Perception, Rural population

INTRODUCTION

Over the past decade, owing to modernization, technical improvements and good inter-sectorial coordination, the Indian health care system has shown a dramatic transformation. This transformation reflected in improved life expectancy rates, decreased mortality rates and such. However, even with these leaps of progress and a staggering population of 121 crores, India spent less than 5% of GDP on healthcare, ranking India one among the countries with lowest expenditure on healthcare.1,2 According to World Health Organization Global Health Expenditure database 2014, 89% of the Indian population experience out of pocket expenditure on Health.3

Around 70% of the Indian population resides in rural areas and around 28 percent of the population live in below poverty line, the out of pocket expenditure on health is quite a burden to the household.4 To accentuate the out of pocket expenditure burden, according to comparisons between National Sample Surveys between 52nd, 60th and 71st round, the average cost of healthcare has sharply increased. It has tripled between the 60th and 71st round, and as assumed, the costs are high in private sector for all types of care. According to the National
Sample Survey 2015, 41.9% of the rural population relies on Public Healthcare as compared to Private Healthcare due to financial constraints. Health Insurance in the earlier days was a luxury only to a specific segment of the community. However in favor of easing the financial burden, as well as to be in accord with health for all principle, the Indian Government initiated several Government Sponsored Health Insurance Schemes (GSHIS). These GSHIS, both Central and State sponsored, and Private Health Insurance companies, provided a ray of light in decreasing the out of pocket expenditure of rural population, as well as providing them affordable tertiary level care.

Even with various government and private Health Insurance schemes available, a report done by Public Health Foundation of India found that only 25% of the Indian population is covered by Health Insurance, of this only 0.3% of the rural population is covered by private insurance. The coverage of GSHIS has increased by 13.1% in rural India, but still falls short of the desirable coverage of 25% according to the National Health Policy. The states with highest individuals covered by any form of health insurance were Andhra Pradesh and Tamil Nadu. According NHFS 4 (2015-16), rural Tamil Nadu boasts with 69.1% of the households covered by any form of health scheme or insurance.

Even though, the Indian Healthcare system has progressed with virtuous intentions with various insurance schemes, it is still disheartening to see that the poor and vulnerable groups are yet to fully reap the benefits of health insurance, and their burden of out of pocket expenditure is still an issue. This disparity between availability and usage provokes the question as to why there is gap and what factors play a role in creating this disproportion. The aim of this study is to assess the awareness, utilization, and perception of health insurance among rural population.

**METHODS**

The study was a community based cross sectional study conducted for a period of 6 months from August 2018 to January 2019, among villages, in field practicing area of a tertiary care hospital, Kancheepuram district, Tamil Nadu. Line listing of adults of aged 18 years and above in the study villages was done and that constituted the sampling frame of study. The total samples of 310 were selected from the clusters on the basis of population proportion to size. A pretested semi-structured questionnaire was administered to the participants included in the study, which includes the socio demographic profile including name, age, educational status, qualification, type of family, socioeconomic status and questions related to the health insurance awareness and their perception. If the selected individual was not present during the time of interview, re-visits were made. Even after two re-visits if the selected individual was not present the person present during the time of last revisit was included in the study. An informed and written consent was taken from the individuals who were willing to participate in the study. Confidentiality of the respondents was maintained. SPSS version 21 was used for analysis of the data collected.

**RESULTS**

The study population comprised of 119 (38%) males and 191 (62%) females. Awareness was higher among males (63.8%) than females (43.4%). The maximum number of persons belonged to the age group 36-45 years (24%), followed by age groups 26-35 (21.6%), 56-65 (18%), 46-55 (17.4%), >66 (10.9%) and 18-25 (7.7%).

### Table 1: Awareness of health insurance based on socio-demographic profile.

| Variables          | Category | Frequency | Health insurance awareness | Chi square value | P value |
|--------------------|----------|-----------|----------------------------|------------------|---------|
|                    |          |           | Yes (%) | No (%)              |    |        |
| Gender             | Male     | 119       | 76 (64) | 43 (36)             | 12.225 | 0.001 |
|                    | Female   | 191       | 83 (43) | 108 (57)            |    |        |
| Age group in years| 18-25    | 24        | 18 (75) | 6 (25)              |    |        |
|                    | 26-35    | 67        | 48 (71.6) | 19 (28.4)             |    |        |
|                    | 36-45    | 75        | 39 (52) | 36 (48)             |    |        |
|                    | 46-55    | 54        | 22 (40.7) | 32 (59.3)             |    |        |
|                    | 56-65    | 56        | 24 (42.8) | 32 (57.2)             |    |        |
|                    | >66      | 34        | 8 (23.5) | 26 (76.5)            |    |        |
| Education          | Illiterate | 110      | 26 (24) | 84 (76)             | 76.247 | 0.000 |
|                    | Primary  | 62        | 27 (44) | 35 (56)             |    |        |
|                    | Middle   | 53        | 36 (68) | 17 (32)             |    |        |
|                    | High school | 49      | 37 (75.5) | 12 (24.5)             |    |        |
|                    | Higher secondary | 16 | 14 (87.5) | 2 (12.5)             |    |        |
|                    | Graduate/Diploma | 18 | 17 (94) | 1 (6)             |    |        |
|                    | Postgraduate | 2        | 2 (100) | 0                  |    |        |

Continued.
Among study participants 110 (35%) were illiterate, 62 (20%) has primary school education, 53 (17%) possess middle school education, 49 (15.8%) had high school education, 16 (5%) had higher secondary education, 20 (6.4%) were graduates and post graduates. There was a statistically significant association between education and awareness of health insurance (p value = 0.000).

The majority of population belonged to middle socioeconomic class (31%) and there was a statistically significant association between socioeconomic status and insurance (p=0.001). 258 (83%) belonged to nuclear family and there was no statistically significant association between type of family and awareness of health insurance. 236 (76%) were married and marital status was significantly associated with awareness of health insurance (p value=0.001). Awareness of health insurance among study participants were 159 (51%).

**Table 2: Source of information about health insurance.**

| Source of information | Frequency | %  |
|-----------------------|-----------|----|
| TV                    | 61        | 38.3 |
| Newspaper             | 18        | 11  |
| Agents                | 59        | 37.2 |
| Family                | 6         | 4   |
| Friends               | 2         | 1.25|
| Employees of insurance company | 11 | 7  |
| Others                | 2         | 1.25|
| Total                 | 159       | 100 |

The major source of information was from television (38.3%) followed by insurance agents (37.2%), newspaper (11%). With regard to the Chief Ministers health scheme 132 (42.4 %) were aware of it. 132 (48%) had knowledge about eligibility criteria, 54% knew the correct criteria, the benefits of the health scheme were known by 65% of them. 68% of them were aware of utilization of the service at private hospital. Financial coverage provided by the scheme was known by 60%, 65% stated that there was no age limit, 59% responded as diagnostic tests were not covered in the scheme, 24 % of them were aware that the call centers were there to provide information, and 25% had knowledge with regard to process of enrollment in the health scheme.

**Table 3: Knowledge of Chief Minister’s health insurance scheme.**

| Variables                     | Yes (%) | No (%) | Don’t Know (%) |
|-------------------------------|---------|--------|----------------|
| Awareness                     | 132 (42.6) | 178 (57.4) | -              |
| Eligibility criteria          | 63 (47.7)  | 68 (51.5)  | 1 (0.7)        |
| Criteria                      | 71 (54)    | 17 (13)    | 44 (33)        |
| Benefits                      | 86 (65)    | 14 (11)    | 32 (24)        |
| Only government hospital      | 15 (11.3)  | 90 (68.8)  | 27 (20.4)      |
| Amount covered                | 79 (60)    | 24 (18)    | 29 (22)        |
| Age limit                     | 14 (11)    | 86 (65)    | 32 (24)        |
| Diagnostic test covered       | 22 (17)    | 78 (59)    | 32 (24)        |
| Call center                   | 32 (24)    | 42 (32)    | 58 (44)        |
| Enrollment criteria           | 33 (25)    | 36 (27)    | 63 (48)        |

**DISCUSSION**

Health insurance now is seen as a major way to meet the health care needs of the people and to better utilize the existing health care facilities. In the past, health insurance was always considered for the well to do part of the society so the government took over the responsibility of providing health insurance for the poor. It was realized that public health sector provision was inadequate in most states and health insurance was realized as an important way to promote health equity for all sectors of the society. The awareness of health insurance has not yet penetrated to the roots of the rural community. The study population comprised of 119 (38%) males and 191 (62%) females.
Awareness was higher among males compared to females and this difference was statistically significant (p=0.001) which was similar to study done by Madhukumar et al in Bangalore.\textsuperscript{11} With regards to education and SES similar statistical significant association was seen in studies done by Madhukumar et al, Reshmi et al, Yellaiah et al.\textsuperscript{11-13} Hence it can be concluded that educational status and socioeconomic status has a vital role to play in the awareness of health insurance. They are packaged in the community in such a way that one cannot develop without the other.

In contrast to our study results with regards to type of family, there was significant association with type of family and subscription to health insurance in the study done by Madhukumar et al.\textsuperscript{11} Smaller families were more likely to have health insurance because the cost was comparatively lesser.

**Awareness of health insurance**

In the present study, 51\% (159) were aware of health insurance and the major source of information was from television (38.3\%) followed by insurance agents (37.2\%). The study by Madhukumar et al were seen in only 35.3\% which was still lower compared to the present study.\textsuperscript{11} In contrast a similar study in an urban population of South India showed awareness to be 64\%.\textsuperscript{14} The major source of health insurance was media like television in studies by Madhukumar et al and Reshmi et al.\textsuperscript{11,12} Media and television play a huge role in spreading awareness in the regard. More efforts must be taken to spread the message through television, short films, role plays, socio drama. Public health sector entities and personnel must play a vital role in making use of every opportunity to educate the community on existing schemes.

**Chief Minister’s health insurance scheme**

With regard to the Chief Ministers health scheme 42.4\% (132) were aware of it. 48\% had knowledge about eligibility criteria, 54\% knew the correct criteria, and 65\% correctly knew the benefits, 68\% knew that it could be availed in private hospitals also, 60\% knew the exact amount covered, 65\% stated there was no age limit, 59\% said diagnostic tests were not covered, 24\% were aware that call centers were there to provide information, and 25\% had knowledge with regard to process of enrollment. Majority of the respondents had adequate knowledge with regard to the benefits of the scheme but the awareness on how to avail the services were relatively poor. In the study by Panda et al to assess awareness-raising in community based health insurance it was found that interactive, contextualized awareness tools are useful in enhancing insurance understanding.\textsuperscript{12} In addition to awareness and knowledge penetration with appropriate health communication more cost friendly schemes that will help reduce the premium paid, contributed majorly by the public sector and innovative ways to reducing the existing out of pocket expenditure are the need of the hour. Developing policies that will be available, accessible, acceptable and affordable to all sections of the society is the way to go.

**CONCLUSION**

The present study shows the patient’s stand with regards to health insurance knowledge. Majority of the people who were aware about the Chief Minister Health Scheme were not aware about the complete benefits & details of the scheme, which emphasis on the need for creating more awareness about health insurance to avoid unpredictable health expenses in case of illness and injuries. Based on our study results it gives a direction to health care providers to strive hard to cadre the needy & deliver the needs with regards to health insurance.

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