

## Original Research Article

# Awareness of health insurance policies among cardiac patients visiting a tertiary care cardiac hospital in South India

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## ABSTRACT

**Background:** Healthcare expenditure is becoming a point of discussion in the recent past. Cardiac problems are the major non-communicable disease burden in the society. Health insurance play a major role to share individual health risks and thereby provide better access to health care. In this study an attempt was made to find out the level of awareness of health insurance policies among cardiac patients in a tertiary care hospital.

**Methods:** One hundred and twenty patients were surveyed using a pretested questionnaire comprising of thirty different questions related to health insurance. Simple statistical test and Chi square test was used to assess the association between the variables.

**Results:** Only 41% were aware of health insurance among non-insured patients (n=100). It was found that only 16.7% (N=20) had chosen insurance policy and reason for having taken insurance was to cater to the huge medical expenses (14.2%). 45% patients were opted Insurance due to low premium and good reputation. Majority (42.5%) meet their medical expenses from salary. It was found that majority (55%) were satisfied with the insurance.

**Conclusions:** It is found that less than one fifth of the patients opted for health insurance policy, which is very low. The level of awareness about insurance among the non-insured is also very poor. Study concluded that the awareness of health insurance is very poor especially in rural and semi-rural areas. Continuous awareness creation is needed to enhance the health insurance benefits and various features.

**Keywords:** Health insurance, Level of awareness, Cardiac diseases, Insurance premium

## INTRODUCTION

Sound health is important for each individual across all strata of society regardless of sex, age and social background. Health issues gain importance due to factors like inflation, increasing life expectancy, increasing load of life style diseases and uncertainties in individual earnings.<sup>1</sup> Today due to high value diagnostics and newly developed drugs, the cost of healthcare has gone up drastically. Therefore, it is imperative to implement an affordable system that ensures adequate availability of healthcare to all patients. In this regard, health insurance could be the preferred instrument to prevent families from

falling into economic despair due to sudden and unforeseen exorbitant medical costs.<sup>2</sup> Health expenditure is a major challenging factor over the last decade due to increasing cost of health services. Health insurance is the most ideal mechanism for transfer of individual health risks.<sup>3</sup> John Akin (1987) has extensively reviewed the economic rationale for risk sharing and discussed the role of the government in providing insurance services to the people.<sup>1</sup> Two specific problems often occur in functioning insurance schemes. First one is the tendency for individuals to overuse the services and for providers to over provide. Second problem is the tendency of providers to reduce services cost, and hence quality.<sup>4</sup>

India is having mal distribution of income and wealth, 20% of population enjoy 80% of wealth and income.<sup>5</sup> There is very less GDP spending on Healthcare. Only 10% of the Indians have some form of health insurance.<sup>6</sup> The public health expenditure in India is only 1.04% of Gross Domestic Product (GDP). Of this total expenditure, about 30% is contributed by the public sector.<sup>7</sup> In a community-based cross-sectional study in an urban population in south India, a total number of 242 respondents from 242 households (male 38.4%; female 61.6%) were interviewed and health insurance awareness was found to be 64%. Most of the respondents (45%) came to know about health insurance from the media only.<sup>8</sup> A study conducted in Gujarat found out that the need for education for rural and urban population is alike as the concept of health information is a critical on extending awareness about health insurance as of masses.<sup>9</sup>

Many countries are adopting social health insurance as a mechanism to secure access to satisfactory healthcare for all at an affordable price.<sup>6</sup> In India, health insurance is seen as one of the options due to inadequate public hospitals. Lot of studies are available on assessment of the awareness of health insurance. Lower levels of awareness (11-30%) and utilization of health insurance were reported from Maharashtra whereas higher levels of awareness (64%) were reported from a South Indian population.<sup>7,10,11</sup> Studies from other countries also reported lack of awareness of the social health insurance schemes and thereby lack of enrolment into the schemes by the eligible.<sup>12,13</sup>

The main objective of this study was to assess the level of awareness of health insurance policies among cardiac patients visiting a tertiary care hospital at south India. The study also tries to find out the other means of meeting the hospital expenses among cardiac patients and level of satisfaction about the health insurance among insured patients.

## METHODS

The study was conducted at a 239 bedded tertiary care hospital at south India (Sree Chitra Tirunal Institute for Medical Sciences and Technology; SCTIMST). The study was a descriptive one, based on survey method with information collected from respondents through a pre-tested, well-structured questionnaire and personal interview. A total of 30 questions in bilingual language were framed to bring out the awareness level of health insurance, reasons for taking and not taking insurance, difficulties and suggestions etc. about health insurance. 120 respondents were selected using judgement sampling and subjected to the questionnaire. The data were collected using MS Excel and simple statistical test were used. Chi square test was used to find out the relationship between various variables.

## RESULTS

83.3% (n=100) respondents were non-insured and 16.7% (n=20) were insured patients. Majority of the respondents were male (62%) compared to females (38%). Most of the respondents were in the age range of 50-60 years (30.8%) followed by 60-70 years (25%). Based on occupation, it was found that most patients belonged to labourer (28.3%) and unemployed (25%) groups with average monthly income below Rs.5000 (56.7%). 77.5% were having cardiac diseases as the hospital has cardiac speciality as one of major sciences. It was found that 48.3% patients had visited the hospital more than six times followed by 31.7% visited 1-3 times. 95% patients spent amount of Rs.500 to Rs.2000 every month for their medical expenses. Majority (42.5%) meet their medical expenses from salary. Regarding awareness of health insurance among non-insured respondents it was found that only 41% were aware about it (Figure 1).

They know about the health insurance from advertisement of insurance company mostly (35.8%). Most of them who opted insurance opined that the worry about future expenses (14.2%) as the reason for having insurance. Those who opted for health insurance, low premium (45%) and good reputation (45%) are the major reason for selecting the insurance company. Majority were of family insurance type (65%) and least age of policy was <35 years of age (35%). Most of them who opted insurance had limitation of treatment as most of them (35%) were spending very less annual premium (<Rs.500) with nearly 55% were with cashless services. 25% of them were having difficulties in claim processing. Upon analysis it was found that 82.5% respondent never owned any health insurance. Ignorance or not knowing (29.1%) and not interested about health insurance (8.3%) are the major reasons for not having health insurance.

Gender wise health insurance status as shown in figure depict that more females (70%) were having insurance compared to Male (30%) (Figure 2).

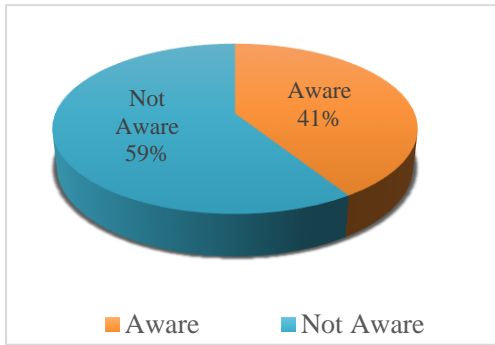
Different age group wise distribution in figure shows that most of the middle-aged people were having insurance (Figure 3).

Occupation wise health insurance status as depicted in figure, showed different occupation of respondents and those who opted for insurance and who did not opt for insurance (Figure 4).

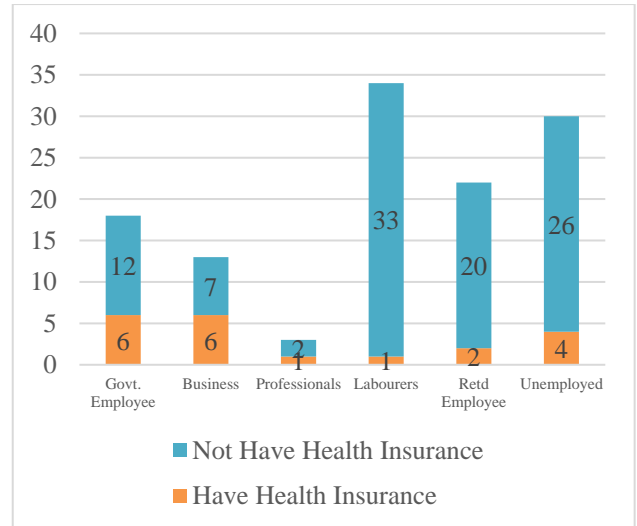
When analysing the average monthly income of the respondents who were having insurance, it was noted that in the higher income group 50% or more were having insurance whereas in lower income group percentage is low (Figure 5).

Among the patients, who visited hospital more than 6 times a year, had higher compliance to health insurance (Figure 6).

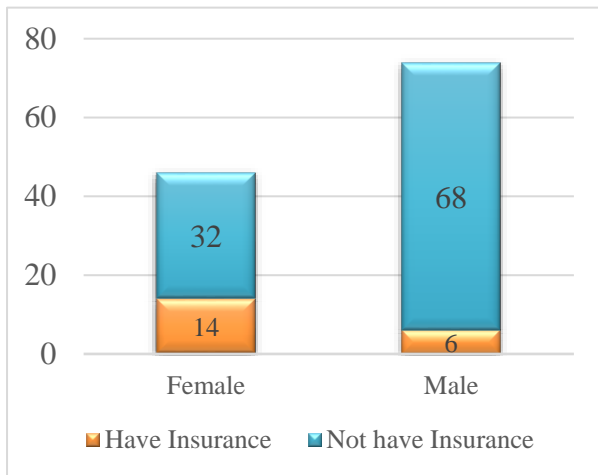
Those who had insurance, it was found that majority (55%) were satisfied with the insurance and only 10% were not satisfied as shown in figure (Figure 7).



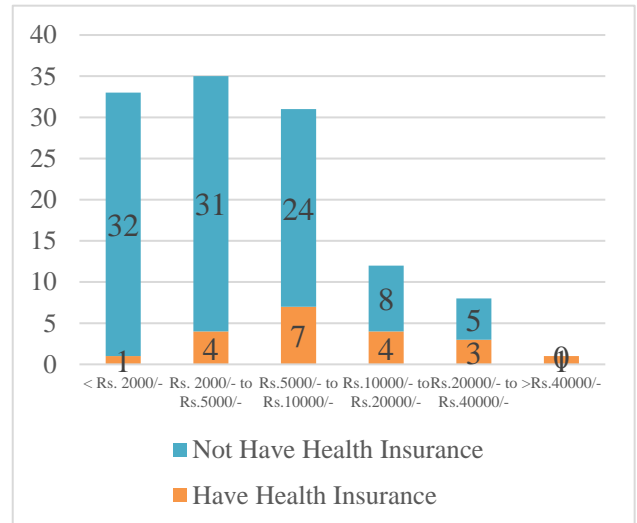
**Figure 1: Awareness of health insurance among non-insured group.**



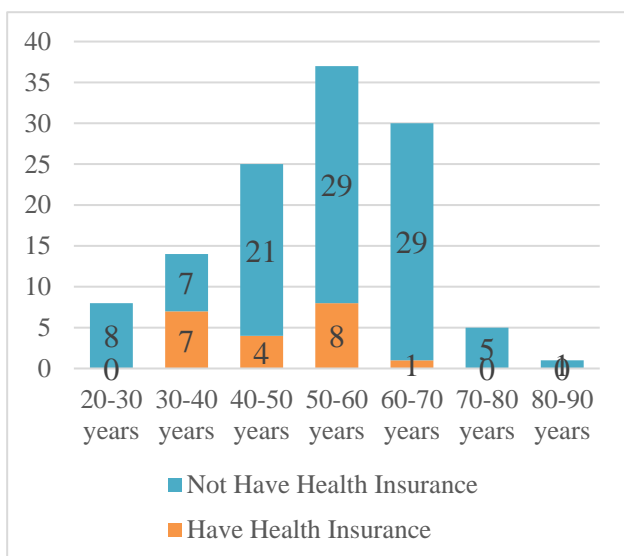
**Figure 4: Occupation based health insurance status ( $\chi^2 = 18.103$ ;  $df=5$ ;  $p=0.002$ ).**



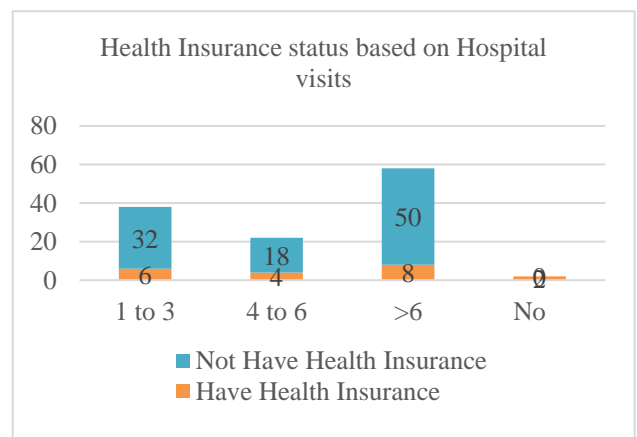
**Figure 2: Gender distribution and health insurance status ( $\chi^2 = 10.181$ ;  $df=1$ ;  $p=0.001$ ).**



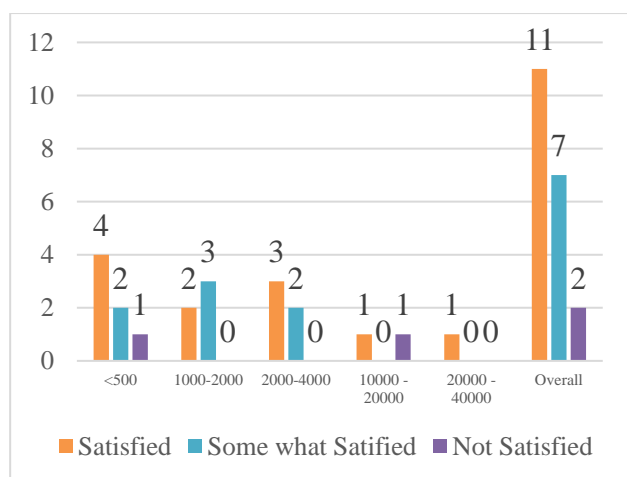
**Figure 5: Health insurance status on average monthly income ( $\chi^2 = 15.790$ ;  $df=5$ ;  $p=0.007$ ).**



**Figure 3: Age distribution and health insurance status ( $\chi^2 = 18.502$ ;  $df=6$ ;  $p=0.005$ ).**



**Figure 6: Health insurance status based on hospital visit ( $\chi^2 = 10.421$ ;  $df=3$ ;  $p=0.002$ ).**



**Figure 7: Satisfaction level based on premium amount.**

## DISCUSSION

From the analysis and results, it was found that only 16.7% respondents were having insurance and the awareness level among non-insured respondents were only 41% in this study. Similar finding was found in a study on awareness about health insurance carried out at Jaipur city of Rajasthan state in India which shows only 43.4% were aware of health insurance.<sup>14</sup> Similar findings were reported from Maharashtra, where only 29.7% were aware about Rastriya Swatha Bima Yajona (RSBY), 21.6% were enrolled, and only 0.3% could utilize the facility for meeting their hospitalization need.<sup>10</sup> Another study reported that only 11% of the rural population in Maharashtra were aware about health insurance, and only 6% actually had any health insurance policy.<sup>9</sup> However, in a south Indian urban population, 64% were aware of health insurance.<sup>11</sup> Panda et al. suggested that raising awareness is an important prerequisite for voluntary community-based health insurance schemes.<sup>15</sup>

When comparing the gender, it was found that more females were insured (30.4%) compared to male population in this study and there is a significant relationship between male and female respondents that had taken health insurance ( $p < 0.05$ ).

In age wise distribution, majority (50%) who have insurance were in the age range of 30-40 years of age. But in 40-50 years age group, 84% were not having insurance. Here also a significant relationship was found between the age and the person with insurance ( $p < 0.05$ ).

In this study, it was found that labourer has the least score regarding availability of insurance (2.9%) and it shows a significant ( $p < 0.05$ ) relationship between occupation and opting health insurance.

When comparing income level of the respondents it was found that higher the monthly income higher percentage

had opted for insurance. There was a significant relationship between income and the person possessing insurance policy ( $p < 0.05$ ). Dror et al reported that community-based health insurance was positively associated with household income and education of the head of the household.<sup>16</sup> Virk and Atun opined that financial protection mechanisms need a balanced approach and evidence-informed policies, which are guided by morbidity and health spending patterns.<sup>17</sup> Contrarily, Michielsen et al. opined that top-down health insurance schemes do not work fully in the Indian context.<sup>18</sup>

A study agrees to the suggestion of expanding Employee State Insurance Scheme (ESIS) to bring all classes of wage earners to the risk pool.<sup>19</sup> Nagaraja et al. reported that regular health camps at industries might re-instil confidence among the workers regarding social security systems.<sup>20</sup> The National health policy of India, 2017 opined that all national and state health insurance schemes need to be aligned into a single insurance scheme and a single fund pool reducing fragmentation.<sup>21</sup> Therefore, the study findings point to the fact that the level of awareness regarding insurance need to be improved.

Health expenditure is a major out go from the individual's income. The study infer that medical expenses are burdening the individuals due to costly drugs and high value diagnostics. The health insurance provides a life line for better access of quality care. But the public awareness is very poor (only 41%), especially in rural and semi-rural areas. Most of them resort to out of pocket expenses for medical care. Lack of funds is a major reason attributed for not taking health insurance. Policy terms are to be relaxed so that common people can afford health insurance. A continuous awareness creation needed to enhance the need of health insurance and its benefits. For specific treatments like diseases of heart or neuro disorders specific health insurance products may be offered. Government can also play a vital role to increase the awareness and benefits of health insurance. It is hoped that the Ayushman Bharat Scheme by Government of India may be able to bridge the gap.

## CONCLUSION

It is found that less than one fifth of the patients opted for health insurance policy, which is very low. The level of awareness about insurance among the non-insured is also very poor. Study concluded that the awareness of health insurance is very poor especially in rural and semi-rural areas. Continuous awareness creation is needed to enhance the health insurance benefits and various features.

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