Knowledge, Usage Pattern and Procedural Issues of Agrahara Medical Insurance Scheme among Government Healthcare Employees in Hambantota District

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Abstract
Sri Lanka has experienced social health insurance for two decades which strongly supports to reduce spending. Agrahara medical insurance scheme was a good initiative that successfully operates in Sri Lanka. A descriptive cross-sectional study was conducted to assess knowledge, usage pattern and procedural issues of Agrahara medical insurance among government healthcare employees in Hambantota district. A representative sample was included to the study by multistage sampling and SAQ, FGDs, KIIs were used as study instruments. Mean age and service of the sample was 41.6 and 17.7 years. The highest educational level of the majority was GCE advanced level. Majority used Agrahara insurance as their alternative health financing. Penetration of other insurances was 17.8% and highest among least educated group. More than half population have utilized Agarhara for spectacles and was highest among employees with service less than 10 years. Utilization was 72.3% among the less educated male employees aged over 51 years. Utilization for government hospitals, spectacles and childbirth were statistically significant with gender. Fraudulent documents were evident, employees claimed several times for same benefit or different benefit types for same year. Among the population, 30% claimed for spectacles had government hospital admission and not claimed. NITF staff was highly satisfied with available benefits. Reimbursement was mentioned as the best method for social health insurance, and they issue guaranty letters for any covered major medical interventions. The interviewers were suggested to include annual health check-up cover, to increase private hospital cover and to increase benefit types for family members.

Developing SOPs and checklists, appointing designated representatives to institutions, revising benefit types/age, extending age limit, formulating medical checkups, issuing e-cards, upgrading policies to gold scheme, conducting activities to improve awareness on Agrahara insurance were considered as recommendations.
Keywords: *Agrahara insurance, Knowledge, Hambantota district*

Introduction

Background information

Sri Lanka has a pluralistic healthcare system with dominating the allopathic healthcare services. Comprehensive promotive, preventive and curative services are available through the public sector allopathic services island wide. These services are funded by public finances, free of charge at the point of delivery ensuring access for low socio-economic groups (Antoinette and Perera, 2017). The total current health expenditure in Sri Lanka for the year 2016 was 463 billion Sri Lankan rupees. Capital investment made in the health sector for the same year was 46 billion Sri Lankan rupees. The current health expenditure in Sri Lanka is approximately 4% of the GDP (MOH, 2018).

There are 12 divisional secretariat divisions in the Hambantota district and this is the largest district in Southern province with 2,609 Km^2 of land area. The total population of the Hambantota district in 2018 was 654,670 (Statistical branch and district election office, 2019). There were 3,244 healthcare workers employed in the Hambantota district for the year 2018 representing all staff categories. Among them, all consultants were allocated to the District General Hospital (DGH) and Base hospitals in the district (Census and Statistics, 2019).

Health insurance is a kind of insurance that covers the cost of an insured individual's medical and surgical expenses. Depending on the type of health insurance coverage, either the insured pays charges out of pocket and receives reimbursement, or the insurer makes expenditures directly to the provider (Felman, 2018). Agrahara is an obligatory social health insurance scheme provided that coverage mainly for inward care for the government employees in Sri Lanka. For the 20 years of its' existence, there is no clear evidence of its' effectiveness in reducing the financial burden due to ill health. Utilizing outpatient care was associated with a higher incidence of catastrophic health expenditure than utilizing inpatient care (Sumudu, Thushara, Nadeeka and Amala, 2019).
Agrahara Insurance scheme was introduced by the ministry of public administration with the circular number of 5/1997. This scheme was under the National Insurance Trust Fund (NITF) from the 1st of January 2006 (Ministry of public administration, 2006). There were a large number of claims, received from Sri Lanka Insurance (SLI) and by now they have cleared the arrears facilitating smooth functioning. The core idea of this Agrahara medical insurance scheme is to uplift the living standards of the public service and provincial public service workers including their family members. Therefore they have taken steps to expedite all claims received as early as possible. They implemented a new system to expedite the claims as early as possible (National Insurance Trust Fund, 2019). The NITF catered to nearly seven hundred thousand public servants and their dependents. They pay for medical (hospitalizations, childbirth, various operations, bypass operations, spectacles, etc.) accidents and death claims submitted by government employees.

Allocated beneficiaries according to NITF are,

Married employees – Member, spouse and children (only if they are unmarried, unemployed and below 21years old).

Unmarried employees - members, parents (only if the parents are below 70 years old).

Benefits are as per the circular published by the ministry of public administration and home affairs (National Insurance Trust Fund, 2019).Public sector provides most inpatient curative care (88%) and half of the outpatient care while the private sector focuses mostly on curative care providing 12% of the inpatient care and half of outpatient care in Sri Lanka (Withanachchi and Uchida, 2006).

Justification

Hambantota district is one of the remote areas having government health institutions managed under line ministry and provincial ministry. This study was done among all government healthcare institutions within the district. DGH Hambantota is managed under the line ministry while the rest of the facilities come under the administrative purview of the Provincial health ministries.
In the literature, it was hard to find studies on Agrahara insurance among healthcare employees. There are many benefits available for eligible servers with Agrahara insurance. It was a worthy effort to assess the knowledge and usage of the Agrahara medical insurance scheme among government healthcare employees in the Hambantota district as those findings can be used in future planning.
The objectives of this study were to assess the knowledge, usage pattern and procedural issues of the Agrahara medical insurance scheme among government healthcare employees in the Hambantota district.

Methodology

This was a descriptive cross-sectional study carried out among government healthcare employees in the Hambantota district. Three study components were in this study.

Component 1: Studying the Knowledge and usage pattern of Agrahara insurance among government healthcare employees by using pretested Self-Administered Questionnaire (SAQ).

Component 2: Studying the procedural issues of Agrahara insurance among government healthcare employees by using KIIs with institutional heads using a KII guide.

Component 3: Assessing procedural issues of Agrahara insurance in the country by using FGDs with Agrahara authority using a FGD guide.

The study was conducted in the Hambantota district with all government healthcare institutions which includes one DGH, three Base hospitals, 17 Divisional hospitals, 12 MOHs and 13 PMCUs (RDHS, 2019). In addition to that, the RDHS, Hambantota office staff were also included in the study. Administration of DGH and Base hospitals are done by the medical administrators, and other institutions are managed by the medical officers. This study was conducted from June to November 2020 successfully. A representative sample was allocated for this study with a sufficient number of participants as studying all government health sector employees in the Hambantota district was not feasible due to time and resource constraints.

Inclusion and exclusion criteria

Government health care employees appointed by the line ministry or Southern provincial council of Sri Lanka with more than one year service period were included. Healthcare workers with less than one year service, workers with contract basis, on medical and maternity leave were excluded.

Sample size and sampling technique

Sample size

The sample size was calculated using the following formula (Lawanga and Lemeshow, 1991).

$$N = \frac{Z^2 \times p\,(1-p)}{d^2}$$

Z= critical value of 95% confidence level =1.96

P= probable estimate of a population prevalence, will be taken as 50%

d= Precision = 0.05

$$N = \frac{1.96 \times 1.96 \times 0.5(1-0.5)}{0.05 \times 0.05} = 384$$

Adding 10% non-responded rate =384 + (10%) 38

Calculated sample size = 422

Institutional heads of selected hospitals and RDHS were the participants for the KIIs. Relevant participants from the Agrahara authority was the participants for FGDs. Considering time and resource constraints and feasibility, the Principal Investigator was conducted FGDs till the data saturation.

Sampling Technique

Proportionate sampling was used for the selected institutions except for PMCUs. Every PMCUs in the Hambantota district were limited to less than five employees and was taken all staff for the study. The random selection of healthcare institutions and healthcare workers was done according to the following schedule in the table.

Institution type	No of institutions in Hambantota District	Selection method of institutions	Selection method of the population from the institutions
DGH Hambantota	01	All institutions	proportionate sampling
Base Hospitals	03	All institutions	proportionate sampling
Divisional Hospitals	17	Simple random selection of 08 hospitals	proportionate sampling
MOH	12	Simple random selection of 06 institutions	Proportionate sampling
PMCU	13	Simple random selection of 06 PMCUs	Total population
Total	46	24	422

Some institutional heads were refused to take part in the study and were replaced by other randomly selected officers for the KIIs. FGDs were conducted with Agrahara authorities of national level and regional level till observation of data saturation.

Pretesting and piloting

Developed the SAQ in English and translated it to Sinhala, back translation was done to check the consistency. Pretesting was done and modified accordingly. Data collection was done by the Principal Investigator, co-investigator and trained research assistants. The pilot study was conducted in Matara District with 40 health care workers representing every category of employees to check the time taken for data collection and to identify ambiguous, difficult and questions not willing to answer.

Minimizing bias

Observed biases were anticipated in the process and instrument of data collection. Used closed-ended questions and minimized open-ended questions as much as possible. Translation, validation and re-wording were done to suit the local audience and supervision of the data entry by the investigators were the steps taken to minimize the biases.

Data Analysis

Quantitative data collected was coded and cross-checked for errors. After ensuring the accuracy, they were entered into an Excel sheet and rechecked. The data were analyzed using IBM Statistical Package for Social Services (SPSS) (version 21). After collecting the qualitative data, they were converted to text form. Keywords and concepts were identified after examining them. Analysis of qualitative data was done based on Thematic analysis.

Ethical aspect

The ethical issues highlighted during the survey were minimized by several methods. Personnel data was not collected and ethical approval was obtained from the postgraduate institute of medicine. Informed written consent was taken from the participants and information leaflets were distributed to all before participating in the survey.

Results and discussion

Results

The mean age of the sample was 41.6 years while the mean service duration was 17.7 years. The highest educational level of the majority of the sample was G.C.E Advanced Level (39.7%) and 19.7% was educated up to degree level.

The total insurance penetration of the sample concerning other insurances was 17.8%. Therefore majorities (83.9%) of alternative health financing was the Agrahara scheme. Even though the female-male ratio of the country population is 11:9 for the own personal insurance it was 6:1. Therefore, the males were not futuristic still in health financing evident by the study findings.

The least educated group had a significantly high percentage (27.5%) of personal insurance penetration despite evidence of poor understanding of the insurance concept among low educated groups (Normand & Weber, 2009). The study also shows higher educated groups and employees with long service were not protected over health conditions unless for the Agrahara scheme.

Benefit utilization was high as 74.8% while 76.8% (Karunarathna, 2016) never claimed and only 69.1% expected to utilize "Agrahara" in the future. Out of 10 benefit types, 92% of the sample have utilized only three types including spectacles, Government hospitals, and childbirth cover. More than half the employees have utilized spectacles although it is not causing any catastrophic health expenses. Utilization of spectacle cover was highest among the employees in the service group of 1 to 10 years. Out of six benefit recipients, the only policyholder, spouse and dependent children less than 21 years have claimed benefits and none of the eligible dependent parents have claimed. Utilization was high among the less educated employees (72.3%), males (63.4%) and employees in the age group over 51 years (69.5%). Utilization of Government hospital cover ($P = 0.048$), Spectacle cover ($P=0.007$) and childbirth cover ($P=0.042$) had a statistically significant relationship with gender. 'Not convenient to claim', 'Not cover private hospital claims adequately', 'In private hospital admissions we have to pay initially', 'Not cover government hospital expenses adequately' were the four leading utilization influencing factors.

The researcher observed a higher claim incidence than stated in the SAQ. Fraudulent documents were identified especially concerning spectacle cover claims. There were hand-written medical bills and same-day medical bills issued from the same institutions. Those can be false claims and the respondents would have not accounted for those in filling out the SAQ and few NITF officers too raised the same matter. The other most important finding was that few employees claimed several times for the same benefit type or different benefit types in the same year. Those are the people who were well aware of the scheme and utilized the maximum of it. Those were the few identified obvious reasons behind the increased number of claims.

The study identified nine influencing factors for the utilization of the Agrahara scheme. One leading factor was 'Not convenient to claim.' The main reason behind it was document-related problems and (Sinha, 2006) identified that the submitted documents were as unclear in social health insurance. Also, incorrect incomplete information or non-availability of required documents were major problems (Karunarathne, 2006, Sinha et al, 2006 and Ranson, 2002) in Social health insurances. As per Karunarathna (2006), in Agrahara 30% of the employees who claimed for spectacles had government hospital admission and not claimed for it. It may be due to 'not convenient to claim' or 'not worth to claim' for government admissions compared to spectacle covers.

One focus group unanimously agreed that private hospital cover was inadequate and minimized private hospital utilization by directing towards government hospitals despite NITF fully satisfied with present benefits including critical illness covers. But NITF CEO informed, that reimbursement basis is the best method for social health insurance, and they issue guaranty letters for any covered major medical intervention to carry out with initial payment. However, NITF had initiated an e-card system to overcome such barriers.

'Not cover government hospital expenses adequately' was highlighted as the most important influencing factor. None of the interviewers raised this matter and the daily payments were only to cover some indirect costs as per NITF officers. The factor of 'Benefit types not adequate' rose by the interviewers. The interviewers were suggested to add annual health check-up cover and OPD cover, to increase private hospital cover, to increase benefit types for family members and add also to parent in law.

Respondents did not readily accept the factors 'I am having another insurance policy', 'Convenient to use government hospitals', 'I am covered with another insurance policy' and 'Nobody use spectacles' in my family.

Conclusion

Sri Lanka has experienced social health insurance for more than two decades and it strongly supports reducing out of pocket spending. Agrahara Medical insurance scheme was a good Sri Lankan initiative and successfully operates with new developments. It was started to influence the social and economic development of Sri Lanka through affordable, effective, efficient and progressive insurance schemes for all needy segments in the society. This study was conducted to assess the utilization of this Agrahara medical insurance scheme among government healthcare employees in the Hambantota district.

The mean age of the public sector employees in the sample was above 41.6 years and they were in the medically risk age group. Health insurance penetration was very low among the study group unless for the Agrahara medical insurance. Overall utilization of Agrahara was very significant but the horizontal spread was limited to four types. Out of that, majority was for spectacles which are not causing any catastrophic health expenses. The expectation was significant in the study group to utilize Agrahara for financial protection for future health expenses. Utilization was high among less educated, males and employees in the age group over 51 years. There is evidence to prove fraudulent claims especially related to the benefit type of spectacle cover.

Problems with documents and procedure of claiming, reimbursed based claiming system, Unawareness of Agrahara medical insurance scheme and related processes and Inadequate benefit types were the important influencing factors for the utilization of Agrahara medical insurance scheme.

Recommendations

1. Development of the SOPs and checklists related to Agrahara insurance claming procedures using stakeholder inputs.
2. Appointing of a dedicated representative to each major institution to coordinate and facilitate services to improve insurance utilization.
3. Considering demographic, epidemiological changes and insurance penetration need to rethink "Agrahara" benefit types and age limits. Therefore, it is important to add medical checkups to the benefits list and extend the age limit of policyholders.
4. Formulation of basic medical checkups with important tests and add to the list of benefit types important for screening.
5. Issuing of e-cards immediately and promoting to use of e-cards among the government servers to easy claim settlement.
6. The motivation of the state employees to upgrade their policies to gold scheme as much as possible and strengthen the Agrahara medical insurance scheme further.
7. Activities should be conducted to improve the awareness among the government healthcare workers on the benefits and the procedures for the benefits of Agrahara insurance.

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