Health Facility Influencing People's Participation in Health Insurance Scheme; a Case of Changunarayan Municipality, Nepal

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Abstract— Health insurance (social health security) is a social protection program of the Government of Nepal that aims to enable its citizens to access quality health care services without placing a financial burden on them; however, people in Nepal are still not interested in the health insurance scheme to the expected level. A mixed type study was carried out in Changunarayan municipality of Nepal to identify the factors influencing the participation of the community in the scheme. It was studied among the 90 households who were participated in the scheme within past 1 to 3 years. Males, those who had completed basic level education, were from Brahmin and Chhetri casts, lived in joint family structure and with a low income were comparatively participated more than their counterparts in this scheme. People initially participated in this scheme with an expectation of free health service, but they soon encountered with the shortage of essential health services in the public health facilities. Most of the medicines were not available in the local health facilities and even the laboratory equipment was insufficient. This reduced both the enrollment rate and continued participation of the community in the scheme

Index Terms— Health Facility, Helath Insurance, people's participation, Nepal

1 INTRODUCTION

Community health insurance had begun by an International Non Govermental Organization (INGO) more than 30 years back initiated by the United Mission to Nepal as “Lalitpur Medical Insurance Scheme" which is regarded as the first non-profit health insurance schemes in Nepal[1]. In 2000, BP Koirala Institute of Health Science (BPKIHS) in Dharan, started health insurance which covered urban and rural populations, offering the same benefit package at different premium rates[2]. National health insurance policy was passed by Government of Nepal in 2014/15. The government of Nepal had announced to roll out Social Health Security Program (SHSP) to three districts (Kailali, Baglung and Illam) but the enrollment process at Kailali was started only from 7th April, 2016 and at Baglung and Illam from 29th June, 2016 ([3].

The insurance has to be renewed every year. Those covered by the insurance are able to receive diagnosis and lab test services as well as drugs, including the 530 types of drugs provided for free by the government. Health insurance programs cover nutrition services, family planning, safe motherhood, Out Patient Department (OPD) and emergency services, medication and preventive services including ambulance. However, it doesn't cover expensive medical equipment, plastic surgery, hearing aid and injury caused by drunken brawl [3].

Murdoch says that most of the people in the world are suffering from the related expenses. Health insurance is emerging as a global solution for breaking the cycle

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of poverty and vulnerability. Further says health insurance is especially designed to poor and vulnerable people to provide them health and medical facilities since they couldn't afford the cost of medicine and hospitalization as other normal income people from the ordinary market. The poorest citizens of the poorest countries are typically exposed to the greatest risks.

According to Tabor , the main weakness of health insurance are the low level of revenues that can be mobilized from poor communities, the frequent exclusion of the poorest of the poor from participation in such schemes without some form of subsidy, the small size of the risk pool, the limited management capacity that exists in rural and low-income contexts and their isolation from the more comprehensive benefits that are often available through more formal health financing mechanism and provider networks.

Health insurance has been shown to decrease out-of-pocket expenditure, especially for catastrophic health events and improve access to care for insured members[4] .

Changunarayan is a Municipality in Bhaktapur district in the province no. 3 of Nepal. It is part of the urban cluster of the Kathmandu Valley. According to ward profile 2016, there were 1562 households in ward no. 8 and total population of ward no. 8 was 7254 where 3397 were males and 3857 were females.

Health services facilities are found grossly inadequate in Nepal. The health status of the people in the country is still poor in comparison to other Asian countries. Insufficient availability of medicine in the public sector is a chronic problem.

The financing of public health services is a worldwide problem. The problem is particularly acute in low-income countries such as Nepal. Inadequate supply of medicine by the government is the major problem for the primary health care. In the context, health insurance is only the alternative to recover the drug cost by the participation of the people. Most of the people live in rural area and have financial problems to afford high charge for the treatment in hospital. If health insurance scheme is put in effect, it will be good for the poor people so that they might not be charged high for their health care.

To ensure the health care services for all, the government of Nepal has started health insurance program in few districts. For the universal health coverage government has adopted the vision of overall health improvement of people through social health security. Health insurance program is to have access for preventive, curative and rehabilitative health services. Health insurance program has played an exciting role in health care systems. Within a very short period of time it has been able to enroll an encouraging number of members.

Objective of the study

The objective of this study was to analyze the factors including access and availability of health facility affecting people's participation in health insurance scheme in Chagunarayan Municipality of Bhaktapur district, Nepal.

Research methods and procedures

The study followed cross-sectional descriptive re-

search design and mostly used mixed methods for data collection. The situation was described in its original form. Qualitative information from key informant interview was also included in this study. It was done in ward no.8 of Changunarayan Municipality, Bhaktapur. All the health insured households were the population in this study. According to ward profile - 2016, there were 1562 households in ward no. 8. According to health insurance board office, there were 90 households who had insured in the health insurance scheme. Therefore, all 90 households were taken as the sample size in this study through census method. Structured and close ended interviews as well as open ended interview schedules were used for data collection. Moreover, key informant interviews were also done for collecting qualitative data.

Privacy of all the respondents was maintained. Their personal rights regarding inclusion and exclusion were respected. Norms and rules of the particular society were followed during data collection.

Results and discussion

Rules and procedures of participation in the health insurance scheme

Health insurance board office informed that health insurance scheme is of a universal coverage. People of all ages are eligible in the scheme. Family size of five members or additional members can be involved in health insurance scheme. Registration process is door to door visit by an enrollment assistant. Similarly, premium payment includes annual and annual renewal. People who wish to involve in health insurance scheme need to provide Nepalese citizenship and detailed information about each family members. People who are poor or vulnerable need to show poverty card to get subsidized by the government health insurance scheme benefits package. Under the scheme, insured participants' each family member gets insurance card after the membership.

Insurance board coordinator in the area said that health insurance scheme is a voluntary program based on family contribution. In this scheme families of up to five members have to contribute Nepalese Rupees (NPR) 2500 per year and NPR 425 per additional member. Benefits of up to NPR 50,000 per year are available for families of up to five members with an additional NPR 10,000 cover for each additional member. The maximum amount available per year is NPR 1,00,000.

Participation in health insurance scheme

Health insurance board office said that when health insurance program was initially launched in Changunarayan Municipality people were interested in the scheme and the rate of household member's participation in the scheme was rapid. However, it could not equally spread to the all types of gender, ethnicity, family type and income level groups. The proportion of male and female among the insured household participants was 80 percent and 20 percent respectively. Male insured participants were found higher compared to the female insured participants.

Initially, Brahmin's participation in health insurance was higher than other Ethnic groups/Caste groups. Brahmin comprised of 56.7 percent of total insured households at present, followed by Chhetri caste group

with 34.4 percent, Dalit with 5.6 percent and Janajati with 3.3 percent.

Table 1: Year-wise participation in health insurance by ethnicity

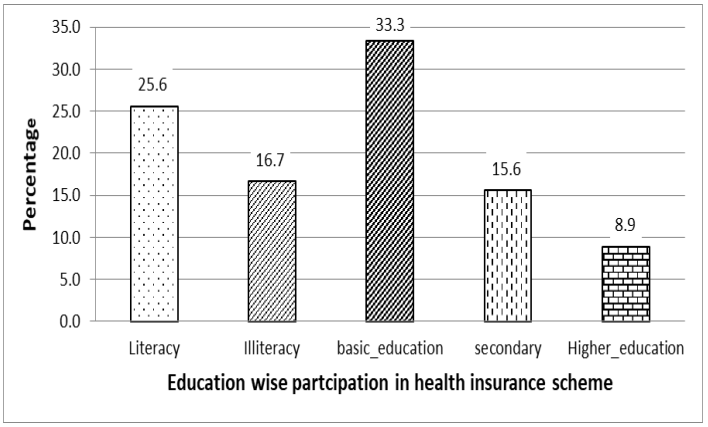
Ethnicity	Year-wise participation in health insurance scheme						
	0-12 Months		1-2 years		2-3 years		Total
	N	%	N	%	N	%	
Brahmin	40	78.4	7	13.7	4	7.8	51
Chhetri	19	61.3	8	25.8	4	12.9	31
Janajati	3	100	0	0	0	0	3
Dalit	5	100	0	0	0	0	5
Total	**67**		**15**		**8**		**90**

As shown in table 1, Brahmin and Chhetri castes were participated more in the scheme compared to the other castes. The participation of both castes is increased till the third year after knowing about it, but the Janajati and Dalits did not participate earlier.

Similarly, regarding the type of family, joint family's participation level was better than nuclear family. About 68 percent joint family and 32 percent nuclear family participated in the scheme. Participant from a family of 1 to 3 persons was lower with 11 percent and 3 to 5 persons was 22 percent. Similarly, about 40 percent participants had 5 to 7 family members and 26.7 percent had 7 or more family members.

Education is one of the major socio-economic factors that influences a person's behavior, attitude, practice and income as well as participation in the health insurance scheme. The education status wise distribution of the member's participation is given in figure 1.

Figure 1: Level of participation in health insurance scheme by educational status



The figure 1 shows that 33.3 percent participants of health insurance had basic level education, 25.6 percent were literate, 16.7 were illiterate, 15.6 had secondary level education and 8.9 percent respondents had higher education. Respondents with basic level education and just literate participants were more involved in health insurance scheme. Higher level educated participants were low as compared to other educational status. Interestingly, participation of the illiterate and educated up to secondary level was almost equal.

One of the Female Community Health Volunteer (FCHV) shared her experience that, *"Poor people or relatively less educated people are interested to obtain the membership. Less educated people show more interest compared to educated ones. It's difficult to convince educated people to become member of health insurance scheme. Sometimes it takes 3 hours to convince them. They were less willing to listen to us compared to less educated people".*

According to the World Bank, in Nepal families face

multiple barriers in accessing health care. Delays in the decision to seek care arise from financial constraints as 72 percent of people finance health cost out of pocket[5]. According to National Health Insurance Policy, the national health insurance policy was supported the objectives of the Nepal Health Sector Program II (2010-2015). This is to increase access to effective health care services, particularly for members of disadvantaged population groups. This policy is an important reform agenda and is intended to improve the health status of the population through strengthening health systems. This study also found that mostly poor people with low education and income are participating in the scheme seeking health service in need.

People are involved in different types of works for their livelihood and better health. Family occupation directly affected their socio-economic condition[6]. It was found that 33.3 percent insured household participants were involved in labor occupation. Similarly, 23.3 percent households were involved in agriculture, 14.4 percent households were involved in business, 12.2 percent households were involved in service (job holder) and 16.7 percent households were involved other occupation sector (foreign employment).

Regarding income of the insured participants, 46.7 percent of them had income of NRs 10000 to 20000. Similarly, 24.4 percent of the participants' monthly income was 20 to 30 thousand, 20 percent of the participants reported that their monthly income was less than 10 thousand and 8.9 percent of the household heads had income more than 30 thousand. The highest proportion of insured household participants had monthly income of 10 to 20 thousand Nepalese rupees. Thus, households with low paid occupations and fewer income sources were participated more in comparison to those doing business or involved in service as occupation and with high income sources in the area.

According to World Health Organization (WHO), community health insurance has emerged as possible means of improving access to health care among the poor, and protecting the poor from indebtedness and impoverishment resulting from medical expenditure. The World Health Report noted that prepayment schemes represent the most effective way to protect people from the cost of health care, and called for investigation into mechanism to bring the poor into such schemes[7].

WHO says that 100 million people every year are driven into poverty due to catastrophic health expenditure? It is imaginable that most reside in resource poor setting such as Sub Saharan Africa with very weak modern healthcare systems and in most cases without any functioning health insurance schemes[8].

Time period of knowing about health insurance scheme and taking membership

In Protection motivation theory, clarified fear appeals. According to the protection motivation theory, people protect themselves based on four factors: the perceived severity of a threatening event, the perceived probability of the occurrence, or vulnerability, the efficacy of the recommended preventive behavior, and the perceived self- efficacy. Efficacy is the belief in one's ability to execute the recommend courses of action

successfully [9].

In the case of health insurance, people protect them based on the perceived severity of a threatening event, the perceived probability of the occurrence, or vulnerability, people involved in health insurance scheme for the future health secured or exempt from the health-related risks. The perception is stimulated by the knowledge people receive. Thus, the participants were asked **"**When did you know about health insurance scheme and how long have you been a member of health insurance scheme?" Their responses were as following:

Table 2: Time period of knowing about health insurance scheme and taking membership

Time period of knowing about health insurance	Membership in health insurance scheme (In Month)						
	0-12	%	12-24	%	24-36	%	Total
Within 0-12 Months	55	100	0	0	0	0	55
Within 1-2	8	50	8	50	0	0	16
2-3 years ago,	4	21.05	7	36.8	8	42.1	19
Total	**67**		**15**		**8**		**90**

As per table 2, a total of 19 households had known about health insurance within past 36 Month. In the same year of knowing, 42.1 percent households were involved in the scheme; however, after that, it gradually reduced in the upcoming years to 36.8 percent and 21.5 percent households. Knowledge of health insurance was high within past 12 months and participation level was also high but it was not sustained in the following years.

Participation and satisfaction of people in health insurance scheme

Under the health insurance scheme, the insured participants were expected to get different health services like nutrition, psychological counseling, vaccination, drugs, Out-patient Department (OPD) and emergency services, promotive, preventive, curative and rehabilitative services including ambulance. Furthermore, premium amounts were subsidized by the government at specified rates for the extremely poor, poor and vulnerable people. A family identified as extremely poor, poor and marginalized get 100%, 75% and 50% discounts respectively. FCHVs get NRP 250 discount in their family contribution. However, it doesn't cover expensive medical equipment, plastic surgery and artificial insemination.

Participants (about 50%) said that the health insurance scheme was needed because it was beneficial for the low-income groups. According to them, it significantly decreased financial risk of ill health. It minimized the financial risks due to the health care expenditure. A 53-year-old male household participant expressed that, *"We do not have cash in hand every time but my family members may fall sick any time. In such time, health insurance (Bima) is helping us to overcome the financial problems"*.

Half of the participants mentioned that the health insurance scheme was for health care at low cost. Similarly, a 35-year-old female participant said, *"the scheme prevents us from the high treatment cost at the private clinics and medical shops when they we have health problems"*. Other participants also highlighted that they would not have money on hand any time to pay for the health care expenses. This program is ben-

eficial to them in such situation to get treatment. It was felt benefit of having unlimited consultation in the scheme when they needed. A 40-year-old female participant said, *"I am happy that under the scheme we get different health care services and treatment at the hospital".* An FCHV also expressed her happiness and said, *"The health insurance scheme is very useful for me and my family. I get NRP 250 as discount in family contribution under the scheme".*

Although, most of the participants perceived that the scheme was beneficial and they got different health services and treatment at the government hospital; their continued participation was not seen. Participants from low income sources said that health insurance scheme minimized the financial risks due to the health care expenditure, but they were worried with the amount of health services they received from the facility. Almost 50 percent of the participants expressed their dissatisfaction towards the scheme.

Health service factors influencing the participation in health insurance scheme

Mathiyazhagan says that socio-economic factors and physical accessibility to quality health services are significant determinants of health insurance scheme[10]. Dong et al.also illustrates that health insurance is influenced by household and individual ability to pay along with other characteristics such as age, gender and education[11].

Shimeles says that community-based health insurance schemes are promising alternative for a cost sharing health care system which hopefully also leads to better utilization of health care services, reduce illness related income shocks and eventually lead to a sustainable and fully functioning universal health care system[12]. Community health insurance can be initiated by government, health facilities, NGOs, trade unions, local communities, local governments or cooperatives and can be owned and run by these organizations. They strengthen the demand for health care in poor rural areas, and enable low-income communities to articulate their own health care needs[13] .

Health insurance board office in Changunarayan Municipality states that people have gradually started to understand about health insurance as the message had been communicated from radio, TV and newspaper. Furthermore, FCHVs, health personnel and enrollment assistants had been informing people about it. However, health insurance board office also accepts that:

> *"People were initially interested in the scheme and the rate of enrollment in health insurance scheme was rapid. During that time people were readily participated in the scheme. However, it could not be sustained in the years following. Lack of health services or delay is the main cause of reduction in the enrollment rate. Sometimes it's difficult to convince people because they know that health personnel are not available in public health facilities".*

Participants were found to be reluctant to be a member in the scheme as the medicines, laboratory services and health personnel were not available in health facilities. Due to lack of health services or delay, enrollment rate to the scheme was decreasing. One of the insurance coordinators of the area shared that:

"*Laboratory equipment is not in proper condi-*

tion in health facilities. These types of problems have created distrust towards health insurance scheme and sometimes people are unwilling to get enrollment in the scheme. Furthermore, once people get enrollment to the scheme, they expect that they should get every medicine free of cost under the scheme. Although they utilize health services of NRP 20000 or 50000 but have to pay for medicines of around NRP 200 outside, they come to us and complain that all medicines are not available. These types of minor problems also make community people annoyed to continue the scheme".

One of the male participants was strongly against the scheme and said that, *"I don't like the health insurance scheme because they don't provide the needful treatment in emergency. My mother was returned to home from emergency with just a simple treatment. They won't respond well when emergency. They provide some relief treatment and first aid only. Therefore, I even left the membership".*

Many community people still lacked proper knowledge on the scheme and its unique necessity. One of the enrollment assistants said, *"People still opine that they don't need health insurance since they don't have any disease. Furthermore, community people have confusions regarding other types of insurance and health insurance scheme. People share about other insurance scheme where the amount is doubled in certain years. We have been trying to convince them that it's different than other types of insurance".*

Some of the participants expressed the problems to walk to various buildings in the process to get treatment. They had comment for the vaccine not being included in the benefit package. They were also asked to buy medicines outside which were not available in the hospital. They also showed dissatisfaction towards availability of advanced drugs at the public hospital. Despite they had some dissatisfaction, some of the insured participants assured to continuing the scheme.

Health insurance board office shared that sometimes it's difficult to convince people. Community people had most complaints about health services. They said that medicines were not available at the public health facility. Sometimes they bought a medicine outside, which became an issue. These types of problems made them drop out from the scheme. Enrollment was not a problem but people's satisfaction became main problem to continue in the scheme.

Health insurance board office informed that there were different factors (education status, occupation, income and health services) which affected enrollment and participation in health insurance scheme. Education is one of the factors which affected in enrollment and participation. Only 8.9 percent higher educated participants were involved in the scheme. It was difficult to convince educated people to become member of health insurance scheme. Furthermore, higher educated family members mostly visited private hospitals for their treatment. They were less willing to involve in health insurance scheme. Poor people or relatively less educated people were interested to obtain the membership. Less educated people showed more interest com-

pared to educated ones.

Similarly, income was another factor which affected participation level of people. People with higher income sources were less willing to involve. Only 8.9 percent participants with higher income were involved in health insurance scheme. Health services mainly affected enrollment and participation level. Under the health insurance scheme, government provides free health services to all people but needed health services were not available in public health facility in the area. Similarly, all medicines were not available at the hospital and laboratory equipment was not in proper condition in health facilities. These were the problems leading the participants to lower in the enrollment rate and continue participation.

Murdoch says that most of the people in the world are suffering from the related expenses. Health insurance is emerging as a global solution for breaking the cycle of poverty and vulnerability. He further says Health insurance is especially designed to poor and vulnerable people to provide them health and medical facilities since they couldn't afford the cost of medicine and hospitalization as other normal income people from the ordinary market. The poorest citizens of the poorest countries are typically exposed to the greatest risks[14].

Health insurance is based on generation of additional revenues to the health sector, improvement in the system's efficiency and cost effectiveness, improvement in the quality of service, establishment of the client's right and motivation for positive behavior change among health care providers and consumers through the creation of proper incentive and reward[6]. According to Spaan et al. in lower-income countries health insurance scheme has been established as a nonprofit financing mechanism to benefit the poor people[15]. According to Odeyemi , health insurance scheme improves resource mobilization for health and health services utilization and protection for financial risks, it is vulnerable to adverse selection, where disproportional enrollment by high-risk contributors accompanies nonparticipation by low-risk individuals [16].

International Labor Organization (ILO) describes that dissatisfaction with the quality and quantity of curative services provided by public systems, along with a growing inability to wide sectors of the population to pay for private medical services, has led many countries to considering implementation of social health insurance schemes as part of the reform of their health systems. This approach leads to improvements in health status, wider access to medical care and sound financing for health services[17].

According to UNICEF, about half of the countries have initiated or planned to initiate health insurance schemes to reduce health expense-related impoverishment, increase care-seeking behavior, eliminate disparities in access, and fulfill national commitments to universal health coverage. A health insurance scheme is a financing mechanism to generate and pool funds to cover the cost of health care for members of that plan. It is here found that the success of the scheme depends on the quality and amount of health care from the health facility[18].

Conclusion and implications

Male participants, mostly Brahmin and Chhetri, and of low income and low education levels were participating more in the health insurance scheme. Those who received well services from health facility were satisfied and continued their participation in the scheme and those who didn't, left the scheme.

Education status, occupation, income and health services affected enrollment and participation in the scheme. Provision of health services from the local health facility was the main factor affecting the enrollment and participation level. The initial level of people's participation was satisfactory in the study area; however, the participation could not sustain due to shortage of health services to the people and its associated rumors. Thus, to mitigate the problems, local government should provide effective health services from the local health facility as well as conduct regular monitoring, feedback and suggestion to make the program more effective and reliable.

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