Dropout in Social Health Insurance Program and its Associated Factors at Pokhara-Lekhnath Metropolitan, Kaski

Amrita Paudel^a, Prabina Subedi^b, Sushmita Baral^b

^aDepartment of Nursing Science, Gandaki Medical College, Teaching hospital and Research Centre, Tribhuvan University ^bDepartment of Public Health, LA Grandee International College, Pokhara University

Abstract:-

> Background

Health insurance is one of the principal methods of health financing mechanism which enables to mobilize local resources to reduce the health inequalities, out of pocket payment and moving towards Universal Health Coverage and ultimately to improve the health status of people. In the context where voluntary health insurance schemes in many developing countries have faced challenges such as dropout. The dropout in health insurance scheme is influenced by a range of factors. The purpose of this study was to assess the factors associated with dropout in Health Insurance Program.

> Materials and Methods

Using a household survey based on cross-sectional descriptive design, the factors associated with dropout and continued was examined in Pokhara Lekhnath metropolitan. A total 401 households renewed and nonrenewed were sampled and interviewed for this study. Data was analyzed using IBM SPSS. Descriptive statistics were used to report the socio-demographic and socio-economic characteristics, morbidity as well as knowledge of participants. The test of association was performed using Chi-square test.

> Result

Among 401 participants, 44.4% were continuously involved in the program and 55.6% were drop outs. Dropout in health insurance program is because of less use of service in previous years (43.9) followed by other reasons like unavailability of medicines (33.2), change in service point (30.0%), crowd in service point (24.7%)and so on. Education of household head (0.030), ethnicity (0.019), family type (0.009) household size (0.015), occurrence of illness in family during last three months (<0.001) distance to health facility (0.004).and satisfaction with available health services had shown statistically significant association with dropout from health insurance scheme.

> Conclusion and Recommendations

The education of household head, long distance to health facility, no satisfaction with available health services, less use of services, un availability of medicines were found to be affecting dropout. Though being underprivileged group and household size favors the

dropping out of the program. Thus, the program should focus on quality improvement of services.

Keywords:- Social Health Insurance, Dropout in Health Insurance, Factors, Ne.

I. INTRODUCTION

Most healthcare expenditures in developing countries are borne through out-of-pocket (OOP) spending payable by healthcare-seekers at the time and place of treatment. Many developing countries suffer from the challenge of high OOP health care expenditure ⁽¹⁾ we are living in the world of Out-Of-Pocket payment to get health services from private as well as public that includes paying for medicines, hospital stay, doctor visit, diagnostics tests. More than 100 Millions of people worldwide and 55% (2015) of Nepal are suffering from poverty and cannot afford the health care $\cot^{(2)}$. The health financing is one of the six building blocks of health system, which play a crucial role for improving the health of a country. In many countries, the health care expenditure is so high that the family can experience the financial catastrophe and often impoverishment because of their spending on their health care ⁽³⁾. This inequitable and inefficient health financing situation persist in other low-income countries including Nepal. The solution proposed by WHO and other international bodies has been to strive towards universal health coverage (UHC), notably through prepayment and risk pooling mechanisms. Very few low-income countries (e.g. Armenia, Moldova, and Mongolia) have so far been able to mandate the entire population to pay premiums for UHC. One solution to these problems has been the practice for people to own and run CBHI schemes.

There are different models of health insurance in different countries follow to offer health service to their people. Every nation in the world, wish to provide all health care service as a basic need and offer service free of cost. Some countries like United States, Ethiopia have made health insurance mandatory to its people and government bears the cost of low income people ^(4, 5). In other countries, people must access hospitals on their own. Out of these different models, social health insurance has been widely recommended health financing system around the world. It enables to mobilize local resources to reduce health inequality and prevents people from financial impoverishment just because of health care cost. One of the essential components of all health financing systems is

mobilizing resources with which to pay providers and to ensure that all individuals have access to effective healthcare. Health insurance systems also aim to ensure that individuals should be reimbursed fairly for their healthcare costs, or get care without having to pay for it.

Health policy makers are faced with competing alternatives for system of health care financing which is one of the way to the path to universal coverage aim to ensure that all people obtain the health services they need without suffering financial hardship when paying for them. To tackle the issues associated with OOP, health insurance is gaining momentum in the country. Community Based Health Insurance(CBHI) schemes in Nepal complement several specialized programs of the government of Nepal for improving people's access to health care services and a new step towards strengthening health financing as well as to achieve the universal health care.

Government of Nepal also has been implementing "Health Insurance Program" as a social Health protection scheme for last two years which main aim is to ensure access to quality health service (equity & equality) and to protect from financial hardship and reduce out of pocket payments. This is nonprofit and voluntary membership scheme and is aimed at protecting the poor and vulnerable against the high costs of seeking medical care and treatment. For these SHIs has been recommended as the best options to prevent families from falling into poverty due to catastrophic health expenditure. It provides equitable health services than out of pocket expenditure system since people have no longer compulsion to sell their cattle ,agricultural land, houses, jewelry and borrow the huge amount of money for the health services⁽⁶⁾.

The Social health insurance scheme was initiated in three districts Kailali, Baglung and Illam in FY 2072/73.Till the end of the first trimester FY 2074/75, the program was operational in 22 districts. It is proposed to extend this scheme to 39 districts by the end of this fiscal year. Kaski district was included to this scheme from last year and about 8.5% of population is covered under this program in Kaski⁽⁷⁾.

Various studies reveal that voluntary health insurance schemes in many developing countries face challenges such as low enrolment coverage and dropout from health insurance scheme. While the country remains committed to achieving universal health coverage, as evidenced in the national health insurance policy and constitution of Nepal, whether this voluntary scheme will be viable to achieve adequate population coverage and sufficient risk pools remains a concern for Nepal.

➢ General Objective

To assess the factors associated with drop out of health insurance program at Pokhara Lekhnath metropolitan.

- Specific Objectives
- a) To find out the status of health insurance program at Pokhara Lekhnath metropolitan
- b) To identify the association between drop out from social health insurance scheme with different study variables.

II. RESULT

This chapter represents the findings on the dropout rate and its associated factors on health insurance program as studied in catchment area of Pokhara Lekhnath metropolitan. Quantitative data were collected by face to face interview with 401 household head. At the end of study, there were total 401 questionnaires with complete information comprising 223 drop out and 178 continuous users and these were included in the results. In the first section, general characteristics of study population are presented. In the second section the results from tests of association have been described.

Study Variables	Number	Percent	
Age of participants			
25-36 yrs	163	40.6	
37-48 yrs	125	31.2	
49-60 yrs	74	18.5	
61-72 yrs	39	9.7	
Mean±SD =42.42±12.15			
Sex of participants			
Female	220	54.9	
Male	181	45.1	
Education of household head			
No formal	115	28.7	
Basic	215	53.6	
Higher	71	17.1	
Ethnicity			
Privileged	324	80.8	
Underprivileged	77	19.2	
Religion			
Hinduism	356	88.8	
Buddhism	23	5.7	
Christianity	21	5.2	
Muslim	1	0.2	
Family Type			
Nuclear	225	56.1	
Joint	176	43.9	
Family Size			
Less than or equal to five	271	67.6	
More than 5	130	32.4	
Mean family size=5.04±1.3	·	•	
Presence of elderly above 60 years			
None	228	56.9	
At least one	173	43.1	

Presence of children aged 0-5		
None	203	50.6
At least one	198	49.0
Home Ownership		
Self-owned	245	61.1
Rented	156	38.9
Main occupation		
Service	119	29.7
Foreign employment	109	27.2
Business	94	23.4
Agriculture	52	13.0
Labor	27	6.7
Wealth Quintile		
Poor	160	39.9
Middle	161	40.1
Rich	<u>80</u>	<u>20.1</u>

Table 1:- Distribution of participants by socio demographic factors (N=401)

Table 1 provides the description of sociodemographic characteristics of the study population. Out of 401 participants, more than half (54.9%) were females. The age of participants was between 25 to 71 years nearly half of them (40.6%) in the age group less than 40 years and two in five (36.2%) from age group 40-60. The mean age of participants was 42.42 ± 12.15 years.

Majority of households (87.4%) in this study were headed by males. More than half of the participants (53.6%) had basic education up to secondary level and one in five (17.1%) had higher than secondary level education. About one in three participants (28.7%) had no formal education.

The average household size of the study population was 5.1 (SD = 1.3). More than half of the households had less than or equal to five members (67.6%) and lived in a nuclear family (56.1%), belonged to privileged ethnic groups (80.8%) did not have children less than five years (50.6%) and had no elderly members above the age of sixty (56.9%).

More than half of the households (61.1%) were owned by family member, while households (38.9%) were rented. The number of service job holder is higher than that of the other economic activities. We can view that the number of labor is the lowest among the respondents. When wealth quintile was calculated using principle Components Analysis it was found that almost equitable distribution was found among all five levels of quintile,

Study Variables	Number	Percent
Knew the amount of annual premium for up to 5 family members (NRP 2500)	334	83.3
Knew the amount of annual premium for each additional member (NRP 425)	164	40.9
Knew the amount of annual benefit ceiling for up to family member (NRP 50000)	334	83.3
Knew the amount of annual benefit ceiling for each additional family member (NRP 10000)	164	40.9
Knew the frequency for membership renewal	375	93. <u>5</u>

Table 2:- Distribution of participants by their Knowledge about health insurance program(n=401)

Most of the respondent had heard about health insurance program from social media (45.4%), followed by enrollment assistant (32.4%) and health workers (14.5%). Regarding the types of premium in health insurance program, among 401 respondents 83.3% knew the annual premium for up to 5 family members and 40.9 % respondents have knowledge about the amount of annual premium for each additional member.

When the respondent was asked about the amount of annual benefit ceiling for up to 5 family members 83.3% said correctly and 40.9% of respondents have known about the benefit celling for each additional member

Out of 401 respondents about 93.5% knew the correct time for renewal of membership

Study Variables	Number	Percent
At least one	277	69.1
None	124	30.9
Visited health facility for treatment(n=277)		
Yes	272	98.2
No	5	1.8
Time taken to reach health Facility		
Less than 30 minutes	58	14.5
30-60 minutes	295	73.6
More than 60 minutes	48	12.0
Mode of Treatment(n=272)		
Health Insurance	272	100
Self	77	19.2

Table 3:- Distribution of participants related to utilization of health insurance service(N=401)

Respondent were asked if any family member were ill during last three months period.it was found that 69.1% had morbidity in past three months with one or more than one members ill and 30.9 % did not have morbidity. Regarding the type of illness 98.2% have visited the health facility for treatment and the 49.1% of respondent reported that they had visited Manipal Teaching Hospital(MTH) ,33.2% Western Regional Hospital(WRH) and 17.7 Gandaki Medical College(GMC) during past three months illness period.

Distance to health insurance implemented health facility i.e. (MTH, WRH, GMC) from respondent's house was measured as the time required to reach health facility on foot or in vehicle, 73.6 % reported distance of health facility being 30 to 60 minutes and 12.0% reported to be more than one hour from their residence. (table 4)

Study Variables	Number	Percent
Satisfaction with health services and service	provider(n=272)	
Very Satisfied	5	1.5
Satisfied	147	36.7
Neutral	42	10.5
Dissatisfied	42	10.5
Very Dissatisfied	36	9.0
Reason for not satisfied(n=78)		
Long waiting time	70	89.7
Low quality of services	57	73.1
Difficult to access the service	56	71.8
Include very less services	41	52.6
No consultation by specialists	22	28.2
Negative attitude of service provider	12	15.4

Table 4:- Distribution of participants by the level of satisfaction with their reasons.

Out of 272 respondents who had used the health insurance program, the level of satisfaction gained by the participant in health service as well as service provider in health insurance program is higher in the number of satisfied in comparison to other level such as dissatisfaction. The major reason behind the dissatisfaction are long waiting (89.7%) for the service is the highest. After this we can find the other secondary reasons are like low quality of service (73.1%) and difficulties to excess service (71.8%) is equivalence that is nearly the major portion of dissatisfaction.

Study Variables	Number	Percent
Health Insurance status	222	
Dropout	223	55.6
Continue	178	44.4
Reasons for dropout		
Did not use service last year	98	43.9
Unavailability of Medicines	74	33.2
Change in service Point	67	30.0
Crowd in service point	55	24.7
OOP is better	46	20.6
No money to pay premium	28	12.6
Unknown about renewal time	12	5.4
Not available of enrollment assistant	8	3.6
Reason for continuation		
Cash less services	69	38.3
Early diagnosis and treatment	44	24.4
Prevent premature Death due poverty	52	28.9
Family member become ill frequently	51	28.3
Encourage by enrollment assistant	74	41.1
Helps in emergency condition	162	90.0
Satisfy with Government policy	141	78.3
Quality of services	39	21.7

Table 5:- Distribution of participants by the health insurance status with their reason (n=401)

When respondents were asked about their membership status in health insurance program during the survey period,44.4% were continuously involved in the program and 55.6% were drop outs.

Both the dropouts and continuous user were asked about the reason behind their health insurances membership practices, the table 6 shows that the estimated proportion of dropout in health insurance program is because of less use of service uses of previous years (43.9) followed by other reasons like unavailability of medicines (33.2), change in service point (30.0%), crowd in service point (24.7%) and so on. The number of continuity of insurance program despite ineffective insurance program is around 40%. They have continued because most of the people are agreed that it may help in emergency condition like fatal disease which may compel them to stay in health centers for medication process. Along with this major number of people believe that it is a government program hoping that it will be successful in coming days. It is followed by the people who are persuaded that it is a cashless service which help them to reduce economic burden. Finally, few people have developed concept such as early diagnosis and treatment as well as premature death due to poverty will be reduced through this program. Due to all above mentioned reasons participant have renewed their health insurance program.

Study Variables	Drop out n (%)	Continue n	Chi-square p-value
		(%)	statistic
Age of participants			
>42 yrs	139(55.2)	113(44.8)	0.56
<42 yrs	84(56.4)	65(43.6)	0.813
Sex of household head			
Male	197(54.9)	162(45.1)	0.753
Female	26(61.9)	16(38.1)	0.386
Education of household head			
No formal	73(63.5)	42(36.5)	4.04
Formal	150(52.4)	136(47.6)	0.044*
Ethnicity			
Privileged	171(52.8)	153(47.2)	5.487
Underprivileged	52(67.5)	25(32.5)	0.019*
Religion			
Hindu	193(54.2)	163(45.8)	2.510
Non-Hindu	30(66.7)	15(33.3)	0.113
Family Type			
Nuclear	138(61.3)	87(38.7)	6.800
Joint	85(48.3)	91(51.7)	0.009*
Family Size			
Less than or equal to five	162(59.8)	109(40.2)	5.882
More than 5	61(46.9)	69(53.1)	0.015*
Presence of elderly above 60 years			
None	138(60.5)	90(39.5)	5.173
At least one	85(49.1)	88(50.9)	0.023*
Presence of children aged 0-5			
None	113(55.7)	90(44.3)	< 0.01
At least one	110(55.6)	88(44.4)	0.982
Home Ownership			
Self-owned	122(49.8)	123(50.2)	8.627
Rented	101(64.7)	55(35.3)	0.003*

Table 6:- Association between drop out to health insurance and socio demographic factors(n=401) (*significant)

The cross-tabulation of factors that showed statistically association with health insurance dropout include education of household head (λ^2 = 6.99, p-value 0.030), ethnicity (λ^2 = 5.49, p-value 0.019), family type

 $(\lambda^2 = 6.80, \text{ p-value } 0.009)$ household size $(\lambda^2 = 5.88, \text{ p-value } 0.015)$. Likewise, presence of elderly members above the age of 60 ($\lambda^2 = 5.173$, p-value 0.023), and House ownership

 $(\lambda^2 = 8.627, \text{ p-value } 0.003)$ also showed statistically significant association.

The cross-tabulation of age of participants with dropout in health insurance program showed that 54.9 percent of households headed by males had dropout from health insurance program while among female headed households the dropout rate was 61.9 percent. However, this difference in dropout rate between male and female headed households was not statistically significant. The socio-demographic factors such as age, religion, presence of children below five years did not show any significant association with dropout in Health Insurance Program.

Study Variables	Drop out n (%)	Continue n (%)	Chi-square p-value statistic (λ^2)
At least one	127(45.8)	150(54.2)	34.58 0.00**
None	96(77.4)	28(22.6)	
Visited health facility fo treatment(n=277)	r		
Yes	124(45.6)	148(54.4)	0.411 0.522
No	3(60.0)	2(40.0)	
Time taken to reach health Facility			
Less than 30 minutes	34(58.6)	24(41.4)	
30-60 minutes	173(58.6)	122(41.4)	10.936 0.004*
More than 60 minutes	16(33.3)	32(66.7)	
Satisfaction with health services an service provider(n=272)	d		
Satisfied	31(20.4)	121(79.6)	
Neutral	22(52.4)	20(47.6)	104.59 0.00**
*Dissatisfied	71(91.0)	7(9.0)	

 Table 7:- Association between dropout to health insurance with service related factors

 **Highly significant *significant

Cross tabulation of health service related variables with dropout to health insurance program had shown significant association with occurrence of illness in family during last three months (λ^2 = 34.58, p-value <0.001). likewise, cross tabulation of distance to health facility with health insurance practices had also shown statistically significant (λ^2 = 10.936, p-value 0.004). In the cross tabulation between satisfaction with available health services and dropout of health insurance program had shown statistically

significant ($\lambda^2 = 104.6$, p-value 0.000)

III. CONCLUSIONS

Finally, we can draw the conclusion that the households with more than five members, from privileged ethnicity, home ownership and presence of elderly are more likely to dropout in Social Health Security Program. Furthermore, morbidity conditions such as prior experience of illness in the household are associated with dropout of households in Social Health Security Program. Dropout in Social Health Security Program is also associated with knowledge regarding annual premium amount and annual benefit ceiling of SHSP for each additional member.

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