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Utilization of Health Care Services and Willingness to Pay for Health Insurance in Kaski

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Abstract

Introduction: Health insurance is currently being considered as a mechanism for promoting progress to universal health coverage (UHC) in many countries. The government started the social health insurance program at selected health facilities. The accessibility and utilization of health insurance is important for quality care and to reduce financial burden to the care provider.

Objective: The objective of the study was to assess Utilization of health care services and Willingness to Pay for Health Insurance in Kaski.

Method: Descriptive cross sectional study design was conducted in Kaski district Pokhara. Cluster random sampling technique was adopted for selecting the subject. From each of the 30 clusters, 16 household were surveyed by using KPC field manual. The sample size was 477and Interview schedule was used to collect data. The data entered and analyzed by using computer software MS Excel and Statistical Package for the Social Sciences (SPSS2016). The quantitative variables were presented as mean and standard deviation, percentages and inferential statistics t test and chi-square test was used.

Result: The study findings revealed that 60.4% involved in health insurance scheme for their health problem. Among them 52.1%utilize the health insurance. Overall mean and standard deviation of the satisfaction was 25.04±5.08. About 48% respondent had high level of satisfaction but only Thirty-five percent wants to renew the scheme. Level of satisfaction is associated with utilization and renew the scheme.

Conclusion: Although more than half of the insured utilizes the scheme, the satisfaction should be improved through quality and efficient service by the hospital managers and service providers.

Keywords: Health insurance; Satisfaction; Utilization and willingness to pay

Introduction

Health insurance is a program where individuals or groups pay premiums in advance for healthcare coverage. It helps to reduce economic burden in health care by individuals and households .[1] Rising healthcare costs, new diseases, and poor accessibility in rural areas highlight the need for quality service, a key factor in Health Insurance Schemes.[2]. Low-income countries face challenges in financing healthcare services and unaffordable to the poor people.[3] Although health status has improved, many still face barriers to accessing quality care, due to healthcare costs. Enhancing community health insurance enrollment, leads to universal health coverage .[4] Patient satisfaction and service quality are crucial for encouraging health insurance enrollment. Despite growing awareness, only 18.5% of the population is insured, with most healthcare expenses still paid out of pocket. Surprisingly, educated individuals are more hesitant to invest in health insurance .[5]

Social Health Insurance aims are to protect all population against financial risks due to illness but there are difficulties in implementation. [4]Patient satisfaction and Quality of service is an important factor for willingness to pay and join the Health Insurance Scheme. [2]

The study in Nepal showed that the socio-economic factors in Nepal are not very favorable for better willingness to pay for health insurance. The quality of health service is very poor and satisfaction of people is very low in the public health services. But awareness is playing a vital role to influence willingness to pay and enrollment.[6] There is obstacle to run the HI program smoothly. [7]HI aims are to protect all population groups against financial risks due to illness. Patient satisfaction is important factor for willingness to pay for government health services compared to private health services. At the local level willingness to pay for public health services in Nepal is questionable. But government launched Health Insurance. It was identified that appropriate intervention is needed for raise awareness and improve quality of life and increase the willingness to pay for health insurance [8,9] It is necessary to study the willingness of community people to pay for the health financing scheme in the context of Nepal. This study best aims to fulfill the study gap to find out the willingness to pay for health insurance scheme in the country. Improv-ing health service quality can increase willingness to pay for insurance. Policymakers should enhance accessibility and affordability to develop quality healthcare services. The objective of the study is to assess utilization, satisfaction and willingness to pay for health insurance in Kaski.

Method

Descriptive cross sectional study design was selected in Kaski district Pokhara. Cluster random sampling technique was adopted for selecting the subject. At first, sampling interval was obtained by dividing the total houshold of Kaski district by the number of cluster made i.e.30 (taking reference of KPC field manual). From the sampling interval random number was obtained by using decision analyst STAT software. After obtaining the first random number subsequent cluster was selected. After selecting 30 cluster, sample number from each cluster determined by dividing total sample size by total number of cluster. From each of the 30 clusters, 16 household was surveryed by using KPC field manual i.e In each cluster researcher stand at the junction or chowk and rotate the pen. The house which the pointer points the first house was selected. Eligible respondents who was willing to take part in the study was included in the study. The respondent was head of house hold or the adult respondent age more than 18 years. Those who refuse to give consent or unwilling to take part was excluded in the study. Total sample size for the study was 477.

A structured interview schedule was prepared in English. And translated into Nepali language then back-to-back translation was done to maintain validity. The questionnaires consist of 4 sections these are: Background information, Utilization of health under the scheme of health insurance and Satisfaction towards health insurance service. And willingness to renew the scheme. Before collecting data, ethical cleareance was taken from Nepal Health Research Council ref no 1574.A written request letter from Pokhara campus was submitted to Chairman of selected ward for grant permission. Verbal and written informed consent was taken and collected data from May 2022 to August 2022 at the place of their residence with confidentiality within 20 minutes. Collected data was checked, organized, coded. The quantitative variables were presented as mean and standard

deviation, percentages and inferential statistics t
test and chi-square was used to identify associa-
tion between the variables.

Result

**Table 1: Background Information of the Respond-
ents(n=477)**

Characteristics	No.	Percentage
Age (years)		
<18	6	1.3
19-29	88	18.4
30-39	94	19.7
40-49	116	24.3
50-59	113	23.7
>60	60	12.6
Mean±SD:43.03±13.678		
Gender		
Male	233	48.8
Female	244	51.2
Religion		
Hindu	436	91.4
Buddist	34	7.1
Christian	4	0.8
Muslim	3	0.6
Ethnic group		
Bhramin	248	52.0
Chhetri	109	22.9
Janajati	62	13.0
Dalit	58	12.2
Education Status		
No education	50	10.5
General literate	159	33.3
Basic level(1-8)	34	7.1
Secondary education(9-10)	106	22.2
Higher secondary(10-12)	84	17.6
Higher education	44	9.2
Occupation		
Service	181	37.9
Agriculture	145	30.4
Business	133	27.9
Housewife	18	3.8
Marital Status		
Separation	9	1.9
Unmarried	72	15.1
Married	396	83.0
Family Type		
Nuclear	301	63.1
Extended	176	36.9
Household size		
1-4	66	13.8
4-5	278	58.3
5-10	133	27.9

(Multiple Responses)

Table 1 Shows that (24.3%) of the respondent
were 40-49 years old only 1.3 %were under 18

years old and mean and standard deviation is
43.03±13.67.

Table 2: Health insurance related Information(n=477)

Information	Number	Percent (%)
Illness in family members(n=477)	109	23
Accessibility of health care service(477)		
Public	418	87.6
Private	39	8.2
No	20	4.2
Involve in health insurance scheme(477)		
Involvement	288	60.4
Not involvement	189	39.6
Involvement years(n=288)		
1year	73	15.3
2year	117	24.5
3year	98	20.5
Utilize health Insurance(288)		
Not utilized	138	47.9
Utilized	150	52.1
Utilize health Insurance(150)*		
Screening for Breast cancer	28	9.7
Illness	52	18.1
Hospitalize overnight	77	26.7
Clinical visit	122	42.4
General examination	134	46.5
Number of prescription(n=288)		
No	153	53.1
One	62	21.5
Two	66	22.9
Morethanthree	7	2.4
Distance to health facility from home(477)		
≤30 minutes	226	47.4
> 30 minutes	251	52.6

Multiple response*

Table 2 reveals that among the respondents
23%has illness in their family members.

Table3: Satisfaction Scores of the Respondents (n=288)

Satisfaction	Mean±SD	CI
Satisfaction with Reception of service	2.87±.931	2.77-2.98
Service provider Attitude toward explaining health problem	2.99±.889	2.89-3.09
Service provider Friendly	3.10±.797	3.01-3.19
Explanation about diagnostic test	2.25±1.07	2.13-2.38
Satisfied with Confidentiality	3.51±.708	3.42-3.59
Satisfied with Staff behavior	2.56±1.22	2.42-2.70
Satisfied with facility environment	2.6±1.05	2.48-2.73
With comprehensive service provided by the clinic	2.22±.958	2.11-2.33

	Mean±SD	CI
Service provider explain about medicines	2.94±.792	2.85-3.03
Overall satisfaction	25.04±5.08	24.45-25.63

Table 3 shows that the satisfaction means score of the respondents is high satisfaction found in confidentiality3.51±.708. And overall satisfaction mean score is 25.04±5.08.

Table 4:Satisfaction on Health Insurance(n=288)

Level of satisfaction	N	Per-cent-age	Mean±SD	CI
Low level <mean	149	52	25.04±5.08	24.45-25.63
High level ≥mean	139	48		

Table 4 shows the 52% of the respondents have low level of satisfaction where mean and SD is 25.04±5.08.

Table 5: Willingness to Pay

Statement	n	Percent
Renew the scheme(288)		
don't want renew	186	64.6
want renew	102	35.4
Want to be a member(189)		
Do not want to be member	92	48.7
Want to be member	97	51.3
Recommend to other(477)		
Yes	416	87.2
No	61	12.8
Not want to be a member or renew the scheme*		
Long waiting time	172	92.4
Unmanaged service system	30	16.1
Lengthy procedure	19	10.2
Unavailable service	16	8.6
Limited package	14	7.5
No enough medicine	12	6.4
Behavior of staffs	9	4.8
No need	8	4.3

Multiple response*

Only 35.4% of the respondents are willing to pay to renew the scheme, but want to recommend the scheme to others (87.2%). Although more than half of the respondents want to be a member, 92.4% complained about long waiting time, which is why the respondents choose not to be a member or renew the scheme (Table 5).

Table 6: Association between Background Information with Satisfaction Domain

Variables	SR1	SA2	SF3	SD4	SC5	SB6	SE7	SS8	SPM9	Sat_over all
Age										
18-39(n-123)	2.68	2.85	2.98	2.06	3.39	2.42	2.47	2.13	2.98	23.95
40-80(n-165)	3.01	3.09	3.19	2.40	3.59	2.66	2.70	2.28	2.92	25.84
ᵗp value	.003*	.025*	.021*	.007*	.016*	.102	.065	.175	.523	.002*
Religion										
Non-hindu(n-23)	2.74	2.83	3.04	1.78	3.61	1.61	1.87	1.61	3.09	22.73
Hindu(n-265)	2.88	3.00	3.11	2.29	3.50	2.64	2.67	2.27	2.93	25.29
ᵗp value	.490	.359	.720	.028*	.474	<.001*	<.001*	.001*	.358	.005*
Education status										
Noeducation(n-30)	3.03	3.30	3.37	2.77	3.60	3.10	3.07	2.63	3.17	28.03
General literate(n-91)	2.84	3.07	3.10	2.40	3.56	2.71	2.71	2.30	2.98	25.65
Secondary education(n-137)	2.93	2.94	3.06	2.02	3.55	2.20	2.39	1.99	2.86	23.94
Higher education(n-30)	2.53	2.67	3.03	2.37	3.03	3.17	2.80	2.60	2.97	25.16
ᵃp value	.139	.033*	.268	.001*	.002*	<.001*	.003*	<.001	.256	<.001*
Occupation										
Business(n-95)	2.81	2.88	3.07	2.12	3.47	2.52	2.48	2.07	2.95	24.37
Service(n-104)	2.79	2.88	3.03	2.05	3.43	2.38	2.44	2.10	2.91	24.00
Agriculture(n-79)	3.09	3.30	3.23	2.65	3.66	2.90	2.94	2.54	3.00	27.30
Housewife(n-10)	2.50	2.70	3.10	2.60	3.40	2.20	2.80	2.30	2.70	24.30
ᵃp value	.068	.003*	.398	.001*	.159	.023*	.007*	.004*	.685	.000*

Higher score indicates high satisfaction

R1-Satisfaction with Reception of service, SA2-service provider Attitude toward explaining health problem, SF3-Provider Friendly, SD4-Service provider explanation about diagnostic test, SC5-with Confidentiality, SB6-with Staff behavior, SE7- facility environment, SS8- Satisfied with comprehensive service provided by the clinic, PM9-Service provider explain about prescribe medicines.

a ANOVA test, t t-test *p significant at ≤ 0.05 level of significance

Table 6 shows, there is significance difference in age group with satisfaction. There is significant difference between age. Age more than 40 were more satisfied than age below 40.

Table 7 Association between Utilization and Level of Satisfaction, Utilization and Renew the scheme with satisfaction Level (n=288)

	Level of Satisfaction		X²	p
	Low%	High %		
Utilization				
Not Utilized	119(86.2%)	19(13.8%)	126.26	.000
Utilized	30(20%)	120(80%)		
Renew the scheme				
Don't want to renew	71(38.2%)	115(61.8%)	38.696	.000

Want to re-new	78(76.5%)	24(23.5%)

Level of significance at p value-<0.005

Table 7 shows there was significant association between level of satisfaction with utilization of the services and renew the scheme.

Discussion

The aim of the study was to identify Utilization and willingness to pay for health insurance in Kaski. All of them were 18 years above. Among them 24.3%were at the age of 40-49years.the mean and standard deviation was Mean±SD:43.03±13. 678.Among the 477 respondents 60.4% were involved in health insurance scheme in Kaski. But only 52.1% had utilized the scheme. This is consistent with the study done in Pokhara where the utilization was less among enrollment.[10]Among them 9.7%has done breast examination. Only 18.1% become sick and they went to the hospital for treatment. This study is consistent with the study done in Ghana where insured utilized the health service.[11]The overall satisfaction mean score was 25.04±5.08. Regarding the level of satisfaction 52% of the respondents have low level of satisfaction on health insurance in Kaski whereas 48%has high level of satisfaction. This is in line with the study done in Ghana where 53.12%were dissatisfied .[3]This is contradicted with Ghimire and Poudel (2019) which shows 52.5% were satisfied.[12]But study done in Nigeria showed 42.1% high satisfaction .[13]Regarding willingness to pay the 35.4%respondents only want to renew the scheme. Among the noninsured more than half 51.3%want to be a member. Most 87.2%recommend other to become member. This study is contradicted with the study done in Ethiopia with high rate of willing ness to pay.[14,15]The factors affecting willingness to pay for health insurance in Kaski are Long waiting time, unmanaged service system, unavailable service, limited package, no enough medicine, no need Behavior of staffs. Most 92.4%not want to be a member or renew the scheme due to long waiting time and only 4.3%felt no need. There is significant association between Satisfaction with Staff behavior, and facility environment with ethnicity. People's satisfaction with their healthcare provider is closely linked to several factors. These include how well the provider explains health problems and diagnostic tests, how private and confidential the service feels, how friendly and professional the staff are, how comfortable the clinic environment is, and how complete the services are. Additionally, a person's level of education also affects their overall satisfaction. People's jobs can greatly affect how satisfied they are with healthcare services. [16] This includes how well the provider explains health problems and diagnostic tests, how polite and helpful the staff are, how comfortable the clinic feels, and how complete the services are. Overall satisfaction also changes based on occupation. [17,18]Marital status significantly influences satisfaction with service delivery but also affects perceptions of staff behavior, facility environment, and different service. Generally, larger household sizes are associated with higher satisfaction in these areas. However, studies in Ethiopia suggest that as family size increases, satisfaction actually decreases.[3]There is a significant association between family illness and satisfaction with provider explanations, staff behavior, facility environment, and overall services. Likewise, satisfaction with provider attitude, friendliness, and service quality is strongly linked to the utilization of health insurance in Kaski. The willingness to renew the scheme depend upon the satisfaction of the service .There is significant association between Satisfaction with Reception of service, Satisfaction with service provider Attitude toward explaining health problem, Service provider Friendly, Service provider explanation about diagnostic test, Satisfied with Staff behavior, Satisfied with facility environment, Satisfied with comprehensive service provided by the clinic and overall satisfaction and willingness to renew the scheme. Communication skill also determine the service utilization.[19]The insured plan to renew the scheme was 35% which was lower than study conducted in Ethiopia.[15] There was significant association between level of satisfaction with utilization of the services. There was significant association between level of satisfaction with renew the scheme. Dropout and willingness to pay is also affected by inefficient program and implementation.[20]

The limitation of the study is that this study only focused on the community people of the Kaski. So this study limits the generalizability all over the country.

Conclusion

Based on these findings more than half of the insured utilize the scheme, more than half have low level of satisfaction, satisfaction level can be improved by providing the health service effectively. Few respondents want to renew the scheme. More than half want to be a member and most of the people recommend to be a member. The factors of non-willingness to pay are long waiting time, unmanaged service system and lengthy procedure. The satisfaction is associated with utilization and renews the scheme. The hospital managers and service provider need to give attention to reduce waiting time. The results may help the policy maker and Implementer to manage the service centre effectively. The findings of the study may provide baseline data for future researcher.

Recommendation

It recommends that future studies should be focused on study of health insurance. The qualitative study will be recommended to find out real live experience of respondents regarding satisfaction.

Conflict of Interest

The author declares no conflict of interest.

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