

Knowledge of Health Insurance Program, Utilization, and Service Satisfaction among Insured in Suryabinayak Municipality, Nepal

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Abstract:

The health insurance program is a social protection and health security program of the Government of Nepal that aims to enable its citizens to access quality healthcare services without placing a financial burden on them. Health insurance is essential for reducing financial barriers to healthcare and ensuring equitable access to health services. This study aimed to assess knowledge of the health insurance program, its utilization practice, and satisfaction with the service among the locals of Suryabinayak Municipality, Bhaktapur District, Nepal. A descriptive cross-sectional study used a structured questionnaire to collect data from 422 households. There was a high level of awareness (73.9%) and service utilization (38.4% using services frequently), with an 86% satisfaction rate among users. However, significant gaps remain in knowledge about specific benefits and access to emergency services, as well as issues with medication availability. Additionally, 7.1% of respondents experienced delays in renewal due to a lack of medicine. Health-insured people had a high level of awareness about the health insurance program, however, they had knowledge gaps in various aspects of the policy. Access to emergency care and essential medications remained questionable, which demanded targeted outreach and educational initiatives.

Keywords: *Health insurance policy, Health-insured, Satisfaction, Social protection, Universal health coverage*

Introduction

Health is universally recognized as a fundamental human right, as enshrined in the Constitution of Nepal (Adhikari & Aryal, 2018) and affirmed by the World Health Organization (WHO, 2005) . This recognition has driven global efforts to improve healthcare access, particularly since the 1978 Alma Ata Conference, which emphasized the importance of primary healthcare for all (Bhattacharya, 2024) . In Nepal, the National Health Policy of 1991 was formulated to extend basic primary health care services to rural areas, establishing health facilities at various administrative levels (Department of Health Services, 2017) . Despite these efforts, millions every year, worldwide are pushed into poverty due to healthcare expenses, a challenge acknowledged by the Alma-Ata Declaration and the World Health Assembly (WHA) (Pankaj et al., 2024) . To address this, the WHA urged countries to develop health financing systems to achieve Universal Health Coverage (UHC) (WHO, 2005, 2024).

In response, the Government of Nepal launched a family-based health insurance program, combining prepayment and risk pooling to prevent catastrophic health expenditures, and advocates for equitable access to health services for disadvantaged groups, which is managed by the Social Health Security Development Committee (now Health Insurance Board) (Ayer et al., 2024) . It was established in February 2015 and the program was rolled out in three districts (Kailali, Baglung, and Ilam) starting in FY 2071/72 (2014), which seeks to provide quality healthcare without imposing financial burdens on citizens (Health Insurance Board, 2018) . The program aligns with Nepal's commitment to achieving UHC, as reflected in the new constitution and National Health Policy 2014 (National Planning Commission, 2015) .

The key features regarding health insurance program enrollment premium, benefit ceiling, renewal of membership, and benefits packages . Families of up to five members must contribute NPR 3,500 per year and NPR 700 per additional member (Health Insurance Board, 2022) . Insurers must renew their membership through annual contributions, i.e., one month before the expiration date . Benefits of up to NPR 100,000 per year are available for families of up to five members, with an additional NPR 20,000 covered for each additional member . The maximum amount available per year is NPR 200,000 (Health Insurance Board, 2077/078) . Additional NPR 100,000 (1000 USD) for each elderly population . Additional NPR 100,000 (1000 USD) for patients with eight chronic diseases (Health Insurance Board, 2018) .

While progress has been made, UHC remains elusive in Nepal . Internationally, initiatives such as the Sustainable Development Goals (SDGs) emphasize UHC as

essential for ensuring all individuals have access to necessary health services without financial hardship (United Nations, 2015) . The WHO defines UHC as access to key promotive, preventive, curative, and rehabilitative health interventions to all at an affordable cost, thereby achieving equity in access and financial risk protection (WHO, 2005) . Despite improvements in healthcare access through various initiatives, only 18.17% of the population enrolled in the insurance program as of the fiscal year 2077/78 (Health Insurance Board, 2022) . The endorsement of the Health Insurance Act in 2017 has further reinforced the government's commitment to sustaining the national health insurance program (Department of Health Services, 2017; Health Insurance Board, 2017).

The primary objective of this study was to investigate the knowledge and utilization status of the health insurance program, and its satisfaction among health-insured people in Suryabinayak Municipality . The study seeks its relevance in exploring how people are consuming the benefits from health services provided under the insurance program .

Methods and Materials

Research Design

This study employed a descriptive cross-sectional design to assess knowledge and practices regarding health insurance among insured households in Suryabinayak Municipality, Nepal.

Study Area and Population

The study was conducted in Ward No . 4 of Suryabinayak Municipality, which has a total population of 9,578 (Suryabinayak Municipality, 2019).

Sampling Procedure and Sample Size

A purposive sampling technique was utilized for sample selection.

The sample size was calculated by using a formula .

i.e., Sample size (n) =

Where, Z (level of significance) = normal variant i.e., 1.96

Prevalence (p) = 50% = 0.5

d = Allowable error i.e., 0.05

n = sample

Now,

= 384

After accounting for a 10% non-response rate, the final sample size was determined as 422 households.

Data Collection Tools and Procedure

The primary data for this study was collected directly from individuals through face-to-face interviews using a structured questionnaire . To ensure reliability, the questionnaire was pretested on 10% of the sample size in another ward of the Suryabinayak Municipality . We received permission from the Health and Physical Education Department at Kathmandu Shiksha Campus and Suryabinayak Municipality to conduct the study.

Data Analysis

Data analysis was performed using IBM-SPSS-25 software, employing quantitative methods to interpret results . The validity was maintained through an extensive literature review and expert guidance . This methodology aimed to provide a comprehensive understanding of knowledge and practices related to health insurance among insured households in Suryabinayak Municipality, contributing valuable insights towards achieving universal health coverage in Nepal.

Ethical Considerations

Ethical approval was secured from the Research Management Cell of Kathmandu Shiksha Campus . Informed consent was obtained from the respondents before starting the interview . Anonymity and confidentiality were maintained . The study adhered to ethical guidelines per the Declaration of Helsinki (Adhikari et al., 2023) .

Results

Duration of Membership in Health Insurance Program

Being a member of a health insurance program suggests that individuals have access to healthcare services covered by their insurance plan . This includes visits to doctors, specialists, hospitals, diagnostic tests, medications, preventive care, and other medical services included in their insurance coverage . By being a member of a health insurance program, individuals have coverage for a portion of their healthcare expenses, reducing the financial burden of medical treatments and services.

Table 1*Duration of being a Health-Insured Member*

	Frequency	Percent
	12	7.1
	14	5.7
	18	6.9
	24	2.8
Period (in months) of being a	28	1.4
member of a health insurance	3	1.4
program	33	7.1
	36	19.9
	48	11.4
	60	36.3
Total	422	100.0

Most (36.3%) respondents were members of the health insurance program for the last 60 months, followed by 19.9% for the last 36 months, 11.4 % for the last 48 months, and 7.1 % for the last 12 months.

Knowledge of the Health Insurance Program

Every insured member is expected to know about the health insurance program, which includes the basics of health insurance program enrollment, such as the premium cost for being a member, the annual benefit from the health insurance program, the maximum benefit from the health insurance program, and the renewal period of membership .

Table 2*Knowledge Of various Aspects of Health Insurance Policy among the Respondents*

		Frequency	Percent
Annual premium for a family of up to five members	3500	312	73.9
	Other	108	25.6
	No Response	2	0.5
Annual premium for each additional member beyond five members	700	312	73.9
	Other	110	26.1
Annual benefit ceiling for a family of up to five members	1 lakh	350	82.9
	Other	72	17.1
The annual benefit for each member beyond five members	20000	105	24.9
	Other	317	75.1
Maximum annual benefit ceiling	2 lakhs	121	28.7
Health Insurance Board will bear per family per year	Other	299	70.9
	No Response	2	0.5
The renewal period for membership	Annually	333	78.9
	Other	89	21.1
	Total	422	100.0

A significant majority (73.9%) of the respondents correctly identified the annual premium of Rs 3,500 for up to five family members . The same percentage accurately knew that Rs 700 is added for each additional member beyond five . Regarding the benefit ceiling, 82.9% correctly stated that the annual benefit for a family of up to five members is one lakh rupees . However, only 24.9% accurately identified the yearly benefit of Rs 20,000 for each member beyond five . Knowledge about the maximum annual benefit ceiling was limited, with only 28.7% correctly identifying it as Rs 200,000 per family a year . On a positive note, 78.9% of respondents knew the annual health insurance policy renewal period . However, many respondents in each category were unaware of these aspects of health insurance policy .

Utilization of Health Insurance Program

Health insurance is crucial in covering medical expenses related to illnesses or injuries . The condition when and how the insured used their insurance policy were identified as follows:

Table 3*Conditions for and Frequency of Utilizing a Health Insurance Policy*

		Frequency	Percent
The condition for using the health insurance policy	For illness	265	62.8
	For Regular follow-up	86	20.4
	If refer needed while complicated health problem occurs	55	13.0
	If the expiry period of insurance is soon	16	3.8
	Not even one time	29	6.9
Number of times utilizing health insurance service in a year	Less than two time	114	27.0
	Three to five-time	117	27.7
	More than six-time	162	38.4
	Total	422	100.0

The average number of service utilization times per year indicates how frequently individuals or a population seek medical services covered by their health insurance . It can include visits to primary care physicians, specialist consultations, hospitalizations, diagnostic tests, preventive screenings, and other healthcare services . It was revealed that 62.8% of the respondents used health insurance primarily for treating illnesses, while 20.4% utilized it for regular follow-ups . A few insured people (3.8%) tried to use it when the insurance policy expired shortly . Additionally, 38.4% of respondents reported using the health insurance service more than six times a year, indicating a high level of engagement with health facilities.

Perceived Satisfaction with the First Health Service Point

It reflects the individual's perception of the quality of care received at the hospital . This includes factors such as the competence and professionalism of healthcare providers, the effectiveness of treatment received, and overall patient experience during their visit . It is important to note that the first service point satisfaction is just one aspect of the overall healthcare experience, along with the satisfaction with health insurance coverage . Other factors, such as the choice of hospitals and healthcare providers within the network, coverage for specific treatments or procedures, and the overall cost-effectiveness of the health insurance plan, also contribute to overall satisfaction.

Table 4*Satisfaction at the First Health Service Point of Health Insurance Policy*

		Frequency	Percent	
Satisfied with the service of the first health service point		Yes	363	86.0
		No	59	14.0
Reasons of satisfaction	A decrease in financial burden	274	64.9	
	Chronic illness/availability of regular in taking medicine	54	12.8	
	For referral purpose	10	2.4	
	Getting quality health service	25	5.9	
	Total	363	86.0	
	Missing system	59	14.0	
Reasons of dissatisfaction		Unavailability of regular in taking medicine	35	59.3
Lack of needed medical equipment				
Lack of quality service				
The first service point is far				
Health workers' rude behavior		12	20.3	
		3	5.1	
		6	10.2	
		3	5.1	

The majority of the respondents, 86%, expressed satisfaction with the first service point, primarily due to a decreased financial burden (64.9%). However, among the unsatisfied members, who comprised 13.9% of the total, the primary reason for dissatisfaction was the unavailability of regular medicines (59.3%) at the health facility.

Perceived Satisfaction with the Referral Health Service Point

Satisfaction with the referral health service point indicates that the individual perceives the quality of care received at the referred hospital as satisfactory. This may include factors such as the expertise of the healthcare providers, the effectiveness of the specialized treatments or procedures received, and the overall outcome of the healthcare services. Individual experiences and satisfaction levels can vary. Satisfaction with the referral health service point hospital in a health insurance program is subjective and depends on an individual's healthcare needs, preferences, and expectations.

Table 5*Satisfaction at the Referral Health Service Point of Health Insurance Policy*

		Frequency	Percent
Satisfied with the service of the referral point	Yes	295	69.9
No		127	30.1
Felt discrimination between health insurance patients and non-health insurance patient	Yes	66	15.6
	No	356	84.4
Faced extra financial burden while taking health insurance service	Yes	96	22.7
No		326	77.3
Felt difficulty while taking emergency service	Yes	121	28.7
No		301	71.3
Go to the first health service point only for referral service/purpose	Yes	88	20.9
No		334	79.1
Forced health person or doctor to write unnecessary investigations and medicine	Yes	60	14.2
No		362	85.8
Total		422	100.0

Regarding referral and emergency services, 69.9% of respondents were satisfied, though 28.7% faced difficulties accessing the emergency services . Although 15.6% revealed being discriminated against at the health facility, 84.4% did not feel discriminated against compared to non-insured patients, and 77.3% did not face extra financial burdens while using the health insurance service . Encountering difficulties during emergency health services may also relate to the quality of care received . The study found that 71.3% did not face any difficulty while taking emergency services . Among the insured people, about 21% have used it for referral purposes only . On the other hand, prescription practices showed that 14.2% of respondents reported pressuring health personnel to prescribe unnecessary investigations or medicines .

Renewal of the Policy

Timely renewal of the health insurance policy ensures no gaps in health insurance coverage . It helps individuals maintain uninterrupted access to healthcare services and financial protection during medical emergencies or unforeseen health issues.

Table 6*Annual Renewal of the Health Insurance Policy*

		Frequency	Percent
Renewed health insurance policy timely	Yes	370	87.7
	No	52	12.3
Reasons for not renewing or delaying the renewal of health insurance policy	Unavailability of needed treatment	12	2.8
	Lack of medicine	30	7.1
	Distance of first service point	5	1.2
	Not Necessity	5	1.2
	Total	52	12.3
	Missing System	370	87.7
Total		422	100.0

Respondents were satisfied with the health service delivery, and therefore, health insurance policy renewal practices were positive, with 87.7% of households renewing on time; while 12.3% delayed renewal due to factors such as medicine unavailability (7.1%), lack of needed treatment (2.8%), distant service points (1.2%), or perceived lack of necessity (1.2%).

Discussion

This study describes several key insights into the knowledge, practices, and satisfaction among the insured people regarding the health insurance program in Suryabinayak Municipality, Nepal.

The high level of awareness about the health insurance program (73.9%) among respondents is encouraging and aligns with previous research emphasizing the importance of awareness in health insurance uptake . This finding echoes the study conducted in Lagos, Nigeria, which concluded that increasing awareness is crucial for successful community-based health insurance schemes (Yusuf et al., 2019) . However, significant gaps exist in specific knowledge areas; for instance, 75.1% of respondents were unaware of benefits for additional family members beyond five, and 71.3% did not know about the maximum annual benefit ceiling of Rs 200,000 per family . This aligns with authors who found that this lack of clarity could hinder equitable access to health services and long-term health security (Ghimire et al., 2023; Paneru et al., 2022).

The findings from the health insurance program indicate a high utilization rate, with 38.4% of respondents using the service more than six times a year, suggesting that

the program effectively addresses significant healthcare needs within the community (Shah et al., 2022). This aligns with the PRECEDE-PROCEED model, which emphasizes that health behaviors are influenced by environmental and policy factors conducive to change (Kent State Online, 2024; Kim et al., 2022). Notably, an 86% satisfaction rate with the first service point suggests that the program generally fulfills its promises. This mirrors findings from the Health Insurance Board (Health Insurance Board, 2022), which highlights the program's role in alleviating out-of-pocket healthcare expenses.

Approximately 28.7% of respondents reported difficulties accessing emergency services, highlighting a significant challenge that requires urgent attention. Furthermore, the unavailability of regular medicines was a primary dissatisfaction factor for 8.3% out of 14% unsatisfied members, echoing issues identified in previous research, which noted that the lack of adequate drug availability significantly contributes to poor enrollment and dropout rates (Ghimire et al., 2023; Ranabhat et al., 2019).

With 64.7% of respondents reporting chronic illnesses, the study supports the notion that chronic conditions drive enrollment in health insurance programs, consistent with findings from Ghana (van der Wielen et al., 2018). While the study shows high satisfaction rates, the challenges in accessing emergency services and medicine availability point to issues of service quality (Shah et al., 2022). This relates to literature that suggests that perceived service quality significantly influences health insurance purchasing decisions (Besley et al., 1999; Harmon & Nolan, 2001).

Furthermore, 14.2% of respondents reported pressuring health personnel to prescribe unnecessary investigations or medicines is noteworthy and has several implications for healthcare practices and patient-provider relationships. A positive trend is observed with 87.7% of households renewing their health insurance on time; however, logistical challenges such as unavailable medicines and distant service points hinder timely renewals for 12.3% of respondents (Ayer et al., 2024). Several other studies also found that the health insurance program initially results in satisfactory participation, but sustained participation may be hindered by a shortage of health services and associated rumors later (Aryal et al., 2019, Pandey, 2023).

There is a need to link socio-economic factors to enrollment in health insurance programs. Future research should focus on this as Cameron and Trivedi (1991) emphasized that income is a crucial factor influencing the choice of insurance plans, and Ghimire et al. (2019) said that households with higher socioeconomic status are about four times more likely to enroll in health insurance schemes, highlighting the need to consider socioeconomic factors in program design (Cameron & Trivedi, 1991; Ghimire et al., 2019).

Conclusion

This study on the health insurance program in Suryabinayak Municipality, Nepal, highlights significant progress toward achieving UHC while also identifying critical gaps that need to be addressed . The findings indicate that while awareness of the health insurance program is relatively high, there are notable deficiencies in knowledge regarding specific benefits, particularly for larger families and maximum coverage limits . The high utilization rate of health services suggests that the program effectively meets healthcare needs; however, challenges such as difficulties accessing emergency services and the unavailability of essential medications remain significant barriers . These issues echo findings from previous studies, indicating that improving service quality and accessibility is paramount for enhancing user satisfaction . Socioeconomic factors play a crucial role in enrollment patterns, with households with higher socioeconomic status being more likely to participate in the program . This underscores the importance of targeted outreach and educational initiatives to ensure equitable access for all community members . In conclusion, while the health insurance program has made strides in increasing awareness and utilization of health services, ongoing efforts are required to address existing challenges . Addressing these issues could enhance the program's effectiveness and contribute to achieving universal health coverage in Nepal.

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