Dissertation Training

at

IIHMR DELHI

A Study to Assess the Awareness and Utilization of Health Insurance Schemes among the General Public in Delhi

by

Lakshit Tyagi

PG/24/047

Under the Guidance of

Dr. Sumant Swain

PGDM (Hospital and Health Management)

2024-26

International Institute of Health Management Research, New Delhi

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International Institute of Health Management Research, New Delhi

The certificate is awarded to

Lakshit Tyagi

In recognition of having successfully completed his Internship in the department of

Healthcare

and has successfully completed his Project on

A Study to Assess the Awareness and Utilization of Health Insurance Schemes among the General Public in Delhi

Date 3rd June 2026

IIHMR Delhi

He comes across as a committed, sincere & diligent person who has a strong drive & zeal for learning.

We wish him all the best for future endeavors.

Dr. Sumant Swain
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- Strong analytical rigor and attention to detail
- Independent, disciplined work ethic in managing a large scale study end to end.

Suggestions for Improvement:
- Build familiarity with more advanced analytical techniques to strengthen future real-world research or business analytics work.

Suggestions for Institute (course curriculum, industry interaction, placement, alumni):

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Abstract

Health insurance is an important mechanism for protecting individuals and families from the financial burden of illness and it plays a central role in India's progress toward Universal Health Coverage. Despite the expansion of government and private health insurance schemes a persistent gap remains between coverage and actual utilization particularly in urban settings with diverse socio-economic populations.

The present study was conducted to assess the level of awareness and the extent of utilization of health insurance schemes among the general adult population of Delhi, and to identify the socio-demographic factors and barriers associated with these patterns. A descriptive cross-sectional study was carried out among 605 adult residents of Delhi aged 18 years and above selected through convenience sampling. Data was collected through a structured questionnaire covering awareness of government and private health insurance schemes, enrolment and coverage status, extent of utilization and barriers to access.

The results show that awareness of health insurance was high, with the large majority of respondents having heard of health insurance in some form. However, this awareness was largely superficial as respondents could correctly name only about half of the common schemes on average, and many lacked understanding of enrolment procedures, eligibility criteria and claim processes. Less than half of all respondents (42.6%) had ever used their health insurance benefits, and out-of-pocket expenditure was still reported by nearly a third of insured respondents, indicating incomplete financial protection even among the covered. Education was found to be significantly associated with insurance coverage and age was significantly associated with utilization while gender, income, occupation and residence showed no statistically significant association with awareness, coverage or utilization in this sample. Affordability, lack of trust, complicated claim procedures, limited empanelled hospitals and fear of claim rejection emerged as the main barriers reported across the enrolment-to-utilization pathway.

The study highlights that improving awareness alone is not sufficient; it is important to build deeper understanding of scheme benefits and procedures, simplify claim processes and strengthen trust in the system to translate coverage into actual utilization. Targeted, scheme-specific outreach and simplified service delivery can help close the awareness-utilization gap and improve financial protection for the population of Delhi.

Acknowledgement

This dissertation entitled "A Study to Assess the Awareness and Utilization of Health Insurance Schemes among the General Public in Delhi" is the outcome of sustained effort, learning, and the guidance and support of several individuals, to whom I owe my sincere gratitude.

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I am sincerely grateful to the Institutional Ethics Committee of the International Institute of Health Management Research (IIHMR), New Delhi for granting ethical approval for this study, and for upholding the standards that ensured this research was conducted responsibly.

I extend my heartfelt appreciation to all the respondents across Delhi who took the time to participate in this study and shared information about their awareness and experience with health insurance schemes. Their cooperation and willingness to respond made this research possible.

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List of Abbreviations

Abbreviation	Full Form
PM-JAY	Pradhan Mantri Jan Arogya Yojana (Ayushman Bharat)
RSBY	Rashtriya Swasthya Bima Yojana
CGHS	Central Government Health Scheme
ESIS	Employees' State Insurance Scheme
NFHS	National Family Health Survey
OOPE	Out-of-Pocket Expenditure
UHC	Universal Health Coverage
WHO	World Health Organization
NHA	National Health Authority
OPD	Out Patient Department
SPSS	Statistical Package for the Social Sciences
IIHMR	International Institute of Health Management Research
PGDM	Post Graduate Diploma in Management
SD	Standard Deviation
N	Total Number of Respondents / Sample Size
NS	Not Significant ($p \geq 0.05$)
p	p-value (Level of Statistical Significance)

CHAPTER 1: INTRODUCTION

In India, the impact of illness is not just physical suffering its far beyond it. For many families it also brings a big financial burden for them. Healthcare expenses often require households to use their savings, borrow from family members or lenders and sell assets in order to pay for treatment. In some situations, the economic aftermath of sickness persists for long after healing too. According to studies, medical expenses are responsible for pushing almost 55 million people below the poverty line in India each year.

One of the main reasons for this situation is that many people in India have to pay for healthcare directly from their own pockets at time of treatment. This happens mainly because health insurance coverage is limited it's the most important factor and many individuals are unable to access as well as use benefits which are available to them through the insurance. According to the National Health Accounts, out-of-pocket expenditure (OOPE) accounts for nearly half of the country's total health spending. Due to this families not only face the physical effects of ill health but they also deal with emotional stress, social challenges and the financial problems. This is especially a problem to economically vulnerable population such as daily wage earners and migrants, informal workers, the elderly or from families with low incomes. In these populations, a single hospitalization can lead to loss and financial problem for a long period.

Health insurance has come up as an important mechanism to solve this challenge. Pooling risks from a large number of population and spreading healthcare costs through pre-paid contributions or premiums health insurance reduces the direct financial problems which are caused by illness. It transforms unexpected and potentially catastrophic medical expenses into more manageable payments which can be made in advance. In doing this, it provides a financial protection and helps individuals as well as their families to use the healthcare services available to them without any fear of economic problems. This role has made health insurance a important component of national and global efforts for achieving Universal Health Coverage the most important one.

India's experience with formal health insurance dates back several years back. The Employees' State Insurance Scheme (ESIS) was introduced under the Employees' State Insurance Act and the Central Government Health Scheme (CGHS) were among the earliest initiatives which aimed at providing healthcare coverage to specific populations. For many years till now the health insurance remained largely restricted to organised sector while a large proportion of the population employed in informal occupations had very little or no access to any form of the prepaid healthcare coverage.

Then the government introduced measures for vulnerable groups which are the most afftected ones. The RSBY system provided economically vulnerable individuals to access and receive cashless treatment. Ayushman Bharat-Pradhan Mantri Jan Arogya Yojana (PM-JAY) was implemented in 2018 which was a big success. PM-JAY is one of the world's largest government-funded health insurance programmes as it provides financial coverage for the secondary and tertiary healthcare services which are hospitalization to many of the beneficiaries which belong to economically weaker households. Along with the government initiatives the private health insurance industry also expanded due to the

rising cost of healthcare and increased awareness among people, tax incentives and employer-sponsored insurance programs.

A scheme and advancements in insurance coverage don't necessarily confirm that people will profit from them. Many people are unaware of the benefits, services or procedures that are provided to them. What are these schemes? Other face difficulties in searching out empanelled hospitals, completing documentation requirements or understanding claim process. Therefore, there is a gap between having health insurance coverage and effectively utilizing it when healthcare services are needed.

Research that were carried out in the different parts of India have showed a major gap between coverage and utilization. The people have the insurance card but they in real don’t know how to use and also lack trust in the system. Negative experiences, procedural obstacles, and administrative complexities can deter people from seeking the benefits that are available. Also, health insurance schemes may not provide the intended financial protection especially for those who are socially and economically weaker.

The situation in Delhi is perfect for examining such matters. It is the national capital of India and home to some of the best healthcare institutions in the country as well as a relatively large infrastructure of healthcare with various government hospitals, Mohalla Clinics, private health care facilities and specialist centres. In the meantime, Delhi is a city with varying socio-economic backgrounds. Government employees, private-sector workers and self employed individuals, migrants, students, those who earn daily wages or are residing in the city and belonging to economically disadvantaged groups (such as low-income families). Differences in earnings, training and career paths as well as access to information may affect both awareness and use of health insurance schemes.

Health insurance in certain states and populations has been investigated by many studies, but the evidence from Delhi is not comprehensive. In a urban setting like Delhi, it is very important to recognize the differences in awareness and the actual use between socio-demographic groups to see the gaps and ensure that health insurance benefits are made available to those who require them most and get suffered a lot.

Therefore, the present study aims to assess the level of awareness and patterns of utilization of health insurance schemes among the general adult population of Delhi. It also aims to identify the socio-demographic factors and barriers that are related to these results. By assessing the level of knowledge and the ability to utilize health insurance schemes this study aims to provide evidence that can be used by policymakers, healthcare administrators and the insurance providers to increase awareness, accessibility and utilization of heath benefits and services through the health insurance. Fixing these things can lead to better financial security and more equitable access to healthcare for all.

Objectives of the Study:

General Objective: To assess the awareness and utilization of various health insurance schemes among the general population of Delhi.

Specific Objectives:

1. To determine the level of awareness regarding different government and private health insurance schemes among the population.

2. To assess the extent of utilization of health insurance schemes among the study participants.

3. To identify the socio-demographic factors associated with awareness and utilization of health insurance schemes.

4. To explore the barriers and challenges faced by the general population in accessing and utilizing health insurance schemes.

CHAPTER 2. REVIEW OF LITERATURE

The important strategy for reducing the financial burden related with illness and improving progress towards the Universal Health Coverage (UHC) is health insurance. There are several government initiatives in India but still there is gap that exist in awareness, enrollment and utilization of health insurance schemes (1,2). For studying these issues Delhi provides a unique setting because it has diverse population and the implementation of PM-JAY was delayed until 2025 (3).

2.1 Health Insurance Landscape in India

India's health insurance system includes government-funded schemes, employment-linked programmes and private insurance products (4). The people who are eligible for the CGHS and ESIS schemes show higher utilization of healthcare services. Kusuma et al. (1) in the study showed that hospitalization utilization under CGHS is 100% and it is 86% under ESIS in Delhi. But these schemes mainly benefit formal sector employees a limited portion of the population.

RSBY which was introduced for below-poverty-line households showed poor performance. Thakur (6) found that although 29.7% of households were aware of RSBY and 21.6% were enrolled only 0.3% utilized the scheme. Similar trends were observed in Delhi where enrollment and after that utilization was low (1). RSBY was later merged with PM-JAY scheme (7).

PM-JAY was launched in 2018 it provides hospitalization coverage of up to ₹5 lakh per family annually (3). Delhi did not implement PM-JAY till 2025 due to this many people who were eligible were not able to access to its benefits during that period (8). Studies showed that the awareness of PM-JAY was moderate to high but utilization was low and limited. Prasad et al. (10), for example reported PM-JAY awareness of 68.6% but utilization of only 1.3% in Bihar.

2.2 Awareness of Health Insurance

For the effective utilization of insurance awareness is the very first step. However, studies across India have shown considerable variation in awareness levels.

Kusuma et al. (1) reported that only 19% of urban poor households in Delhi were aware of health insurance schemes with just 18% had any form of coverage. NFHS-5 also reported that approximately 41% of Indian households had at least one member covered under health insurance which showed an increase from NFHS-4 (13).

Regional studies which were conducted also showed wide variations in awareness levels across states (11,14–17). While some populations dis show relatively high awareness, many of them lacked adequate understanding of benefits, eligibility criteria and claim procedures. Madhukumar et al. (18) and Indumathi et al. (19) highlighted that hearing about insurance does not indicate practical understanding. Similarly, Thakur (20) found that individuals with higher educational levels had better knowledge of health insurance schemes when compared.

2.3 Socio-Demographic Determinants

Previous studies identified education as one of the most important determinant of awareness and coverage. Higher educational levels have been associated with better understanding of insurance schemes and increased enrolment in the schemes (14,19–21). However, health insurance literacy much beyond formal education and includes the ability to understand and use insurance benefits properly (22).

Income and socioeconomic status also do influence the utilization of insurance. The people who are wealthier and salaried generally have higher coverage levels whereas the "missing middle" often remains uninsured because they are ineligible for government schemes and they are unable to afford the premiums for the private insurance schemes so these are the most affected ones (12,14).

The insurance coverage and utilization is also influenced by gender as women may experience barriers related to informal employment and household decision-making which results in lower utilization in some settings (19,23,24,25). Occupation, migration status and place of residence also do influence the awareness and enrolment status particularly among populations who often face documentation-related challenges like informal workers and migrant (1,20,21,26).

Age and household composition are also important as older adults have more healthcare needs generally but they may lack adequate insurance coverage while the presence of elderly or chronically ill family members can influence enrollment decisions (3,27,28).

2.4 Utilization of Health Insurance

A repeated finding in Indian studies is the awareness–enrollment–utilization cascade. Awareness does not lead to enrolment automatically and enrollment does not guarantee that the utilization is done.

Thakur (6) reported declines from awareness to utilization under RSBY while Prasad et al. (10) and Netra G. et al. (29) observed similar gaps under PM-JAY and other schemes. These findings show that the barriers which are beyond awareness continue to affect the effective use of insurance benefits.

Studies conducted Delhi also showed considerable differences across schemes. Utilization was the highest among beneficiaries of CGHS and lowest among RSBY beneficiaries (1). The delayed implementation of PM-JAY affected access to financial protection for the people who were eligible under it between 2018 and 2025 (8).

Overall the literature shows that awareness, enrollment and utilization are shaped by multiple socio-demographic and health system factors with the largest challenge often occurs at the stage of actual utilization and not the awareness alone.

2.5 Assurance for Financial Protection and Out-of-Pocket Expenditure

Health insurance is designed to protect people from expenses that come from healthcare utilization. The OOPE in India has been decreasing over the time but it is still higher when compared to global average (30,31). Researches have revealed that health insurance offer only a limited amount of financial support to the people. According to Devadasan et al. (32), households who had insurance were still burdened by the cost of healthcare. The authors Sriram and Khan (33) followed by Garg et al. (34,35) to demonstrate that beneficiaries frequently faced expenses related to the medicines, outpatient care or treatment in the private hospitals. These findings show that insurance not always cut down the financial pressures on the people.

2.6 Issues of Awareness and Use

There are several barriers that exists and affect the enrollment and the use of the health insurance programs. Lack of awareness, inadequate knowledge of eligibility and claim procedures and limited insurance literacy are the individual level factors that affect the use of the insurance (6,9,19). Thakur(6) showed the relation of the enrollment to financial constraints, lack of confidence and social obstacles.

Health systems face challenges such as restricted hospitals, delay in the processing time of the claims, rejections, incomplete documentation or administrative burdens (9,26,37,38). Challenges faced by the migrants include portability and documentation issues (1,25). Effective utilization is further affected by local barriers such as the inadequate outreach and limited awareness activities (19,40) at the community level.

2.7 Sources of Information

Health insurance information is commonly sourced from sources other than doctors, community workers, family members, social media accounts, traditional media, and digital platforms (9,19). These studies shows this importance. Awareness has been given and considered important by healthcare facilities providing counselling and guidance (9) but people with lower literacy levels are impacted by the family and community

networks (15,16,19).

As the access to internet access expands health information is being increasingly shared on a large scale through the digital platforms. But still there are worries about digital literacy and equal access especially among those who are at risk (41).

It is a major debate that whether the expansion of universal health coverage is enough or it still requires more investments in the public healthcare services. Insurance can provide financial protection against hospitalization but still it may not fully cover primary care and outpatient needs (42,43).

A matter of concern is the errors which occur in including and excluding the information from beneficiary identification. Research has shown that a significant number of households which are eligible but they are still excluded due to inadequate documentation, administrative barriers and lack of awareness while others may be enrolled outside the intended population (6–7).

Gender equality is a very important concern. The prevalence of informal employment patterns and household decision-making processes (23-25) may result in women having lower enrollment and utilization.

2.8 Research Gaps

Several gaps in the literature were identified which are relevant to the current study one is that there is limited proof from Delhi after the introduction of PM-JAY in 2025. Few studies have been conducted on the general population instead of the specific vulnerable groups. The impact of documentation and migration on insurance access in Delhi are not researched on a large scale (1,26). Barriers that impact actual utilization over awareness has not been given much attention. There is limited data on sex differences in the context of Delhi (23, 24). Evidence for the potential benefits of digital platforms in enhancing insurance awareness and utilization is growing but lacks sufficient data (41). There are limited research available which compares awareness and usage rates across various government and private insurance schemes.

The literature indicates that India's awareness and utilization of health insurance are influenced by various factors which include education, income, gender, occupation, migration status and health system constraints. The gap between knowledge, enrollment and usage is always the important and seen. With the recent implementation of PM-JAY and the diverse population of Delhi there is a need for more current evidence on awareness, utilization patterns, associated factors and barriers. The aim of this study is to fill these gaps and contribute to the better understanding of health insurance use and financial protection for the general public in Delhi.

CHAPTER 3: METHODOLOGY

This chapter explains the methodology used for the present study. It tells about the study design, study area, study population, sampling technique, sample size calculation, data collection methods, ethical considerations and statistical methods used for data analysis. The methodology was planned in a way to ensure that the data collected was reliable, relevant and appropriate for achieving the objectives of the study.

3.1 Study Design

Descriptive cross-sectional study design was used conduct the study and to assess the awareness and utilization of health insurance schemes among the general population of Delhi. The study collected the information at a single point of time without doing any intervention so a cross-sectional study design was used.

3.2 Study Area

The study was conducted in Delhi which is the National Capital Territory of India. Delhi was selected as it has diverse population in terms of socio-economic factors and the availability of both the public as well as private healthcare services. The study was conducted approximately one year after the implementation of PM-JAY in Delhi so see the after effects of the effectiveness and awareness among people.

3.3 Study Period

The study was conducted during the period of April and May 2026.

3.4 Study Population

The study included adult residents of Delhi who are aged 18 years and above from different socio-demographic backgrounds irrespective of their gender, education, occupation, income or place of the residence.

3.4.1 Inclusion Criteria

Participants who were included in the study were according to the following criteria:

(i) People living in Delhi who are 18 years of age and above.

(ii) People who are willing to participate voluntarily and provided the informed consent for the study.

(iii) Individuals who could communicate in Hindi or English.

3.4.2 Exclusion Criteria

Participants were excluded from the study if they didn’t met the specific criteria which are as follows:

(i) Individuals who were below 18 years of age.

(ii) Individuals who didn’t provide or were unable to provide informed consent.

(iii) Individuals who were not residing in Delhi.

(iv) Responses which had missing or incomplete information were excluded during the data cleaning process.

3.5 Sample Size

3.5.1 Sample Size Calculation

The sample size was calculated using Cochran's formula a 40% prevalence of health insurance utilization was assumed, a 95% confidence level and a 4% margin of error was considered. So, according to this the minimum sample size obtained was 577. After doing the adjustments for a 5% non-response rate the final target sample size obtained was approximately of 605 participants. The formula used was:

$n = Z^2 \times p(1 - p) / d^2$

Where:

n = Required sample size

Z = Standard normal variate at 95% confidence level (1.96)

p = Assumed prevalence of utilization (0.40)

d = Margin of error (0.04)

Substituting the values:

$n = (1.96)^2 \times 0.40 \times (1 - 0.40) / (0.04)^2$

$n = 3.8416 \times 0.24 / 0.0016$

$n = 0.9220 / 0.0016$

$n = 576.24$

$n \approx 57$

The minimum required sample size was 577 participants.

A 5% non-response adjustment was applied for the non-response and incomplete answers:

Adjusted n = 577 + (5% of 577)

Adjusted n = 577 + 28.85

Adjusted $n \approx 606$

So, the final target sample size was approximately 605 respondents after rounding off the values.

3.5.2 Actual Sample Collected

The questionnaire was circulated to more than 800 individuals living in Delhi. After excluding the incomplete, duplicate and invalid responses a total of 605 valid responses were included in the final analysis.

3.6 Sampling Technique

A non-probability convenience sampling technique was used as there was absence of the complete sampling frame and the feasibility of online and telephonic data collection. All the efforts were made to so that the people from different socio-demographic groups are included in the study.

3.7 Data Collection

3.7.1 Data Source

The study was on primary data which was collected directly from the respondents. No secondary data sources were used for analysis the study is entirely based on primary data.

3.7.2 Data Collection Tool

Data was collected using a structured questionnaire in English and Hindi. The questionnaire had four sections:

- Socio-demographic characteristics.
- Awareness regarding health insurance schemes.
- Utilization of health insurance services.
- Barriers and suggestions related to health insurance.

3.7.3 Pilot Testing and Questionnaire Validation

The questionnaire was pilot-tested for almost 20 people who were eligible according to the criteria but they were not included in the final sample. Minor changes in the questionnaire were made according to the feedback to improve understanding and flow.

3.7.4 Mode of Data Collection

- Online: form was circulated by WhatsApp, email and other online platforms including Google Forms.
- Telephonic: telephonic interviews were done on people who require assistance such as who are 65 years and above. Same questionnaire was used for both the methods.

3.8 Ethical Considerations

- All participants provided the informed consent.
- All the participants had the option to withdraw anytime in between any question if they felt uncomfortable at any point of time.
- No personal information was collected.
- It was made sure that the responses remain private and confidential.
- The storage of data was done securely with securely stored with the researcher.

3.9 Data Analysis

3.9.1 Data Management

Responses which were complete and eligible were further analysed. Incomplete, duplicate and invalid responses were not included in the analysis. Data was cleaned, coded and entered into Microsoft Excel before analysis.

3.9.2 Statistical Analysis

Data analysis was performed using IBM SPSS Statistics Version 26.

The following analyses were conducted:

- Statistical descriptive data such as proportions and characteristics was done.
- Identification of the central tendency and dispersion measurements for variables on the Likert scale.
- The score range for health insurance awareness was calculated in 0-6 range.
- Analysis of insurance cascades which include awareness, coverage and usage was done.
- Use of Chi-square tests were done to investigate the correlation between socio-demographic factors and study outcomes.
- The analysis of barriers and suggestions was done using frequencies and percentages.
- The statistical significance of a score below 0.05 was considered as significant.

CHAPTER 4: RESULTS

This chapter tells about the findings of the study on awareness and utilization of health insurance schemes among the general population of Delhi. Data was collected from 605 people who were eligible using a structured questionnaire. The results are organized according to the four objectives of the study:

(1) the level of awareness of health insurance schemes among the people of Delhi.

(2) the patterns of utilization of health insurance

(3) the socio-demographic factors which are associated with awareness and utilization of the insurance schemes

(4) the barriers and challenges faced which are faced by the people during the utilisation of the insurance scheme and its benefits

4.1 SOCIO-DEMOGRAPHIC PROFILE OF RESPONDENTS

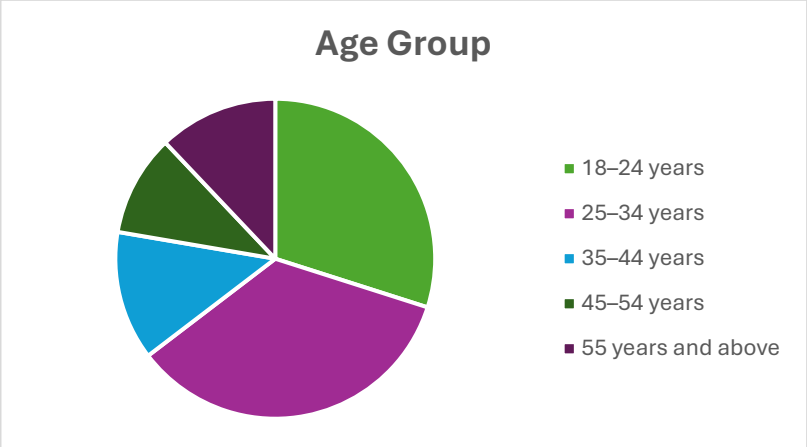
4.1.1 Age Distribution

Table 4.1: Age Distribution of Respondents

Age Group of Respondents		
Age Group	**Frequency**	**Percentage**
18–24 years	181	29.9%
25–34 years	210	34.7%
35–44 years	79	13.1%

45–54 years	62	10.2%
55 years and above	73	12.1%
Total	605	100.0%

Figure 4.1: Age Distribution of Respondents

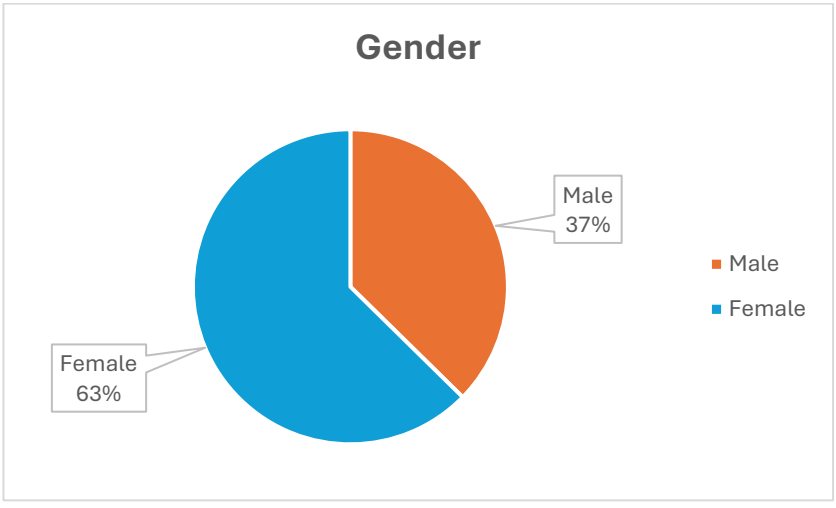


4.1.2 Gender Distribution

Table 4.2: Gender Distribution of Respondents

Gender of Respondents		
Gender	**Frequency**	**Percentage**
Male	226	37.4%
Female	379	62.6%
Total	605	100.0%

Figure 4.2: Gender Distribution of Respondents

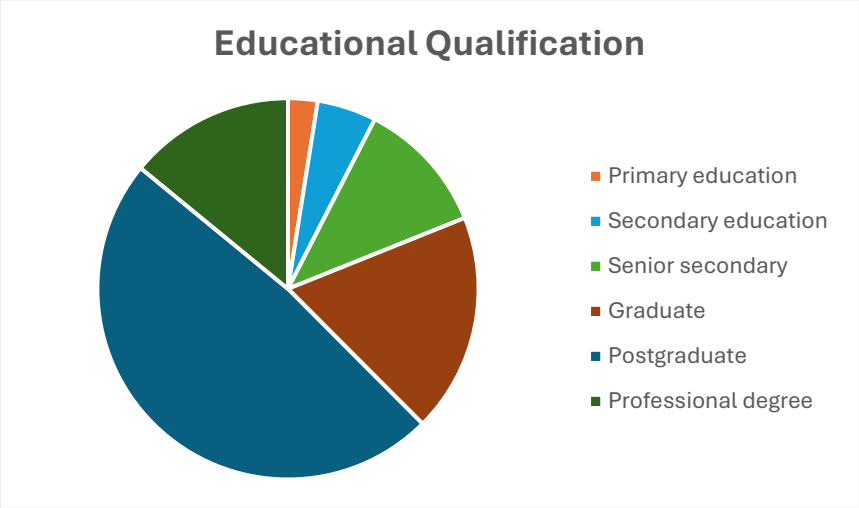


4.1.3 Educational Qualification

Table 4.3: Educational Qualification of Respondents

Educational Qualification		
Education Level	**Frequency**	**Percentage**
Primary education	15	2.50%
Secondary education	30	5.00%
Senior secondary	68	11.20%
Graduate	111	18.30%
Postgraduate	289	47.80%
Professional degree	84	13.90%
Doctorate (PhD)	8	1.30%

Figure 4.3: Educational Qualification of Respondents

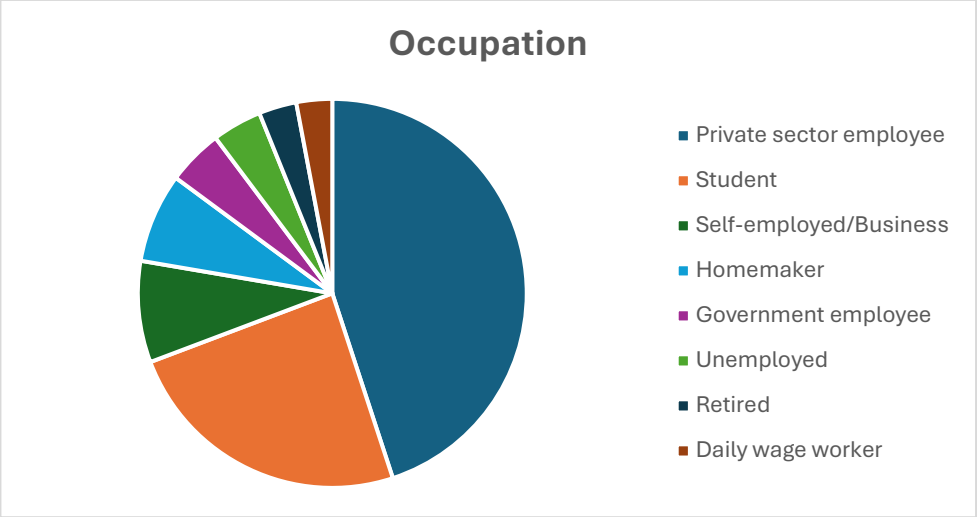


4.1.4 Occupation

Table 4.4: Occupation of Respondents

Occupation of Respondents		
Occupation	**Frequency**	**Percentage**
Private sector employee	272	45.00%
Student	147	24.30%
Self-employed/Business	51	8.40%
Homemaker	45	7.40%
Government employee	28	4.60%
Unemployed	25	4.10%
Retired	19	3.10%
Daily wage worker	18	3.00%
Total	605	100.0%

Figure 4.4: Occupation of Respondents

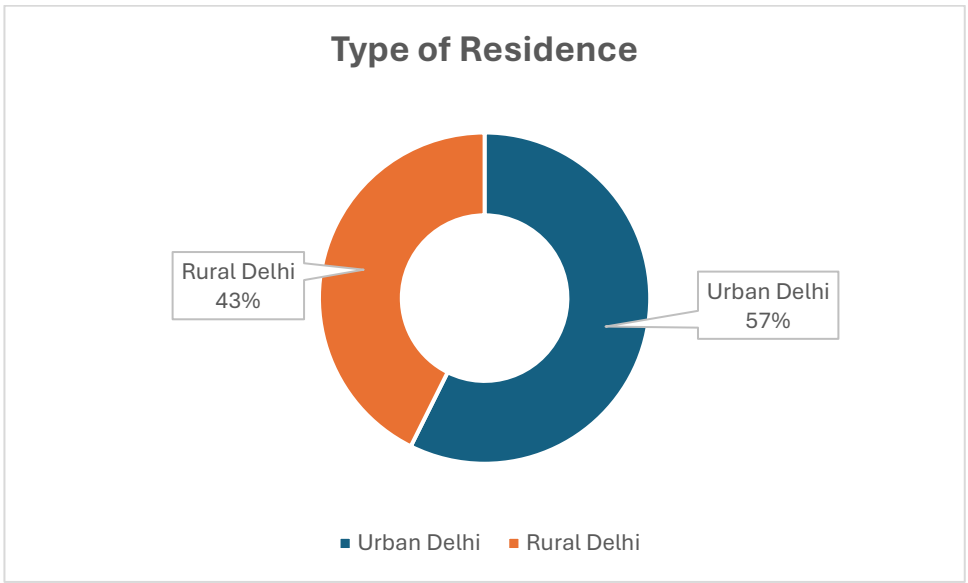


4.1.5 Type of Residence

Table 4.5: Type of Residence of Respondents

Type of Residence		
Residence	**Frequency**	**Percentage**
Urban Delhi	347	57.4%
Rural Delhi	258	42.6%
Total	605	100.0%

Figure 4.5: Type of Residence of Respondents

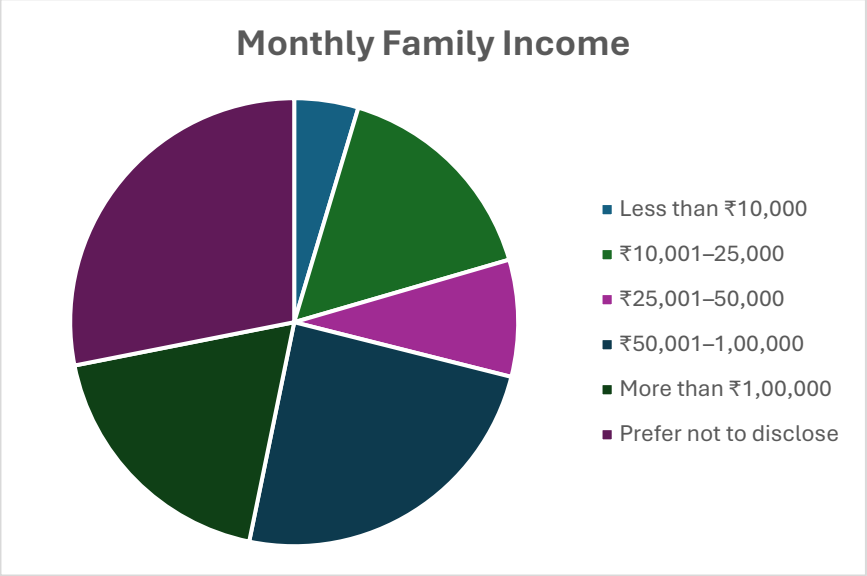


4.1.6 Monthly Family Income

Table 4.6: Monthly Family Income of Respondents

Monthly Family Income		
Income Category	**Frequency**	**Percentage**
Less than ₹10,000	28	4.6%
₹10,001–25,000	96	15.9%
₹25,001–50,000	51	8.4%
₹50,001–1,00,000	147	24.3%
More than ₹1,00,000	113	18.7%
Prefer not to disclose	170	28.1%
Total	605	100.0%

Figure 4.6: Monthly Family Income of Respondents

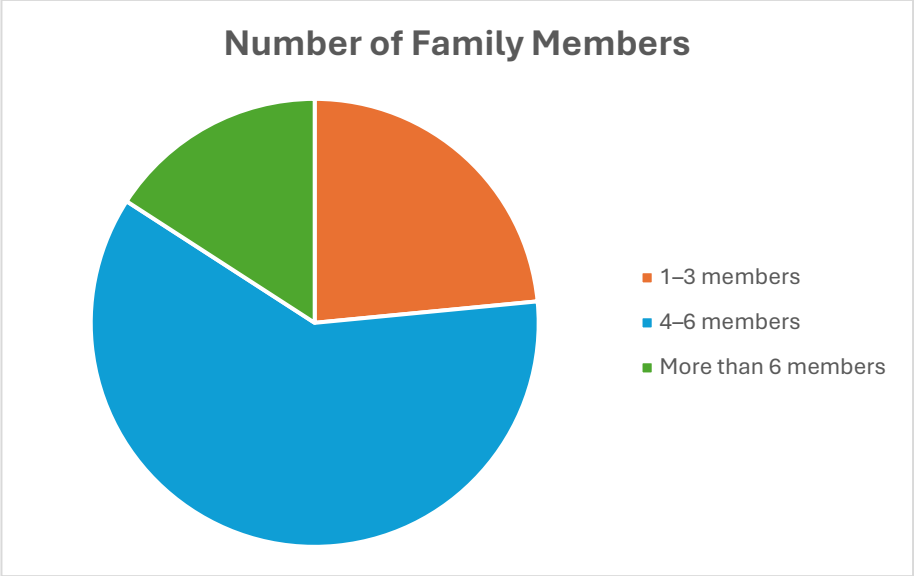


4.1.7 Family Size

Table 4.7: Family Size of Respondents

Number of Family Members		
Family Size	**Frequency**	**Percentage**
1–3 members	142	23.5%
4–6 members	367	60.7%
More than 6 members	96	15.9%
Total	605	100.0%

Figure 4.7: Family Size of Respondents

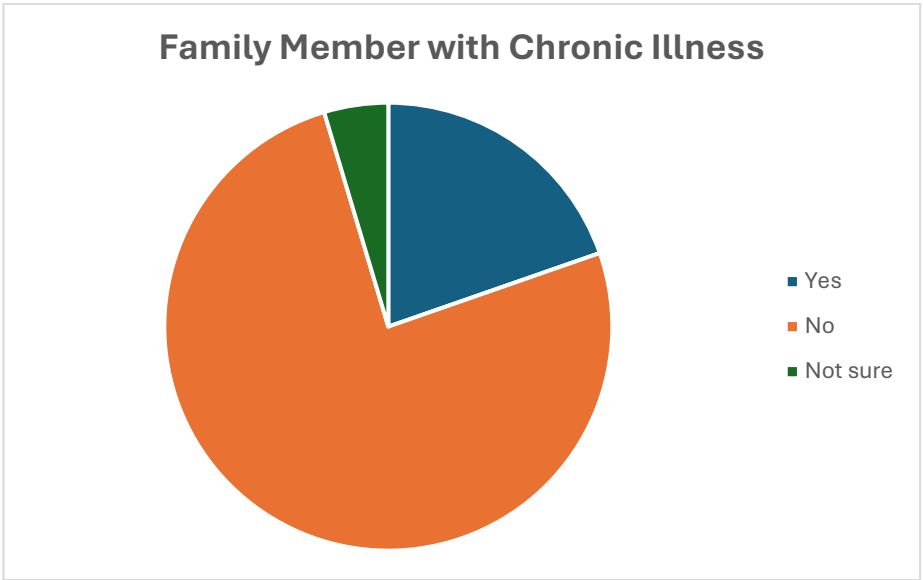


4.1.8 Presence of Chronic Illness in Family

Table 4.8: Presence of Chronic Illness in Family

Family Member with Chronic Illness		
Response	**Frequency**	**Percentage**
Yes	119	19.7%
No	458	75.7%
Not sure	28	4.6%
Total	605	100.0%

Figure 4.8: Presence of Chronic Illness in Family



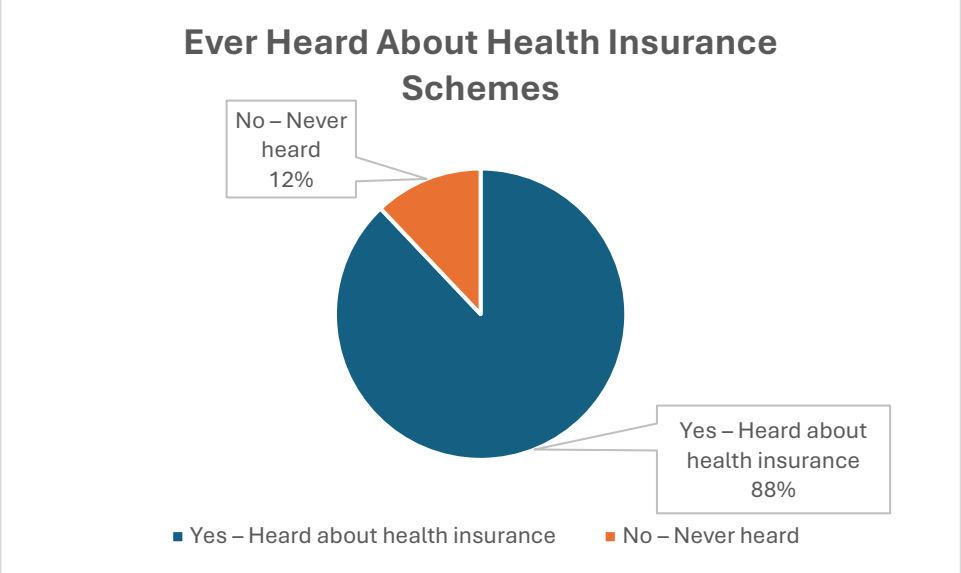
4.2 AWARENESS REGARDING HEALTH INSURANCE SCHEMES

4.2.1 Overall Awareness of Health Insurance Schemes

Table 4.9 Overall Awareness of Health Insurance Schemes

Ever Heard About Health Insurance Schemes		
Response	**Frequency**	**Percentage**
Yes – Heard about health insurance	532	87.9
No – Never heard	73	12.1
Total	605	100.0

Figure 4.9 Overall Awareness of Health Insurance Schemes

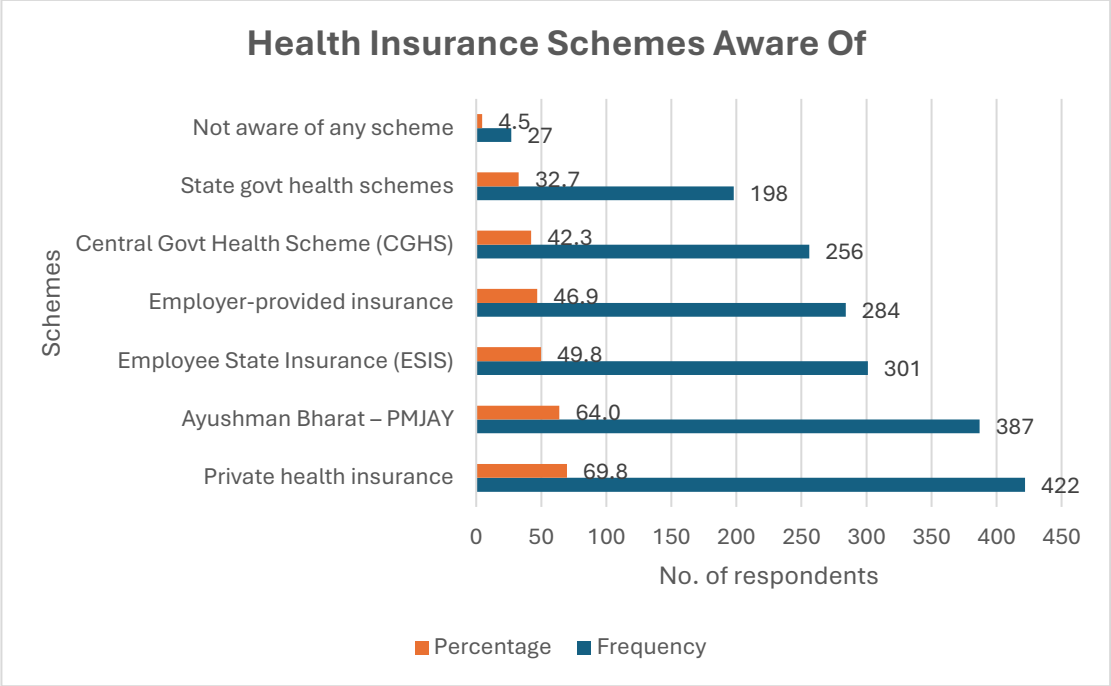


4.2.2 Awareness of Specific Health Insurance Schemes

Table 4.10: Awareness of Specific Health Insurance Schemes (Multiple Response; N = 605)

Health Insurance Schemes Aware Of		
Scheme	**Frequency**	**Percentage**
Private health insurance	422	69.8
Ayushman Bharat – PMJAY	387	64.0
Employee State Insurance (ESIS)	301	49.8
Employer-provided insurance	284	46.9
Central Govt Health Scheme (CGHS)	256	42.3
State govt health schemes	198	32.7
Not aware of any scheme	27	4.5

Figure 4.10: Awareness of Specific Health Insurance Schemes



4.2.3 Awareness Score Analysis

Overall awareness was calculated according to the number of health insurance schemes that respondents were aware of but it does not reflect the data set. Therefore, awareness score was used to measure this.

Scoring Method:
The six health insurance schemes were evaluated:

- PM-JAY
- Private Health Insurance
- ESIS
- CGHS
- Employer-Provided Insurance
- State Government Health Insurance Schemes

For each scheme:

- Aware = 1
- Not aware = 0

A total score of 0 was obtained by summarizing the scores from the range of 0 to 6.

Interpretation:

- 0 = No awareness
- 1–2 = Low awareness
- 3–4 = Moderate awareness

- 5–6 = High awareness

Results:

- Mean = 2.75
- Median = 3
- Mode = 3
- SD = 1.47
- Range = 0–6

Three health insurance schemes were known to the average of the respondents.

4.2.3.1: Awareness Score by Socio-Demographic Characteristics

Table 4.11: Awareness Score by Sub-Group (Mean Number of Schemes Known; Maximum = 6)

Sub-group	n	Mean	Median	SD
All respondents	605	2.75	3.0	1.47
Urban Delhi	484	2.72	3.0	1.51
Rural Delhi	121	2.84	3.0	1.26
Male	226	2.81	3.0	1.49
Female	379	2.71	3.0	1.46
Insured (n=439)	439	2.96	3.0	1.43
Uninsured (n=166)	166	2.24	2.0	1.44

Table 4.12: Awareness Score by Educational Level

Education Level	n	Mean	Median	SD
Primary education	15	2.60	3.0	1.80
Secondary education (10th pass)	24	3.08	3.0	0.88
Senior secondary education (12th pass)	36	2.83	3.0	1.21

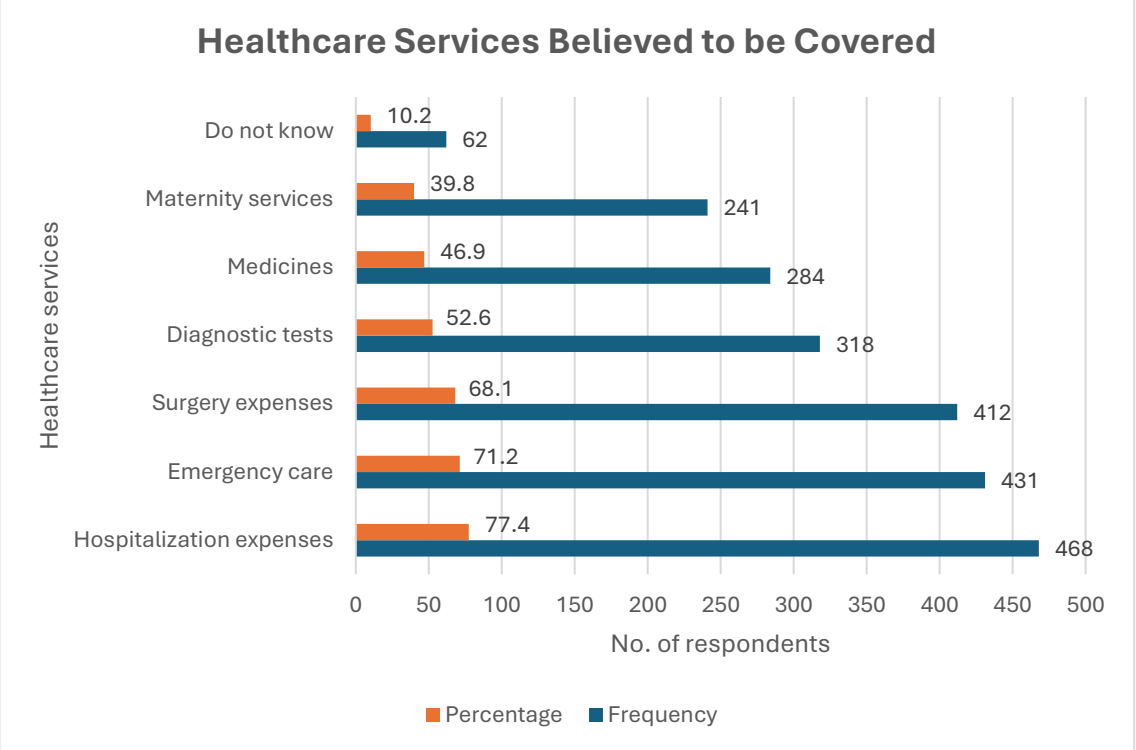
Graduate	119	2.78	3.0	1.44
Postgraduate	311	2.66	3.0	1.48
Professional degree	91	2.97	3.0	1.51
Doctorate (PhD)	9	3.56	4.0	1.24

4.2.4 Knowledge Regarding Healthcare Services Covered Under Health Insurance

Table 4.13 Healthcare Services Believed to be Covered Under Health Insurance

Health Insurance Schemes Aware Of (Multiple; N=605)		
Scheme	**Frequency**	**Percentage**
Private health insurance	422	69.8
Ayushman Bharat – PMJAY	387	64.0
Employee State Insurance (ESIS)	301	49.8
Employer-provided insurance	284	46.9
Central Govt Health Scheme (CGHS)	256	42.3
State govt health schemes	198	32.7
Not aware of any scheme	27	4.5

Figure 4.11 Healthcare Services Believed to be Covered Under Health Insurance

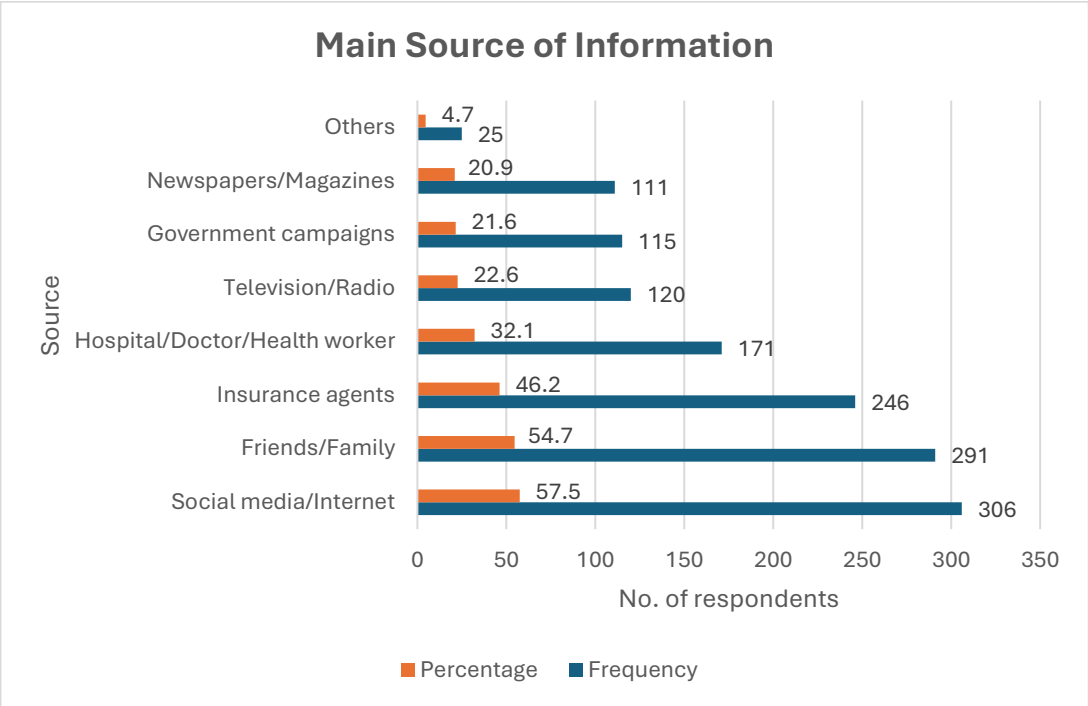


4.2.5 Sources of Information Regarding Health Insurance

Table 4.14 Sources of Information Regarding Health Insurance

Main Source of Information (Multiple; N=532 aware)		
Source	**Frequency**	**Percentage**
Social media/Internet	306	57.5
Friends/Family	291	54.7
Insurance agents	246	46.2
Hospital/Doctor/Health worker	171	32.1
Television/Radio	120	22.6
Government campaigns	115	21.6
Newspapers/Magazines	111	20.9
Others	25	4.7

Figure 4.12 Sources of Information Regarding Health Insurance

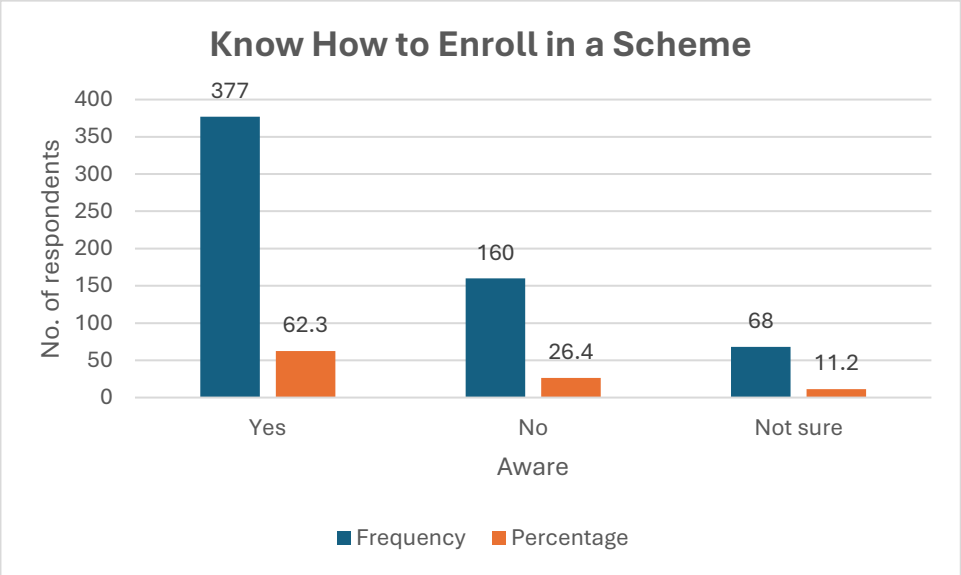


4.2.6 Knowledge Regarding Enrollment Procedures

Table 4.15 Knowledge Regarding Enrollment Procedures

Know How to Enroll in a Scheme		
Response	**Frequency**	**Percentage**
Yes	377	62.3
No	160	26.4
Not sure	68	11.2
Total	605	100

Figure 4.13 Knowledge Regarding Enrollment Procedures

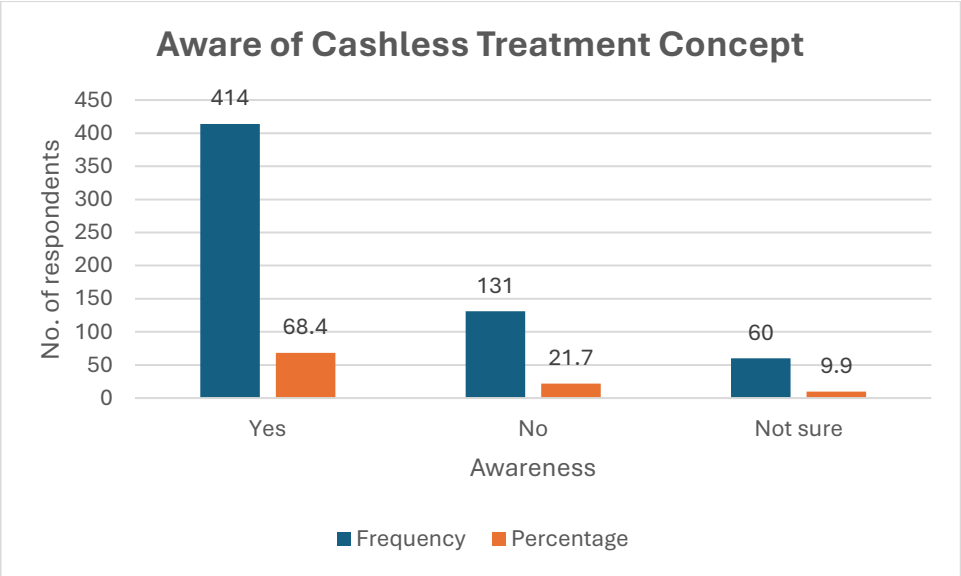


4.2.7 Awareness of Cashless Treatment

Table 4.16 Awareness of Cashless Treatment

Aware of Cashless Treatment Concept		
Response	**Frequency**	**Percentage**
Yes	414	68.4
No	131	21.7
Not sure	60	9.9
Total	605	100

Figure 4.14 Awareness of Cashless Treatment

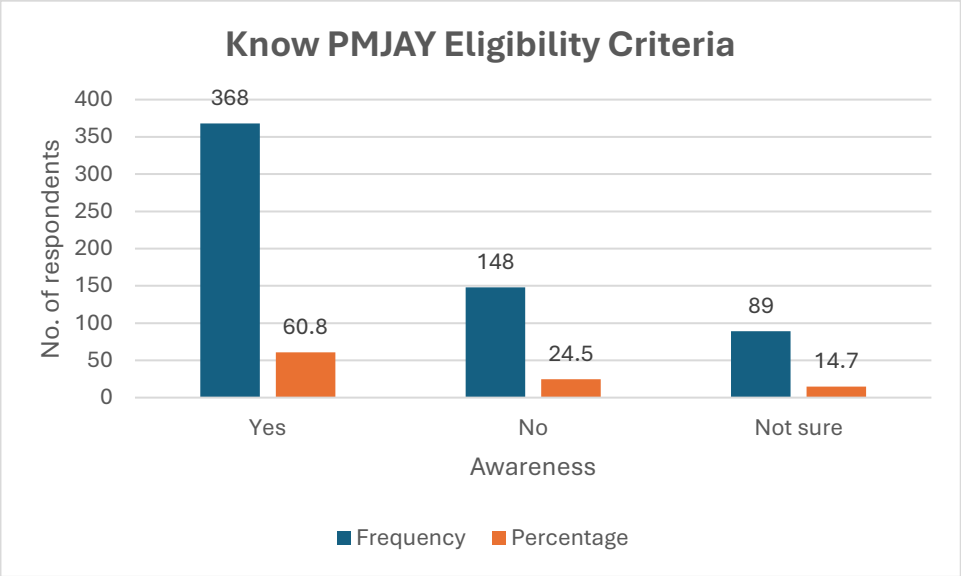


4.2.8 Knowledge of PM-JAY Eligibility Criteria

Table 4.17 Knowledge of PM-JAY Eligibility Criteria

Know PMJAY Eligibility Criteria		
Response	**Frequency**	**Percentage**
Yes	368	60.8
No	148	24.5
Not sure	89	14.7
Total	605	100

Figure 4.15 Knowledge of PM-JAY Eligibility Criteria

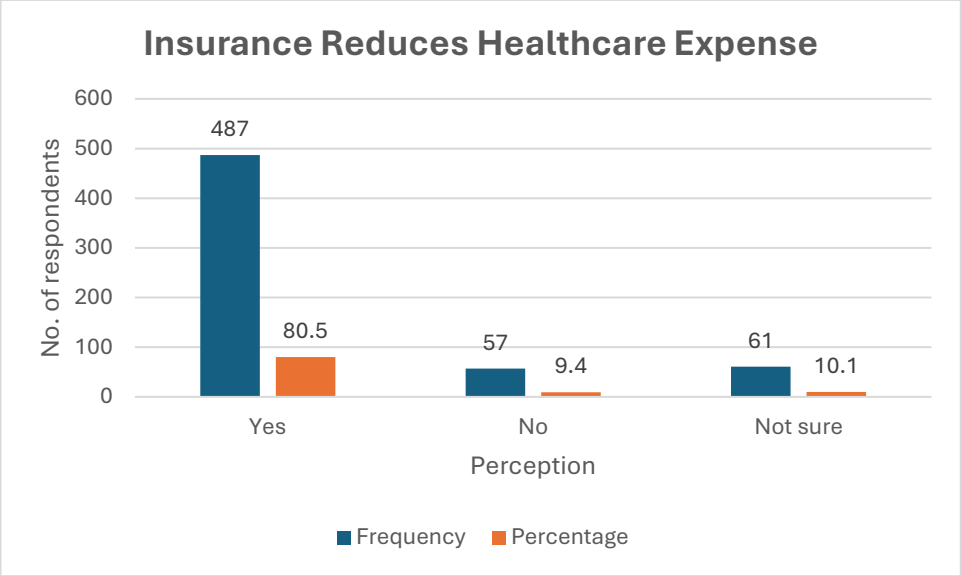


4.2.9 Perception that Health Insurance Reduces Healthcare Expenditure

Table 4.18 Perception that Health Insurance Reduces Healthcare Expenditure

Insurance Reduces Healthcare Expense		
Response	**Frequency**	**Percentage**
Yes	487	80.5
No	57	9.4
Not sure	61	10.1
Total	605	100

Figure 4.16 Perception that Health Insurance Reduces Healthcare Expenditure

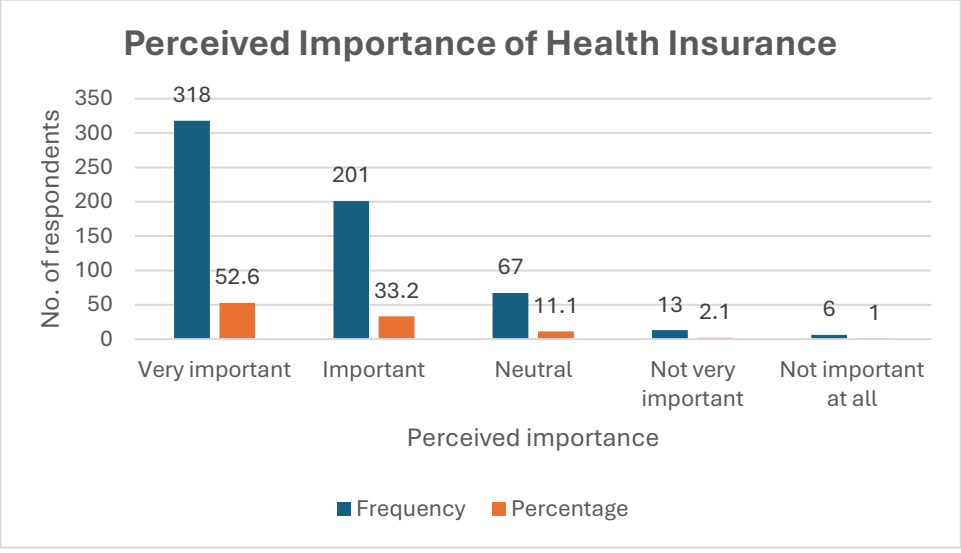


4.2.10 Perceived Importance of Health Insurance

Table 4.19 Perceived Importance of Health Insurance

Perceived Importance of Health Insurance		
Response	**Frequency**	**Percentage**
Very important	318	52.6
Important	201	33.2
Neutral	67	11.1
Not very important	13	2.1
Not important at all	6	1
Total	605	100

Figure 4.17 Perceived Importance of Health Insurance



The mean score on a 5-point scale was 4.61 (Median = 5, Mode = 5, SD = 0.79) indicating a strong positive attitude towards health insurance in the people who participated in the study. This finding is importance because it shows that low enrollment and utilization discussed in the next section is not primarily due to negative attitudes towards insurance but its because of the barriers such as affordability, complexity and access which are faced by the people.

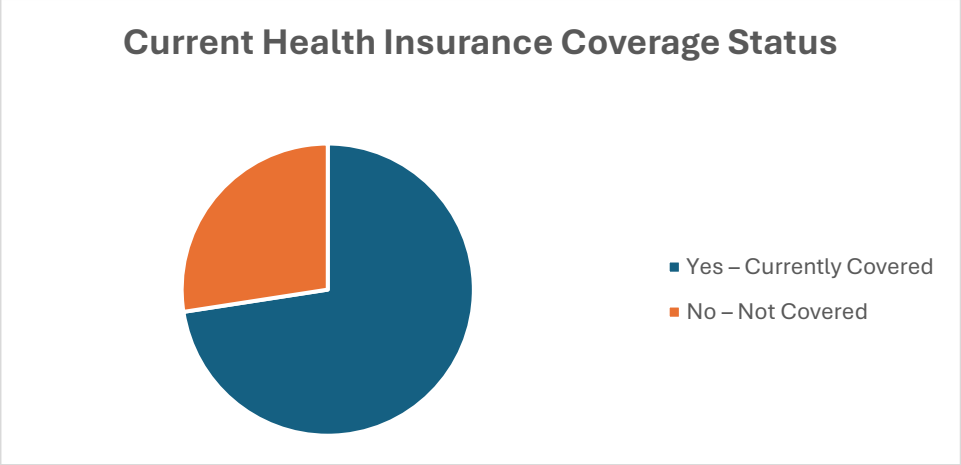
4.3 UTILIZATION OF HEALTH INSURANCE SCHEMES

4.3.1 Current Health Insurance Coverage Status

Table 4.20 Current Health Insurance Coverage Status

Currently Covered Under Any Health Insurance		
Response	**Frequency**	**Percentage**
Yes – Currently Covered	439	72.6
No – Not Covered	166	27.4
Total	605	100

Figure 4.18 Current Health Insurance Coverage Status

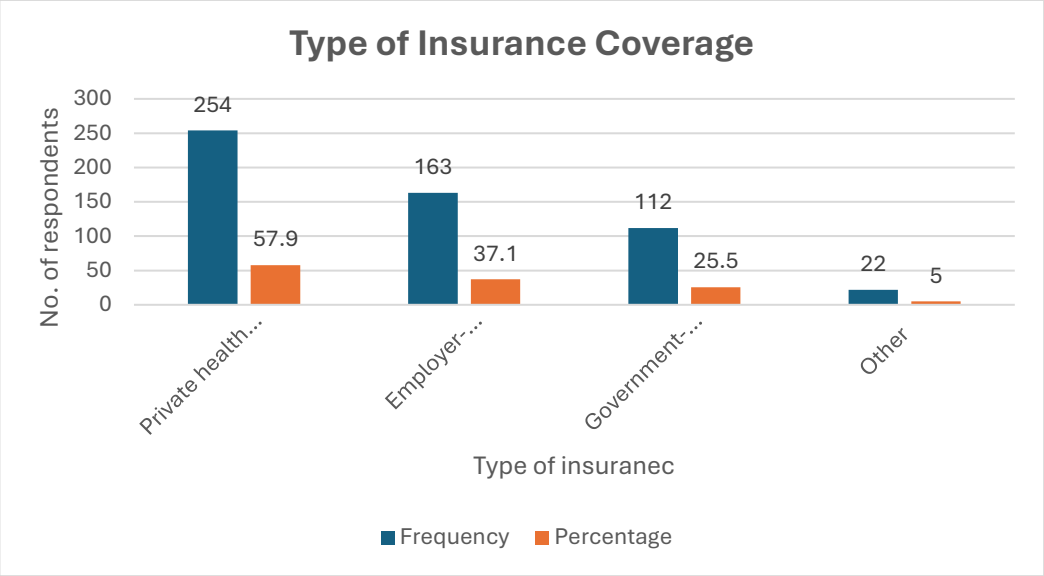


4.3.2 Type of Health Insurance Coverage

Table 4.21 Type of Health Insurance Coverage

Type of Insurance Coverage (Multiple; N=439 insured)		
Coverage Type	**Frequency**	**Percentage**
Private health insurance	254	57.9
Employer-provided insurance	163	37.1
Government-sponsored insurance	112	25.5
Other	22	5

Figure 4.19 Type of Health Insurance Coverage

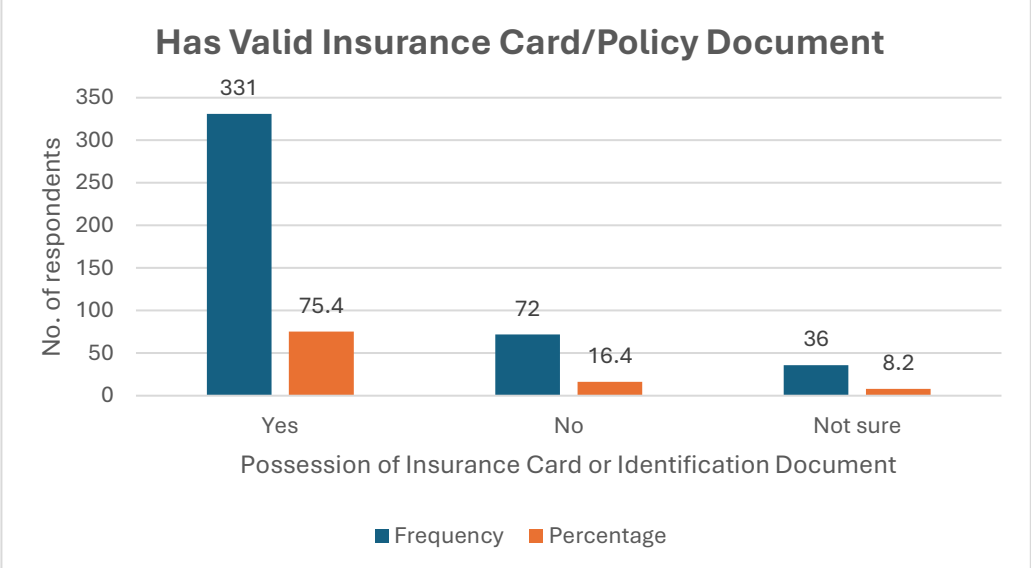


4.3.3 Possession of Insurance Card or Identification Document

Table 4.22 Possession of Insurance Card or Identification Document

Has Valid Insurance Card/Policy Document (N=439)		
Response	**Frequency**	**Percentage**
Yes	331	75.4
No	72	16.4
Not sure	36	8.2
Total	439	100

Figure 4.20 Possession of Insurance Card or Identification Document

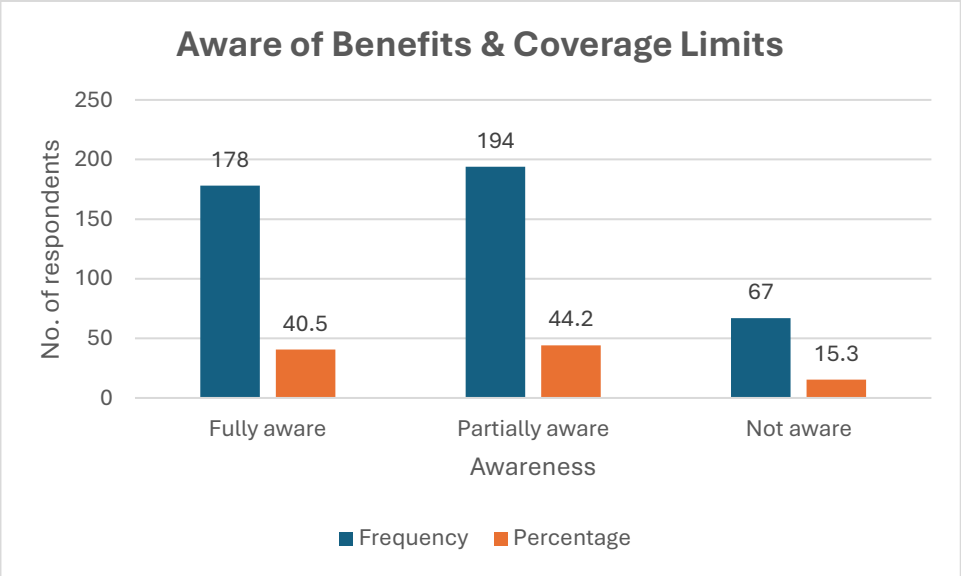


4.3.4 Awareness of Insurance Benefits and Coverage Limits Among Insured Respondents

Table 4.23 Awareness of Insurance Benefits and Coverage Limits Among Insured Respondents

Aware of Benefits & Coverage Limits (N=439)		
Response	**Frequency**	**Percentage**
Fully aware	178	40.5
Partially aware	194	44.2
Not aware	67	15.3
Total	439	100

Figure 4.21 Awareness of Insurance Benefits and Coverage Limits Among Insured Respondents

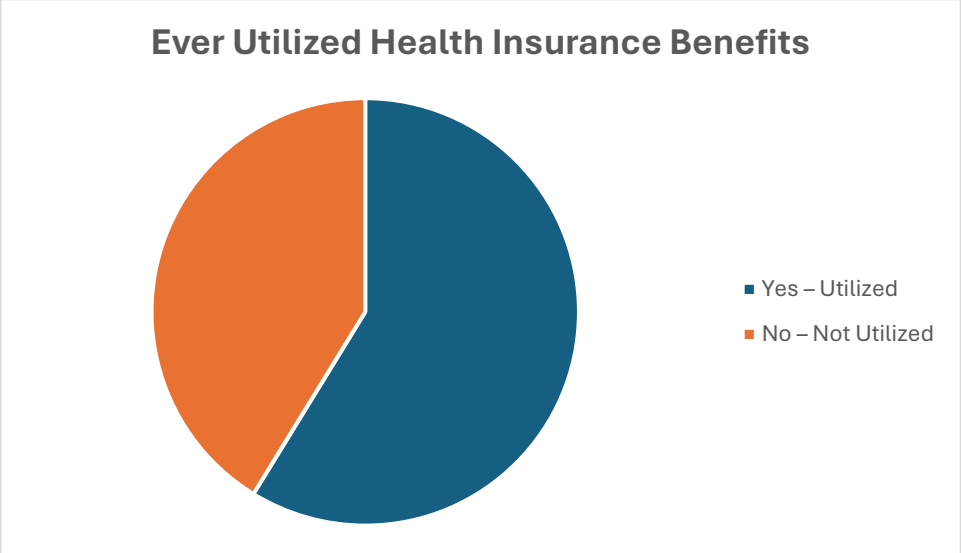


4.3.5 Utilization of Health Insurance Benefits

Table 4.24 Utilization of Health Insurance Benefits

Ever Utilized Health Insurance Benefits (N=439)		
Response	**Frequency**	**Percentage**
Yes – Utilized	258	58.8
No – Not Utilized	181	41.2
Total	439	100

Figure 4.22 Utilization of Health Insurance Benefits



4.3.6 Insurance Cascade Analysis

Health insurance performs its functions through a sequence of stages. Individual first become aware of insurance, then they enroll in a scheme and finally they get a chance to utilize the benefits of the insurance when healthcare services are needed.

To understand this Insurance Cascade was constructed.

The cascade consists of three stages:

Stage 1: Awareness

Stage 2: Coverage

Stage 3: Utilization

The purpose of this is to see the movement across these stages and identify the point at which the reduction occurs in a larger number.

Table 4.25: The Insurance Cascade — Awareness → Coverage → Utilization (N = 605)

Stage	N	% of Total (605)	% of Prev. Stage	Gap / Attrition
Stage 1: Aware of health insurance	532	87.9%	—	—
Stage 2: Currently insured / covered	439	72.6%	82.5% of aware	93 not insured despite awareness (15.3% gap)

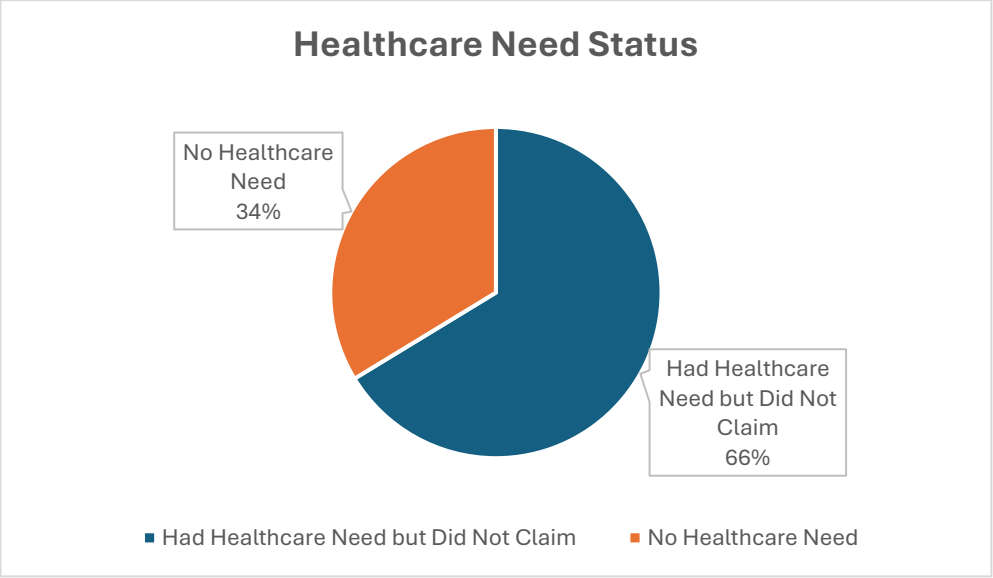
Stage 3: Ever utilized benefits	258	42.6%	58.8% of insured	181 enrolled but never utilized (30.2% gap)
Overall utilization (utilized / total N=605)	258	42.6%	—	Less than half the population ever used HI

4.3 Healthcare Need Among Non-Utilizers

Table 4.26: Healthcare Need Among Non-Utilizers (N = 181)

Healthcare Need Status	Frequency (n)	Percentage (%)
Had Healthcare Need but Did Not Claim	120	66.3
No Healthcare Need	61	33.7
Total	181	100.0

Figure 4.23 Healthcare Need Among Non-Utilizers



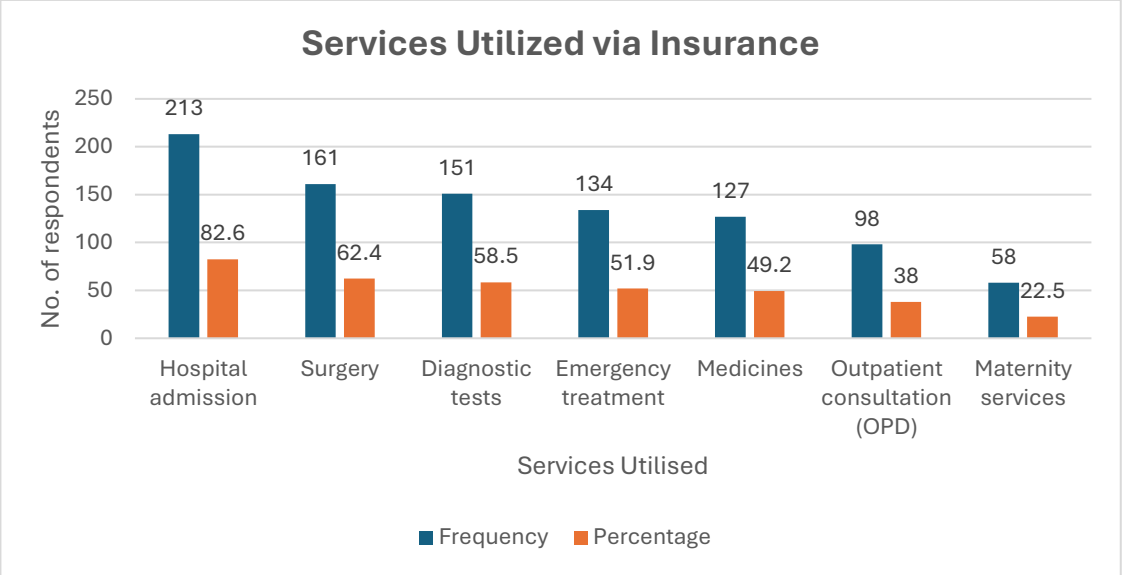
4.3.7 Types of Services Utilized Through Health Insurance

Table 4.27 Types of Services Utilized Through Health Insurance

Services Utilized via Insurance (Multiple; N=258 utilizers)		
Service	**Frequency**	**Percentage**
Hospital admission	213	82.6
Surgery	161	62.4
Diagnostic tests	151	58.5
Emergency treatment	134	51.9

Medicines	127	49.2
Outpatient consultation (OPD)	98	38
Maternity services	58	22.5

Figure 4.24 Types of Services Utilized Through Health Insurance



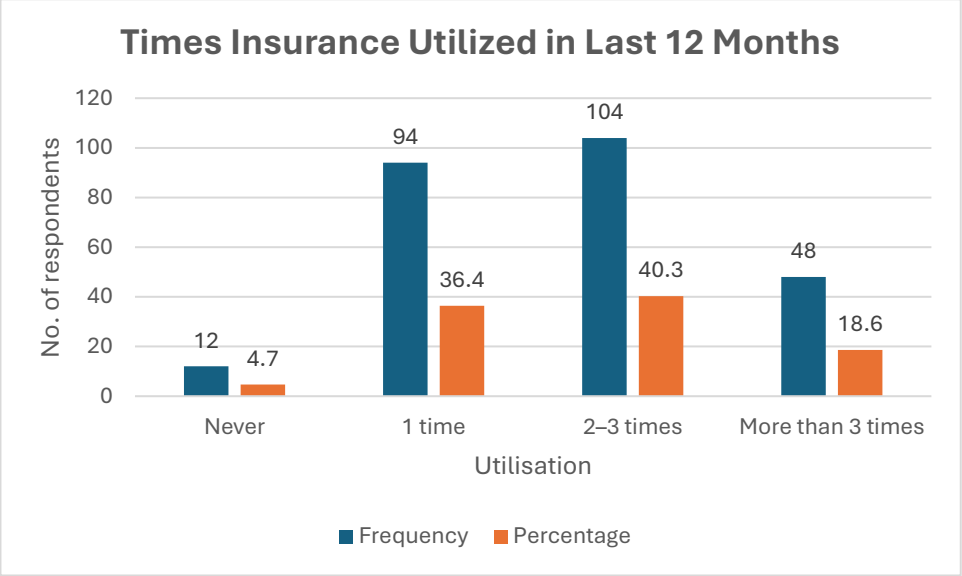
*The mean Utilization Score (number of service types used) was **2.50 (Median = 2, Mode = 2, SD = 1.15)**, suggesting that most utilizers accessed 2–3 service categories through their insurance.*

4.3.8 Frequency of Insurance Utilization in the Last 12 Months

Table 4.28 Frequency of Insurance Utilization in the Last 12 Months

Times Insurance Utilized in Last 12 Months (N=258)		
Frequency	**Frequency**	**Percentage**
Never	12	4.7
1 time	94	36.4
2–3 times	104	40.3
More than 3 times	48	18.6
Total	258	100

Figure 4.25 Frequency of Insurance Utilization in the Last 12 Months

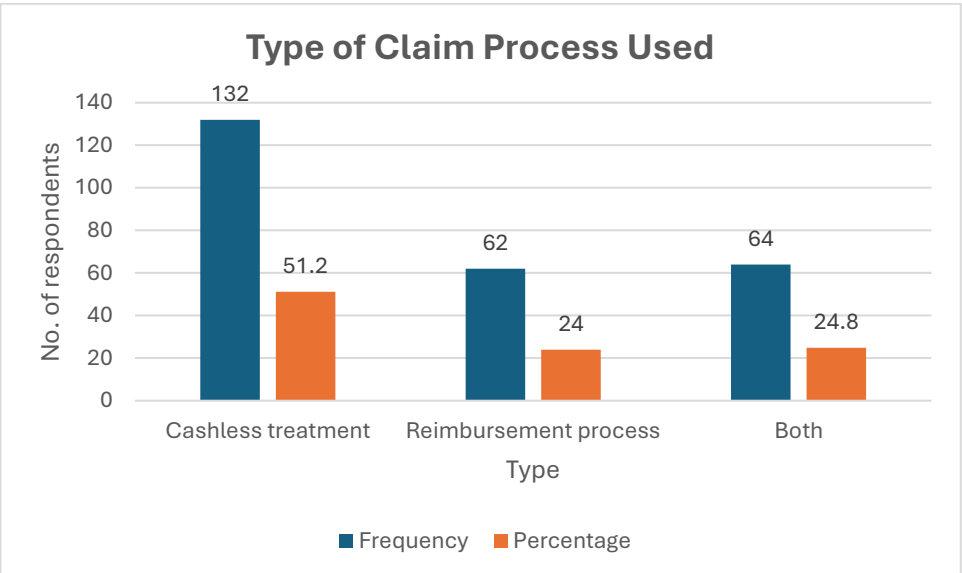


4.3.9 Type of Claim Process Used

Table 4.29 Type of Claim Process Used

Type of Claim Process Used (N=258)		
Claim Type	**Frequency**	**Percentage**
Cashless treatment	132	51.2
Reimbursement process	62	24
Both	64	24.8
Total	258	100

Figure 4.26 Type of Claim Process Used

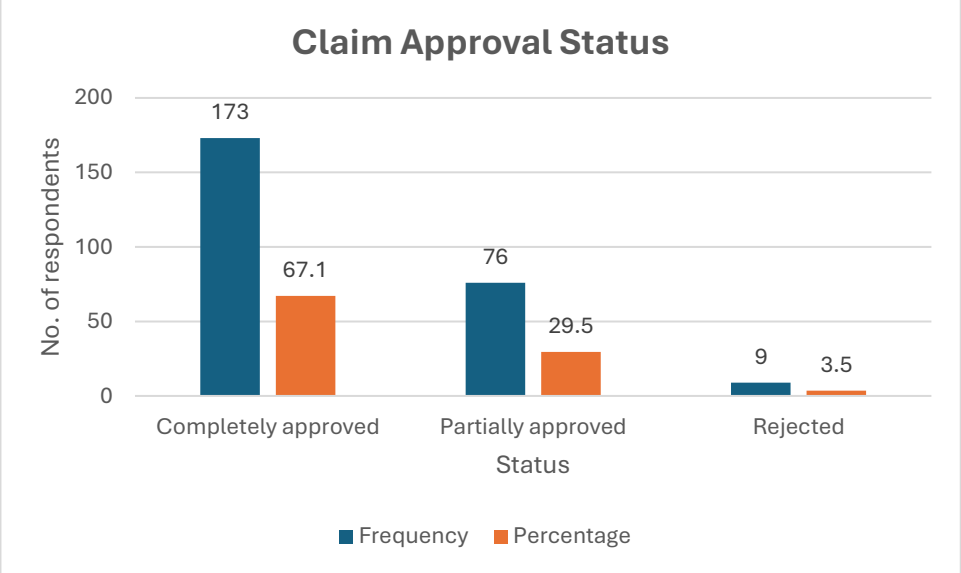


4.3.10 Claim Approval Status

Table 4.30 Claim Approval Status

Claim Approval Status (N=258)		
Status	**Frequency**	**Percentage**
Completely approved	173	67.1
Partially approved	76	29.5
Rejected	9	3.5
Total	258	100

Figure 4.27 Claim Approval Status

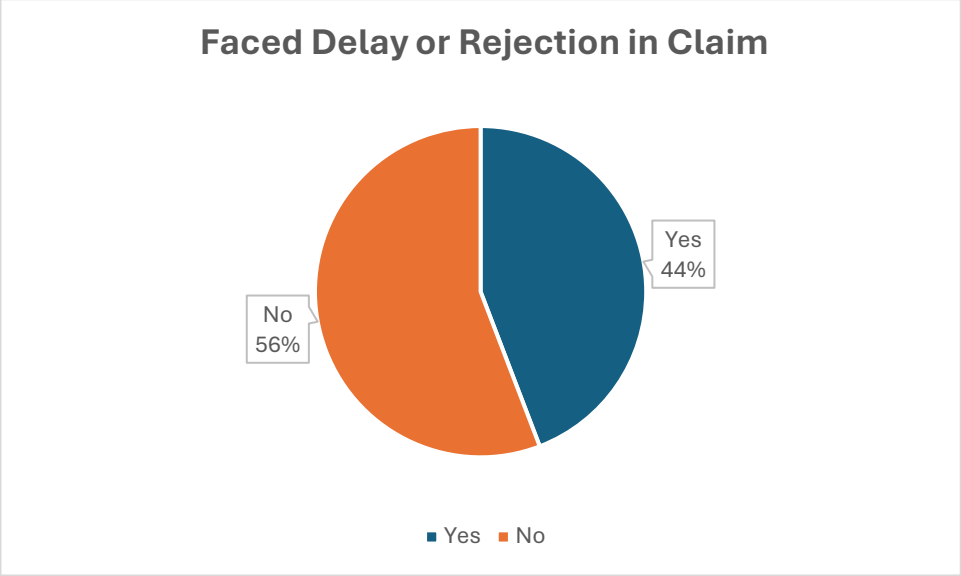


4.3.11 Experience of Delay or Rejection in Claim Processing

Table 4.31 Experience of Delay or Rejection in Claim Processing

Faced Delay or Rejection in Claim (N=258)		
Response	**Frequency**	**Percentage**
Yes	114	44.2
No	144	55.8
Total	258	100

Figure 4.28 Experience of Delay or Rejection in Claim Processing

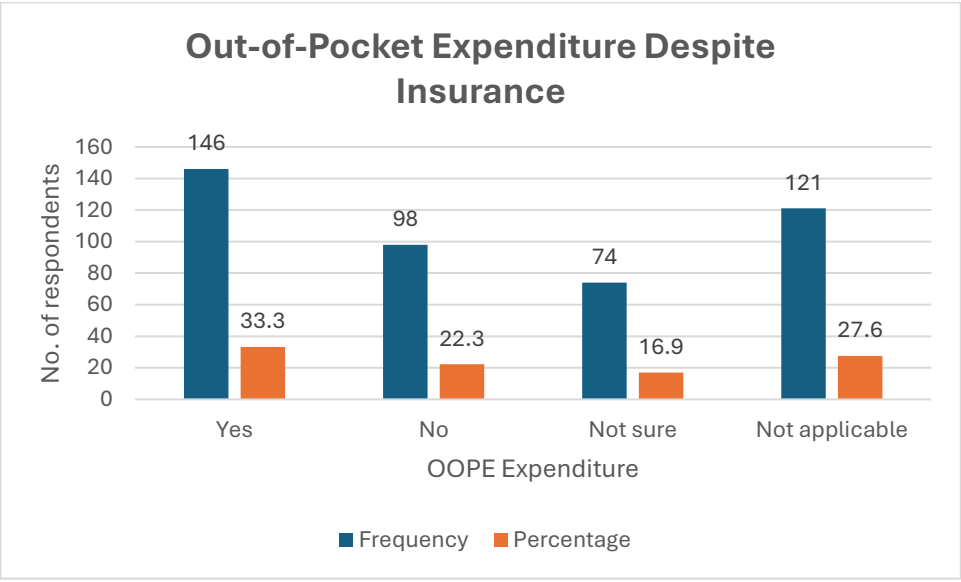


4.3.12 Out-of-Pocket Expenditure Despite Insurance Coverage

Table 4.32 Out-of-Pocket Expenditure Despite Insurance Coverage

Out-of-Pocket Expenditure Despite Insurance (N=439)		
Response	**Frequency**	**Percentage**
Yes	146	33.3
No	98	22.3
Not sure	74	16.9
Not applicable	121	27.6
Total	439	100

Figure 4.29 Out-of-Pocket Expenditure Despite Insurance Coverage

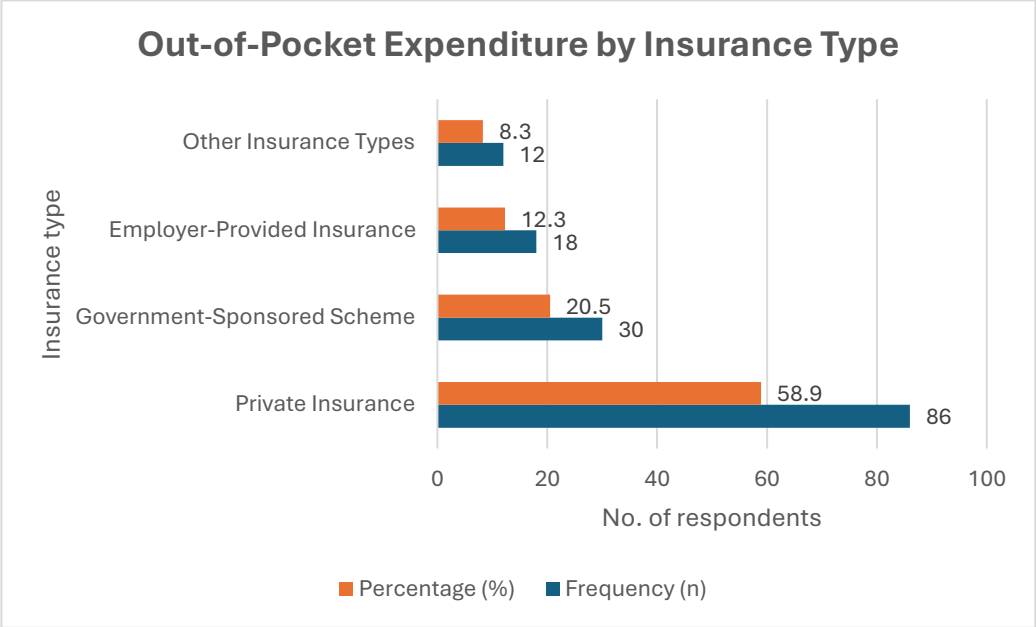


4.3. Out-of-Pocket Expenditure Faced Among Utilizers by Insurance Type

Table 4.33. Out-of-Pocket Expenditure by Insurance Type (N=146)

Insurance Type	Frequency (n)	Percentage (%)
Private Insurance	86	58.9
Government-Sponsored Scheme	30	20.5
Employer-Provided Insurance	18	12.3
Other Insurance Types	12	8.3
Total	146	100.0

Figure 4.30 Out-of-Pocket Expenditure by Insurance Type

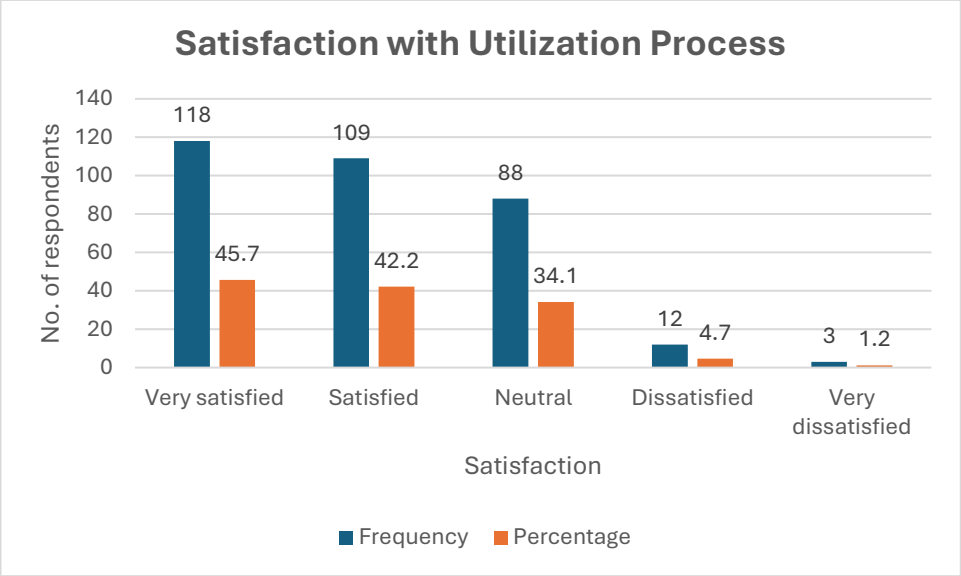


4.3.13 Satisfaction with the Utilization Process

Table 4.34 Satisfaction with the Utilization Process

Satisfaction with Utilization Process (N=258 utilizers)		
Response	**Frequency**	**Percentage**
Very satisfied	118	45.7
Satisfied	109	42.2
Neutral	88	34.1
Dissatisfied	12	4.7
Very dissatisfied	3	1.2
Total	258	100

Figure 4.31 Satisfaction with the Utilization Process



*The mean satisfaction score was **4.01 on a 5-point scale (Median = 4, Mode = 4, SD = 0.82)**, showing an overall 'Satisfied' rating.*

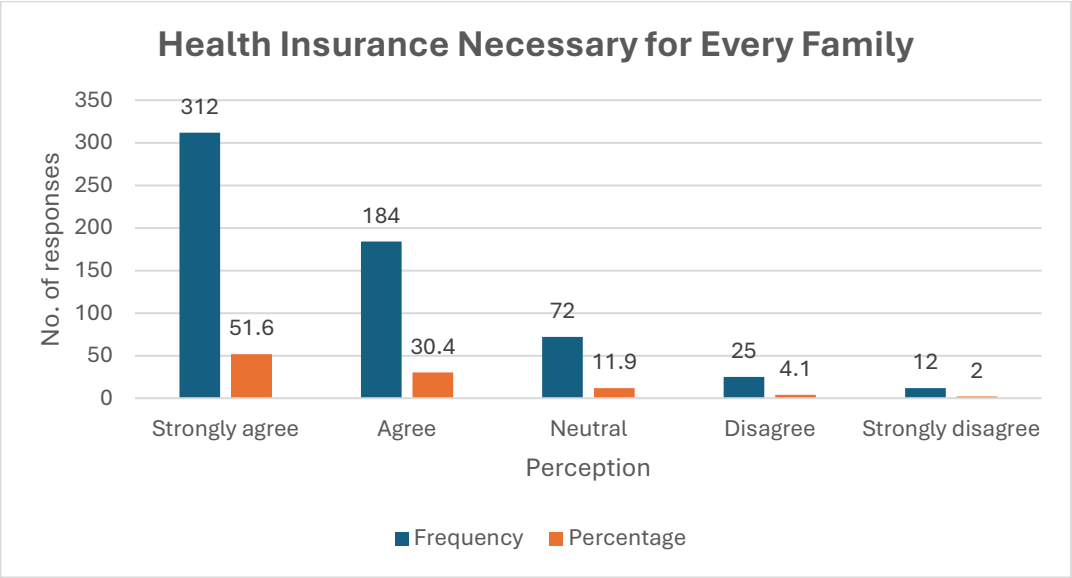
4.3.14 Perception of Necessity and Willingness to Recommend

4.3.14 (a) Perception That Health Insurance is Necessary for Every Family (N = 605)

Table 4.35 Perception That Health Insurance is Necessary for Every Family

Health Insurance Necessary for Every Family		
Response	**Frequency**	**Percentage**
Strongly agree	312	51.6
Agree	184	30.4
Neutral	72	11.9
Disagree	25	4.1
Strongly disagree	12	2
Total	605	100

Figure 4.32 Perception That Health Insurance is Necessary for Every Family

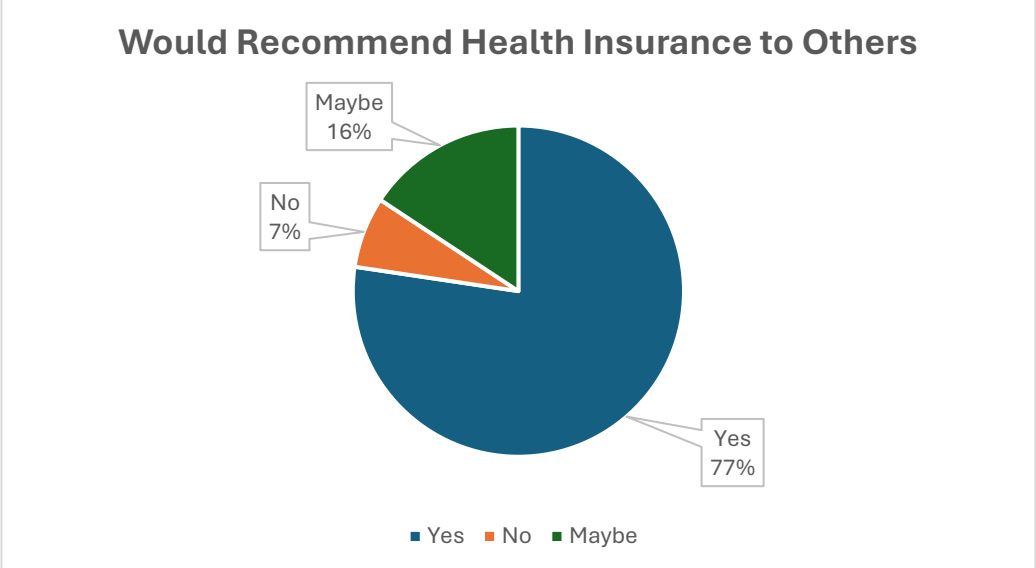


4.3.14 (b) Willingness to Recommend Health Insurance to Others (N = 605)

Table 4.36 Willingness to Recommend Health Insurance to Others

Would Recommend Health Insurance to Others		
Response	**Frequency**	**Percentage**
Yes	468	77.4
No	42	6.9
Maybe	95	15.7
Total	605	100

Figure 4.33 Willingness to Recommend Health Insurance to Others



4.4 Socio-Demographic Factors Associated with Awareness and Utilization: Chi-Square Test Results

Chi-Square Test of Association: it is done to see whether awareness, insurance coverage and utilization differ across socio-demographic groups.

Variables Assessed:

- Gender
- Age group
- Education
- Occupation
- Monthly family income
- Residence

Outcomes:

- Awareness of health insurance
- Insurance coverage
- Utilization of insurance benefits

Key Terms:

- χ^2: Difference between observed and expected frequencies.
- df: Degrees of freedom.
- p-value: Indicates statistical significance.

Interpretation:

- $p < 0.05$ = Significant association
- $p \geq 0.05$ = No significant association

Hypotheses:

- H_0: No association exists.
- H_1: An association exists.

4.4.1 Summary of Chi-Square Test Results

Table 4.37: Summary of Chi-Square Test Results — All Variables and Outcomes

Variable	Outcome Tested	χ^2 Value	df	p-value	Significance
Gender	Awareness	0.039	1	0.8426	NS
Age Group	Awareness	0.154	4	0.9972	NS
Education Level	Awareness	9.911	6	0.1285	NS

Monthly Family Income	Awareness	4.304	5	0.5066	NS
Type of Residence	Awareness	3.623	1	0.0570	Borderline NS
Occupation	Awareness	3.429	9	0.9448	NS
Gender	Coverage	0.079	1	0.7790	NS
Age Group	Coverage	8.439	4	0.0768	NS
Education Level	Coverage	12.858	6	0.0453	* Significant
Monthly Family Income	Coverage	8.410	5	0.1350	NS
Type of Residence	Coverage	2.059	1	0.1513	NS
Occupation	Coverage	11.772	9	0.2264	NS
Gender	Utilization	0.438	1	0.5082	NS
Age Group	Utilization	10.030	4	0.0399	* Significant
Education Level	Utilization	7.653	6	0.2647	NS
Monthly Family Income	Utilization	7.058	5	0.2163	NS
Type of Residence	Utilization	3.153	1	0.0758	NS
Occupation	Utilization	8.775	9	0.4583	NS

Note: NS = Not Significant ($p \geq 0.05$). * = Significant at $p < 0.05$. Significance legend: *** $p<0.001$, ** $p<0.01$, * $p<0.05$.

- *Education level was significantly associated with health insurance coverage ($p = 0.045$).*
- *Age group was significantly associated with utilization of health insurance benefits ($p = 0.040$).*
- *No significant association was found for gender, income, residence or occupation.*
- *These findings suggest that education may influence insurance coverage while age may affect the utilization of health insurance services.*

4.4.2 Socio-Demographic Factors Associated with Awareness of Health Insurance

- **H_0:** No significant association is there between socio-demographic variables and awareness of health insurance.
- **H_1:** A significant association is there between socio-demographic variables and awareness of health insurance.

Chi-square analysis showed that none of the socio-demographic variables were significantly associated with awareness of health insurance as all p-values were greater than 0.05.

- Gender: p = 0.843
- Age group: p = 0.997
- Education level: p = 0.129
- Monthly family income: p = 0.507
- Occupation: p = 0.945
- Residence: p = 0.057

Although residence was close to significance but it did not meet the significance value of 0.05. Rural respondents reported slightly higher awareness (93.4%) than urban respondents (86.6%).

Awareness of health insurance did not differ significantly across the socio-demographic groups studied. Therefore, the null hypothesis was retained.

Cross-Tabulation: Awareness by Gender

Table 4.38: Awareness of Health Insurance by Gender (N = 605)

Gender	Not Aware n (%)	Aware n (%)	Total	Chi-Square Result
Male	26 (11.5%)	200 (88.5%)	226	χ^2=0.039, df=1
Female	47 (12.4%)	332 (87.6%)	379	p=0.843 (NS)
Total	73 (12.1%)	532 (87.9%)	605	H_0 Retained

There was no statistically significant difference in awareness between males (88.5%) and females (87.6%). Both genders showed similar level of awareness showing that health insurance awareness in this Delhi sample gender speific. The null hypothesis of no association between gender and awareness is retained (p=0.843).

Cross-Tabulation: Awareness by Type of Residence

Table 4.39: Awareness of Health Insurance by Type of Residence (N = 605)

Residence	Not Aware n (%)	Aware n (%)	Total	Chi-Square Result
Urban Delhi	65 (13.4%)	419 (86.6%)	484	χ^2=3.623, df=1
Rural Delhi	8 (6.6%)	113 (93.4%)	121	p=0.057 (NS, Borderline)
Total	73 (12.1%)	532 (87.9%)	605	H_0 Retained

Rural respondents showed a slightly higher level of awareness of health insurance (93.4%) than urban respondents (86.6%). The Chi-square test had a value of $\chi^2 = 3.623$ with a p-value of 0.057. Although the difference in awareness levels was noticeable but the p-value was higher than the significance level of 0.05. Therefore, no statistically significant association was observed between type of residence and awareness of health insurance and the null hypothesis was retained.

4.4.3 Socio-Demographic Factors Associated with Insurance Coverage

H_0 (Null Hypothesis): There is no significant association between the socio-demographic variable and insurance coverage status.

H_1 (Alternate Hypothesis): There is a significant association between the socio-demographic variable and insurance coverage status.

Education Level and Insurance Coverage — SIGNIFICANT FINDING

Table 4.40: Insurance Coverage by Educational Qualification (N = 605) [χ^2=12.858, df=6, p=0.045*]

Education Level	Uninsured n (%)	Insured n (%)	Total n
Primary education	6 (40.0%)	9 (60.0%)	15
Secondary education (10th pass)	6 (25.0%)	18 (75.0%)	24

Senior secondary (12th pass)	12 (33.3%)	24 (66.7%)	36
Graduate	46 (38.7%)	73 (61.3%)	119
Postgraduate	73 (23.5%)	238 (76.5%)	311
Professional degree	21 (23.1%)	70 (76.9%)	91
Doctorate (PhD)	2 (22.2%)	7 (77.8%)	9
Total	166 (27.4%)	439 (72.6%)	605

Education level was found to be significantly associated with insurance coverage status ($\chi^2 = 12.858$, df = 6, p = 0.045). As the p-value was less than 0.05 the association was considered statistically significant. Therefore, the null hypothesis was rejected showing that insurance coverage varied significantly across different educational categories.

The proportion of insured respondents was highest among those with doctorate degrees (77.8%), professional degrees (76.9%) and postgraduate qualifications (76.5%). The respondents with primary education (60.0%) and graduate-level education (61.3%) reported comparatively lower insurance coverage. This show that insurance coverage was not uniformly distributed across educational groups and varied according to respondents' educational levels.

Cross-Tabulation: Insurance Coverage by Gender

Table 4.41: Insurance Coverage by Gender (N = 605)

Gender	Uninsured n (%)	Insured n (%)	Total	Chi-Square Result
Male	64 (28.3%)	162 (71.7%)	226	χ^2=0.079, df=1
Female	102 (26.9%)	277 (73.1%)	379	p=0.779 (NS)
Total	166 (27.4%)	439 (72.6%)	605	H_0 Retained

No statistically significant association was found between gender and insurance coverage (p=0.779). Males (71.7%) and females (73.1%) had almost same insurance coverage rates. The null hypothesis is retained.

Cross-Tabulation: Insurance Coverage by Age Group

Table 4.42: Insurance Coverage by Age Group (N = 605)

Age Group	Uninsured n (%)	Insured n (%)	Total n	Chi-Square Result
18–24 years	54 (29.8%)	127 (70.2%)	181	χ^2=8.439, df=4
25–34 years	57 (27.1%)	153 (72.9%)	210	p=0.077 (NS)
35–44 years	15 (19.0%)	64 (81.0%)	79	—
45–54 years	24 (38.7%)	38 (61.3%)	62	H_0 Retained
55 years and above	16 (21.9%)	57 (78.1%)	73	—
Total	166 (27.4%)	439 (72.6%)	605	—

Although insurance coverage varied across age groups ranging from 81.0% among respondents aged 35–44 years to 61.3% among those aged 45–54 years the association was not statistically significant (χ^2 = 8.439, df = 4, p = 0.077). Since the p-value was greater than 0.05 the observed differences in coverage across age groups were not considered statistically significant. Therefore, the null hypothesis was retained indicating that insurance coverage did not differ significantly according to age group in the study population.

Cross-Tabulation: Insurance Coverage by Monthly Family Income

Table 4.43: Insurance Coverage by Monthly Family Income (N = 605)

Income Category	Uninsured n (%)	Insured n (%)	Total n	Chi-Square Result
Less than ₹10,000	4 (14.3%)	24 (85.7%)	28	χ^2=8.410, df=5
₹10,001–25,000	24 (25.0%)	72 (75.0%)	96	p=0.135 (NS)
₹25,001–50,000	19 (37.3%)	32 (62.7%)	51	—
₹50,001–1,00,000	46 (31.3%)	101 (68.7%)	147	H_0 Retained
More than ₹1,00,000	34 (30.1%)	79 (69.9%)	113	—

Prefer not to disclose	39 (22.9%)	131 (77.1%)	170	—
Total	166 (27.4%)	439 (72.6%)	605	—

No statistically significant association was observed between monthly family income and insurance coverage status ($\chi^2 = 8.410$, df = 5, p = 0.135). Since the p-value was greater than 0.05 the null hypothesis was retained showing that insurance coverage did not differ significantly across income categories.

Although differences in coverage rates were observed across income groups these differences were not statistically significant. The highest insurance coverage was reported among respondents with a monthly family income of less than ₹10,000 (85.7%) followed by those who preferred not to disclose their income (77.1%) and those earning ₹10,001–25,000 (75.0%). The lowest coverage was observed among respondents with a monthly family income of ₹25,001–50,000 (62.7%).

Overall, the findings indicate that the monthly family income is not significantly associated with insurance coverage status.

Cross-Tabulation: Insurance Coverage by Residence

Table 4.44: Insurance Coverage by Type of Residence (N = 605)

Residence	Uninsured n (%)	Insured n (%)	Total n	Chi-Square Result
Urban Delhi	126 (26.0%)	358 (74.0%)	484	χ^2=2.059, df=1
Rural Delhi	40 (33.1%)	81 (66.9%)	121	p=0.151 (NS)
Total	166 (27.4%)	439 (72.6%)	605	H_0 Retained

Urban respondents had slightly higher coverage rate (74.0%) compared to rural respondents (66.9%) but this difference was not statistically significant (p=0.151). The null hypothesis is retained.

Cross-Tabulation: Insurance Coverage by Presence of Chronic Illness in Family

Table 4.45: Insurance Coverage by Chronic Illness in Family (N = 605)

Chronic Illness	Uninsured n (%)	Insured n (%)	Total n	Chi-Square Result
Yes	38 (31.9%)	81 (68.1%)	119	χ^2=5.576, df=2
No	116 (25.3%)	342 (74.7%)	458	p=0.062 (NS)
Not sure	12 (42.9%)	16 (57.1%)	28	H_0 Retained
Total	166 (27.4%)	439 (72.6%)	605	—

The association between the presence of chronic illness in the family and insurance coverage was not statistically significant (p = 0.062) although the result was close to the significance level of 0.05. Households without a chronic illness had a slightly higher insurance coverage rate (74.7%) compared to households with a chronic illness (68.1%) but this difference was not statistically significant. Therefore, the null hypothesis was retained.

4.4.4 Socio-Demographic Factors Associated with Utilization of Insurance

H_0 (Null Hypothesis): There is no significant association between the socio-demographic variable and utilization of health insurance benefits.

H_1 (Alternate Hypothesis): There is a significant association between the socio-demographic variable and utilization of health insurance benefits.

Age Group and Utilization — SIGNIFICANT FINDING

Table 4.46: Utilization of Insurance by Age Group (N = 439 Insured Respondents) [χ^2=10.030, df=4, p=0.040*]

Age Group	Not Utilized n (%)	Utilized n (%)	Total n	Chi-Square Result
18–24 years	56 (44.1%)	71 (55.9%)	127	χ^2=10.030, df=4
25–34 years	53 (34.6%)	100 (65.4%)	153	p=0.040 (*)
35–44 years	36 (56.2%)	28 (43.8%)	64	SIGNIFICANT
45–54 years	16 (42.1%)	22 (57.9%)	38	H_1 Accepted

55 years and above	20 (35.1%)	37 (64.9%)	57	—
Total	181 (41.2%)	258 (58.8%)	439	—

Age group was significantly associated with health insurance utilization ($\chi^2 = 10.030$, df = 4, p = 0.040). The highest utilization was observed among respondents aged 25–34 years (65.4%) and ≥55 years (64.9%) while the lowest was reported among those aged 35–44 years (43.8%).

Other Variables: Non-Significant Associations with Utilization

Table 4.47: Non-Significant Associations with Utilization of Insurance

Variable	Outcome	χ^2	p-value	Decision
Gender	Utilization	0.438	0.508	NS — H_0 Retained
Education Level	Utilization	7.653	0.265	NS — H_0 Retained
Monthly Family Income	Utilization	7.058	0.216	NS — H_0 Retained
Type of Residence	Utilization	3.153	0.076	NS — H_0 Retained
Occupation	Utilization	8.775	0.458	NS — H_0 Retained

No significant association was found between health insurance utilization and gender education income, residence or occupation (all p > 0.05). Hence, the null hypothesis was retained.

4.5 Barriers to Enrollment and Utilization of Health Insurance

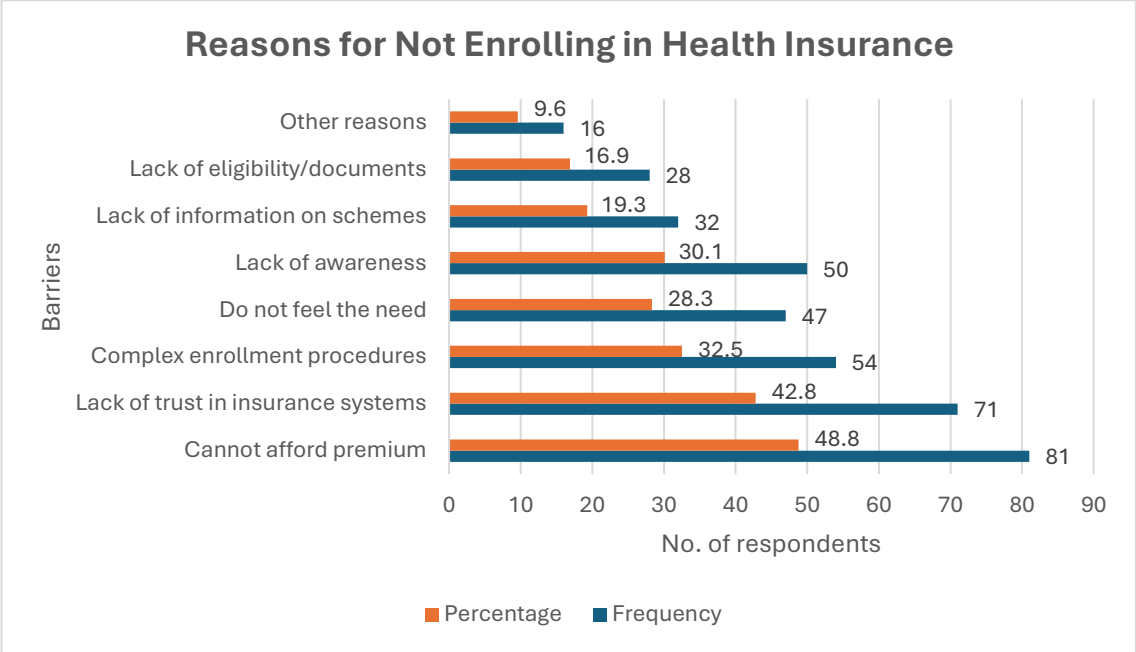
4.5.1 Barriers to Enrollment Among Uninsured Respondents

Table 4.48 Barriers to Enrollment Among Uninsured Respondents

Reasons for Not Enrolling in Health Insurance (Multiple; N=166 uninsured)		
Barrier	**Frequency**	**Percentage**
Cannot afford premium	81	48.8
Lack of trust in insurance systems	71	42.8
Complex enrollment procedures	54	32.5
Do not feel the need	47	28.3

Lack of awareness	50	30.1
Lack of information on schemes	32	19.3
Lack of eligibility/documents	28	16.9
Other reasons	16	9.6

Figure 4.34 Barriers to Enrollment Among Uninsured Respondents

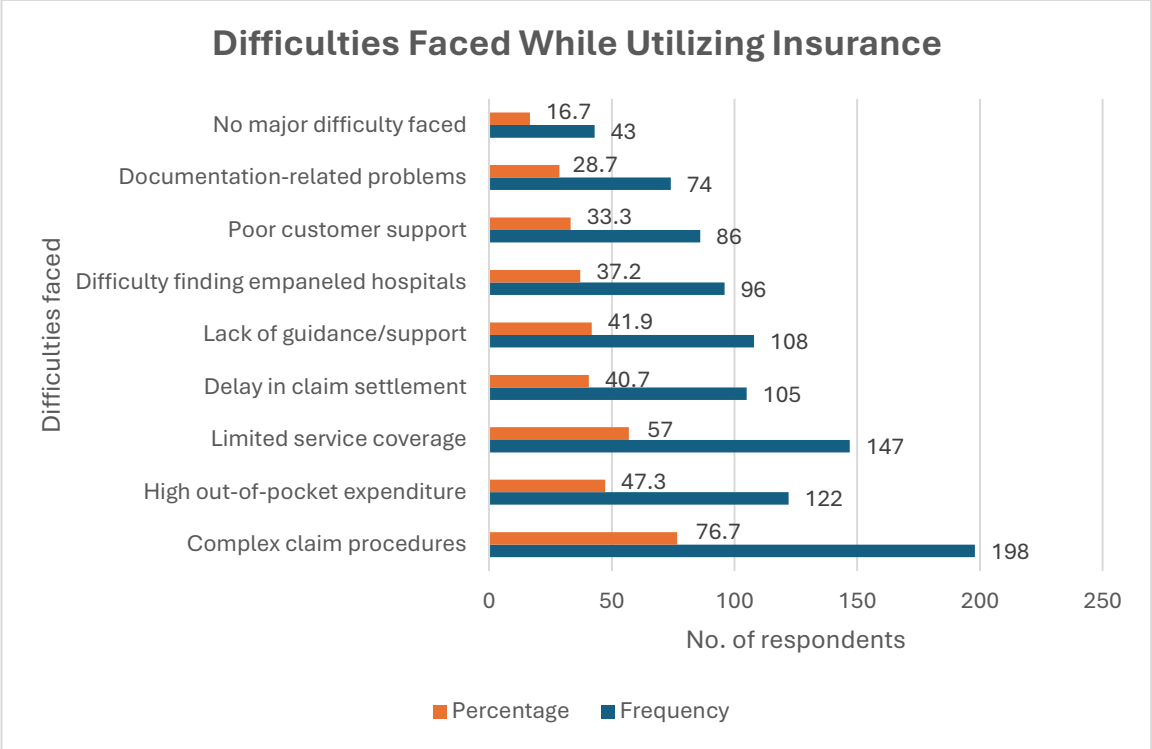


4.5.2 Difficulties Faced During Utilization Among Insured Respondents

Table 4.49 Difficulties Faced During Utilization Among Insured Respondents

Difficulties Faced While Utilizing Insurance (Multiple; N=258 utilizers)		
Difficulty	**Frequency**	**Percentage**
Complex claim procedures	198	76.7
High out-of-pocket expenditure	122	47.3
Limited service coverage	147	57
Delay in claim settlement	105	40.7
Lack of guidance/support	108	41.9
Difficulty finding empaneled hospitals	96	37.2
Poor customer support	86	33.3
Documentation-related problems	74	28.7
No major difficulty faced	43	16.7

Figure 4.35 Difficulties Faced During Utilization Among Insured Respondents

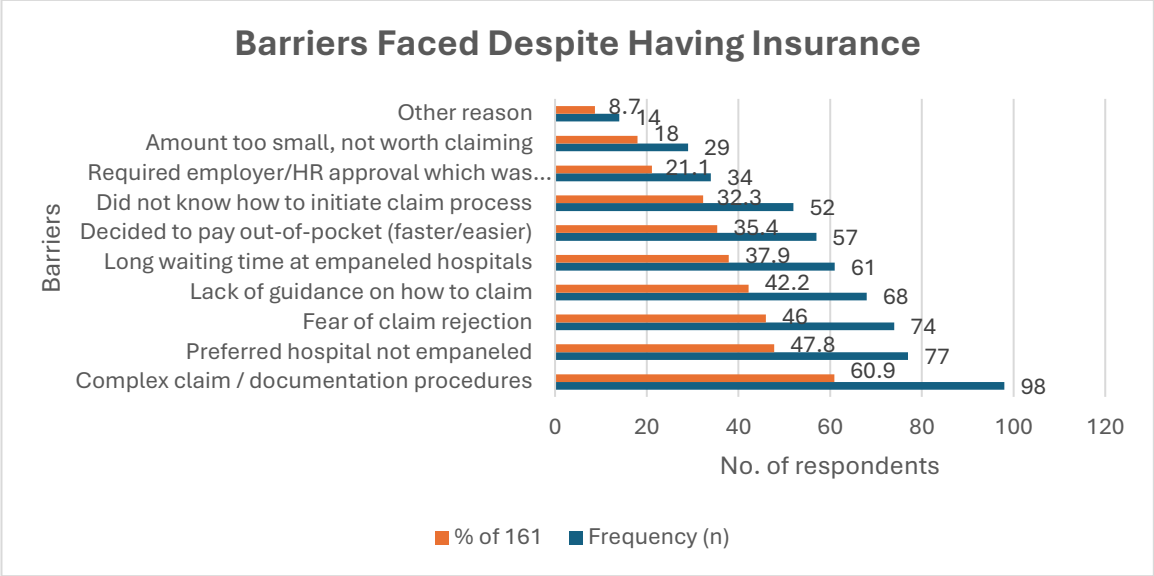


4.5.3 Barriers Faced Aong the Non-Users Despite Having Insurance

Table 4.50 Barriers Faced Despite Having Insurance (N = 161; Multiple Responses)

Barrier	Frequency (n)	% of 161
Complex claim / documentation procedures	98	60.9
Preferred hospital not empaneled	77	47.8
Fear of claim rejection	74	46
Lack of guidance on how to claim	68	42.2
Long waiting time at empaneled hospitals	61	37.9
Decided to pay out-of-pocket (faster/easier)	57	35.4
Did not know how to initiate claim process	52	32.3
Required employer/HR approval which was delayed	34	21.1
Amount too small, not worth claiming	29	18
Other reason	14	8.7

Figure 4.36 Barriers Faced Despite Having Insurance

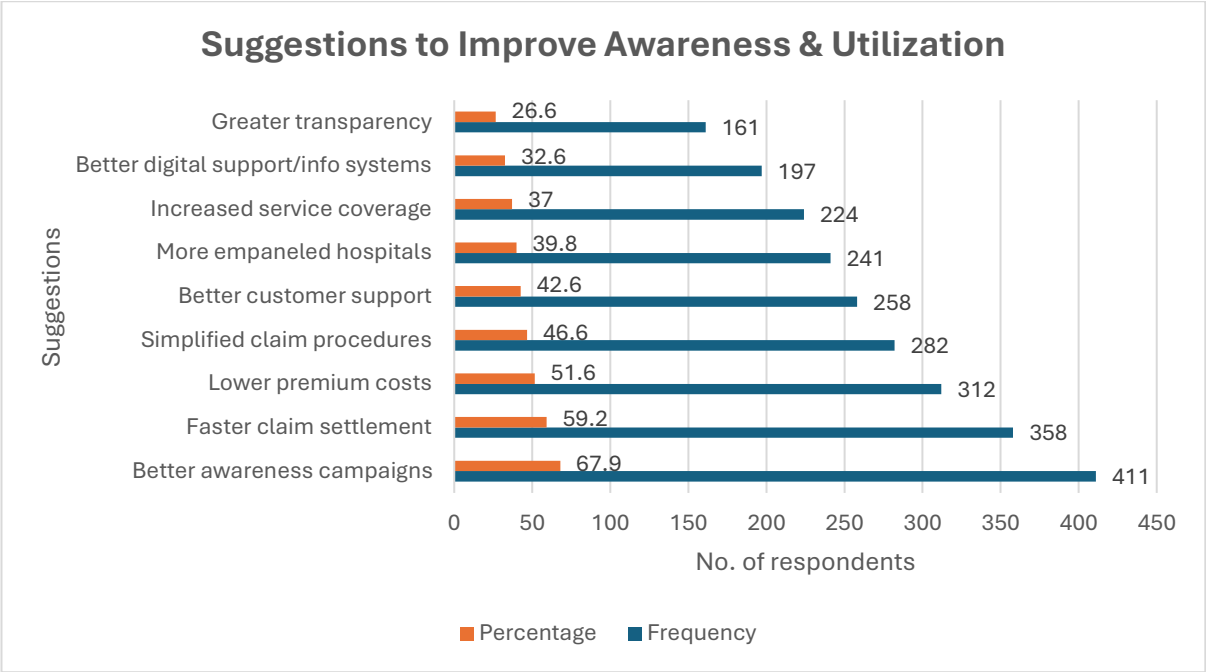


4.5.4 Suggestions for Improving Awareness and Utilization

Table 4.51 Suggestions for Improving Awareness and Utilization

Suggestions to Improve Awareness & Utilization (Multiple; N=605)		
Suggestion	**Frequency**	**Percentage**
Better awareness campaigns	411	67.9
Faster claim settlement	358	59.2
Lower premium costs	312	51.6
Simplified claim procedures	282	46.6
Better customer support	258	42.6
More empaneled hospitals	241	39.8
Increased service coverage	224	37
Better digital support/info systems	197	32.6
Greater transparency	161	26.6

Figure 4.37 Suggestions for Improving Awareness and Utilization



CHAPTER 5: DISCUSSION

This chapter discusses the findings of the present study against the four objectives that were set at the beginning and compares them with results from earlier studies which are mentioned in the literature review. The study includes about 605 adult residents of Delhi and they are studied for their awareness of health insurance schemes, utilization these schemes by the people in the study, the socio-demographic groups linked to outcomes and the problems people generally face while using the insurance benefits. The discussion is presented under four parts matching the four objectives of the study followed by an overall reflection.

5.1 Awareness of Health Insurance Schemes

The first objective was to find out how much people know about government and private health insurance schemes. This study found a high overall awareness level of 87.9% which shows that almost nine out of every ten respondents have heard of health insurance in some or the other form. This is higher than what Kusuma et al. (1) reported among the urban poor of Delhi where only 19% were aware of health insurance schemes. It is also higher than the national figure of around 41% reported by NFHS-5 (13) and higher than the awareness levels found among rural and slum populations in other parts of the country such as in Nagpur (40) and Bangalore (18,19). A possible reason for this difference may be the type of people that took part in the present study. Most of the respondents were graduates, postgraduates or working professionals and most filled the form online. This group is more likely to come across information through smartphones, social media and workplace talk than the urban poor or rural households studied earlier. So this high figure

should be read with some caution since it may not fully represent every section of Delhi especially very poor households, daily wage workers or those with little schooling who formed only a small part of this sample.

When the participants were asked about the individual schemes they know the responses were as private health insurance (69.8%) and PM-JAY (64.0%) were the two most known schemes while CGHS (42.3%) and state government schemes (32.7%) were known to comparatively a few number of people. The awareness level for PM-JAY found here is close to the 68.6% reported by Prasad et al. (10) in Bihar which is a positive sign because Delhi only implemented PM-JAY in 2025 (3,8) which is much after than most of the other states. This shows that even if it was implemented late the awareness among the people about the scheme has spread faster among people of Delhi within a short period of time.

Knowing the name of a scheme may not always show that people actually understand it. As the mean awareness score in this study which was calculated was 2.75 out of a possible 6 which lies in the moderate range which means that the average respondent could correctly name only about three of the six common health insurance schemes. This finding aligns with what Madhukumar et al. (18) and Indumathi et al. (19) pointed out earlier in their studies that simply hearing about insurance does not always mean that a person really knows and understands that how it works. In the same way only 62.3% of respondents included in this study knew how to actually enrol in a scheme and only 60.8% knew what is the eligibility for PM-JAY. This gap between having knowledge of the name and knowing how it works supports the point made by Edward et al. (22) that real insurance literacy goes well beyond simple awareness that a scheme exists.

Social media and the internet (57.5%) and friends and family (54.7%) were the two most common sources of information while government campaigns were named by only 21.6% of respondents. This shows that there is a growing evidence that digital platforms are now a major channel for health information (41) while also confirms with the earlier findings that the information from word of mouth from family and community still have importance as seen in rural studies from other states (15,16,19). The study shows the comparatively low reach of formal government campaigns which is the concern raised by Bhatnagar et al. (9) that outreach efforts under government schemes have not always reached people well. Attitudes towards insurance were strongly positive in this sample with a mean importance score of 4.61 out of 5. This shows that poor utilisation discussed in the next section is unlikely to be caused by people which do not value health insurance. It is more likely linked to barriers around access and cost a point that fits with what Thakur (6) and Bhatnagar et al. (9) found in their work on RSBY and PM-JAY.

5.2 Utilization of Health Insurance Schemes

The second objective was to study about how much people actually use health insurance once they know about it or are enrolled or covered under the insurance. In this study, 72.6% of respondents were covered under some form of the health insurance and among these covered people only about 58.8% had used their health insurance benefits at least

once. Across the whole sample this means 42.6% of all respondents had ever used health insurance benefits.

So, this figure is much larger than what is usually been reported regarding the government schemes in the other parts of the India. Thakur (6) found that only 0.3% of households ever used RSBY benefits even though many of them were already enrolled and Prasad et al. (10) found utilization of just 1.3% under PM-JAY in Bihar. Compared with these numbers the utilization rate in this study looks far better. A possible reason may be the type of insurance which the respondents have. Most insured respondents (57.9%) held private insurance and a large group (37.1%) held employer-provided insurance while only 25.5% depended on the government scheme. This pattern is somewhat closer to what Kusuma et al. (1) found in the study which was held in Delhi where CGHS and ESIS both linked to formal employment had utilization rates of 100% and 86% which was much higher than RSBY in the same city. It shows that schemes linked to formal jobs or private companies work more smoothly and easily for the people who have them as compared with the schemes run by the states which are aimed at poorer households which often involve more complicated procedures and understanding.

The gap between coverage and the actual utilization is still a real concern and problem. Among respondents who had not used their insurance 66.3% said they had a genuine healthcare need but still did not claim it. This is an important finding and data because it shows that having an insurance and having its papers does not always guarantee financial protection at the time when it is actually needed this was a concern also raised by Nandi and Schneider (26) in their study of state-funded schemes in Chhattisgarh. Adding to this 33.3% of insured respondents said they still paid out of their own pocket despite being covered and this was highest among those with private insurance (58.9%). This fits a long line of research showing that health insurance in India often gives only partial financial protection. Devadasan et al. (32), Sriram and Khan (33) and Garg et al. (34,35) have all shown that insured households continue to face costs related to medicines, outpatient visits and private hospital care. National-level data tell a similar story since out-of-pocket spending remains high in India compared with other countries (30,31). In the present study too, hospital admission (82.6%) and surgery (62.4%) were the services most often covered through insurance while outpatient consultation (38.0%) and maternity care (22.5%) were used far less. This fits the wider debate raised by Selvaraj et al. (42) and the World Health Organization (43) about whether hospital-focused insurance schemes are enough on their own or whether more investment is also needed in primary and outpatient care which insurance often does not cover well.

Despite these gaps which are discussed above the satisfaction among those who had used their insurance was high as the mean score was 4.01 out of 5 and 77.4% of all respondents said they would recommend the health insurance to others. This shows that even partial protection is seen as positive and worth it by people and that trust in the system while not perfect may be slowly building possibly helped by the recent rollout of PM-JAY in Delhi.

5.3 Socio-Demographic Factors Associated with Awareness and Utilization

The third objective looked at which socio-demographic factors were linked with awareness, coverage and utilization. In this study according to the result it was found that education was significantly linked with insurance coverage ($p = 0.045$) and age was significantly linked with utilization ($p = 0.040$). No significant link was found for gender, income, occupation or place of residence with any of the three outcomes although residence came close to significance for awareness ($p = 0.057$) with rural respondents showing slightly higher awareness than urban respondents.

The link between education and coverage matches a large body of earlier work showing that more educated people are generally better placed to enrol in insurance including studies by Singh et al. (14), Thakur (20) and Singh and Jain (27). What stands out here is that education was not linked with awareness itself but only with coverage. This suggests that in Delhi basic awareness about insurance has spread fairly evenly across people with different levels of schooling likely helped along by social media and word of mouth but actually enrolling in a scheme may still depend on the paperwork skills, money or job-related access that tends to come more easily to educated people. This divides the stage of knowing from the stage of doing which align up with the point which was made earlier by Edward et al. (22) that insurance literacy is about more than basic awareness.

The link between age and utilization with the 25 to 34 and 55-and-above age groups showing the highest use fits with literature on the higher healthcare needs of older adults (3,27,28). However, the decrease in utilization among the 35 to 44 years of age group who are possibly at a busy stage of their work and family life was not expected and is really worth exploring further by the future research.

Other important findings of this study is the absence of a significant gender gap which is really very different from several earlier Indian studies which were held. Witter et al. (23), Vijayasingham et al. (24) and Sundararajan et al. (25) reported that women generally face more problems in enrolling and using insurance frequently because of informal work or limited right to say in household decisions making. A possible reason for the difference seen here is that this sample was largely urban, educated and digitally active with women making up 62.6% of respondents. Gender-based gaps reported in earlier studies may show up more clearly among poorer, less educated or rural populations which were not strongly represented in this sample. In a similar way, the lack of a significant income effect goes against Tandon's idea of a missing middle (12) where middle-income groups often fall through the gaps of both government and private insurance. It is possible that the recent extension of PM-JAY to Delhi together with rising private insurance uptake is starting to narrow this gap although this would need to be confirmed with a more broadly representative sample in future work.

5.4 Barriers and Challenges in Accessing and Utilizing Health Insurance

The fourth objective was to study the barriers faced by the people. Among respondents who were not insured under any insurance the most common reasons for not enrolling were that they could not afford the premium (48.8%), they lacked trust in the insurance

system (42.8%) or found that the enrolment process was too complex (32.5%). These reasons closely match what Thakur (6) reported for non-enrolment in RSBY where cost, lack of confidence and social barriers stood out as the main reasons. Among insured respondents who had not used their benefits the biggest barriers were complicated claim and documentation procedures (60.9%), their preferred hospital not being empanelled (47.8%) and fear that a claim might be rejected (46.0%). This fits closely with what Joseph et al. (37) and Meghani et al. (38) found about gaps in hospital empanelment and the procedural friction that stops people from claiming benefits even after they have enrolled.

From the people who had successfully used their insurance at least once the complicated claim procedures remained the top barrier in utilizing (76.7%) which is followed by limited coverage of services (57.0%) and high out-of-pocket spending (47.3%). This shows that procedural and system-level problems do not disappear simply because a person has used a scheme once they appear to be a recurring part of how insurance works on the ground in Delhi much as earlier work on administrative and documentation burdens has described (9,26,37,38). The suggestions offered by respondents to fix these problems mainly better awareness campaigns (67.9%), faster claim settlement (59.2%) and lower premiums (51.6%) are in effect the same gaps that the literature has already pointed to for many years (6,9,19,40). The fact that people in Delhi are still raising these same issues today shows that they have not yet been fully resolved even with newer schemes such as PM-JAY now in place.

5.5 Overall Reflection

Taken together, the findings of this study confirm a pattern that keeps appearing in Indian health insurance research: awareness is usually higher than enrolment and enrolment is usually higher than actual utilization (1,6,10,29). What this study adds is a more recent picture from Delhi collected just after PM-JAY was finally implemented in the city in 2025 (3,8). Compared with the older Delhi-based estimates from Kusuma et al. (1) awareness and coverage levels found here look considerably better which is encouraging. But the same long-standing problems around claims, empanelled hospitals and out-of-pocket costs (32-38,42,43) are still very much present. This suggests that simply expanding or increasing the health insurance schemes is not enough on its own. Equal attention is needed on fixing the system-level barriers that stop people from turning their awareness and enrolment into real and usable financial protection at the time they fall sick.

CHAPTER 6: CONCLUSION

This study set out to assess how much the general adult population of Delhi knows about health insurance schemes and how much they actually use these schemes along with the

socio-demographic factors and barriers connected to these patterns. Based on responses from 605 adults a few clear conclusions can be drawn.

The people who took part in this study their awareness of the health insurance was higher which tells nine out of ten respondents heard about the health insurance and most of them knew at least one government or private scheme by their name. However, this awareness was found to be low when in depth analysis was done as the respondents could correctly name only about three out of six common schemes on average and a good amount of people didn't know about the enrolment steps, eligibility rules or the claim procedures. This points to a gap between general awareness and the deeper understanding that is needed to use insurance with confidence.

The level of utilization while better than what has been reported for some government schemes in other states still falls short of full coverage translating into actual use. Less than half of all respondents (42.6%) had ever used health insurance benefits and a large share of those who had not used their benefits reported a genuine healthcare need at the time. Out-of-pocket expenditure was still reported by one third of the insured respondents which shows that insurance coverage in Delhi much like other parts in India does not always mean full financial protection.

Education was found to be significantly linked with insurance coverage and age was significantly linked with utilization while gender, income, occupation and residence showed no statistically significant links with awareness, coverage or use in this sample. This is a useful finding because it suggests that at least among the type of population surveyed here the usual gender and income-based divides reported in other Indian studies may be narrowing although this needs further confirmation with a more broadly representative sample of Delhi's population including more daily wage earners, informal workers and less educated groups.

Affordability, lack of trust, complicated claim processes, limited empanelled hospitals and fear of claim rejection were the main barriers reported by respondents at different stages from enrolment through to actual use of benefits. These barriers were strikingly similar to those reported in studies conducted in other parts of India over the past several years suggesting that despite newer schemes and digital tools the basic system-level problems with health insurance in India have not changed much.

This study adds new and timely evidence on health insurance awareness and use in Delhi collected soon after PM-JAY was finally implemented in the city. It captures a moment when government insurance coverage in Delhi was just catching up with the rest of the country and provides a useful reference point for future comparisons. The study has some limitations which should be kept in mind. Because a convenience sampling method was used with most responses collected online and a smaller number by phone the sample is skewed towards educated, urban and digitally active residents and may under-represent daily wage workers, the very poor, the elderly without phone access and those less comfortable in Hindi or English. Being a cross-sectional study, it captures a single point in time and cannot establish cause-and-effect relationships only associations. All information was also self-reported which carries some risk of recall error or social

desirability bias especially around sensitive topics such as income and actual claim experiences.

On the basis of these findings and limitations a few directions for future work and practice can be suggested such that future studies should use a more representative or stratified sample with deliberate inclusion of informal workers, daily wage earners and less educated groups to give a fuller picture of awareness and utilization across all sections of Delhi's population. Repeated or long-term studies can be done which can track the same population before and after the rollout of PM-JAY which would help to measure its real impact more directly over time. Qualitative interviews can be done with non-utilizers and rejected claimants which could help explain in more depth why people who are insured still avoid making a claim. Future research can look and explore more closely at why certain groups such as the 35 to 44 age group in this study show a lower utilization after having healthcare needs. Continued focus should be done on simplifying claim procedures, increasing the number of empanelled hospitals and running targeted awareness campaigns for under-covered groups is recommended to improve real-world financial protection from health insurance in Delhi.

Overall, the findings of the study shows that while awareness of health insurance schemes in Delhi has clearly improved compared with earlier studies that were done showing that making awareness into smooth and dependable use of benefits remains the bigger challenge. Strengthening claim processes and hospital networks and continuing focused awareness work particularly among groups not well represented in this study would likely do more to improve real financial protection than further expansion of scheme enrolment alone.

APPENDIX

INSTRUMENTATION

Consent Form

Study Title: A Study to Assess the Awareness and Utilization of Health Insurance Schemes among the General Public in Delhi

Principal Investigator- Lakshit Tyagi

Institution- International Institute of Health Management Research (IIHMR), Delhi

Participant Information- You are being invited to participate in a research study conducted as part of an academic requirement. The objective of this study is to assess the awareness and utilization of various health insurance schemes among the general public in Delhi. Your participation in this study is entirely voluntary. You have the right to refuse to participate or to withdraw at any time before submitting your response, without any consequences. You may also choose not to answer any question that you are not comfortable with.

Procedure- If you agree to participate, you will be required to complete a structured questionnaire through an online platform (Google Form). The questionnaire will take approximately 5–7 minutes to complete.

Confidentiality- All information collected through this questionnaire will be kept strictly confidential and will be used solely for academic and research purposes. No personal identifying information will be collected or disclosed. The data will be presented only in aggregated form.

Risk and Benefits- There are no anticipated risks associated with participation in this study. Although there may be no direct benefit to you, your responses will contribute to a better understanding of health insurance awareness and utilization, which may help improve healthcare policies and services.

Consent Declaration- I have read and understood the information provided above. I voluntarily agree to participate in this study.

Consent for Participation

☐ Yes, I agree to participate

☐ No, I do not agree

TOOL FOR DATA COLLECTION

SECTION A — SOCIO-DEMOGRAPHIC PROFILE

Q1. What is your age group?

□ 18–24 years

□ 25–34 years

□ 35–44 years

□ 45–54 years

□ 55 years and above

Q2. What is your gender?

□ Male

□ Female

□ Prefer not to say

Q3. What is your highest educational qualification?

□ Primary education

□ Secondary education (10th pass)

□ Senior secondary (12th pass)

□ Graduate

□ Postgraduate

□ Professional degree (MBBS, LLB, CA, etc.)

□ Doctorate (PhD)

Q4. What is your current occupation?

□ Private sector employee

□ Government employee

□ Self-employed / Business

□ Student

□ Homemaker

□ Daily wage worker

□ Unemployed

□ Retired

Q5. What is your type of residence?

□ Urban Delhi

□ Rural Delhi

Q6. What is your monthly family income?

□ Less than ₹10,000

□ ₹10,001 – ₹25,000

□ ₹25,001 – ₹50,000

□ ₹50,001 – ₹1,00,000

□ More than ₹1,00,000

□ Prefer not to disclose

Q7. How many members are there in your family?

□ 1–3 members

□ 4–6 members

□ More than 6 members

Q8. Does any family member have a chronic illness (diabetes, heart disease, cancer, etc.)?

□ Yes

□ No

□ Not sure

SECTION B — AWARENESS OF HEALTH INSURANCE SCHEMES

Q9. Have you ever heard about health insurance schemes?

□ Yes

□ No (If No, skip to Section D)

Q10. Which of the following health insurance schemes are you aware of? (Select all that apply)

□ Ayushman Bharat – Pradhan Mantri Jan Arogya Yojana (PM-JAY)

□ Employee State Insurance Scheme (ESIS)

□ Central Government Health Scheme (CGHS)

□ Employer-provided / Group insurance

□ State Government health scheme

□ Private health insurance

□ None of the above

Q11. What is your main source of information about health insurance? (Select all that apply)

□ Social media / Internet

□ Friends or family

□ Insurance agent

□ Hospital / Doctor / Health worker

□ Television / Radio

□ Government campaigns

□ Newspaper / Magazine

□ Others

Q12. Which healthcare services do you believe are covered under health insurance? (Select all that apply)

□ Hospitalization expenses

□ Surgery expenses

□ Emergency care

□ Diagnostic tests

□ Medicines

□ Maternity services

□ Do not know

Q13. Do you know how to enroll in a health insurance scheme?

□ Yes

□ No

□ Not sure

Q14. Are you aware of the cashless treatment facility available under health insurance?

□ Yes

□ No

□ Not sure

Q15. Are you aware of the eligibility criteria for Ayushman Bharat – PM-JAY?

□ Yes

□ No

□ Not sure

Q16. Do you think health insurance helps reduce healthcare expenditure?

□ Yes

□ No

□ Not sure

Q17. How important do you consider health insurance to be?

□ Very important

□ Important

□ Neutral

□ Not very important

□ Not important at all

SECTION C — HEALTH INSURANCE COVERAGE & UTILIZATION

Q18. Are you currently covered under any health insurance scheme?

□ Yes

□ No (If No, skip to Section D)

Q19. What type of health insurance do you currently have? (Select all that apply)

□ Private health insurance (individually purchased)

□ Employer-provided / Group insurance

□ Government-sponsored scheme (PM-JAY, CGHS, ESIS, State scheme)

□ Other

Q20. Do you have a valid insurance card or policy document?

□ Yes

□ No

□ Not sure

Q21. Are you aware of the benefits and coverage limits of your insurance scheme?

□ Fully aware

□ Partially aware

□ Not aware

Q22. Have you ever utilized your health insurance benefits?

□ Yes (Continue to Q23)

□ No (Skip to Q28)

Q23. Which services have you utilized through your health insurance? (Select all that apply)

□ Hospital admission

□ Surgery

□ Diagnostic tests

□ Emergency treatment

□ Medicines

□ Outpatient consultation (OPD)

□ Maternity services

Q24. How many times have you used your health insurance in the last 12 months?

□ Never (enrolled but did not use in last 12 months)

□ 1 time

□ 2–3 times

□ More than 3 times

Q25. What type of claim process did you use?

□ Cashless treatment

□ Reimbursement process

□ Both

Q26. What was the outcome of your insurance claim?

□ Completely approved

□ Partially approved

□ Rejected

Q27. Did you face any delay or rejection during the claim process?

□ Yes

□ No

Q28. Despite having insurance, did you incur any out-of-pocket expenditure?

□ Yes

□ No

□ Not sure

□ Not applicable (did not utilize)

Q29. How satisfied are you with your overall insurance utilization experience?

□ Very satisfied

□ Satisfied

□ Neutral

□ Dissatisfied

□ Very dissatisfied

For respondents who answered No to Q22 (insured but never utilized):

Q30. Did you have a health need but chose not to make an insurance claim?

□ Yes

□ No

Q31. If yes, what were the reasons you did not claim despite having insurance? (Select all that apply)

□ Complex claim / documentation procedures

□ Preferred hospital was not empaneled

□ Fear that the claim would be rejected

□ Did not know how to initiate the claim process

□ Lack of guidance or support

□ Long waiting time at empaneled hospitals

□ Decided to pay out-of-pocket as it was faster and easier

□ Required employer / HR approval which was delayed

□ Amount was too small, not worth claiming

□ Other reason

SECTION D — BARRIERS

(For respondents not covered under any health insurance — Q18 = No)

Q32. Why are you not enrolled in any health insurance scheme? (Select all that apply)

□ Cannot afford the premium

□ Lack of trust in insurance systems

□ Complex enrollment procedures

□ Do not feel the need for insurance

□ Lack of awareness about available schemes

□ Lack of information on how to enroll

□ Do not have required eligibility documents

□ Other reasons

(For respondents who have utilized insurance — Q22 = Yes)

Q33. What difficulties did you face while utilizing your health insurance? (Select all that apply)

□ Complex claim procedures

□ Limited service coverage

□ High out-of-pocket expenditure despite insurance

□ Delay in claim settlement

□ Lack of guidance or support during the process

□ Difficulty in finding an empaneled hospital

□ Poor customer support

□ Documentation-related problems

□ No major difficulty faced

Q34. Do you think health insurance is necessary for every family?

□ Strongly agree

□ Agree

□ Neutral

□ Disagree

□ Strongly disagree

Q35. Would you recommend health insurance to others?

□ Yes

□ No

□ Maybe

Q36. What improvements would you suggest to make health insurance more accessible and useful? (Select all that apply)

□ Better awareness campaigns

□ Faster claim settlement

□ Lower premium costs

□ Simplified claim procedures

□ Better customer support

□ More empaneled hospitals

□ Increased service coverage (OPD, medicines, diagnostics)

□ Better digital support and information systems

□ Greater transparency in claim processes

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