

# Utilizing the KAP Model: Analysing Public Perception and Knowledge of Government Health Care Schemes

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**Abstract- Background and Objectives:** The government healthcare scheme survey aims to assess the effectiveness and satisfaction levels among beneficiaries of the program. The government launched this initiative with the goal of providing the general population with accessible and fairly priced healthcare services. The goals of the survey are to assess satisfaction levels, pinpoint areas that need work, comprehend difficulties, and obtain input. **Methodology:** The target population encompassed individuals of all age groups. Utilizing Google Forms as the primary data collection tool. To enhance participation and awareness, pamphlets were distributed throughout the region. The collected data was analysed using Power BI. **Result:** The age categories that appear to have the most replies are 18–24 and 45–54, suggesting that individuals in these ranges are more likely to receive advice on health programs from medical staff. People who have insured themselves with health insurance coverage tend to agree more with the idea of paying higher taxes or contributing more for the improvement and sustainability of health care schemes. People with Bachelor's degree suggests more social media promotion, while people with less education prefer simple application procedures. People in rural areas might focus more on posters and flyers, while those in urban areas might suggest better communication channels to spread awareness regarding health care schemes.

## INTRODUCTION

The pursuit of comprehensive health insurance has achieved uneven progress. Just 25% of people in 56 nations with middle and low incomes which do not qualify as older adults (16–59 years old) have health insurance.<sup>2</sup> Individuals with reduced insurance coverage tend to be older, female, live in rural areas, work informally, be poorer, and have less education.<sup>2-4</sup> Impoverished households have been covered by non-contributory public health insurance (NPHI), which is financed by general government funds, to varying degrees of efficiency.<sup>4-10</sup> The Ayushman Bharat-Pradhan Mantri Jan Arogya Yojana (PM-JAY) in

India is the most grandiose example; it aims to surpass all previous NPHI programs worldwide. The publicly financed Rashtriya Swasthya Bima Yojana (RSBY) initiative in India had solely patchy success reaching the impoverished prior to PM-JAY.<sup>11-14</sup> Better job status, income, and educational level were all associated with better health insurance.<sup>11, 12, 14</sup> Coverage differed significantly between communities and states.<sup>15</sup> To assist those in India who are struggling with medical conditions and other connected challenges, the Indian government has introduced numerous health insurance programmes. The rising cost of medical products has led to an increase in the cost of health insurance these days. With the help of these health schemes, everyone, particularly the underprivileged and struggling, may afford high-quality treatment. These programs provide support to all Indian citizens, regardless of their gender or caste. People can seek assistance in receiving free medical treatment through a variety of health plans. Government healthcare schemes vary from country to country, but they typically aim to provide affordable and accessible healthcare services to the general population. Here's are some government schemes in India

1. Ayushman Bharat - Pradhan Mantri Jan Arogya Yojana (PM-JAY)
2. Rashtriya Swasthya Bima Yojana (RSBY)
3. National Health Mission (NHM)
4. Pradhan Mantri Surakshit Matritva Abhiyan (PMSMA)
5. Janani Suraksha Yojana (JSY)
6. National Rural Health Mission (NRHM)
7. Senior Citizens Health Insurance Scheme (SCHIS)
8. Mahatma Jyotirao Phule Jan Arogya Yojana (MJPJAY)
9. Rajiv Gandhi Jeevandayi Arogya Yojana (RGJAY)
10. Janani Shishu Suraksha Karyakram (JSSK)
11. Pradhan Mantri Bhartiya Janaushadhi Pariyojana (PMBJP)

## OBJECTIVES

Financial security for those in urgent need of medical attention is the primary goal of government health programs. For those with shaky finances, high medical expenses have made life very difficult. Programs for government health insurance are health insurance policies whereby the government offers financial aid to those who are less fortunate. Numerous government-sponsored health insurance programs are available to Indian citizens. These programs cover hospital expenses, cashless medical services, and benefits for accidents. All citizens who qualify for the program can enroll in government health insurance plans. The national health schemes are open to all citizens of India.

## STATISTICS

### HEALTH INSURANCE COVERAGE

In 2021, 514 million individuals in India were enrolled in health insurance programs; this represents only 37% of the nation's population. Approximately 400 million people in India lack access to health insurance. It is estimated that about 70% of people have either voluntary private health insurance or governmental health insurance. The remaining thirty percent of people, or more than 40 crore, do not have health insurance.

### HEALTH INSURANCE PREMIUM

In 2021, the Indian health insurance market's gross written premium was estimated to be worth more than INR 637 billion. In India, insurance premiums paid by private and public sector health insurers totalled approximately INR 159 billion and INR 272 billion, respectively, while individual health insurers reported receiving approximately INR 151 billion in premiums. In terms of percentage of health-care premiums in India, Maharashtra state led the pack in 2021. More than INR 183 billion, or 32% of health insurance premiums, were paid by the state in the southwest.

## METHODOLOGY

The survey on government health care schemes was meticulously conducted online utilizing the Google Forms platform, chosen for its user-friendly interface and broad accessibility. The geographical focus was Western India, with a primary emphasis on Maharashtra, acknowledging the region's significant

population and relevance to the topic. The survey was conducted over a two-month period, spanning from January 5th to March 5th, 2024. To reach a broad and diverse audience, the survey link was shared through various online channels, including emails, direct message and direct communication. Privacy was upheld in response collection. Combining open-ended, multiple-choice, and rating scale questions made it easier to gather quantitative data and qualitative insights. Power BI conducted post-survey data analysis using statistical approaches to extract significant insights and find relationships in the dataset.

## INCLUSION CRITERIA

The survey's inclusion criteria encompass individuals of all age groups, encompassing both males and females, and representing diverse economic classes.

## DATA COLLECTION

The final assessment had 1000 responses from participants overall. A survey form includes the demographic information such as name, email, phone number, gender, age, annual family income, education level, occupation, health insurance coverage, and urbanization level. The survey aims to measure public perception, participation and utilization in government healthcare schemes through a series of questions designed to capture individual's familiarity with such schemes, their participation history, and reasons behind their decisions. In addition to rating the standard and accessibility of the healthcare services offered under these schemes, participants are asked to list any difficulties they might have encountered. Ultimately, the survey seeks to gain a comprehensive understanding of how effectively government healthcare schemes are meeting the healthcare needs of the population and to identify areas for enhancement.

## DISCUSSION

Our survey also reveals that how many people are utilising the government healthcare scheme mainly from Western India. Comparable survey findings were found in terms of demographics and questions. The distribution of age among the population demonstrate that the group 18-24 mostly involve in our study followed by 45-54 age group and then 25-34 the group. Mostly 40.9% population are uninsured people willing

to pay higher taxes or contribute more for the improvement and sustainability of the health-care system. So Ayushman Bharat - Pradhan Mantri Jan Arogya Yojana (PM-JAY) are mostly utilised by the general population.

SPSS version 26 was the statistical tool used for data entry and analysis. The results of this study were calculated using descriptive analysis, and two categories, such as the predisposing factor, were compared using chi square. P-value was used to define the statistical significance. Power BI, Excel and Minitab were also used.

STATISTICAL ANALYSIS

1<sup>st</sup> Interpretation and Analysis

What improvements or changes would you suggest to enhance the effectiveness of government health initiatives?	Improved communication channels			Increased awareness campaigns			Posters/Flyers			Promotion through social media			Simplified application procedures		
	Rural	Suburban	Urban	Rural	Suburban	Urban	Rural	Suburban	Urban	Rural	Suburban	Urban	Rural	Suburban	Urban
Education level	Urbanization level														
Some college or vocational training	1	5	7	2	4	10	3	30	12	3	16	5	3	21	4
Postgraduate degree	0	1	1	1	2	5	13	4	8	34	2	5	7	5	9
Less than high school	17	0	2	4	1	3	22	6	2	13	4	4	12	4	4
High school graduate	3	1	16	3	3	7	37	12	28	14	10	13	33	8	21
Bachelor's degree	7	35	14	8	23	53	13	47	53	8	47	51	9	41	16

Table 1.1 A comparative table of 3 distinct parameters: a) what improvements or changes would you suggest to enhance the effectiveness of government health initiatives? b) Educational Level c) Urbanization Level.

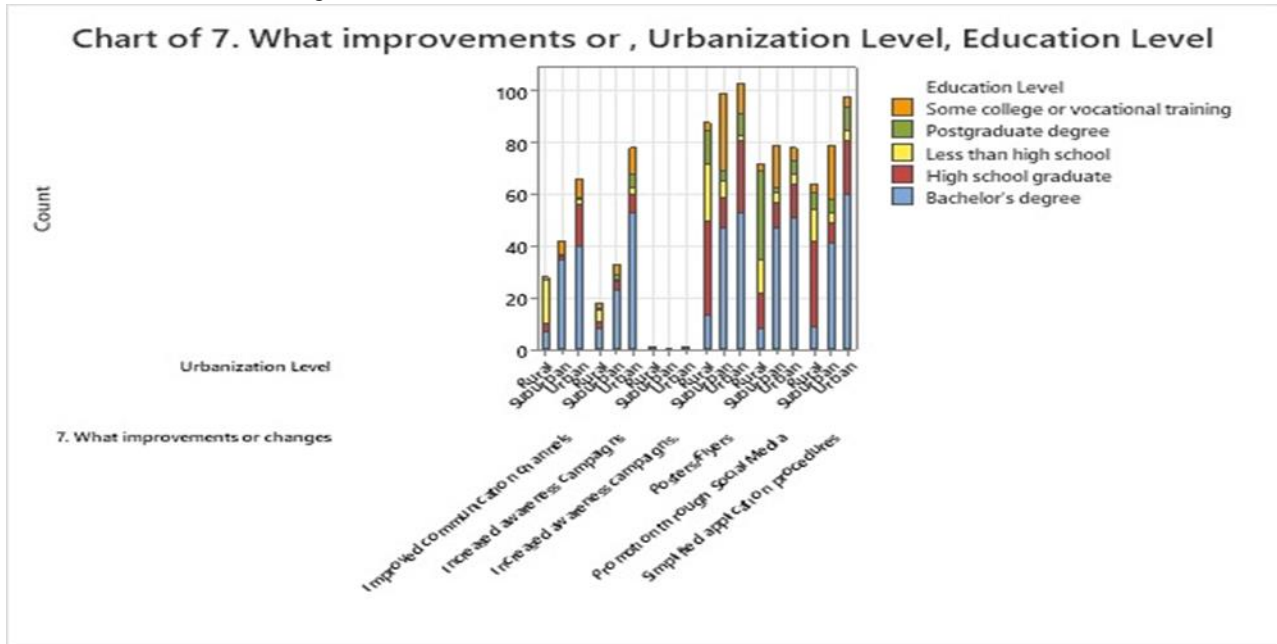


Fig 1.1 A comparative chart of 3 distinct parameters: a) what improvements or changes would you suggest to enhance the effectiveness of government health initiatives? b) Education Level c) Urbanization Level.

People with different education levels have different suggestions. For example, those with a bachelor's degree might suggest more social media promotion, while those with less education might prefer simpler application procedures. People in urban, suburban, and

rural areas also have different ideas. For instance, those in rural areas might focus more on posters and flyers, while those in urban areas might suggest better communication channels. By looking at the graph, we can see which ideas are popular among different

groups. This helps policymakers know where to focus their efforts to improve government health programs

effectively. Chi-square value: 2317.358751566829, P-value: 0.0

2<sup>nd</sup> Interpretation and Analysis

Did any time the doctors or any medical staff from the hospital recommended you regarding any of the health schemes?	NO			YES		
	Health Insurance Coverage					
Age	Insured	Prefer not to say	Uninsured	Insured	Prefer not to say	Uninsured
Under 18	1	4	3	2	3	0
18 – 24	104	89	89	54	33	101
25 – 34	16	63	22	24	2	10
35 – 44	19	3	70	23	2	16
45 – 54	20	2	30	72	5	19
55 – 64	8	1	24	3	1	27
65 or older	50	0	2	1	2	7

Table 1.2 a comparative table of 3 distinct parameters: a) did any time the doctors or any medical staff from the hospital recommended you regarding any of the health schemes? b) Age c) Health Insurance Coverage.

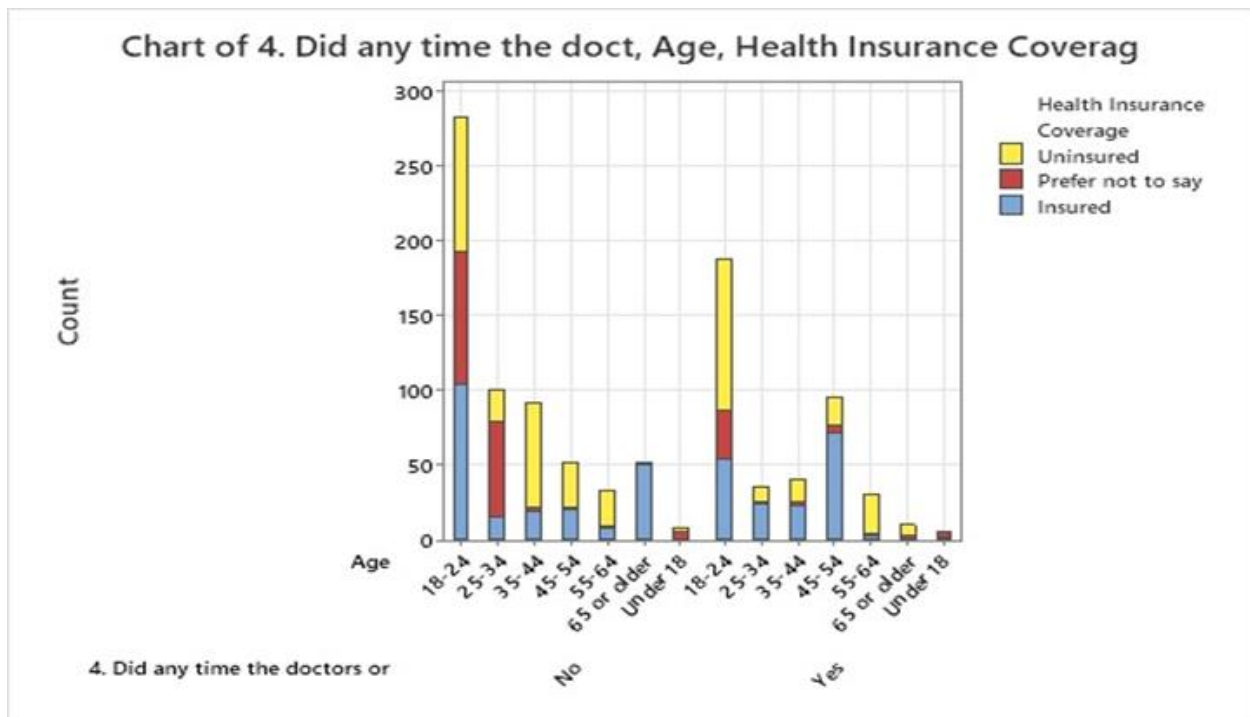


Fig 1.2 a comparative chart of 3 distinct parameters: a) did any time the doctors or any medical staff from the hospital recommended you regarding any of the health schemes? b) Age c) Health Insurance Coverage.

The most replies appear to be from the 18–24 and 45–54 age categories, suggesting that individuals in these ranges are more likely to receive advice regarding health programs from medical experts. There's a noticeable decrease in responses among older age groups (55-64 and 65+), suggesting that recommendations might be less common in these age brackets. The graph provides a comprehensive

comparison of recommendations received across different age groups and health care coverage statuses. It allows us to see how these factors influence the likelihood of receiving recommendations from medical staff regarding health schemes. Chi-square value: 429.282006709104, P-value: 1.6766194380963957e-74

3rd Interpretation and Analysis

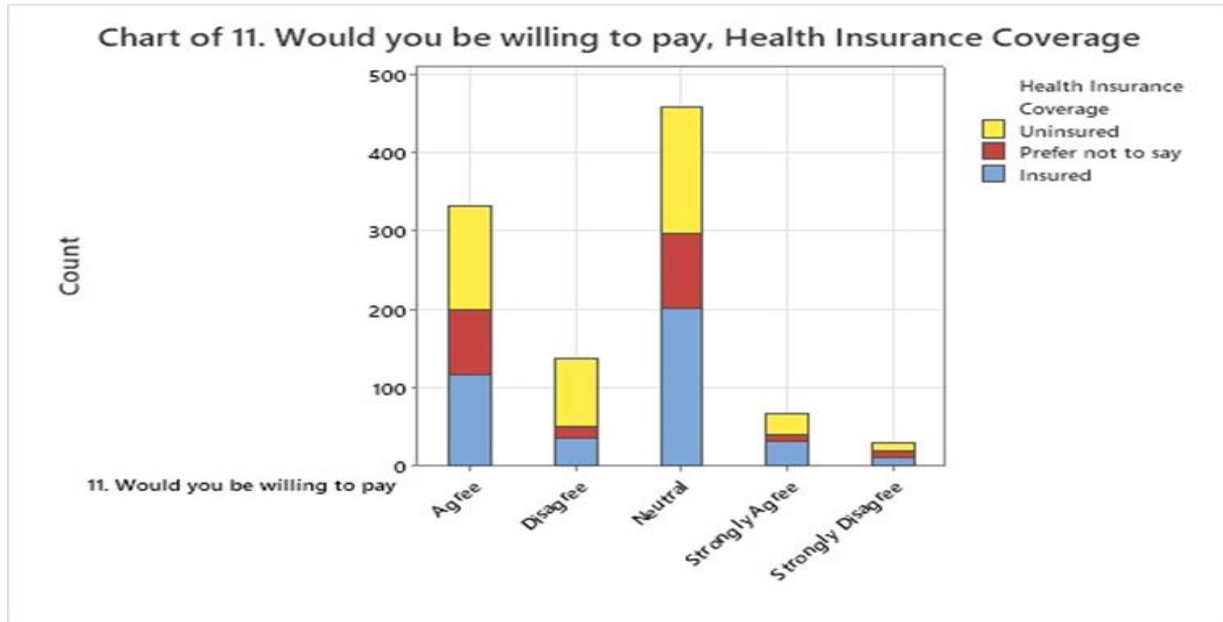


Fig 1.3 A comparative chart of 2 distinct parameters: a) would you be willing to pay higher taxes or contribute more for the improvement and sustainability of health care schemes? b) Health Insurance Coverage.

Would you be willing to pay higher taxes or contribute more for the improvement and sustainability of health care schemes?	Agree	Disagree	Neutral	Strongly agree	Strongly disagree
Health Insurance Coverage					
Uninsured	132	86	163	28	11
Prefer not to say	84	14	95	8	9
Insured	116	37	201	32	11

Table 1.3 A comparative table of 2 distinct parameters: a) would you be willing to pay higher taxes or contribute more for the improvement and sustainability of health care schemes? b) Health Insurance Coverage.

People who are insured tend to agree more with the idea of paying higher taxes or contributing more for the improvement and sustainability of health care schemes compared to those who are uninsured or prefer not to disclose their health care coverage status. The number of people who disagree with the idea is higher among the uninsured and those who prefer not to disclose their health care. There is a higher number of neutral responses among the insured group compared to the uninsured and prefer not to say groups. The differences between the groups are less pronounced for these extreme agreement levels, but generally, insured individuals show slightly higher agreement levels compared to uninsured and prefer not to say groups. Chi-square value: 34.64183360615533, P-value: 2.0500311683019073e-0

LIMITATIONS

Challenges in Participant Recruitment: Reaching and convincing individuals to participate in the survey posed a significance challenge. The process of recruitment was hindered by factors such as reluctance among participants and difficulty in accessing certain demographic groups. Consequently, there may be a bias in the sample towards individuals who were more willing or accessible to participate, potentially affecting the representativeness of the findings. Under representation of Specific Demographic Groups: The survey, administered via Google Forms, encountered difficulties in reaching older adults, particularly those aged 40 and above, and women who primarily engage in household activities and may not have access to smartphones or internet connectivity. As a result, the

data obtained from these demographic groups may be limited, leading to gaps in understanding the perspectives and behaviours of these populations. Complexity of Data Analysis: The wide geographical coverage of the survey, encompassing diverse populations working in various sectors and spanning different age groups, posed challenges in data analysis. The heterogeneity of the sample introduces complexities in interpreting the results, as trends and patterns may vary significantly across different regions, professions, and age cohorts. Analysing such diverse datasets requires careful consideration and may necessitate more sophisticated analytical techniques to derive meaningful insights.

### CONCLUSION

In conclusion, the social demographic profile, personal social history, and pattern of government plan use in western India are clarified by this prospective observational study. The study reveals that responses from general population are mostly from the age group 18-24. There are difference in the number of responses based on healthcare coverage status with insured individuals generally receiving more recommendations compared to uninsured individuals or those who prefer not to disclose their status. People who are insured tense to agree more with an idea of paying higher taxes or contributing more for the improvement and sustainability of healthcare scheme compared to those who are uninsured or prefer not to disclose their health coverage status.

### STATEMENT OF ETHICS

**Voluntary Participation:** Participants were not coerced into taking the survey. Before participating, people were asked to confirm that they understood the survey's objective and the ramifications of doing so. **Confidentiality:** Personal information collected was kept confidential. Data was anonymized and aggregated to protect participants' privacy. **Conclusion:** This study prioritized ethical principles, ensuring voluntary participation and confidentiality. By upholding these standards, the research maintains integrity and respects participants' rights.

### SUMMARY

The study include 1027 responses with 44.9% male and 51.1% female. Most of the population is from the

Urban (41.3%) followed by Suburban (32.2%) and Rural Localities (26.4%). Majority of population taking benefits of government healthcare schemes are of the age group 18-24 years uninsured by any health insurance coverage.

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