

A STUDY ON ASSESSMENT OF UTILIZATION OF PM-JAY (AYUSHMAN BHARAT) HEALTH SCHEME IN SURAT.

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ABSTRACT

The Pradhan Mantri Jan Arogya Yojana (PM-JAY), one of the biggest publicly financed health insurance programs, was introduced as part of the Ayushman Bharat effort with the goal of giving India's economically disadvantaged communities financial security and universal health care. Eligible families can receive secondary and tertiary healthcare services through the program without using cash or paper. The current study looks into PM-JAY awareness, usage, and satisfaction in Gujarat's Surat district. 218 people chosen from both urban and rural locations provided primary data for the study. A cross-sectional study design that was both descriptive and analytical was used. Chi-square tests and descriptive statistics were employed to analyze the data. According to the results, 39.4% of respondents knew everything there was to know about PM-JAY, 46.8% knew something about it, and 13.8% didn't know anything at all. Monthly family income and PM-JAY service use were substantially correlated ($\chi^2 = 67.702$, $df = 6$, $p = 0.000$). Higher utilization was observed by lower-income households, especially those making between ₹10,001 and ₹20,000 per month. Just 27% of respondents said they were satisfied with the financial protection advantages, while 71.6 percent said they were not. According to the study, the main obstacles are service delivery problems, indirect expenses, and administrative hurdles.. Overall, the study concludes that improved awareness campaigns and strengthened operational mechanisms are essential for effective and equitable utilization of PM-JAY in Surat district.

KEYWORDS:

Public health policy, Surat district, PM-JAY, Ayushman Bharat, health insurance, awareness, utilization, and universal health coverage

INTRODUCTION:

A key factor in human development and a crucial predictor of socioeconomic advancement is healthcare. Due to high out-of-pocket healthcare costs, a sizeable section of the Indian population experiences financial difficulties, which frequently leads to catastrophic health spending and pushes households into poverty. The Pradhan Mantri Jan Arogya Yojana (PM-JAY) is the primary health insurance component of the Ayushman Bharat program, introduced by the Indian government in 2018 to address these issues and advance the objective of Universal Health Coverage (UHC).

Through PM-JAY, over 10 crore impoverished and vulnerable families will have access to health insurance coverage of up to ₹5 lakh per family annually for secondary and tertiary care hospitalization. By strategically acquiring healthcare services from both public and private hospitals, the program aims to enhance the public health system and provide access to high-quality healthcare services without cost constraints.

The public health insurance program's efficacy, however, is contingent upon beneficiaries' awareness, enrollment, and actual use of services in addition to policy design and funding distribution. Inadequate knowledge, complicated administrative procedures, low hospital involvement, and sociocultural elements frequently hinder the best possible use of healthcare

programs. In this situation, examining PM-JAY's awareness and usage trends is essential to measuring its effectiveness and locating implementation gaps.

The socioeconomic environment of Surat, one of Gujarat's main urban and industrial districts, is distinct due to its mix of rural, peri-urban, and urban residents, including migrant workers and economically disadvantaged areas. Examining PM-JAY awareness and use in Surat offers important insights into how the program operates at the district level and supports evidence-based policy suggestions for improving the systems that distribute health insurance.

HISTORICAL PERSPECTIVE OF PUBLIC HEALTH INSURANCE AND PM-JAY IN INDIA:

India's long-standing attempts to increase healthcare access and financial security for disadvantaged groups are reflected in the development of public health insurance in that nation. India's healthcare system was mostly dependent on publicly funded medical institutions with little insurance coverage in the early years following independence. Beginning with the establishment of social health insurance programs like the Employees' State Insurance Scheme (ESIS) in 1948 and the Central Government Health Scheme (CGHS) in 1954, formal sector workers began to receive structured health insurance.

The healthcare requirements of the underprivileged and workers in the unorganized sector were then addressed by the introduction of a number of state-level and customized health insurance programs. The Rashtriya Swasthya Bima Yojana (RSBY), which was introduced in 2008 and offered basic hospitalization coverage to families below the poverty line, was noteworthy. Other state-specific programs were Vajpayee Arogya Shree in Karnataka and Arogya Sri in Andhra Pradesh.

The Government of India built on these experiences when it launched the Ayushman Bharat program in September 2018 as a comprehensive initiative to strengthen primary healthcare through Health and Wellness Centers and to provide financial protection through PM-JAY. PM-JAY replaced RSBY and expanded coverage by removing family size restrictions, increasing the insurance amount, and adopting a nationwide portability feature.

PM-JAY is implemented using a hybrid model that combines insurance and trust types. It uses digital platforms to process claims, identify beneficiaries, and empanel hospitals. The program has hit important benchmarks in terms of hospital admissions and beneficiary enrollment since its launch. A vital context for examining PM-JAY's awareness and usage trends in certain areas, like the Surat district, is knowledge of the institutional framework and the historical evolution of health insurance programs.

REVIEW OF LITERATURE:

1. Shraddha K., Deepshika R., Rakesh M., and Shwetha Shree M. (2025) conducted a community-based cross-sectional study in Mysuru district to examine awareness, utilization, and perception of Ayushman Bharat–PMJAY. The study revealed poor awareness and low utilization of the scheme despite wide eligibility. Socio-economic factors, particularly household income, significantly influenced awareness levels. The authors identified a clear gap between scheme availability and actual use, highlighting the need for stronger community awareness programs.

2. Dixit, Chauhan, and Juneja (2025) carried out a comparative study in Gautam Buddha Nagar district to assess rural–urban differences in PMJAY awareness and utilization. The findings showed higher awareness and utilization in rural areas compared to urban areas, mainly due to the active role of ASHA workers and Arogya Mitras. Urban beneficiaries lacked proper

guidance and relied mostly on hospitals for information. The study emphasized the need for targeted information and education campaigns in urban regions.

3. Chaudhary et al. (2024) examined enrollment, utilization, and financial impact of PMJAY among the rural population of Ayodhya. Although a considerable number of households possessed the Golden Card, actual utilization remained limited. The scheme was mainly used for surgical treatments, with a preference for private hospitals. Exclusion of OPD services and administrative issues were identified as major barriers. The study recommended expanding coverage and improving operational efficiency.

4. Dinesh Kumar P. and Chandrasekaran R. (2023) studied beneficiary awareness and satisfaction towards PMJAY in Coimbatore city. The results indicated that age, occupation, and number of earning members significantly influenced awareness levels. Advertisements and private hospitals were the main sources of information for beneficiaries. Indirect costs related to hospitalization reduced satisfaction levels. The study highlighted the need for improved urban outreach and beneficiary support systems.

5. Lavanya Nandan, Prachi Sahni, and Ann Gladis Sunny (2021) evaluated the effectiveness of folk media in improving knowledge and perception of PMJAY in Uttar Pradesh. The study found a significant improvement in awareness and perception after the folk media intervention. However, increased knowledge did not strongly translate into a positive attitude or utilization. The short follow-up period limited long-term assessment. The study concluded that culturally appropriate communication methods are effective for awareness generation.

OBJECTIVE OF THE STUDY:

- 1: To study the socio-demographic profile of the respondents of the Surat urban and rural areas.
- 2: To assess level of education with the level of awareness about PM-JAY among respondents of the Surat area.
- 3: To analyze the utilization of PM-JAY services across the family income level of the respondents.
- 4: To study the satisfaction level of beneficiaries with PM-JAY services

RESEARCH METHODOLOGY:

The study follows a descriptive and analytical cross-sectional research design based on primary data collected from 218 respondents in selected urban and rural areas of Surat using the convenience sampling method. Data were collected through a structured questionnaire and analyzed using descriptive statistics and the Chi-square test.

VARIABLES OF THE STUDY

The study uses a convenience sample of 218 respondents. Gender, age, educational qualification, monthly family income, and awareness level of PM-JAY are the independent variables, while utilization of PM-JAY services and overall satisfaction with PM-JAY services are the dependent variables.

RESEARCH HYPOTHESES:

The study is based on the following research hypotheses formulated to examine the relationships among the selected variables.

- 1.H01: There is no significant difference between the level of educational qualification and the level of awareness about PM-JAY benefits among respondents in the Surat area.

2.H02: There is no statistically significant association between monthly family income and utilization of PM-JAY services for treatment among respondents in the Surat area.

SIGNIFICANCE OF THE STUDY:

1. The study provides district-level empirical evidence on PM-JAY awareness and utilization.
2. It helps policymakers understand income-based disparities in healthcare utilization.
3. The findings support the need for targeted awareness interventions in urban and semi-urban areas.
4. The research contributes to existing literature on public health insurance schemes in India.
5. It offers actionable insights for improving beneficiary satisfaction and scheme implementation.

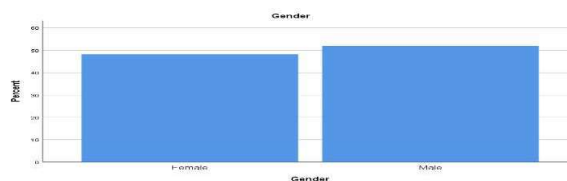
DATA ANALYSIS AND INTERPRETATION:

Objective 1: To study the socio-demographic profile of the respondents of the Surat area.

This objective covers the social demographic profile, gender, age, educational qualification, and monthly family income of the respondents in Surat urban and rural areas.

Table 1: Gender-wise Distribution of Respondents

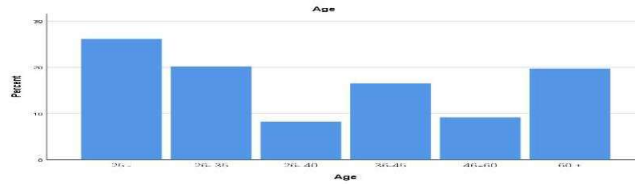
		Gender		
		Frequency	Percent	Valid Percent
Valid	Female	105	48.2	48.2
	Male	113	51.8	51.8
	Total	218	100.0	100.0



The sample consists of a fairly balanced representation of male (51.8%) and female (48.2%) respondents, indicating gender inclusiveness in the study.

Table 2: Age-wise Distribution of Respondents

		Age		
		Frequency	Percent	Valid Percent
Valid	Below 25	57	26.1	26.1
	26- 35	44	20.2	20.2
	26- 40	18	8.3	8.3
	36-45	36	16.5	16.5
	46-60	20	9.2	9.2
	60 +	43	19.7	19.7
	Total	218	100.0	100.0



A majority of respondents belong to the economically active age group (25–45 years), which is significant as healthcare utilization decisions are often influenced by working-age household members.

Table 3: Educational Qualification of Respondents

Educational Qualification				
		Frequency	Percent	Valid Percent
Valid	Doctor	1	.5	.5
	Graduate & above	121	55.5	55.5
	Higher Secondary	60	27.5	27.5
	Ph D	1	.5	.5
	Primary	21	10.1	10.1
	Secondary	7	3.2	3.2
	Total	218	100.0	100.0

More than half of the respondents are graduates or above, indicating a relatively educated sample, which positively influences awareness and understanding of government health schemes

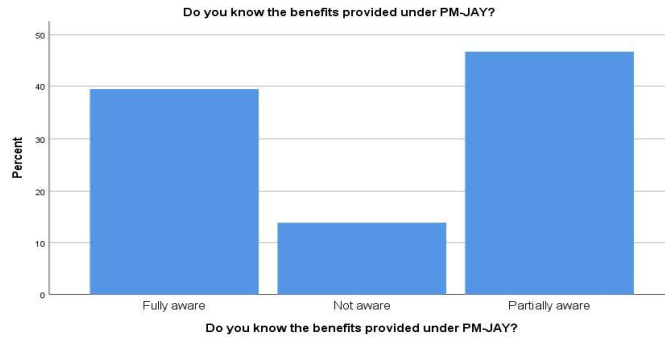
Table 4: Monthly Family Income Distribution

Monthly Family Income				
		Frequency	Percent	Valid Percent
Valid	10,000-	13	6.0	6.0
	10,001– 20,000	89	40.8	40.8
	20,001– 30,000	36	16.5	16.5
	30,000+	80	36.7	36.7
	Total	218	100.0	100.0

The majority of respondents belong to lower-middle-income households, which aligns with the target beneficiary group of PM-JAY

Table 5: Awareness about PM-JAY Benefits

Do you know the benefits provided under PM-JAY?				
		Frequency	Percent	Valid Percent
Valid	Fully aware	86	39.4	39.4
	Not aware	30	13.8	13.8
	Partially aware	102	46.8	46.8
	Total	218	100.0	100.0



While a large proportion of respondents are at least partially aware of PM-JAY, complete awareness remains limited, indicating gaps in information dissemination.

Objective 2: To assess level of education with the level of awareness about PM-JAY among respondents of the Surat area.

This objective relates to mainly three awareness categories: fully aware, partially aware, and not aware about of the PM-JAY schema at Surat. To justify objective 2, following hypothesis framed for assessment.

Null Hypothesis (H₀₁)

There is **no significant difference** in the level of education with the awareness about PM-JAY benefits among the respondents of the Surat area

Table 6: Case processing summary

Case Processing Summary						
	Cases					
	Valid		Missing		Total	
	N	Percent	N	Percent	N	Percent
Educational Qualification * Have you heard about PM-JAY (Ayushman Bharat Yojana)?	218	100.0%	0	0.0%	218	100.0%

Case Processing Summary

The case processing summary indicates that all 218 respondents (100%) were included as valid cases in the analysis, with no missing data (0.0%). Thus, the total number of cases analyzed for the relationship between educational qualification and awareness of PM-JAY (Ayushman Bharat Yojana) was 218 (100%).

Educational Qualification *						
Have you heard about PM-JAY (Ayushman Bharat Yojana)?						
Crosstabulation						
			Have you heard about PM-JAY (Ayushman Bharat Yojana)?		Total	
			No	Yes		
Educational Qualification	CPSC	Count	0	1	1	
		Expected Count	.1	.9	1.0	
	Diploma	Count	0	1	1	
		Expected Count	.1	.9	1.0	
	Doctor	Count	0	1	1	
		Expected Count	.1	.9	1.0	
	Graduate & above	Count	16	105	121	
		Expected Count	11.7	109.3	121.0	
	Higher Secondary	Count	5	55	60	
		Expected Count	5.8	54.2	60.0	
	Ph.D.	Count	0	5	5	
		Expected Count	.5	4.5	5.0	
	Primary	Count	0	22	22	
		Expected Count	2.1	19.9	22.0	
	Secondary	Count	0	7	7	
		Expected Count	.7	6.3	7.0	
	Total		Count	21	197	218
			Expected Count	21.0	197.0	218.0

Interpretation:

Out of 218 respondents, 197 (90.4%) have heard about PM-JAY (Ayushman Bharat Yojana), while 21 (9.6%) have not. Awareness is highest among respondents with Graduate & above education (105 out of 121), followed by Higher Secondary (55 out of 60) and Primary education (22 out of 22). This indicates that awareness of PM-JAY increases with educational qualification.

Chi-Square Tests			
	Value	Df	Asymptotic Significance (2-sided)
Pearson Chi-Square	5.852 ^a	7	.557
Likelihood Ratio	9.241	7	.236
N of Valid Cases	218		

a. 10 cells (62.5%) have expected count less than 5. The minimum expected count is .10.

Based on the results, 197 out of 218 respondents (90.4%) reported being aware of PM-JAY, while 21 respondents (9.6%) were not aware. Since the Chi-square test is not significant ($\chi^2 = 5.852$, $p = 0.557$), educational qualification does not significantly predict awareness of PM-JAY.

Objective 3: To analyze the utilization of PM-JAY services across the family income level of the respondents.

Objective 3 is examined using family income and utilization of the PM-JAY schema by cross-tabulation using Chi-square analysis. The following hypothesis tests the association between family monthly income and PM-JAY utilization.

Null Hypothesis (H₀₂)

There is **no statistically significant association** between monthly family income and utilization of PM-JAY services for treatment.

Table 7: Case Processing Summary

Case Processing Summary						
	Cases					
	Valid		Missing		Total	
	N	Percent	N	Percent	N	Percent
Monthly Family Income * Have you ever used PM-JAY services for treatment?	218	100.0%	0	0.0%	218	100.0%

Since no cases were excluded, the statistical results obtained from the cross-tabulation and Chi-square analysis can be considered robust and dependable, strengthening the validity of the study findings.

Table 8: Monthly Family Income Crosstabulation

**Monthly Family Income * Have you ever used PM-JAY services for treatment?
Crosstabulation**

			Have you ever used PM-JAY services for treatment?			Total
			No	Yes		
Monthly Family Income	30,000+	Count	52	22	6	80
		Expected Count	35.2	22.0	22.8	80.0
	10,001–20,000	Count	19	19	51	89
		Expected Count	39.2	24.5	25.3	89.0
	20,001–30,000	Count	20	13	3	36
		Expected Count	15.9	9.9	10.2	36.0
	10,000-	Count	5	6	2	13
		Expected Count	5.7	3.6	3.7	13.0
Total		Count	96	60	62	218
		Expected Count	96.0	60.0	62.0	218.0

The observed utilization pattern predicts that economic vulnerability strongly influences reliance on PM-JAY services. As income increases, dependence on PM-JAY decreases, indicating that the scheme is effectively targeted towards economically weaker sections. Among 218 respondents, only 62 reported using PM-JAY services, while the majority reported non-utilization. In the lower income group, 5 respondents reported non-use against an expected count of 5.7, and only 2 reported utilizations compared to an expected count of 3.7. This numerical gap indicates that, despite eligibility, income level alone does not significantly predict PM-JAY utilization.

Table 9: Chi-Square Analysis

Chi-Square Tests			
	Value	df	Asymptotic Significance (2-sided)
Pearson Chi-Square	67.702 ^a	6	.000
Likelihood Ratio	70.133	6	.000
N of Valid Cases	218		

a. 2 cells (16.7%) have expected count less than 5. The minimum expected count is 3.58.

Interpretation:

The Chi-Square analysis reveals a statistically significant association between income level and utilization of PM-JAY services. The Pearson Chi-Square value of 67.702 with 6 degrees of freedom and a p-value < 0.001 indicates that the null hypothesis of no association is rejected at the 5% level of significance. This result suggests that utilization of PM-JAY services varies significantly across different income groups. Hence, income plays an important role in determining the extent to which beneficiaries utilize PM-JAY health services. Although 16.7% of the cells have expected counts less than 5, the minimum expected count being 3.58, the overall Chi-Square result remains valid due to the large sample size (N = 218).

Since the p-value is less than 0.05, there is a statistically significant association between monthly family income and utilization of PM-JAY services.

Lower-income households (₹10,001–20,000) show significantly higher utilization of PM-JAY services, confirming that the scheme is effectively reaching its intended economic target group. 2 cells (16.7%) have expected count less than 5. The minimum expected count is 3.5

Symmetric Measures	
	Value
N of Valid Cases	218

The symmetric association suggests that monthly family income is a strong predictor of PM-JAY utilization behavior. Lower-income groups are significantly more likely to utilize PM-JAY services compared to higher-income groups. Correlation statistics are available for numeric data only

CONCLUSION:

The present study, based on primary data collected from 218 respondents in Surat district, concludes that the awareness and utilization of the Pradhan Mantri Jan Arogya Yojana (PM-JAY) are moderate socio-economic groups. While 39.4 percent of respondents were fully aware of the scheme and 46.8 percent were partially aware, a notable 13.8 percent remained unaware, indicating gaps in information dissemination. Utilization of PM-JAY services was found to be significantly influenced by monthly family income, as confirmed by the Chi-square test ($\chi^2 = 67.702$, def. = 6, p = 0.000). Lower-income households, particularly those earning

between ₹10,001 and ₹20,000 per month, showed the highest utilization of PM-JAY benefits, whereas utilization declined among higher-income groups. Despite the scheme's role in providing financial protection, beneficiary satisfaction was relatively low, with only 27 percent reporting satisfaction and 71.6 percent expressing dissatisfaction, pointing towards administrative challenges, indirect costs, and service-delivery issues. Overall, the study establishes that income is a statistically significant determinant of PM-JAY utilization and highlights the need for strengthened awareness initiatives and improved operational efficiency to enhance the scheme's effectiveness and achieve equitable healthcare access in Surat district.

LIMITATIONS OF THE STUDY:

1. The study is limited to selected urban and rural areas of Surat district; therefore, the findings may not be generalizable to other regions.
2. A relatively small sample size was used, which may limit the broader applicability of the results.
3. The study is based on self-reported primary data, which may be subject to response and recall bias.
4. Being cross-sectional in nature, the study captures awareness and utilization at one point in time only.
5. The quality of healthcare services and clinical outcomes under PM-JAY were not examined in depth.
6. Perspectives of healthcare providers and administrators were not included in the analysis.
7. Income and awareness levels were categorized based on respondents' perception, which may not be fully precise.
8. Limited use of secondary data restricted the comparative validation of findings.

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OFFICIAL WEBSITES & GOVERNMENT RESOURCES:

1. Government of India (Primary Scheme Portal)

•PMJAY official website: <https://www.pmjay.gov.in>

Contains policy documents, implementation guidelines, beneficiary statistics, and official reports.

2. National Health Authority (NHA)

•NHA publishes scheme performance data, hospital empanelment lists, and annual reports — useful for background and statistics.

3. Government Notifications & Reports

•Ministry of Health & Family Welfare releases reports on Ayushman Bharat outcomes, enrolment trends, and coverage data (often available via <https://mohfw.gov.in>).

WEBSITE:

•National Health Authority – PM-JAY Official Page

<https://nha.gov.in/PM-JAY>

•PM-JAY Official Data & Insights Dashboard

<https://insights.pmjay.gov.in/>

•Ayushman Bharat – Ministry of Health & Family Welfare (GoI)

<https://www.mohfw.gov.in/>

•Ayushman Bharat – PM-JAY Beneficiary Portal

<https://www.pmjay.gov.in/>

•National Health Authority – Government of India

<https://nha.gov.in/>

•Press Information Bureau – Ayushman Bharat / PM-JAY Updates

<https://pib.gov.in/>

•WHO India – Universal Health Coverage & Ayushman Bharat

<https://www.who.int/india/health-topics/universal-health-coverage>