

Original Research Article

A STUDY ON COVERAGE OF AYUSHMAN BHARAT - PRADHAN MANTRI JAN AROGYA YOJANA (AB-PMJAY) IN RURAL POPULATION OF GURUGRAM

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ABSTRACT

Background: The Ayushman Bharat–Pradhan Mantri Jan Arogya Yojana (AB-PMJAY) aims to improve healthcare access and financial protection for India's marginalized, but faces challenges such as low awareness, limited utilization, and reliance on private healthcare. The objective is to assess the coverage, utilization, and factors influencing AB-PMJAY use among rural populations in Gurugram, Haryana.

Materials and Methods: A community-based cross-sectional study was conducted among 400 individuals from five villages, selected using two-stage random sampling. Data were collected via house-to-house interviews and analyzed using SPSS, following IEC approval.

Results: The study population was predominantly male (82% household heads) and literate (76%). While 81.8% were aware of PMJAY, only 50% utilized the Ayushman Bharat Card, resulting in an 85.5% reduction in Out-of-Pocket Expenditure (OOPE) among users.

Conclusion: Although awareness is high, AB-PMJAY utilization remains suboptimal. Addressing technical and informational barriers through targeted strategies and community outreach is essential for improving uptake and financial protection.

Keywords: Ayushman Bharat, AB-PMJAY, OOPE.

INTRODUCTION

The Ayushman Bharat-Pradhan Mantri Jan Arogya Yojana (AB-PMJAY) is a flagship scheme in India aimed at providing financial protection and improving healthcare access for marginalized populations. Despite the scheme's launch, challenges persist, including low awareness and utilization rates, inadequate resource allocation, and a significant portion of the population relying on private healthcare. Achieving Universal Health Coverage (UHC) remains a priority, with efforts focused on increasing awareness, improving healthcare infrastructure, and addressing financial barriers to access.^[1,2]

PMJAY, the world's largest government-funded health protection scheme, faces challenges including insufficient motivation among tertiary hospitals, limited beneficiary awareness, and capacity

constraints.^[3] To enhance healthcare in India, strategies include increasing government investment, strengthening existing initiatives, establishing stakeholder collaboration mechanisms, and leveraging PMJAY for broader health system reforms. PMJAY's implementation strategy allows states flexibility in choosing between assurance, insurance, or mixed models, with a focus on hospital empanelment and robust anti-fraud measures to ensure integrity and accessibility.^[4]

Recent inflation has increased healthcare costs in India, making it vital to evaluate government schemes like PMJAY for their effectiveness and gaps. Rural healthcare disparities persist due to limited facilities, financial barriers, and low awareness. This study assessed PMJAY's impact in Gurugram's rural areas, highlighting challenges even after six years of implementation. It analyzed healthcare-seeking patterns, influencing factors, and

barriers faced by the population. Findings revealed that while Out-of-Pocket Expenditure (OOPE) was a key concern, effective implementation of AB-PMJAY significantly reduced financial burdens, offering valuable insights to improve policy and service delivery.

Aim: To study coverage of Ayushman Bharat-Pradhan Mantri Jan Arogya Yojana (AB-PMJAY) and Health care utilization in rural population of Gurugram.

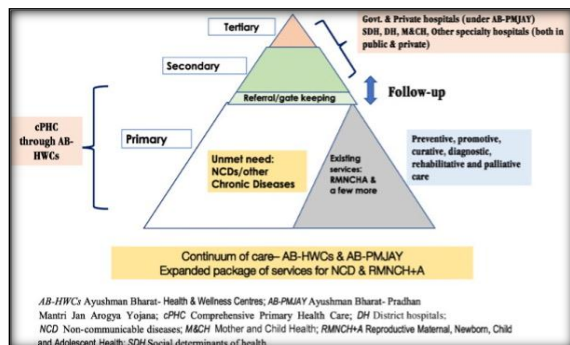


Figure 1: A schematic of Ayushman Bharat Program in India.

Source: Lahariya C. “Ayushman Bharat” Program and Universal Health Coverage in India. Indian Pediatrics. Available from: <https://www.indianpediatrics.net/june2018/495.pdf>

MATERIALS AND METHODS

A community-based cross-sectional study was conducted in rural areas of Gurugram, Haryana, under the purview of PHC Garhi Harsaru, a part of CHC Farrukh Nagar, which serves approximately 4.75 lakh people. The study site was the rural field practice area of the Department of Community Medicine at SGT University.

Inclusion Criteria:

- Individuals aged ≥ 18 years and residing in the village for more than 6 months.
- Those eligible for the AB-PMJAY card.

Exclusion Criteria:

- Participants whose houses or residences were found locked even after two subsequent visits.

The required sample size was calculated using Cochran's formula, assuming a 37%⁵ prevalence, 5% absolute precision, and a 10% non-response rate.

A two-stage sampling method was employed. In the first stage, five villages were randomly selected from the 14 under PHC Garhi Harsaru. In the second stage, households were chosen using Probability Proportional to Size (PPS). A comprehensive list of AB-PMJAY-eligible households (n=1124; population=6916) from the five villages was obtained. Simple random sampling was utilized to select 400 individuals.

Table 1: List of households eligible for AB-PMJAY card of 5 villages selected for study.

S No.	Name of village	Number of Houses	Population
1.	Chandu	190	904
2.	Budhera	227	1513
3.	Hayatpur	131	637
4.	Garhi Harsaru	358	2755
5.	Sadrana	218	1107
	Total	1124	6916

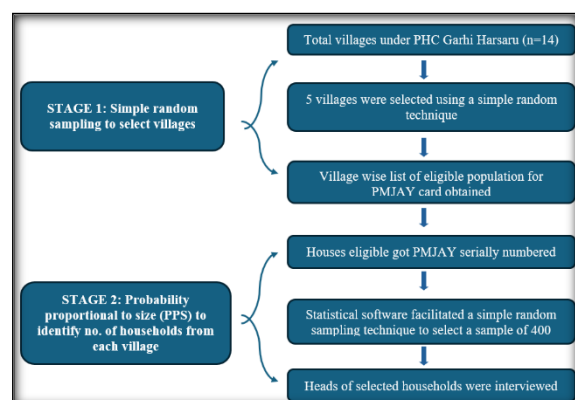


Figure 2: Flow Diagram of the Two-Stage Sampling Method

Data was collected through house-to-house visits using a semi-structured, pretested, interviewer-administered questionnaire in Google Forms. The questionnaire comprised four sections: sociodemographic data, healthcare utilization patterns, enablers and barriers to facility use, and healthcare expenditure (a 3-month recall).

Quality assurance measures included double data entry in Microsoft Excel and cross-verification of every 10th questionnaire. Data analysis was conducted using SPSS v27. Ethical approval was obtained from the Institutional Ethics Committee of SGT University, Gurugram (IEC No. IEC/FMHS/MD/S/2022-26), and the study adhered to the ethical principles of the Declaration of Helsinki.

RESULTS

This community-based study included 400 household heads from rural Gurugram, Haryana. Most participants were male (82%) and followed Hinduism (82.3%). Age-wise, 33.8% were 18–45 years, 38.4% were 46–60, and 27.8% were above 60 years. The average household size was 3.96. Educational status showed 53.7% had education up to middle school, 23.3% completed high school or higher, and 23% were illiterate, primarily among the elderly. Occupationally, 45.5% were laborers (in agriculture, construction, etc.), 32.5% unemployed, and 22% worked in the private sector. Regarding

socioeconomic status, 24.5% were middle class, 24% upper-middle, 19% lower-middle, 16.5% upper class, and 16% lower class. Despite lower literacy among

older respondents, there was a strong emphasis on education for the younger generation.

Table 2: Socio-Demographic details of study subjects.

Variable	Frequency (%)
Gender	
Male	328 (82%)
Female	72 (18%)
Religion	
Hindu	329 (82.3%)
Others	71 (17.7%)
Age group (in years)	
18-45	135 (33.8%)
46-60	154 (38.4%)
>60	111 (27.8%)
Educational status	
Illiterate	92 (23%)
Middle school	215 (53.7%)
High school & above	93 (23.3%)
Employment status	
Laborers	182 (45.5%)
Unemployed	130 (32.5%)
Private sector employed	88 (22%)
Socio-Economic Status (SES)	
Upper class	66 (16.5%)
Upper-middle class	96 (24%)
Middle class	98 (24.5%)
Lower-middle class	76 (19%)
Lower class	64 (16%)

In healthcare-seeking behavior, study revealed that 34% (136 households) sought care within 1-2 days of illness onset, 52.5% (210 households) within 7 days as symptoms worsened, and 13.5% (54 households) after 7 days or when daily activities were significantly impacted.

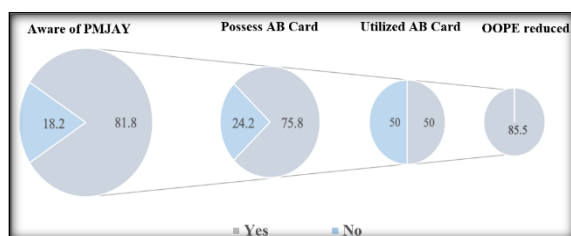


Figure 3: Awareness, possession, utilization of Ayushman Bharat Card, and reported reduction in OOPE among participants

DISCUSSION

The study's 400 participants were evenly distributed across three age groups: 18-45, 46-60, and over 60 years. This distribution is similar to previous studies.^[7-9] The majority of household heads are male, with studies showing male predominance ranging from 56.8% to 84.4% in rural areas of India.^[10-12] 23% of participants had no formal education, with most being over 60 years old. 53.7% studied up to high school, and 23.3% had education up to secondary school or beyond. 76% literacy rate, slightly higher than the national average of 74.04% (Census 2011).^[13] The present study found that 45.5% of participants were laborers, 32.5% were unemployed, and 22% were in private services. Other

studies,^[14,15] reported varying employment structures, possibly due to different study locations. This study shows that although awareness of Ayushman Bharat–PMJAY was high (81.8%), card possession (62%) and utilization (50%) were comparatively lower, largely due to server problems, lack of knowledge about documentation, and limited acceptance in emergencies. Despite these challenges, scheme utilization led to an 85% reduction in Out-of-Pocket Expenditure (OOPE), highlighting its effectiveness in financial protection. Similar trends were reported in Gujarat (Thomas et al) and by Surendran et al, where awareness exceeded utilization. Educational status was positively associated with awareness, while occupation and socioeconomic factors also influenced uptake. These findings emphasize that while PMJAY has significant potential to reduce OOPE, stronger enrollment processes, better awareness of documentation, and wider service coverage are essential to maximize its impact.

Limitations:

The study's small sample size, limited to rural areas, and cross-sectional design restrict its generalizability and temporal analysis. Additionally, the lack of standardization and recall bias may have influenced the results.

Recommendations:

To improve PMJAY coverage, awareness should be spread about the AB Card, server infrastructure at CSCs should be upgraded, and accessibility to health facilities should be improved. Treatment packages should be revised, and private hospitals should be monitored for card usage and beneficiary feedback.

CONCLUSION

Although awareness is high, AB-PMJAY utilization remains suboptimal. Addressing technical and informational barriers through targeted strategies and community outreach is essential for improving uptake and financial protection.

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