A case study of Ayushman Bharat Pradhan Mantri Jan Arogya Yojana in Andhra Pradesh

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Abstract

Ayushman Bharat-Pradhan Mantri Jan Arogya Yojana (AB-PMJAY) scheme provides financial healthcare coverage for nearly 50 crore vulnerable Indians. However, awareness is crucial for beneficiary registration and program utilization. Limited research exists on AB-PMJAY awareness, enrollment, and utilization in Andhra Pradesh. This cross-sectional study investigated these factors in Guntur, Krishna, and Ongole districts. Using a multi-stage sampling method, researchers surveyed 1000 households through structured interviews conducted by 20 undergraduate students. The study found high (24%) and moderate (59%) awareness levels of AB-PMJAY in Andhra Pradesh. Encouragingly, 87.3% of households possessed AB-PMJAY cards, but only 39.2% reported actual utilization. Factors like residence location, religion, and caste influenced awareness levels. Interestingly, despite card ownership, 34.2% of respondents incurred out-of-pocket medical expenses, and 24.7% didn't utilize their cards at all. ASHA workers, village volunteers, and Ayushman Mitras emerged as the primary sources of program information. While awareness and enrollment rates were promising, the utilization rate remained concerning at around 40%.

Keywords: AB-PMJAY, Health insurance scheme, Awareness, OOP expenditure.

Introduction

The Government of India has inaugurated Ayushman Bharath-Pradhan Mantri Jan Yojana (AB-PMJAY) was launched on September 23, 2018. Main aim of AB-PMJAY is to help poor people who are vulnerable and necessary to get the proper treatment without paying single penny to the hospital for the treatment which covers both basic and advanced medical emergencies at both Government and Private hospital the government will cover the cost, up to a limit of ₹5,00,000 per family per year.

Sustainable Development Goal (SDG) will focus on achieving UHC which means that everyone can easily have the access to the proper medical treatment without suffering from the financial hardships. By sponsoring almost all complex surgeries and a multitude of procedures, AB-PMJAY ensures that individuals receive timely and appropriate medical care, thereby conducive to the achievement of SDG. Universal health coverage is essential for

promoting health and well-being for all, and initiatives like AB-PMJAY play a crucial role in realizing this goal by providing equitable access to healthcare services for those who need it the most. Andhra Pradesh has a history of effectively implementing state-run health programs for low-income (BPL) and above-poverty-line (APL) families[1]. However, several obstacles hinder public utilization, including illiteracy, lack of awareness, limited program knowledge, and poor hospital access. These factors prevent people from maximizing the benefits even after enrollment. Overcoming these barriers and actively promoting the program's advantages are crucial for the successful implementation of AB-PMJAY. The scheme identifies beneficiaries from rural and urban areas based on deprivation and occupational criteria using Socio-Economic Case Census (SECC) data of 2011.The criteria for eligibility under AB-PMJAY as per SECC 2011

Involuntarily included:

- Households without shelter
- Destitute/living on alms (Beggers)
- Manual scavenger families (Road cleaning)
- Primitive tribal groups
- Legally released bonded labour

To study the rural and urban areas with multi-stage sampling method was used and collected 1000 households were randomly selected from Guntur, Krishna, Ongole districts of Andhra Pradesh. Twenty undergraduate students have collected data with help of a structured interview schedule, ASHA workers, grama voters and Ayushman Mitras are also major sources of information.

According to the procedure involved AB-PMJAY is implemented all eligible beneficiary family gets covered from the first day the plan launches in the states and UTs for AB-PMJAY. AB-PMJAY does not require any enrolment. However, a beneficiary verification process is conducted to verify the authenticity of the beneficiary. All eligible recipients receive Ayushman cards as part of this procedure, which guarantees simple access to health benefits. Since the AB-PMJAY program is driven by beneficiary demand for healthcare services, there are no set targets. These districts are randomly selected from the best, average and worst performing districts of ANDHRA PRADESH state "to capture the possible heterogeneity, and intra-district differentials for better understanding of the scheme" in all three districts (Krishna, Guntur, Ongole).

Altogether 1000 beneficiaries were interviewed by the Twenty undergraduate students after having their informed consent with the help of a proper household survey which was

collected by the students by the trained field investigators. The heads of households were interviewed with a structured interview schedule, and in the absence of the head of the family, other members above 16 years of age were considered for the interview. The objectives of study were explained and informed consent was obtained from participants after ensuring the confidentiality of the collected data. The participants were advised that they might leave the interview at any time and care was made to protect their privacy.

The current study motivations on responsiveness and utilization of the AB-PMJAY scheme, since most families are in the rural and urban areas of GUNTUR, KRISHNA, ONGOLE District with BPL card holders and belong to lower socioeconomic class. These families find it difficult to pay for medical treatment when it is needed in the absence of an existing health insurance plan.

Objectives: The study was to assess the current status of AB-PMJAY in terms of level of awareness, having cards, and utilization among beneficiaries, to examine various sources of information and support to beneficiaries regarding AB-PMJAY in the community and to identify the proximate factors associated with the level of awareness among beneficiaries.

Methods: This cross-sectional study, guided by a multi-stage (four-stage) random sampling method, attempted to a critical understanding of the level of awareness and knowledge about the APMJAY scheme among its beneficiaries from Guntur, Krishna as well as the Ongole districts. These districts are randomly selected from the best, average and worst performing districts of Andhra Pradesh state "to capture the possible heterogeneity, and intradistrict differentials for better understanding of the scheme"[2-3]. This district selection was the first stage of sampling from each selected district, a random selection of one area was done in the second stage. In the third stage of sampling three villages as well as one urban ward each were selected from the areas followed by the random selection of households from the list of beneficiaries in the fourth stage. The rural-urban proportion was considered and hence proportionate sampling method was used to calculate the samples from each district.

Altogether 1000 beneficiaries were interviewed after having their informed consent with the help of a household survey and data collection was done from January to March 2023 by 20 trained field investigators. The households in the list of PMJAY-SECC beneficiaries from the study sites were included in the study. Households that did not consent to giving details, were locked, and did not have a person above 16 years of age during data collection were excluded from the study, and in that case, the adjacent households in the list were taken. The

heads of households were interviewed with a structured interview schedule, and in the absence of the head of the family, other members above 16 years of age were considered for interview. Participants gave their information permission once the study's goals were explained and the confidentiality of data gathered was guaranteed. Care was taken to maintain privacy during the interview, and participants were informed that they could withdraw at any point in an interview. Interview schedule had different sections to collect demographical details of households, beneficiaries' awareness, enrolment and utilization of AB-PMJAY cards (Figure 1).

Table 1: Sampling frame and sample size with district and rural-urban distribution

Districts	Samples		Total
	Urban	Rural	
Guntur	120	305	425
Krishna	90	230	320
Ongole	70	185	255
Total	280	720	1000

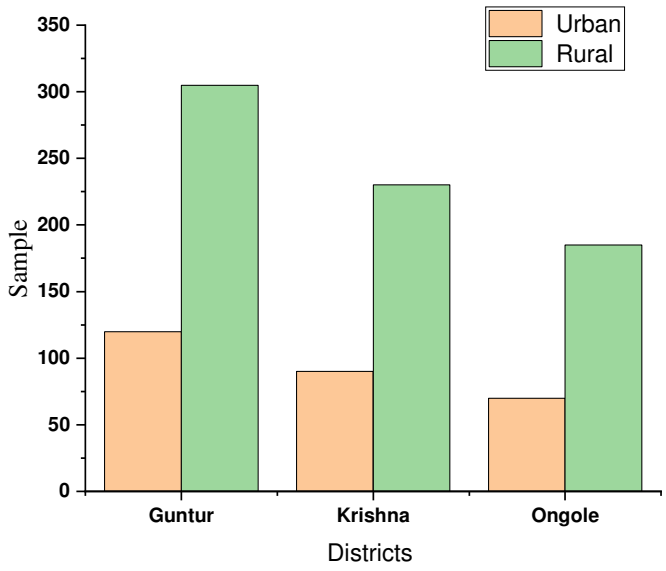

Figure 1 Distribution of districts urban and rural

Analysis:

The collected data was analysed using SPSS. The responses to the awareness statements were coded as yes, no, or don't know. The level of awareness was computed with the total correct answers of the respondents to the awareness-related statements. On that basis, respondents were classified into three levels of awareness namely low, moderate, and high.

Cross tabulations and chi-square tests were done to understand the extent of awareness, and its associations with the demographical variables.

Results:

Analysis of data is documented in this section with the help of tables and explanations. AB-PMJAY awareness, enrolment, and utilization among beneficiaries in the study sites are mainly analyzed. Overall, Table 2 makes it clear that beneficiaries are aware of many features of the PM-JAY scheme. Out of 13 different features of the scheme, eight features were well known with more than 50% awareness rate. While the maximum proportion (96.9%) of respondents knew that the PM-JAY scheme offers insurance coverage of five lakhs per annum per family, its pre- and post-hospitalization coverage, coverage all over India, transportation allowance, availability of Ayushman Mitras (AM) at empanelled hospitals, and dental care coverage are some less-aware features of this scheme among the majority of the beneficiaries interviewed. Table 3 indicates district-wise awareness among beneficiaries.

Table 2 Awareness of PM-JAY scheme and beneficiaries aware

Awareness of PM-JAY scheme	Beneficiaries aware	
	N	%
Insurance coverage of 5 lakhs per annum per family	969	96.9
Without caping on the family size, age or gender	852	85.2
They allow all pre-existing conditions	458	45.8
Covers 3 days or 15 days pre-hospitalization expenses	535	53.5
Cashless treatment & hospitalization anywhere in the India	452	45.2
Treatment facility in private sector & government empanelled hospitals	526	52.6
Transport allowance per hospital	342	34.2
Appoints P Mi Aarogya Mitras in empanelled hospitals	426	42.6
Offers PM-JAY card at free of cost	581	58.1
Is for the poor & below poverty line households in India	698	69.8
Covers surgery, day care- treatment, hospitalization, vaccinations and medicines	665	66.5
Covers oral health/dental care	236	23.6
Covers hospitalization & not OPD services	736	73.6

Table 3 District-wise awareness of PM-JAY among beneficiaries

Districts	Level of awareness, n (%)			Total
	Low	Moderate	High	
Guntur	140 (32.9)	195 (45.9)	90 (21.2)	425
Krishna	80 (25.0)	190 (59.4)	50 (15.6)	320
Ongole	62 (24.3)	132 (51.8)	61 (23.9)	255
Total	282 (28.2)	517 (51.7)	201 (20.1)	1000

Discussion:

Beneficiaries all over India have substantially benefitted from the Ayushman Bharat scheme, world's largest health insurance program, which provides cashless quality medical access to poor families[4-5]. Several innovative, commendable, and objectively viable resolutions by many scheme-implementing states had improved the awareness, enrolment, acceptability, and utilization of this scheme among beneficiaries. However, available literature suggests varied levels of awareness and utilization from different parts of India, and this difference is mainly attributed to the settings in which these studies are carried out and to the socio-economic, educational, cultural, rural-urban, and clinical characteristics of participants, HHs, etc.[6-7] While a study from rural Jammu reported a low 28% percent awareness, a rural Tamil Nadu study found 77% awareness among the participants. An improved level of awareness about AB-PMJAY among the rural population is reported by Dash et al also 12% at a high level and 47.8% at a moderate level) among beneficiaries from Gujarat. However, the rate of awareness varies with districts under study. At the same time, the area of living (rural-urban), religion and caste are the demographical characteristics of HHs significantly associated with the awareness level of beneficiaries. Many researchers in the past also documented rural-urban differences in terms of awareness about health insurance schemes[8]. A greater proportion of HHs (82.9) reported having ABPM-JAY cards after successful enrolment and almost the same proportion of HHs (within a range of 80-86%) from all three districts claimed that they were enrolled and possess the cards. A better performance by Gujarat, while compared to Madhya Pradesh, in almost all components including enrolment, was reported by Trivedi et al[9]. At the same time, the possession of AB-PM-JAY cards by the majority of respondents were documented by Prasad et al also from rural Bihar. Better enrolment coverage in states with long-standing state schemes, for example, RSBY in Gujarat, is also reported by Bhatnagar et al.[6,10]. Altogether, 43.3% of beneficiaries utilized the benefit of the card for hospitalization and as expected, a clear district-based variation could be seen in the utilization pattern in the present study with Anand district having the maximum proportion (59.1%) of respondents who availed the benefits for their health care needs under the ABPMJAY scheme. This wide variation in

utilization across districts, despite having an almost equal proportion of enrolment, can be attributed to the implementation mechanisms put in place at the district level in terms of treatment facilities at empanelled hospitals. It is a matter of great concern that despite the need, many HHs could not avail the benefits of the scheme for reasons ranging from the non-availability of empanelled hospitals nearby to the non-availability of treatment facilities for a particular disease in an empanelled hospital and not knowing what to do and where to go. Similar findings are reported by other studies also in the recent past where they also raised the poor quality of treatment as an issue for non-utilization[3,11].

The present study sheds light on the utilization of the ABPMJAY card. Out of the total 1000 households, 87.3% (n=873) had the card, of which only 39.2% (n=392) utilized it and from them 34.2% (n=342) spent OOP. This is similar to Chennai and Karnataka studies where 47.24% and 50% of families used their cards in the past year[4,12]. However, only 6% utilization was reported by a hospital study from Bangalore[13]. The present study examined source of information about benefits of AB-PMJAY card. The results showed that 45% of respondents got information from ASHA (Accredited social health activist) workers, 25% received it from Arogya Mitra, and 11% got it from village sarpanches. Similar results were found in a recent study by Prasad et al where 35.1% received the information from ASHA/AWW/HCW (AWW Anganwadi worker, HCW-health care worker) and 28.7% received it from family/friends[6]. Parisi et al also found in their study that when beneficiaries learn from the program through family/friends, ASHA employees, and PM's letter, they are generally well aware of their eligibility for PM-JAY. [8] However, the respondents' awareness of features suggests that information given to them is lacking or unclear. Proper training and other mechanisms should be used to ensure that information givers are fully aware of all aspects of the scheme and can disseminate it to beneficiaries according to their level of understanding. Table 4 and Table 5 depicts the information about the enrolment and utilization and reasons for non-utilization. On examining the reasons for non-utilization of the card, the respondents who said who didn't utilize the card (n=162), 74.2% of respondents said that there was a nonavailability of a treatment facility, 12% reported that they had no guidance from anywhere about using the card, 24.7% said that they didn't know about the use of the card they were having.

A similar kind of response was also reported by Das et al in which 95% of the respondents reported a "lack of knowledge" about "where and how to use the scheme"[8]. Some respondents in the present study also reported that they could not avail of the services of the scheme due to the non-availability of the nearby empanelled hospital, a similar kind of statement is also given by Saxena et al that lack of empanelled hospitals in rural areas is low

so lot of rural people have to go far to avail the service[14]. Moreover, some of the scheme implementation errors could be that, although the vast majority of households were aware of the PMJAY program, most of them were unaware of their eligibility status[15]. While generalizing the findings, a few study limitations must be taken into account. Three districts in Gujarat state were chosen to participate in this study. Generalizations must be made carefully because state and district-specific factors must have affected the stated levels of awareness, utilization, and non-utilization. The respondents' degree of awareness, which is determined by their familiarity with the many features and advantages of the AB-PMJAY program, must also have had an impact on the results.

Table 4 Overview of the beneficiaries' enrolment and utilization of AB-PM-JAY Scheme.

Particulars	Guntur N(%)	Krishna N(%)	Ongole N(%)	Total N(%)
HHs interviewed	425	320	255	1000
HHs having cards	370 (87.0)	295 (92.1)	208 (81.6)	873 (87.3)
HHs utilized the card	228 (53.6)	95 (29.7)	69 (27.0)	392 (39.2)
HHs required benefit, yet could not use card	81 (19.1)	44 (13.8)	37 (14.5)	162 (16.2)
HHs have cards, but were not required to use	74 (17.4)	146 (45.6)	128 (50.2)	348 (34.8)
HHs spent out pocket expenditure	72 (16.9)	145 (45.3)	125 (49.0)	342 (34.2)

Table 5 Reasons for non-utilization of the AB-PMJAY card, despite needed (162).

Reasons	N (%)
Non-availability of treatment facility for a particular disease	120 (74.1)
Non-availability of nearby empanelled hospital	2 (1.23)
Do not know about the use of card	40 (24.7)
No guidance	20 (12.3)

Conclusion:

AB-PMJAY with its attractive features have potential to make a dramatic change in lives of India's identified poor and vulnerable beneficiaries.

The present study, overall, puts forth an impressive awareness and enrolment ratio in all the study sites.

However, the awareness about specific features and benefits of the scheme among beneficiaries seemed to be less, suggesting that they may further add to under-utilization.

Furthermore, the utilization rate among beneficiaries is found to be less and OOP payments are still prevalent.

The OOP expenditure reported by respondents warrants immediate attention.

Since the very purpose of the ABPMJAY scheme is to ensure universal health coverage, this OOP may keep the poorest away from availing treatment due to their absolute inability to do arrangements for the money and that will further add to the poor utilization rate.

Empanelling more hospitals, especially hospitals with specialties must be given utmost priority.

Efforts must be taken to motivate the main drivers of information namely ASHA workers, Ayushman Mitras, and gramma volunteers with adequate monetary and non-monetary methods. Similarly, beneficiaries must be made aware of their beneficiary status and that cashless, quality treatment with dignity is their entitlement, so that they demand the services under the PM-JAY scheme.

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