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Research Article

Assessment of Utilisation and Impact of Ayushman Bharat Pradhan Mantri Jan Arogya Yojana (AB-PMJAY) on Out-of-Pocket Expenditure in Jammu and Kashmir

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A B S T R A C T

Background & Objective: Economic barriers significantly affect access to healthcare. Health insurance is essential to prevent financial hardship and ensure service utilization. To reduce this burden, the Government of India launched Ayushman Bharat Pradhan Mantri Jan Arogya Yojana (AB-PMJAY) in Jammu and Kashmir on December 1, 2018. This study focuses on assessing the utilisation and impact of AB-PMJAY in reducing Out-Of-Pocket Expenditure (OOPE) and Catastrophic Health Expenditure (CHE) among the population of Jammu and Kashmir.

Methods: A primary survey was carried out in four districts of Jammu and Kashmir which includes districts Srinagar, Baramulla, Anantnag and Budgam. Simple random sampling technique was used to determine the sample size and around 192 hospitalisation cases were selected. The interview schedule was developed based on the 71st round of the National Sample Survey Office (NSSO) and details on health expenditure for inpatient care and outpatient care were collected separately.

Results: Out of 192 hospitalisation cases, 11% did not utilise services under the AB-PMJAY scheme and out of these, around 6.71% faced financial hardship.

Conclusion: From this study, it was found that out-of-pocket spending was lower among those hospitalisation cases who utilised services under the Ayushman Bharat SEHAT scheme. Ayushman Bharat PM-JAY scheme has the potential to reduce the financial burden to a great extent if more services like OPD services in major and common illnesses (like diabetes, hypertension and CVS diseases) are made available. Also, modification and upgradation of hospital infrastructure and easing the claim process can also play a key role.

Keywords: Universal Health Care (UHC), AB-PMJAY, Financial Burden, Out-of-Pocket Expenditure (OOPE), Catastrophic Health expenditure (CHE)

Introduction

The goal of universal health coverage, or UHC, is to ensure that everyone has access to the medical care they require without having to worry about facing serious financial difficulties in order to pay for it.[1] The concept of universal health coverage, or UHC, has become widely accepted as a goal of health policy development at both the national and international levels since the release of the World Health Report in 2010.[2] Differences in the epidemiology, health systems and financing, and socio-economic development levels of different nations suggest varied methods for the implementation of UHC as well as a possible variety of pertinent indicators.[3] An estimated 1.3 billion individuals do not have access to basic, cost-effective, and high-quality healthcare globally. The requirement to pay for health care pushes nearly 100 million people into poverty.[4] According to the World Health Organization's World Medicines Situation Report, 38% of people worldwide and 65% of Indians are thought to lack fair access to necessary medications. The Indian public sector has historically received inadequate funding. In India, the majority of households pay 70% of their medical costs out of pocket, which adds to the country's pervasive poverty.[5]

In India, out-of-pocket expenditure (OOPE) on healthcare is exceptionally high, constituting 62.6% of the total health spending, a figure nearly three times the global average of 20.5%. This financial burden primarily stems from expenses on consultation fees, medicines, and diagnostic tests, which together account for over two-thirds of OOPE.[6] The main cause behind this crisis is the limited availability of affordable healthcare services in the public sector. Hospitalisations, which cost an average of INR 20,000 per case, exceed the annual consumer expenditure for nearly half of India's population. Notably, medicines alone contribute to 70% of the total OOPE, surpassing the combined expenses on consultation fees and diagnostic services, exacerbating the financial strain on households across the country.[7] According to National Health Accounts Estimates in India for the year 2019–2020, out-of-pocket expenditure (OOPE) constituted 52% of Current Health Expenditure and 1.54% of gross domestic product (GDP), placing it among the highest in the world. A study analysing National Statistical Office (NSO) surveys revealed that between 1994 and 2014, out-of-pocket health expenditure pushed 55 million people in India into poverty. Among these, nearly 38 million experienced catastrophic health expenditure (CHE), defined as healthcare costs amounting to 10% or more of total household expenditure.[8]

Out-of-pocket health expenses contribute to a rise in poverty rates by approximately 2%, affecting an estimated 185,000 individuals. This increase also widens the poverty gap, intensifying economic hardship among the poor, particularly in hilly and geographically disadvantaged regions. Around 9.6% of the population in Jammu and Kashmir faces catastrophic health expenses, with 2.6% spending beyond their financial means. Married individuals, higher-income groups per capita, and socially marginalised sections are more susceptible to experiencing severe financial burdens due to healthcare costs, whereas higher levels of education are associated with a reduced likelihood of facing such challenges.[9] In J&K, government schemes and health insurance are some of the leading sources of healthcare finance aimed at alleviating financial burdens resulting from sickness cases among the sick as well as their families as perceived in different parts of India Consequently, medical care programmes are more hampered by lack of money that can facilitate their use in all parts of the nation especially those inhabited by the least privileged and minority populations.[10]

Adequate health insurance coverage is necessary to protect an individual from financial hardship due to paying for health services and to encourage access to healthcare. Although a number of health insurance schemes were introduced in India, only 13% of households in Jammu and Kashmir have any kind of insurance that covers at least one member of the household, as per the NFHS-5 survey.[11] The Indian government is making significant efforts to enhance the healthcare system in J&K. The government has implemented several projects that have contributed to the improvement of Jammu and Kashmir's health system. Ayushman Bharat Pradhan Mantri Jan Arogya Yojana (AB-PMJAY) and the AB-PMJAY SEHAT plan are the main initiatives. This programme is available to all J&K residents, and all enrolled golden card holders can receive free medical care in all government and affiliated private institutions in India up to INR 5 lakhs. It makes cashless healthcare available to all Indian people, regardless of their financial situation, and their families.[12]

Ayushman Bharat PM-JAY marks a significant stride towards achieving universal healthcare coverage in India, effectively bridging longstanding gaps in healthcare access and financial protection for millions of citizens. This initiative extends coverage to a larger population and offers a more comprehensive benefit package, bolstered by an extensive network of hospitals for healthcare delivery. Under Ayushman Bharat PM-JAY, Health and Wellness Centers (HWCs) play a pivotal role by offering a wide array of preventive, promotive, curative, and rehabilitative healthcare services. These services encompass treatment for non-communicable diseases and chronic communicable diseases like tuberculosis, addressing the country's high out-of-pocket (OOP) expenditure on healthcare. The Government of India has allocated INR 3,200 crores for this initiative and encourages private sector involvement through corporate social responsibility contributions.[13–15]

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Studies evaluating Ayushman Bharat PM-JAY have presented mixed findings regarding its effectiveness in providing financial risk protection. A significant portion of the claim payouts under PM-JAY, with 32% representing claims greater than INR 30,000 and 9% exceeding INR 1,00,000, suggests that the scheme has successfully enabled access to services that would otherwise impose significant out-of-pocket (OOP) expenses or financial catastrophe on individuals. However, a notable limitation of PM-JAY is its exclusion of outpatient services, which constitute a substantial portion of healthcare expenses in India, accounting for around 60% of OOP expenditures in 2016.[16–21] This gap implies that while PM-JAY covers major hospitalisation costs, it does not alleviate the financial burden associated with routine outpatient care, potentially leaving individuals vulnerable to significant healthcare expenses outside of hospital settings.

In summary, while Ayushman Bharat PM-JAY has been instrumental in mitigating catastrophic health expenditures for many through its coverage of hospitalisation costs, the absence of outpatient services coverage remains a significant concern for achieving comprehensive financial risk protection in India's healthcare landscape.

Objective of the Study

One of the key solutions to all the healthcare challenges faced by low- and middle-income countries is UHC. As a part of this effort, AB-PMJAY was introduced in Jammu and Kashmir by the Government of India. This scheme represents a significant step towards UHC in the UT. To ensure the success of this scheme, it is important to assess the financial protection offered by this scheme and measure progress towards UHC. The aim of this study was to contribute towards the development of a comprehensive policy framework for UHC and establish a clear roadmap for its future implementation.

Methodology

Study design: This is a case-control study where, a primary survey was carried out in major hospitals of four different districts of Jammu and Kashmir (J&K) viz. districts Anantnag, Baramulla, Budgam and Srinagar. Simple random sampling technique was used to collect the data. Around 192 hospitalisation cases were selected. The study was primarily focused on the estimation of coverage, utilisation and impact of the AB-PMJAY scheme on the reduction of OOPE and CHE among the population of J&K. The study was carried out between the period of June 2022 and October 2022. Approval was obtained from each hospital before starting the study. The interview schedule was developed based on the 71st round of the National Sample Survey Office (NSSO) questionnaire.[22] Details on health expenditure for inpatient care and outpatient care were collected separately. It collected information on socio-demographic details, morbidity profile, monthly consumption expenditure and details on health services availed. A pilot survey was conducted to pretest and validate the questionnaire and information regarding socio-demographic profile, monthly household expenditure, and expenditure on inpatient and outpatient healthcare, health service availed, and medical reimbursement and coverage under any health insurance scheme including AB-PMJAY was collected. Details on health expenditure for inpatient care and outpatient care were collected separately. Along with direct medical expenditures such as medicine fees, consultation fees and diagnostic test fees, non-medical expenses like transportation charges and other non-medical charges were also captured.

Data Analysis

MS Excel was used fro the analysis of data. Data was oibtained and compared across two groups. The components of health expenditure were divided into direct medical expenditure and non-medical expenditure on health. Final medical expenditure was then calculated as the sum of both medical and non-medical expenditures. Any reimbursement received from the insurance company or Ayushman Bharat scheme was then subtracted from the total health expenditure and OOPE for each case was calculated. Average OOPE was expressed in both absolute amounts (in INR) and as a proportion of the household budget.

Ethical Clearance

Ethical clearance was obtained from Institutional Ethical Committee, Institutional review board, GMC, Srinagar.

Inclusion criteria

This study included hospitalisation cases of the selected hospitals that gave consent for filling out the questionnaire.

Exclusion criteria

Individuals who did not give consent or paediatric patients who did not have any attendant present above the age of 18 years were excluded from the study.

Results

The data in Table 1 represents the hospitalisation cases treated by type of gender and district. Among 192 hospitalisation cases studied, 109 (56.8%) were male and 83 (43.2%) were female. All the cases were selected from public hospitals as public care providers are the main choice of treatment for inpatient hospitalisation treatments.

The data in Table 2 shows the utilisation of services under the AB-PMJAY scheme. From this study, it was found that out of 192 hospitalisation cases, 170 subjects (88.5%) utilised healthcare services under AB-PMJAY, whereas 22 persons (11.4%) did not utilise the AB-PMJAY scheme.

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The data in Table 3 represents health spending and financial burden faced by families for utilizing health care during the past 365 days. The average amount spent by households not covered under the Ayushman Bharat scheme for healthcare in the past 1 year is INR 8749 which includes INR 4059 for inpatient care and INR 4690 for outpatient care.

Table 1.Number of Hospitalisation Cases Treated during Last 365 Days by Type of Gender

N = 192

District	Male (M)	Female (F)	M + F	Percentage
Anantnag	25	26	51	26.6
Srinagar	36	10	46	23.9
Budgam	25	23	48	25.0
Baramulla	23	24	47	24.5
Total	109	83	192	100.0

Table 2.Utilisation of AB-PMJAY Scheme among 192 Hospitalisation Cases during the Past 15 Days

Characteristics	Total Number N = 192	Percentage (%)
Availed the Ayushman Bharat SEHAT scheme in the past 1 year	170	88.5
Not availed the Ayushman Bharat SEHAT scheme in the past 1 year	22	11.4
Conditions for availing the Ayushman Bharat SEHAT scheme (n = 170)		
Medical	89	52.4
Surgical	06	3.5
Both	75	44.1
Additional amount spent in spite of using the Ayushman Bharat SEHAT scheme		
Yes	166	97.6
No	04	2.4

Table 3.Average Medical Expenditure (INR) and Average Non-Medical Expenditure (INR) on Account of Hospitalisation (N = 192) for Quintile Class and Gender during the Past 365 Days

Quintile Class	Average Medical Expenditure (INR) during Stay at Hospital			Average Non-Medical Expenditure (INR) during Stay at Hospital			Total Average Healthcare Expenditure (INR)
	Male	Female	Total	Male	Female	Total	
1.	1000	1250	2250	200	350	550	2800
2.	1100	1200	2300	500	620	1120	3420
3.	1158	1311	2469	687	750	1437	3906
4.	1200	1394	2594	981	1511	2492	5086
5.	1320	1400	2720	1900	1760	3660	5810

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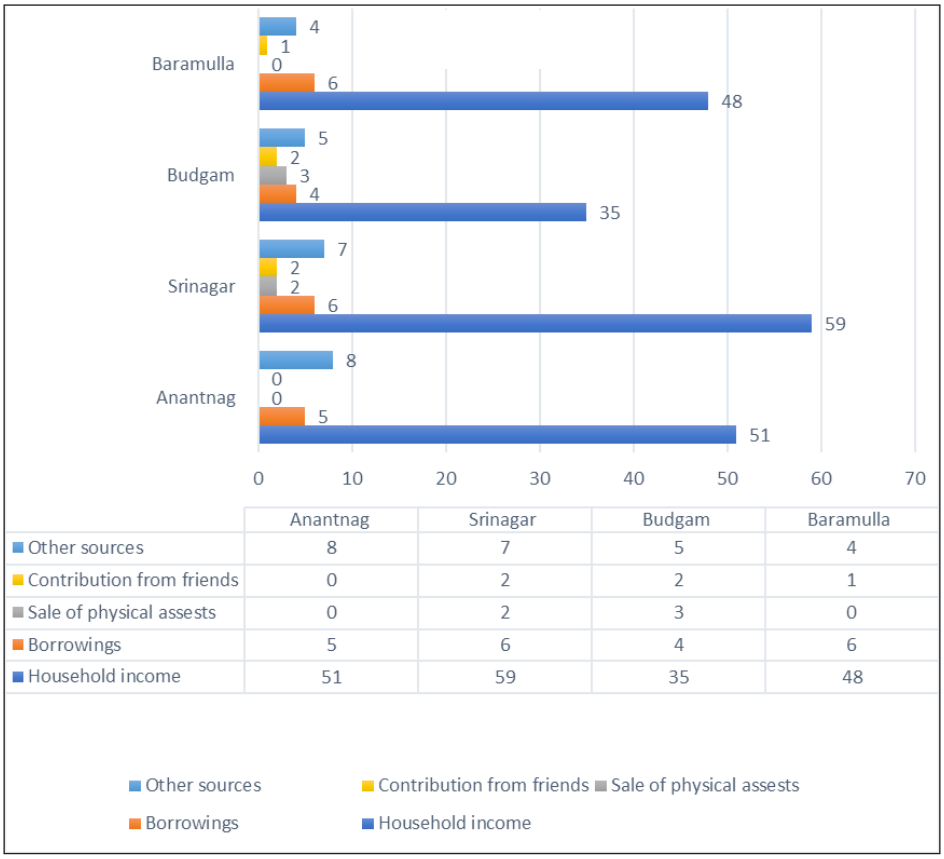

	Anantnag	Srinagar	Budgam	Baramulla
Other sources	8	7	5	4
Contribution from friends	0	2	2	1
Sale of physical assests	0	2	3	0
Borrowings	5	6	4	6
Household income	51	59	35	48

Figure 1.Distribution of Health Expenditure by Major Source of Finance for Each District

Among the 192 hospitalisation cases, around 22 (11.4%) patients were not covered under the Ayushman Bharat scheme. Out of these 22 subjects, around 13 hospitalisation cases faced financial hardship which included 3 (23.1%) from the poor class, 8 (61.5%) from the middle class, and 2 (15.4%) from the rich class. It was found that medicines were the single largest component of health expenditure comprising (46%) of the total health spending. Expenditure on diagnostic tests contributed to the second largest component of health expenditure (25.6%) followed by consultation fees (18%).

Figure 1 represents the distribution of health expenditure as per the major sources of finance of expenditure for each district. It was found that household income was the main source of finance for outpatient health care. Twenty-one (10.9%) households reported borrowing as the second most common source of finance for health expenditure. Five (2.6%) households reported the sale of physical assets as a source of finance for medical expenditure.

Discussion

The aim of this study was to evaluate coverage, utilisation and impact of AB-PMJAY on out-of-pocket expenditure (OOPE) and Catastrophic Health Expenditure (CHE). Since the coverage under this scheme is made universal for the people of Jammu and Kashmir and due to various awareness programmes launched by the Government of UT, this scheme has achieved more than 95% coverage. District Samba has achieved 100 % coverage under this scheme.

As this scheme offers cashless services at the point of care, the utilisation rate of hospital care among the people of J&K has increased. Similar findings were reported in a study “Impact of public-funded health insurances in India on health care utilisation and financial risk protection: a systematic review” by Reshmi et al. who found that initiatives such as Rashtriya Swasthya Bima Yojana, Vajpayee Arogyashree, and Pradhan Mantri Jan Arogya Yojana have led to a notable increase in the accessibility and utilisation of healthcare services.[23] The current study found that coverage under PM-JAY reduced OOPE and CHE significantly in the UT. This analysis provides results showing financial protection offered for hospital care under the PM-JAY scheme is consistent with another study performed at the leading hospital of the UT, which concluded that distress financing and CHE were reduced to zero in patients availing benefits under PM-JAY.[24]

Among the hospitalisation cases that utilised AB-PMJAY, about 97.6% spent an additional amount in spite of using Ayushman Bharat. The reason was the non-availability of services like medicines and sufficient infrastructure for diagnostic tests at the point of care. Prinja et al. stated that publicly financed health insurance schemes alone

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cannot fully achieve Universal Health Coverage (UHC) in India.[25] Instead, these schemes should be integrated with efforts to strengthen the public sector's capacity to deliver comprehensive primary healthcare. Furthermore, the existence of health insurance schemes presents an opportunity to reform aspects of the healthcare sector that extend beyond standard regulatory frameworks.

Conclusion

From this study, it was found that out-of-pocket spending was lower among the households who utilised services under the Ayushman Bharat SEHAT scheme. Still, many people face financial hardship due to the ineligibility of diagnosis or by paying out of pocket for outpatient health care services. Due to the increased burden of non-communicable diseases among the population of Jammu and Kashmir, many people, especially from the poorer income class and middle-income class are pushed below the poverty line. The Ayushman Bharat scheme has the potential to reduce the financial burden to a great extent if more services like OPD services in major and common illnesses (like diabetes, hypertension and CVS diseases) are made available. Also, modification and upgradation of hospital infrastructure and easing the claim process can also play a key role.

Conflict of Interest: None

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Authors' Contribution: Both the authors have contributed equally to this work.

Declaration of Generative AI and AI-Assisted Technologies in the Writing Process: None

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