



REVIEW ARTICLE

Transforming Lives Through Ayushman Bharat Pradhan Mantri Jan Arogya Yojana (AB-PMJAY): A Review

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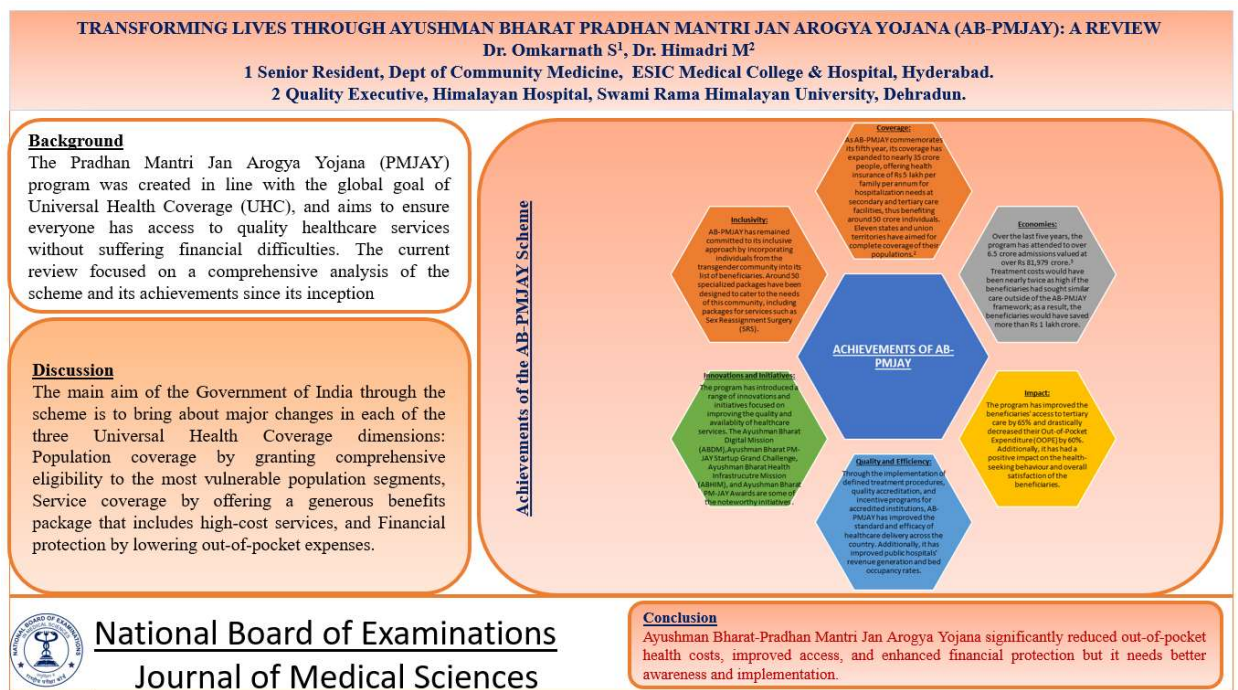
Abstract

Background: The Pradhan Mantri Jan Arogya Yojana (PMJAY) program was created in line with the global goal of Universal Health Coverage (UHC), and aims to ensure everyone has access to quality healthcare services without suffering financial difficulties. In India, over 60% of healthcare spending is still borne by households, and a significant portion of the population lacks any form of health protection coverage. **Discussion:** The High-Level Expert Group (HLEG) recommended a shift from supply-side healthcare financing to demand-side financing, leading to the introduction of government-sponsored health insurance schemes. To achieve Universal Health Coverage (UHC), the Ayushman Bharat - Pradhan Mantri Jan Arogya Yojana (PMJAY) was launched following the recommendations of the National Health Policy 2017. The PMJAY program is the world's largest publicly sponsored social health insurance program, delivering comprehensive healthcare services covering primary, secondary, and tertiary care levels. The scheme covers approximately 12 crore households, including more than 50 crore beneficiaries, offering healthcare coverage of up to Rs. 5 lakh per family annually. PMJAY operates nationwide in India, covering all states and union territories except for a few.. **Conclusion:** To move forward, PMJAY can play a transformative role in the healthcare landscape, integrate with primary healthcare, contribute to economic development, and expand its scope to include more healthcare services.

Keywords: Ayushman Bharat, Global Healthcare System, Out-of-Pocket Expenditure (OOPE), Public Funded Health Insurance, Universal Health Coverage (UHC)

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Graphical Abstract



Background

The major policy goal in the health sector globally is to achieve Universal Health Coverage (UHC). The World Health Organization defines Universal Health Coverage (UHC) as providing all people with access to needed health services, including prevention, promotion, treatment, and palliation, of sufficient quality to be effective while ensuring that the use of these services

doesn't cause financial hardships for the users [1,2]. Despite India's policy-level acceptance of UHC, more than 47% of healthcare spending in the country is still borne by households [3]. According to the recent National Sample Survey (NSS-75th round) report, only 19.1% of the urban population and 14.1% of the rural population are covered by any form of health protection [4] (Table 1).

Table 1. Percentage breakdown of individuals by type of health expense coverage [4]

Sector	Percentage of population not covered	Percentage of Population Covered by					Total
		Government-sponsored insurance schemes	Government/PSU as an employer	Employer-supported health protection (excluding PSU)	Arranged by households with insurance companies	Others	
Rural	85.9%	12.9%	0.6%	0.3%	0.2%	0.1%	100.0
Urban	80.9%	8.9%	3.3%	2.9%	3.8%	0.2%	100.0

Traditionally, in India, financing for healthcare has primarily been allocated to the supply side, with an emphasis on building infrastructure and people resources. The High-Level Expert Group (HLEG) of the Planning Commission recommended a model for achieving Universal Health Coverage (UHC), whereby residents would have broad access to free medical services provided by a combination of both private and public healthcare providers. As a result, the government began to focus more on demand-side funding methods, such as publicly funded health insurance programs, rather than its previous emphasis on supply-side approaches. Historically, the Central Government and several State Governments have introduced a variety of government-sponsored healthcare insurance systems to improve demand-side funding. Since 2007, several publicly financed health insurance schemes have been launched in India both at the state level such as Rajiv Aarogyasri Health Insurance Scheme (RAS) in Andhra Pradesh, Rajiv Gandhi Jeevandayee Arogya Yojana (RGJAY) in Maharashtra, Chief Minister's Comprehensive Health Insurance scheme (CMCHIS) in Tamil Nadu, and Rashtriya Swasthya Bima Yojana (RSBY) at the Central level. The Rashtriya Swasthya Bima Yojana (RSBY) was introduced with annual coverage of INR 30,000 per family at the government level, primarily catering to secondary care hospitalization, while various State programs addressed tertiary care issues [5]. The fact that these programs operated apart from the nation's wider healthcare system contributed to the risk pools' further fragmentation. Furthermore, there was no connection between any of these programs

and primary healthcare. In response to this shortcoming, the Ayushman Bharat Pradhan Mantri Jan Arogya Yojana AB-PMJAY scheme was introduced as per the guidance provided in the National Health Policy of 2017 with obtaining Universal Health Coverage as the main goal. The current review focused on a comprehensive analysis of the scheme and its achievements which are highlighted in Figure 2.

Introduction to AB-PMJAY

AB-PMJAY, the world's largest publicly funded social health insurance initiative was officially launched on September 23, 2018. The main objective of this program is to implement a revolutionary policy that thoroughly addresses the whole range of healthcare services, including prevention, promotion, and ambulatory care, across all three levels primary, secondary, and tertiary [2]. Ayushman Bharat uses a continuum of care framework that is comprehensive and consists of two interrelated parts:

1. Health and Wellness Centers (HWCs): to provide comprehensive primary healthcare.
2. Pradhan Mantri Jan Arogya Yojana (PM-JAY): to provide secondary and tertiary levels of healthcare.
3. The vision of PMJAY is to achieve the Sustainable Development Goal (SDG) 3.8 which ensures everyone has access to affordable, high-quality healthcare as well as financial insurance against catastrophic medical expenses. The scheme was recommended mainly based on the five (5) major challenges being faced by Indians which include:

- Poverty
- Triple burden of diseases
- Lack of affordable healthcare
- Increased out-of-pocket expenditure and
- No portability of state health schemes.

Salient Features of AB-PMJAY

The PM-JAY scheme is fully funded by the Government, with the Central and State Governments sharing the implementation costs. The program is currently operational in all states and Union territories in India, except for West Bengal, Odisha, and Delhi [2].

- PM-JAY provides secondary and tertiary hospitalization coverage up to Rs. 5 lakh per household every year. This coverage includes almost 50 crore beneficiaries and covers about 10.74 crore families who are marginalized and underprivileged. It covers over 1950 medical procedures and includes pre-hospitalization and post-hospitalization charges for three days and fifteen days, respectively. Additionally, the program is adaptable across the nation.
- PM-JAY is organized as a claim-based initiative, targeting underprivileged and vulnerable families based on criteria related to deprivation and occupation, as specified in the Socio Economic and Caste Census (SECC 2011) database.
- The scheme ensures beneficiaries' cashless and paperless access to public and private services empanelled hospitals throughout India. This means

the program is transferable across different states in the country.

- PM-JAY places no restrictions on family size, guaranteeing coverage for all members of eligible families, including girl children and senior citizens.
- To facilitate its implementation, PM-JAY has established a robust IT system, incorporating real-time transaction data for efficient operation.

Beneficiaries of the PMJAY Scheme

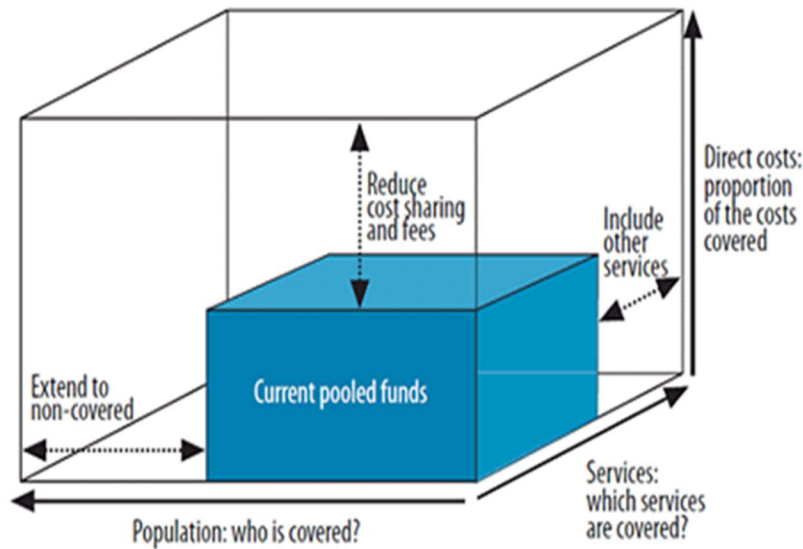
PM-JAY has been extended to benefit the least affluent 40 percent of the poor and vulnerable population, or about 100.74 million households in total. In both rural and urban areas, families are selected based on the deprivation and occupation criteria specified in the 2011 Socio-Economic Caste Census (SECC 2011) [2].

Structure & Functioning of PMJAY Scheme

The main aim of the Government of India through the scheme is to bring about major changes in each of the three UHC dimensions (Figure 1):

1. Population coverage (by eliminating formal enrollment procedures and granting comprehensive eligibility to the most vulnerable population segments);
2. Service coverage (by offering a generous benefits package that includes high-cost services provided by a large network of PMJAY accredited and empaneled providers); and

3. Financial protection (by lowering out-of-pocket expenses with the cashless provision and high insurance ceiling).



Three dimensions to consider when moving towards universal coverage

Figure 1. Universal Health Coverage Cube

The National Health Authority (NHA) oversees the program at the national level, while the State Health Agency (SHA) is responsible for its implementation in each state. Existing insurance firms, publicly run autonomous trusts or nodal agencies, or a combination of these strategies known as mixed models—which allow for state-specific adjustments—can carry out this implementation. Currently, the initiative is in place in 33 of India's 36 states and union territories. PM-JAY aims to achieve dual objectives: enhancing healthcare accessibility and financial security while also fostering efficiency, transparency, and accountability through the utilization of output-based financing mechanisms [2].

Mode of Implementation of the Scheme

Different states utilize a range of models to implement their individual assurance and health insurance programs. Some states collaborate with insurance companies, while others handle the scheme directly.

Given the differences in the readiness and capabilities of states to manage such programs, PM-JAY offers states the liberty to select the implementation model that best suits their needs. They can decide to use an insurance model, a mixed model, or an assurance/trust approach to implement the plan.

A. Assurance Model/Trust Model

In many states, this is the implementation model that is most frequently used. In this

framework, insurance firms are not involved in the scheme's administration; instead, the State Health Agency (SHA) does so directly. This model establishes the financial responsibility of carrying out the program on the government. Healthcare providers get direct reimbursement from the SHA. The State Health Agency (SHA) employs an Implementation Support Agency (ISA) to handle tasks such as claim processing, despite the absence of an insurance company. The SHA is responsible for various functions, including hospital empanelment, beneficiary identification, claims management, audits, and other related activities, alongside the daily management and administration of the program [2].

B. Insurance Model

According to the insurance model, an insurance company gets selected through a competitive tendering procedure by the SHA to manage PM-JAY throughout the state. The insurance company handles claims settlement and payments of service providers, while the insurance company is paid a premium by the SHA for each qualified family during the policy period, based on an amount set by the insurance sector. Under this strategy, the insurance provider bears the financial risk of executing the strategy. The plan has a system that restricts the proportion of the premium that insurance firms can keep for profit and administrative expenses to prevent them from making an unjustified profit. The insurer shall immediately reimburse any excess to the SHA within 30 days of deducting specified expenses from executives

(excluding only service tax and any relevant fees) and resolving any claims [2].

C. Mixed Model

Under the mixed model, the SHA achieves flexibility and cost-efficiency while enabling alignment with current state schemes by combining aspects of both the assurance trust and insurance models stated above in different capacities. States using this model usually have existing programs that serve a larger group of people [2].

Financing of the Scheme

The Central and State Governments divide the costs of PM-JAY, which is fully supported by the Government. The maximum amount of the central contribution is determined by the national limit per household set by the Indian government. The Central Government and the States/Union Territories will split the actual premium, which will be decided through an open tendering process or, if lower, the highest ceiling of the determined premium imposed by the Government of India for PM-JAY implementation, by the Ministry of Finance's periodically updated directives. Furthermore, the scheme also covers the administrative costs of executing the scheme at the State level, with the Central and State governments splitting the costs in accordance with the same sharing pattern. The current funding ratio for PMJAY between the Central Government and the States is at a ratio of 60:40, with the exception of the North-Eastern States and the three Himalayan States (Jammu & Kashmir, Himachal Pradesh, and Uttarakhand), where the ratio is 90:10. For Union Territories without legislatures, the

Central Government may provide up to 100% funding, determined on a case-by-case basis [2].

Hospitals

More than 30,000 accredited hospitals are part of the program's nationwide network. Of these, the majority, totaling 17,300, are public healthcare institutions, while the rest, numbering 12,884, are privately empaneled hospitals with over 6.5 crores of authorized admissions to date [3].

Discussion

The central and state governments have implemented numerous publicly funded health insurance schemes in India. Many studies were conducted to assess the implementation and functioning of these schemes. Highlighted below are some studies conducted on implementing the AB-PMJAY scheme which showed mixed findings.

A cross-sectional study by Kanwal et al. (2024) examined the impact of the Ayushman Bharat-Pradhan Mantri Jan Aarogya Yojna (AB-PMJAY) on health expenditure among poor patients admitted to a public tertiary care hospital in Himachal Pradesh from August 2020 to October 2021. The study found that the out-of-pocket expenditure (OOPE) share of total medical family expenditure (TMFE) decreased from 76.1% before admission to 30.0% after admission. The study concluded that the AB-PMJAY scheme effectively reduced health expenditure among the poor [7].

Khan A (2021) conducted a study among 160 patients registered at the Ayushman Bharat cell of a tertiary care hospital in Srinagar and found that distress

financing and catastrophic health expenditure were reduced to zero in patients availing benefits of the PMJAY scheme. It was also mentioned that previous studies conducted at the same center before the launch of AB-PMJAY showed the prevalence of distress financing in cancer and chronic kidney disease (CKD) patients was over 70%. This study found that the patient didn't have to pay for the hospital expenses because the prevalence of catastrophic healthcare costs had again dropped to zero [8].

Joseph (2021) conducted a secondary analysis using cross-sectional administrative program data for 30 Indian states that were made available to the public on the PM-JAY webpage. They discovered that, of all the facilities enrolled in the plan (N = 20,257) in 2020, the majority (56%) were in the public sector, followed by private for-profit facilities (40%) and private not-for-profit organizations (4%). The study found that five states (Karnataka 14.9%, Gujarat 13.3%, Uttar Pradesh 13.3%, Tamil Nadu 11.5%, and Rajasthan 10.4%) made up more than 60% of the PMJAY facilities. 40% of the facilities had two to five specialties, and 14% had 21 to 24 specialties. The study found that most of the hospitals that are part of the scheme are in states that have already tried to set up public health insurance programs [9].

Rajiv (2021) conducted a qualitative examination of the obstacles and enablers to the private hospitals in Kerala's Pradhan Mantri Jan Aarogya Yojana Empanelment. It was shown that social commitment and an increase in patient flow were the main facilitators for private hospital empanelment in the system. Because there aren't enough claim rates, hospitals must cut back on the

quality of care because of a lot of patients, the government doesn't want to do anything about it, and hospitals have had bad experiences in the past [10].

Dash U et al. (2020) evaluated the degree of awareness throughout the scheme's first implementation phase in 2019 across three states: Bihar, Haryana, and Tamil Nadu. It was found that the primary source of information was the PM-JAY letter received by households. In Bihar, only 9.84% of beneficiaries were aware of the PM-JAY program, while in Haryana, 12.41% of beneficiaries had awareness. In Tamil Nadu, where PM-JAY was integrated with the pre-existing state program, 59% of beneficiaries were aware of the program [11].

Kranthi et al. (2020) conducted a cross-sectional study on the awareness and readiness of healthcare workers in a tertiary care hospital in Rishikesh, India, during the implementation of the Pradhan Mantri Jan Arogya Yojana scheme. The study found that faculty members scored considerably higher on awareness than senior residents, and it also made clear how important it is to hold PMJAY training for hospital stakeholders [12].

Pugazhenthii (2020) conducted a study on awareness of the PMJAY scheme in the Thanjavur district of Tamil Nadu. They assessed various details about the scheme among 200 beneficiaries and found that awareness regarding coverage was 65%, awareness regarding grievance redressal was 15%, and awareness regarding PM Arogya Mitra was 21%. They concluded that there was a partially higher degree of awareness recorded for the scheme's coverage amount than for the monitoring of the scheme's

execution, which was followed by the grievance redressal system's operation. The degree to which the beneficiaries are aware of the various components of the program will determine the system's overall performance [13].

Garg et al. (2020) conducted three repeated cross-sectional studies in Chhattisgarh. They used two of the cross-sections of the (NSS) year 2004 when there were no publicly funded health insurance (PFHI) schemes and in 2014, during the operation of the older Publicly Funded Health Insurance scheme, primary data was collected in 2019 to cover the first year of PM-JAY implementation and it was used to make the third cross-section. It found that the incidence of catastrophic health costs did not go down with enrollment in PMJAY or other PFHI programs [14].

Sriee et al. (2020) conducted a cross-sectional survey in 2020 among 300 residential units in the Thiruvallur district of Tamil Nadu revealed that only about 42.33% of the 300 households were receiving benefits from the Ayushman Bharat. Only 10% of the Ayushman Bharat scheme-eligible households have incurred additional costs for medical care in the last year, out of the 47.24% of homes who are covered by the program. Medical costs could have put 39.88% of households without access to the Ayushman Bharat scheme in a difficult financial position. They added that households covered by the health insurance program had a smaller financial burden from medical expenses. Currently, this program does not include the middle class of society. Therefore, many families may become impoverished because of significant or

unforeseen medical costs [15].

Saxena (2019) conducted a study in 14 hospitals in Gujarat and Madhya Pradesh. In addition, a household survey with 100 beneficiaries was carried out by each state. The PMJAY system was shown to have required out-of-pocket payments from about 27% of recipients. Beneficiaries from Gujarat (89%) reported "zero payment" at a higher rate than those from Madhya Pradesh (57%), and from public hospitals (80%) than from private hospitals (66%). In Madhya Pradesh, OOP payments were more common among patients in private hospitals. They also provided an explanation for any out-of-pocket expenses. For pre-operative diagnostic treatments, many hospitals demand money because they worry that the patient could not be admitted if the results are unfavorable. Before admitting a patient, several private hospitals require that they complete this at a public hospital [16].

Monitoring and Evaluating the Scheme

The program incorporates an accountability and transparency-upholding monitoring and evaluation system. It provides a dashboard that is open to the public where everyday progress on implementation can be tracked. Also, the

scheme provides beneficiary information for those who have utilized its services while safeguarding their privacy. Furthermore, all claim processing is conducted in a completely anonymous manner.

Convergence

The alignment of National Health Authority (NHA) and Employee's State Insurance Corporation (ESIC): A cooperation partnership has been established between the National Health Authority (NHA) and the Employee's State Insurance Corporation (ESIC). Through this partnership, the Employee's State Insurance Scheme (ESIS) and Ayushman Bharat - Pradhan Mantri Jan Arogya Yojana (AB PM-JAY) would create an ecosystem that will allow ESIC participants to access services at hospitals that are a part of AB PM-JAY and vice versa. Currently, the PM-JAY is extending its platform, to reach ESIC beneficiaries across 157 districts in India [17]. The NHA is also working on convergence with the Central Government Health Services (CGHS) and Central Armed Police Forces (CAPF) for the provision of health services to the employees in the PMJAY empaneled facilities [2].



Figure 2. Achievements of AB-PMJAY

Challenges in the Implementation of the PMJAY Scheme

Awareness Deficiency

The program grapples with a limited level of awareness, particularly in rural areas, among potential beneficiaries. Many eligible individuals remain unaware of their entitlements and how to access them. Enhancing outreach and communication efforts is essential to raise knowledge and stimulate demand.

Supply-Side Constraints

This program faces supply-side challenges, mainly arising from the uneven allocation and accessibility of healthcare resources and personnel nationwide. There is a scarcity of recognized hospitals in many states, especially in rural and tribal areas.

Reimbursement Challenges

The program has difficulties in ensuring that empaneled hospitals, especially those in the private sector, receive adequate

and timely reimbursement for their claims. Many hospitals have expressed worries about long processing times, low package rates, high rejection rates, and payment delays. To keep the program viable and sustainable, it is essential to expedite and streamline the procedure for settling claims and to examine package rates on a regular basis.

Fraud and Misuse

The program tackles the problem of preventing and identifying fraud and abuse by fraudulent individuals trying to benefit themselves. Remarkably, a recent finding from the audit that has been conducted by the Comptroller and Auditor General of India indicated that a single mobile phone number, (9999999999), was linked to around 7.5 lakh beneficiaries. It is crucial to strengthen anti-fraud measures and impose strict penalties on individuals engaged in fraudulent or malpractice within the program.

Way Forward Transformation

Around half of India's population will now have universal health coverage, the initiative has the potential to completely transform the national healthcare system. Additionally, it can help achieve Goal 3.8 of the Sustainable Development Agenda states that everyone should have access to healthcare by 2030.

Continuum of Care

By establishing interconnections with the primary care systems, the initiative might act as an inspiration for improving the nation's basic healthcare system. It can also improve the quality, affordability, and

accessibility of healthcare services by utilizing the potential of digital health technologies.

Encouraging Private Healthcare Facilities for Empanelment

The network of the empaneled hospitals in the tier-II and tier-III cities may be enhanced and some additional incentives may be given to motivate the hospitals in those cities to get empaneled under the scheme.

Follow-up Packages

From the available literature, it has been observed that a major portion of Out-of-Pocket expenditure is being spent on follow-up investigations and purchasing medicines after the discharge of the patients. The provision for follow-up packages and continued supply of medicines till the required duration may be ensured to reduce the OOPE among the patients.

Reduce Indirect OOPE

A significant proportion of indirect OOPE can be reduced by compensating for the wage loss during the hospital stay and provision of transport facilities to and from the health facilities. Strategies may be developed to curb these by providing indemnity coverage to the patients under the scheme for the loss of wages by Direct Benefit Transfer to the patients and to compensate for the transportation charges, the beneficiaries may be paid a fixed amount per visit to meet the transportation expenses like in other schemes i.e., RSBY and Arogya Sri scheme in Andhra Pradesh and Telangana states.

Convergence

To escape repetition and fragmentation, the program must develop its integration and alignment with some additional health programs and initiatives at the state and national levels. Additionally, it needs to encourage collaboration and cooperation with a wide range of stakeholders, including academic institutions, commercial enterprises, and civil society organizations, to maximize the leverage of their expertise and resources.

Conclusion

The Ayushman Bharat-Pradhan Mantri Jan Aarogya Yojna (AB-PMJAY) represents a significant step towards achieving universal health coverage in India. This review highlights the scheme's positive impact on reducing out-of-pocket expenditure and catastrophic health expenditures for the poor, enhancing financial protection, and improving access to quality healthcare services. Despite these successes, challenges such as the need for increased awareness, efficient implementation, and addressing regional disparities remain. Overall, AB-PMJAY has shown promising results in its early stages, and with continued refinement and robust policy support, it has the potential to transform India's healthcare landscape and ensure equitable health care access for all.

Conflicts of interest

The authors declares that they do not have conflict of interest.

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