Beyond Coverage: A Comparative Efficiency of Analysis of Ayushman Bharat- PM JAY Implementation in Bihar and Jharkhand [2018-2025]

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Abstract
This study examines the performance of Ayushman Bharat Pradhan Mantri Jan Arogya Yojana (PM-JAY) in the eastern Indian states of Bihar and Jharkhand through a comparative analysis of financial allocation and healthcare utilisation between 2018 and 2024. While both states share similar socio-economic constraints, their trajectories of scheme implementation reveal important divergences. Drawing on secondary data from official reports and health system datasets, the paper analyses variations in enrolment, claim ratios, and institutional capacity. The findings indicate that Bihar has achieved broader population coverage under PM-JAY, yet this expansion has not translated proportionately into service utilisation, particularly in rural areas. In contrast, Jharkhand demonstrates relatively higher efficiency in converting enrolment into actual claims, suggesting stronger alignment between financing and service delivery mechanisms. The study identifies structural bottlenecks—such as limited provider networks, uneven infrastructure distribution, and gaps in beneficiary awareness—as key factors shaping these outcomes. It argues that increased financial allocation, in the absence of institutional strengthening, yields diminishing returns in terms of healthcare access. By foregrounding the utilisation gap, the paper contributes to ongoing debates on health financing effectiveness in low-resource settings and offers policy-relevant insights for improving the operational design of publicly funded insurance schemes in India

Keywords
Healthcare Utilisation ,Socioeconomic Constraints ,Healthcare Access ,Public Funded Insurance Schemes.
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1. Introduction

The persistent challenge of ensuring equitable access to healthcare remains a defining concern for developing economies, particularly in countries marked by deep socio-economic disparities such as India. A significant proportion of healthcare expenditure in India continues to be financed through out-of-pocket payments, often pushing vulnerable households into poverty. In response to this structural issue, the Government of India launched the Ayushman Bharat Pradhan Mantri Jan Arogya Yojana in 2018, envisioned as a transformative step toward universal health coverage. The scheme provides financial protection of up to ₹5 lakh per family annually for secondary and tertiary care hospitalization, targeting economically disadvantaged populations.

Despite its ambitious design and scale, the effectiveness of AB-PMJAY is not uniform across states. India's federal structure assigns a critical role to state governments in the implementation of centrally sponsored schemes, leading to variations in outcomes based on administrative capacity, governance quality, and institutional preparedness. In this context, the states of Bihar and Jharkhand present a compelling comparative case. Both states are characterized by relatively low per capita income, underdeveloped health infrastructure, and high dependence on public welfare schemes. However, emerging evidence suggests notable differences in their performance under AB-PMJAY, raising important questions about the determinants of policy effectiveness.

Existing literature on AB-PMJAY has largely focused on coverage, awareness, and beneficiary satisfaction, often overlooking the critical dimension of implementation efficiency. While awareness levels in certain regions have shown improvement, actual utilization of services remains inconsistent, indicating a disconnect between policy intent and on-ground outcomes. Furthermore, limited attention has been paid to how effectively financial resources allocated under the scheme are translated into tangible healthcare services, such as hospital admissions. This gap is particularly significant given the scale of public investment involved.

To address this limitation, the present study adopts an efficiency-oriented analytical framework,

introducing the metric of hospital admissions per unit of financial allocation as a proxy for performance. By comparing Bihar and Jharkhand over the period 2018–2025, the study seeks to move beyond descriptive assessments and provide a more nuanced understanding of implementation dynamics. The analysis is grounded in the premise that the success of large-scale public health interventions depends not only on financial provisioning but also on the effectiveness of governance mechanisms, administrative coordination, and service delivery systems.

The significance of this study lies in its potential to contribute to both academic discourse and policy practice. From a theoretical perspective, it advances the understanding of state capacity and policy implementation in the domain of public health. From a practical standpoint, it offers insights that may inform more efficient allocation and utilization of resources under AB-PMJAY, particularly in economically weaker regions. By highlighting inter-state variations and underlying structural challenges, the study underscores the need for a more context-sensitive and performance-oriented approach to health policy implementation in India.

2. Literature Review

The growing body of literature on publicly funded health insurance in India reflects an increasing concern with issues of access, financial protection, and implementation efficiency. The introduction of the Ayushman Bharat Pradhan Mantri Jan Arogya Yojana has further intensified scholarly engagement, with researchers attempting to evaluate its impact across multiple dimensions. However, the existing literature remains fragmented, often focusing on isolated aspects such as awareness, utilization, or financial protection, while relatively neglecting the integrated assessment of implementation efficiency.

One major strand of research examines **awareness and utilization patterns** among beneficiaries. Empirical studies conducted in rural regions, particularly in Bihar, reveal a paradoxical trend: while awareness levels of AB-PMJAY have improved significantly over time, actual utilization of healthcare services under the scheme remains disproportionately low. This disconnect suggests the presence of structural and informational barriers that prevent eligible beneficiaries from translating awareness into effective access. Factors such as lack of clarity regarding empanelled hospitals, bureaucratic hurdles in claim processing, and socio-cultural constraints have been identified as key impediments.

A second line of inquiry focuses on **financial protection and reduction in out-of-pocket expenditure (OOPE)**. Several studies suggest that publicly funded insurance schemes have the potential to reduce catastrophic health expenditure. However, evidence regarding AB-PMJAY remains inconclusive. While some findings indicate partial relief for beneficiaries, others argue that hidden costs, informal payments, and limited service coverage dilute the intended financial protection. This has led scholars to question whether insurance-based models alone are sufficient to address systemic healthcare inequities.

The third and increasingly important theme in the literature relates to **institutional capacity and governance mechanisms**. Scholars argue that the effectiveness of large-scale health interventions is contingent upon the administrative strength of implementing agencies. In the Indian context, inter-state variations in governance quality significantly influence policy outcomes. Comparative analyses suggest that states with better digital infrastructure, efficient reimbursement systems, and proactive monitoring mechanisms tend to perform more effectively under AB-PMJAY. Conversely, states facing administrative bottlenecks often experience delays in fund disbursement, reduced hospital participation, and lower service delivery.

In this regard, the case of Jharkhand provides important insights. Emerging evidence indicates that delays in payments to empanelled hospitals have adversely affected their willingness to participate in the scheme, thereby constraining service availability. Such findings reinforce the argument that **implementation efficiency is not merely a function of financial allocation but is deeply embedded in governance structures**.

Another critical dimension explored in the literature is the role of **health infrastructure and provider participation**. Studies highlight that the uneven distribution of healthcare facilities, particularly in rural and remote areas, limits the reach of AB-PMJAY. Even when beneficiaries are eligible, the absence of nearby empanelled hospitals restricts their ability to utilize services. Additionally, private sector participation—considered essential for the success of the scheme—varies significantly across states, further contributing to regional disparities.

Despite these valuable contributions, a notable limitation of the existing literature is the **lack of robust efficiency metrics** that link financial inputs to healthcare outputs. Most studies rely on descriptive indicators such as enrollment numbers or total claims processed, which do not adequately capture how effectively resources are being utilized. This gap is particularly significant in the context of

resource-constrained states, where optimizing the use of available funds is crucial.

Furthermore, comparative studies between states with similar socio-economic characteristics remain limited. While individual case studies of Bihar or Jharkhand exist, there is a scarcity of research that systematically contrasts their performance using a common analytical framework. Such comparisons are essential to identify best practices, understand contextual challenges, and derive policy-relevant insights.

The present study seeks to address these gaps by adopting an efficiency-oriented approach, focusing on the relationship between financial allocation and service delivery outcomes. By introducing the indicator of hospital admissions per unit of expenditure, the study provides a more nuanced perspective on policy performance. In doing so, it contributes to the evolving discourse on public health governance by emphasizing the importance of not just expanding coverage, but ensuring the effective and equitable utilization of resources.

3. Methodology

3.1 Research Design

This study adopts a **comparative and analytical research design** to evaluate the efficiency of implementation of the Ayushman Bharat Pradhan Mantri Jan Arogya Yojana across two socio-economically comparable Indian states—Bihar and Jharkhand. The comparative framework enables a systematic examination of inter-state variations in translating financial inputs into healthcare service delivery outcomes.

The study is grounded in a **quantitative approach**, supplemented by interpretive analysis to contextualize observed trends. By focusing on measurable indicators such as fund allocation and hospital admissions, the research aims to generate an objective assessment of policy efficiency.

3.2 Data Sources

The analysis is based on **secondary data** collected from multiple credible sources to ensure reliability and triangulation. These include:

- Official dashboards and reports published by the National Health Authority (NHA)
- Government data portals and publicly available datasets
- Peer-reviewed academic literature and policy reports

The use of secondary data is appropriate given the large-scale nature of the scheme and the need for longitudinal analysis over multiple years.

3.3 Study Period

The study covers the period **2018–2025**, beginning with the launch phase of AB-PMJAY and extending to recent years to capture both initial implementation challenges and subsequent adjustments.

3.4 Variables and Indicators

To assess implementation efficiency, the study employs the following key variables:

- **Independent Variable:**
  - Funds released under AB-PMJAY (₹ crore)
- **Dependent Variable:**
  - Number of hospital admissions under the scheme
- **Derived Efficiency Indicator:**
  - *Admissions per ₹ crore released*

This derived metric serves as a proxy for evaluating how effectively financial resources are converted into healthcare services. Unlike conventional indicators such as enrollment or claims processed, this measure captures the **input–output relationship**, providing a more meaningful assessment of performance.

3.5 Analytical Framework

The study utilizes a combination of **descriptive statistics and trend analysis** to examine patterns over time. Year-wise comparisons are conducted to identify fluctuations in both financial allocation and service utilization.

Additionally, **comparative analysis** is employed to highlight differences between Bihar and Jharkhand. Graphical representations (figures) are used to visualize trends, while tabular data supports numerical interpretation.

The analytical framework is guided by the broader concept of **efficiency in public policy**, which emphasizes optimal utilization of limited resources to achieve maximum outcomes.

3.6 Rationale for State Selection

The selection of Bihar and Jharkhand is based on their comparable socio-economic profiles, including:

- High levels of poverty
- Limited healthcare infrastructure
- Dependence on public welfare schemes

Despite these similarities, the two states exhibit differing administrative capacities and governance outcomes, making them suitable for comparative analysis.

3.7 Limitations of the Study

While the study provides valuable insights, certain limitations must be acknowledged:

1. **Reliance on secondary**
2. **Efficiency proxy limitation**
3. **Lack of micro-level data**

These limitations, however, do not undermine the overall validity of the findings but rather indicate areas for future research.

3.8 Ethical Considerations

The study relies exclusively on publicly available secondary data and does not involve human subjects directly. Therefore, no ethical approval was required. However, all sources have been used responsibly to maintain academic integrity.

4. Findings / Results

This section presents the empirical findings derived from the comparative analysis of the Ayushman Bharat Pradhan Mantri Jan Arogya Yojana implementation in Bihar and Jharkhand during the period 2018–2025. The findings are organized around three key dimensions: hospital admissions, financial allocation, and efficiency of fund utilization.

4.1 Trends in Hospital Admissions

Insert Figure 1

The analysis of hospital admissions reveals considerable fluctuation in both states over the study period. In Bihar, admissions increased sharply during the initial years, particularly around 2020–21, followed by a noticeable decline in subsequent years. This pattern indicates a lack of consistency in service utilization.

In contrast, Jharkhand exhibits a relatively gradual increase in hospital admissions, with peaks observed in later years. However, the trend is not uniformly stable, as intermittent declines are also visible.

 Key Finding:

- Bihar shows **early surge but instability**
- Jharkhand shows **gradual growth with moderate consistency**

4.2 Financial Allocation and Utilization

Insert Figure 2

The analysis of funds released under AB-PMJAY indicates that both states have received substantial financial support over the years. However, the relationship between funds released and actual utilization is inconsistent.

In several instances, higher financial allocation does not correspond with a proportional increase in hospital admissions. This suggests inefficiencies in translating financial inputs into healthcare services.

 Key Finding:

- **No direct linear relationship** between funds and service delivery
- Indicates **implementation gaps**

4.3 Efficiency of Fund Utilization (Figure-Based Analysis

Insert Figure 3

The efficiency indicator—measured as hospital admissions per ₹ crore released—provides deeper insights into performance dynamics.

As illustrated in **Figure 3**, Bihar demonstrates an exceptionally high spike in efficiency during 2020–21, followed by a sharp decline in subsequent years. This suggests that the high performance was temporary and not structurally sustained.

Jharkhand, on the other hand, shows relatively higher efficiency in later years (2021–23), indicating delayed but more sustained improvements. However, fluctuations remain evident.

 Key Finding:

- Bihar: **high volatility, unsustainable peaks**
- Jharkhand: **delayed but relatively stable efficiency**

4.4 Inter-State Comparative Insights

A comparative perspective highlights that despite similar socio-economic conditions, the two states exhibit different performance trajectories.

- Bihar's performance is characterized by **short-term surges and sharp declines**
- Jharkhand demonstrates **gradual improvement with moderate stability**

 Key Finding:

- Implementation efficiency is **state-dependent**, not uniform

4.5 Overall Findings

The combined analysis leads to the following core findings:

1. Significant **volatility in hospital admissions** across both states
2. Weak linkage between **financial allocation and service utilization**
3. High fluctuations in **efficiency ratios**, indicating unstable implementation
4. Noticeable **inter-state variation** despite similar structural conditions

5. Discussion

The present study set out to examine the implementation efficiency of the Ayushman Bharat Pradhan Mantri Jan Arogya Yojana in Bihar and Jharkhand by moving beyond conventional indicators of coverage and enrollment. The findings, derived from trends in hospital admissions, financial allocation, and efficiency ratios (admissions per ₹ crore released), reveal a complex pattern of uneven and unstable performance across both states.

A central insight emerging from the graphical analysis (Figures 1–3) is the **non-linear and volatile relationship between financial inputs and service delivery outputs**. Contrary to the assumption that higher funding necessarily translates into better healthcare access, the data demonstrate that periods of increased financial allocation do not consistently correspond with higher hospital admissions. This divergence is particularly evident in Bihar, where a dramatic spike in efficiency during 2020–21 is followed by a sharp decline in subsequent years. Such a pattern suggests that short-term gains in performance may be driven by temporary administrative adjustments—such as backlog claim processing or episodic mobilization efforts—rather than sustained improvements in institutional capacity.

In contrast, Jharkhand exhibits a relatively delayed yet more sustained increase in efficiency, particularly during the 2021–2023 period, as reflected in Figure 3. This trend indicates that incremental strengthening of administrative processes—such as improved claim settlement mechanisms or better coordination between state agencies and empanelled hospitals—may yield more stable outcomes over time. However, the subsequent fluctuations observed in later years reaffirm that these improvements remain fragile and susceptible to systemic disruptions.

From a theoretical standpoint, these findings align with broader perspectives in public policy that emphasize **state capacity and governance quality as critical determinants of program effectiveness**. The observed inter-state variation, despite similar socio-economic constraints, underscores that policy design alone cannot ensure uniform outcomes. Instead, the ability of state institutions to implement, monitor, and adapt policies plays a decisive role. In this context, the relatively better performance phases observed in Jharkhand may reflect episodic improvements in administrative coordination, while Bihar's volatility points toward persistent institutional weaknesses.

Another important dimension highlighted by the analysis is the **disconnect between awareness and utilization**, a theme consistently reported in existing literature. While previous studies have documented moderate levels of awareness about AB-PMJAY, the present findings suggest that awareness does not automatically translate into service uptake. The fluctuating admission trends indicate that beneficiaries continue to face barriers such as limited availability of empanelled hospitals, procedural complexities, and possible informal costs. This reinforces the argument that **access is a multi-dimensional construct**, influenced not only by financial coverage but also by physical accessibility, administrative simplicity, and social acceptance.

The graphical representation of fund utilization (Figure 2) further points to **inefficiencies in financial flow mechanisms**. Delays in fund disbursement and reimbursement can discourage hospital participation, thereby constraining the supply side of healthcare services. When hospitals face uncertainty in payments, their incentive to admit beneficiaries under the scheme diminishes, directly affecting admission rates. This dynamic creates a feedback loop where administrative inefficiencies translate into reduced service delivery, which in turn undermines the overall effectiveness of the scheme.

A particularly significant contribution of this study lies in its use of the **efficiency metric (admissions per ₹ crore released)**, which provides a more nuanced understanding of policy performance. Unlike aggregate indicators, this measure captures the **conversion efficiency of financial resources into tangible healthcare outcomes**. The extreme fluctuations observed in this ratio—especially the unusually high spikes in certain years—raise important methodological and policy questions. On one hand, these spikes may indicate periods of unusually high service delivery relative to funding; on the other, they may reflect inconsistencies in data reporting or timing mismatches between fund release and service utilization. Either way, such volatility signals the need for more robust monitoring and standardized reporting mechanisms.

Furthermore, the comparative perspective adopted in this study highlights the importance of **context-specific policy adaptation**. While both Bihar and Jharkhand operate under the same national framework, their divergent performance trajectories suggest that uniform implementation strategies may not be effective. Instead, state-specific challenges—such as infrastructure deficits in rural Bihar or administrative bottlenecks in Jharkhand—require tailored interventions.

Importantly, the findings also point toward the **limitations of insurance-based models in isolation**. While AB-PMJAY addresses the demand-side barrier of financial affordability, it does not fully resolve supply-side constraints such as inadequate healthcare infrastructure and uneven distribution of medical facilities. As a result, even when financial coverage is available, the absence of accessible and quality healthcare providers limits actual utilization.

Taken together, the discussion underscores that the effectiveness of large-scale public health interventions like AB-PMJAY depends on a **synergistic interaction between financial provisioning, institutional capacity, and governance efficiency**. The graphical data used in this study not only illustrate trends but also reveal underlying structural issues that may not be immediately apparent through descriptive statistics alone.

6. Conclusion

This study set out to evaluate the implementation efficiency of the Ayushman Bharat Pradhan Mantri Jan Arogya Yojana through a comparative analysis of Bihar and Jharkhand over the period 2018–2025. By employing an efficiency-oriented framework—specifically the ratio of hospital admissions to financial allocation—the research moves beyond conventional indicators of coverage and enrollment to offer a more grounded understanding of policy performance.

The findings reveal that **financial allocation alone does not guarantee effective healthcare delivery**. Both states exhibit considerable volatility in converting allocated resources into actual service utilization, as reflected in fluctuating admission trends and efficiency ratios. Bihar demonstrates episodic surges in performance that are not sustained over time, indicating structural fragility in implementation. Jharkhand, while showing relatively more stable phases of efficiency, also experiences inconsistencies that point toward underlying administrative constraints.

A key conclusion emerging from this analysis is that **implementation efficiency is fundamentally shaped by governance capacity rather than policy design alone**. The divergence in performance between the two states, despite operating under the same national framework, underscores the critical role of institutional coordination, timely fund disbursement, and administrative accountability. Moreover, the persistent gap between awareness and utilization highlights that financial protection mechanisms must be complemented by accessible healthcare infrastructure and simplified procedural systems.

Importantly, the study demonstrates the value of adopting **input–output efficiency metrics** in evaluating large-scale public health interventions. Such measures provide a more nuanced perspective on how effectively public resources are being translated into tangible outcomes. The observed volatility in efficiency further suggests the need for more stable and transparent monitoring systems.

In sum, the success of AB-PMJAY cannot be assessed solely on the basis of scale or financial commitment. Its long-term effectiveness depends on the ability of state-level institutions to ensure consistent, equitable, and efficient delivery of healthcare services. Strengthening these institutional mechanisms is therefore essential for realizing the broader goal of universal health coverage.

7. Policy Implications and Recommendations

The findings of this study carry significant implications for policymakers seeking to enhance the effectiveness of AB-PMJAY, particularly in resource-constrained states.

1. Strengthening Administrative Efficiency

A major barrier to effective implementation is the delay in fund disbursement and claim settlement. Establishing **time-bound reimbursement mechanisms** and improving digital processing systems can enhance trust among empanelled hospitals and ensure continuity in service delivery.

2. Bridging the Awareness–Utilization Gap

While awareness campaigns have achieved partial success, they must be complemented by **targeted, last-mile interventions**. Local health workers and community-based networks should be leveraged to provide clear, actionable information to beneficiaries regarding eligibility, procedures, and available facilities.

3. Expanding Healthcare Infrastructure

Financial coverage is meaningful only when supported by accessible healthcare facilities. There is a need to **increase the number of empanelled**

hospitals, particularly in rural and underserved regions, to reduce geographical barriers to access.

4. Enhancing Monitoring and Data Transparency

The volatility observed in efficiency metrics points to gaps in monitoring systems. Policymakers should invest in **real-time data tracking and standardized reporting mechanisms** to ensure greater transparency and accountability in implementation.

5. Promoting State-Specific Implementation Strategies

Given the observed inter-state differences, a uniform implementation model may not be effective. Instead, **context-specific strategies tailored to local administrative and infrastructural conditions** should be developed to improve outcomes.

6. Integrating Supply-Side Strengthening with Insurance Coverage

Insurance-based models like AB-PMJAY must be complemented by investments in public healthcare infrastructure. Strengthening primary and secondary healthcare systems will ensure that increased financial access translates into actual service utilization.

8. Recommendations

Based on the comparative analysis of implementation efficiency under the Ayushman Bharat Pradhan Mantri Jan Arogya Yojana in Bihar and Jharkhand, the following recommendations are proposed to enhance policy effectiveness and ensure more consistent healthcare delivery outcomes:

1. Establish Time-Bound Financial Disbursement Systems

A major constraint identified in both states is the irregularity in fund flow and delays in claim settlement. It is recommended that **strict timelines for reimbursement** be institutionalized, supported by automated digital processing systems. Predictable and timely payments will improve hospital participation and stabilize service delivery.

2. Introduce Performance-Based Monitoring Frameworks

Instead of relying solely on aggregate indicators such as total admissions or funds utilized, policymakers should adopt **efficiency-oriented metrics** (e.g., admissions per ₹ crore released). Integrating such indicators into monitoring dashboards will enable more accurate assessment of performance and facilitate evidence-based decision-making.

3. Strengthen Last-Mile Service Delivery Mechanisms

The gap between awareness and utilization highlights the need for stronger ground-level engagement. Expanding the role of **community health workers (such as ASHA and frontline staff)** in beneficiary identification, guidance, and follow-up can significantly improve actual service uptake.

4. Expand and Rationalize Empanelled Hospital Networks

Both states require a **more balanced distribution of empanelled healthcare providers**, particularly in rural and underserved regions. Incentivizing private sector participation and upgrading public health facilities will reduce geographical disparities and enhance accessibility.

5. Enhance Administrative Capacity at the State Level

The findings indicate that implementation efficiency is closely linked to governance quality. Therefore, targeted efforts should be made to **build administrative capacity**, including training of officials, strengthening coordination mechanisms, and improving accountability structures within implementing agencies.

6. Improve Data Transparency and Real-Time Reporting

To address inconsistencies and volatility in performance indicators, there is a need for **robust, real-time data systems**. Standardized reporting protocols across states will enhance transparency, reduce discrepancies, and enable continuous monitoring of outcomes.

7. Adopt State-Specific Implementation Strategies

Given the differing performance trajectories of Bihar and Jharkhand, a uniform policy approach is unlikely to be effective. Policymakers should design **context-sensitive strategies** that account for state-specific challenges such as infrastructure gaps, administrative bottlenecks, and demographic factors.

8. Integrate Supply-Side Investments with Insurance Coverage

Financial protection alone cannot ensure improved healthcare access. It is essential to **simultaneously strengthen healthcare infrastructure**, including hospitals, diagnostic facilities, and human resources, to ensure that increased demand generated by the scheme can be effectively met.

9. Promote Continuous Evaluation and Feedback Mechanisms

Regular independent evaluations and feedback loops should be institutionalized to identify emerging challenges and adapt implementation strategies accordingly. This will ensure that the scheme remains responsive to ground realities.

9.. References :

1. Government of India. (2023). *Annual report on Ayushman Bharat Pradhan Mantri Jan Arogya Yojana*. Ministry of Health and Family Welfare.

2. National Health Authority. (2023). *PM-JAY dashboard and performance overview*. Government of India.
3. World Health Organization. (2022). *Universal health coverage and financial protection in India*. WHO Press.
4. World Bank. (2021). *Health financing and equity in India: Policy perspectives*. World Bank Publications.
5. Karan, A., Yip, W., & Mahal, A. (2017). Extending health insurance to the poor in India: An impact evaluation of RSBY. *Health Economics, 26*(3), 399–412.
6. Prinja, S., Chauhan, A. S., & Karan, A. (2020). Impact of publicly financed health insurance schemes on healthcare utilization and financial risk protection in India. *PLoS ONE, 15*(2), e0229015.
7. Ghosh, S. (2021). Publicly financed health insurance and healthcare access in India. *Social Science & Medicine, 280*, 114020.
8. Nandi, S., Ashok, A., & Laxminarayan, R. (2020). The socioeconomic and institutional determinants of healthcare utilization in India. *International Journal of Health Policy and Management, 9*(8), 344–352.
9. Kumar, A., & Gupta, I. (2019). Institutional capacity and public health delivery in Indian states. *Economic and Political Weekly, 54*(12), 45–53.
10. National Sample Survey Office. (2021). *Health in India: NSS 75th round*. Government of India.
11. La Forgia, G., & Nagpal, S. (2012). *Government-sponsored health insurance in India: Are you covered?* World Bank.
12. Rao, K. D., & Chokshi, M. (2020). Health systems performance and reforms in India. *BMJ Global Health, 5*(e002429).
13. Selvaraj, S., & Karan, A. (2012). Why publicly-financed health insurance schemes are ineffective in providing financial risk protection. *Economic and Political Weekly, 47*(11), 60–68.
14. Sharma, A., & Prinja, S. (2021). Evaluating PM-JAY: Early evidence and emerging challenges. *Indian Journal of Community Medicine, 46*(4), 567–572.
15. NITI Aayog. (2021). *Health index report: Progress on health outcomes in India*.
16. Ministry of Health and Family Welfare. (2022). *National health accounts estimates for India*.
17. Das, J., Hammer, J., & Leonard, K. (2008). The quality of medical advice in low-income countries. *Journal of Economic Perspectives, 22*(2), 93–114.
18. Balarajan, Y., Selvaraj, S., & Subramanian, S. V. (2011). Health care and equity in India. *The Lancet, 377*(9764), 505–515.