

## Analysis of Public Health Expenditure in India: Post COVID-19 Pandemic (2022-2025)

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### Abstract

This paper analyzes the trends in public health expenditure in India during the post-COVID period from 2022 to the present. It examines the increased government spending in the health sector, its distribution between central and state governments, and the composition of major health schemes like the National Health Mission and Ayushman Bharat. Using secondary data sources such as the Union Budget, Economic Survey, National Health Accounts, RBI, and WHO records, the study identifies a gradual increase in total health expenditure alongside a shift toward infrastructure investment and digital health initiatives. Persistent disparities between states and health spending below the WHO recommended benchmark of 6% of GDP are highlighted. The research underscores a policy shift towards preventive and insurance-based healthcare models, emphasizing the need for increased investment and equitable resource allocation to improve health outcomes across India.

**Key words:** Government, Health, Expenditure, WHO and Infrastructure.

### Introduction

This paper situates the analysis of public health expenditure trends in India within the broader context of economic development and public welfare policy after the COVID-19 pandemic. This research aims to critically analyze the trajectory of public health expenditure in India during the post-COVID years, highlighting budgetary priorities, scheme composition, the division of responsibilities between the central and state governments, and progress towards national and international benchmarks. The study seeks to contribute to the literature by assessing whether recent reforms and increased allocations are translating into sustainable improvements in access, equity, and health outcomes.

Public health expenditure is widely recognized as a critical driver of national development, especially in emerging economies like India. The COVID-19 pandemic exposed vulnerabilities in health systems and underscored the need for sustained and enhanced government intervention in health financing and infrastructure. In the aftermath of the pandemic, India's public health budget witnessed a significant rise, both at the central and state levels, reflecting an urgent policy push toward strengthening healthcare delivery, building infrastructure, and expanding digital health initiatives<sup>1</sup>.

Historically, India has devoted a lower percentage of GDP to public health compared to global averages and the World Health Organization's recommended 6%. The post-pandemic period (2022–present) thus marks a pivotal juncture, with renewed policy attention on universal healthcare, insurance-driven models like Ayushman Bharat, and large-scale health missions such as the National Health Mission (NHM). These efforts are intended not just to increase the reach and quality of services, but to address long-standing inter-state disparities and shift the focus towards preventive, primary, and digital health solutions<sup>2</sup>.

This paper offers an examination of India's public health financing landscape, its challenges, and the potential policy pathways that can drive more inclusive and resilient growth in the years ahead.

India's public health system has undergone numerous transformations since independence, shaped by shifting government priorities and economic challenges. Historically, health expenditure remained a low government priority, reflected in budget allocations rarely exceeding 1.5% of GDP before 2020. The country faced challenges such as inadequate infrastructure, workforce shortages, and unequal access, particularly in rural and remote areas. Over the decades, several flagship programs such as the National Rural Health Mission (NRHM) and later Ayushman Bharat have been launched to improve public health services and expand insurance coverage<sup>3</sup>.

### **Pandemic Effects**

The outbreak of the COVID-19 pandemic in early 2020 exposed critical vulnerabilities in India's health financing and infrastructure. In response, both the central and state governments increased public health allocations substantially, with budgetary emphasis on pandemic management, vaccination drives, and healthcare infrastructure upgrades. The pandemic also accelerated digital health initiatives and policy reforms aimed at health system strengthening. Nonetheless, disparities in state-level expenditures and high out-of-pocket health costs persisted, underscoring the systemic changes still required.

### **Financial Protection and Out-of-Pocket Expenditure**

One of the key challenges in India's health financing has been the high level of out-of-pocket expenditure (OOPE) by households, contributing to catastrophic health spending and pushing families into poverty. Strengthening public health budgets aims to increase financial protection mechanisms, through insurance schemes and increased subsidies, thereby reducing the reliance on private and out-of-pocket payments<sup>4</sup>.

### **Alignment with National and Global Health Goals**

Increased health expenditure goal post-2022 aligns with India's commitments to universal health coverage (UHC) and Sustainable Development Goals (SDGs). Strategic investments in health financing are crucial for achieving targets related to maternal and child health, communicable and non-communicable disease control, and overall improvements in population health.

## **Review of Literature**

### **Overview of Public Health Expenditure in India**

Government spending on public health in India has historically lagged relative to the size of the population and burden of disease. According to the Ministry of Health and Family Welfare (Government of India, 2024)<sup>5</sup>, India's public health expenditure increased to 1.8% of GDP during the 2020-21 fiscal year, influenced strongly by the demands of the COVID-19 pandemic. Despite this increase, India's spending remains much lower than global averages, where countries typically allocate between 5% and 10% of GDP to health, as documented by the World Health Organization (WHO, 2025).<sup>6</sup>

### **Impact of the COVID-19 Pandemic on Health Financing**

The COVID-19 pandemic has catalyzed a surge in health-related government expenditure. Majhi and others (2024)<sup>7</sup> describes the governmental response focusing on increased allocations for disease surveillance, infrastructure scaling, and vaccination campaigns. However, these efforts revealed deep inter-state disparities, with southern states generally investing more robustly in health systems than northern counterparts. International organizations such as the OECD (2021)<sup>8</sup> and IMF (2022)<sup>9</sup> highlight that while increased public spending during crises is essential for economic stabilization, it raises significant concerns regarding long-term fiscal sustainability amid competing budgetary pressures.

### **Regional Disparities and State-Level Variations**

Significant disparities in health expenditure persist across India's states. Das and others (2024)<sup>10</sup> find that states such as Kerala and Tamil Nadu allocate upwards of 12% of their budgets to health, compared to some northern states that allocate less than 4%. Narayan (2023) underscores the role of governance efficiency, arguing that fiscal

capacity alone does not guarantee improved health outcomes without effective fund management and accountability mechanisms.

### **Out-of-Pocket Expenditure and Financial Risk Protection**

Despite increased government spending, out-of-pocket expenditure (OOPE) remains high, comprising around 47.1% of total health expenditure (Kamath and Kumar, 2025)<sup>11</sup> (National Health Authority, 2023)<sup>12</sup>. This substantial financial burden continues to push millions of households into poverty (WHO & World Bank, 2021)<sup>13</sup>. The persistence of high OOPE reflects gaps in universal health coverage and insurance penetration, necessitating urgent policy interventions to strengthen financial risk protection (World Bank, 2024)<sup>14</sup>.

### **Fiscal Health Index and Budget Execution Efficiency**

The Fiscal Health Index (NITI Aayog, 2025)<sup>15</sup> provides an assessment framework that highlights not only the volume but also the efficiency and quality of health expenditure by states. Studies indicate that increased allocations are necessary but not sufficient; the efficient execution of budgets and reduction of leakages are essential to translate financial inputs into improved health outcomes. The index shows that states with better fiscal health tend to allocate resources more effectively for public health.

### **Integration of Digital Health and Public Financing**

Recent literature points to digital health initiatives, such as the Ayushman Bharat Digital Mission (ABDM)<sup>16</sup>, as crucial complements to increased public health financing. Integrating digital tools with public expenditure enhances health service delivery efficiency, transparency, and outreach, particularly in remote areas. This indicates a shift towards more technologically driven health financing, ensuring that expenditure growth supports a modern, accessible healthcare system.

### **Objectives of the Study**

1. To assess the share of GDP and total government expenditure during the post-pandemic years.
2. To examine the health expenditure allocation between central and state governments and assess intergovernmental differences.
3. To evaluate the composition of public health expenditure by major schemes, including the National Health Mission and Ayushman Bharat.
4. To compare India's public health spending with global and WHO norms and benchmarks.
5. To analyse the trend of Government Health Expenditure in India.

### **Research Methodology**

This study employs a descriptive and analytical research design to examine trends in India's public health expenditure during the post-COVID period from 2022 to 2025. The primary objective is to assess how government spending on health has evolved following the pandemic and analyze its allocation across central and state governments and key health schemes.

### **Analysis**

#### **Public Health Expenditure in India**

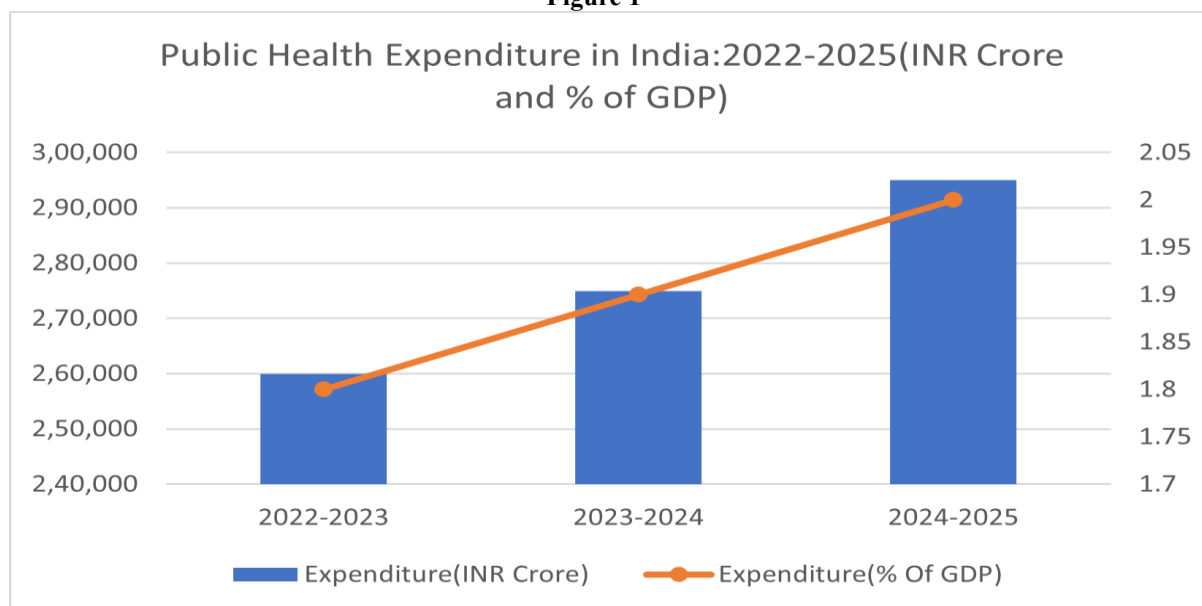
Table 1 and figure 1 shows a steady increase in public health expenditure in India over the three-year period from 2022–23 to 2024–25. In absolute terms, government spending on health rises from ₹2,60,000 crore in 2022–23 to ₹2,95,000 crore in 2024–25, indicating a continuous commitment to strengthening the healthcare sector.

**Table 1**  
**Public Health Expenditure in India:2022-2025**

Year	Expenditure (INR Crore)	Expenditure (% Of GDP)
2022-2023	2,60,000	1.8
2023-2024	2,75,000	1.9
2024-2025	2,95,000	2.0

**Source:** Union Budget Documents (2022–2025), Ministry of Health and Family Welfare, Government of India, and PRS Legislative Research

**Figure 1**



**Source:** Union Budget Documents (2022–2025), Ministry of Health and Family Welfare, Government of India

As a percentage of GDP, expenditure increases from 1.8% to 2.0%, reflecting a gradual improvement in the priority accorded to health within overall economic planning. This upward movement suggests that the government is not only increasing spending in nominal terms but also allocating a larger share of national income to health.

However, the table also reflects that there is gradual but insufficient increase in public health spending, highlighting the need for greater fiscal commitment and efficient resource utilization to achieve equitable and sustainable healthcare outcomes in India.

### Central and State Government Health Spending

Table 2 and figure 2 shows the distribution of public health expenditure between the central and state governments from 2022–23 to 2024–25. It indicates that state governments contribute a significantly larger share of health spending compared to the central government throughout the period.

Table:2

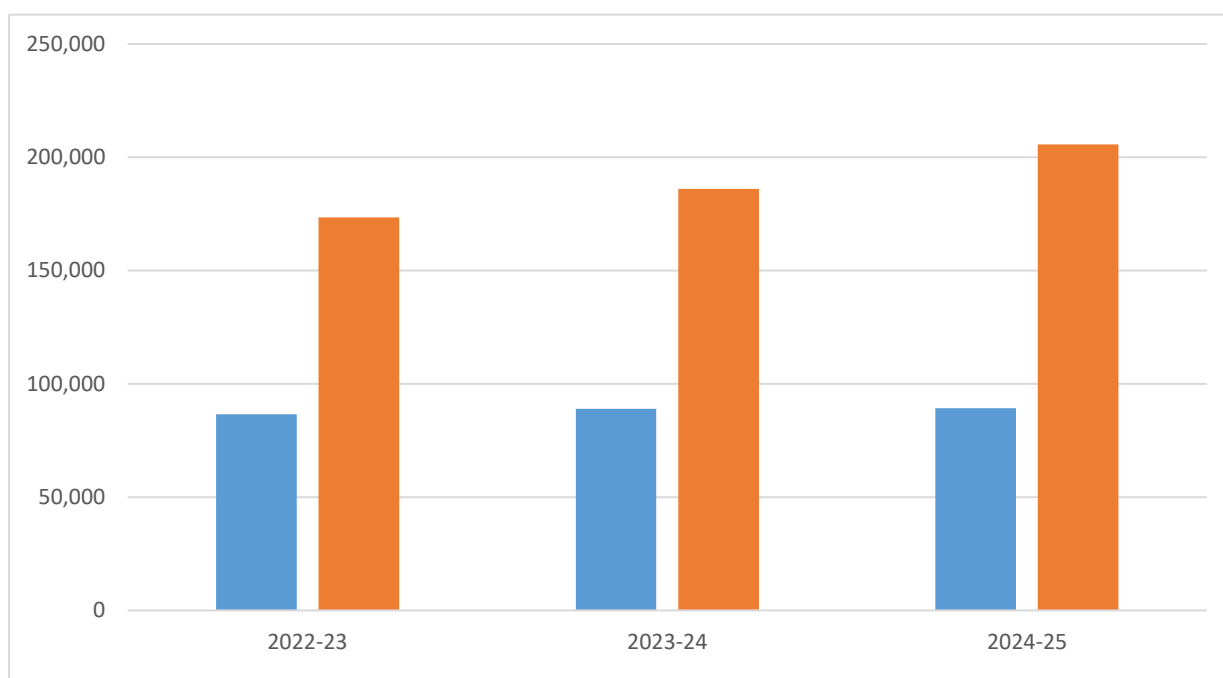
Central and State Government Health Spending (Amounts in INR Crore)

Year	Central Government (INR Crore)	State Government (INR Crore)
2022-2023	86,606	173,394
2023-2024	88,956	186,044
2024-2025	89,287	2,05,713

Source: Union Budget Documents (Demand for Grants) 2022–2025, Ministry of Health and Family Welfare, Government of India, and PRS Legislative Research.

Figure: 2

Central and State Government Health Spending (Amounts in INR Crore), 2022–2025



Source: Union Budget Documents (Demand for Grants) 2022–2025, Ministry of Health and Family Welfare, Government of India, and PRS Legislative Research.

Central government expenditure increases marginally from ₹86,606 crore in 2022–23 to ₹89,287 crore in 2024–25, reflecting a slow and steady rise. In contrast, state government expenditure shows a more substantial increase, rising from ₹1,73,394 crore to ₹2,05,713 crore over the same period.

The table shows clear intergovernmental differences in health expenditure between the central and state governments. Throughout the period, state governments consistently spend more than the central government, indicating that the primary responsibility for healthcare financing lies with the states.

The gap between the two levels of government widens over time. In 2022–23, the difference between state and central expenditure is substantial, and this disparity further increases by 2024–25 as state spending rises significantly while central spending grows only marginally. This reflects an increasing fiscal burden on states in the health sector.

Additionally, the growth pattern differs: the central government shows a slow and nearly stagnant increase, whereas state governments exhibit a stronger and more dynamic rise in expenditure. This suggests that states are taking a more active role in expanding healthcare services, while the central contribution remains relatively limited in comparison.

**Analysis of Regional and State-level Disparities in Health Expenditure**

- The graph highlights notable disparities in health expenditure as a percentage of state budgets across Indian states and union territories in 2025. Top 10 states, marked in green, prioritize health spending significantly/ These states typically have stronger governance, and better fiscal capacity. Bottom 10 states/UTs, shown in red, allocate less than 4.5% of their budgets to health, reflecting fiscal constraints.

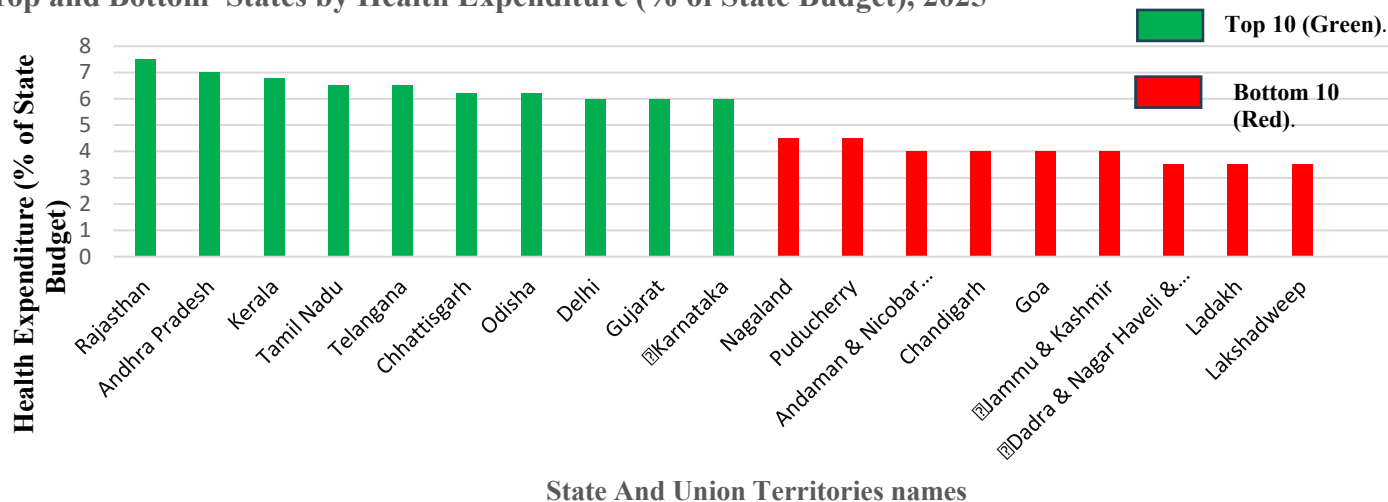
**Table 3**

**Top and bottom States by Health Expenditure (% of State Budget), 2025**

Rank	Top States/UTs	Health Expenditure (% State Budget)	Rank	Bottom States/UTs	Health Expenditure (% State Budget)
1	Rajasthan	7.5	15	Uttarakhand	5.7
2	Andhra Pradesh	7.0	27	Nagaland	4.5
3	Kerala	6.8	28	Puducherry	4.5
4	Tamil Nadu	6.5	29	Andaman & Nicobar Islands	4.0
5	Telangana	6.5	30	Chandigarh	4.0
6	Chhattisgarh	6.2	31	Goa	4.0
7	Odisha	6.2	32	Jammu & Kashmir	4.0
8	Delhi	6.0	33	Dadra & Nagar	3.5
9	Gujarat	6.0	34	Ladakh	3.5
10	Karnataka	6.0	35	Lakshadweep	3.5

Source: indiadata.com, Fiscal Health Index 2025 (NITI Aayog)

**Top and Bottom States by Health Expenditure (% of State Budget), 2025**



**Scheme-wise Expenditure Analysis**

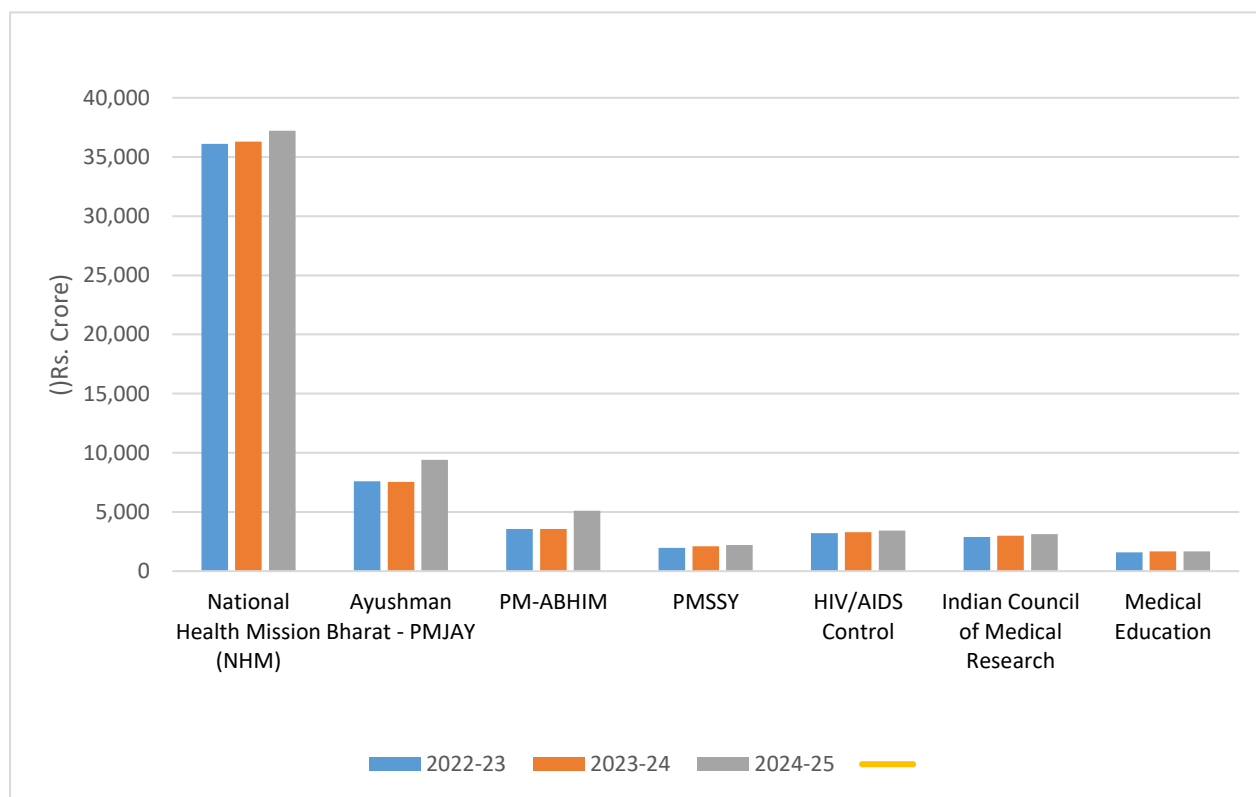
Major schemes include National Health Mission (NHM), Ayushman Bharat (PMJAY and PM-ABHIM), PMSSY, HIV/AIDS Control, ICMR, and Human Resources & Medical Education with NHM leads with 37% of health ministry budget; showed a 2.6% increase from 2023-24 to 2024-25.

**Table: 3**  
**Scheme-wise Health Expenditure Analysis in India 2022-25**

Scheme	2022-23 (Cr)	2023-24 (Cr)	2024-25 (₹ Cr)	% Change (2023-24 to 2024-25)
National Health Mission (NHM)	36,118	36,300	37,227	+2.6%
Ayushman Bharat - PMJAY	7,600	7,548	9,406	+24.6%
PM Ayushman Bharat Health Infrastructure Mission	3,569	3,567	5,109	+43.2%
PM Swasthya Suraksha Yojana	1,976	2,100	2,200	+4.8%
HIV/AIDS Control Programme	3,200	3,300	3,443	+4.3%
Indian Council of Medical Research	2,900	3,000	3,126	+4.2%
Human Resources & Medical Education	1,600	1,673	1,675	+0.12%

**Source:** Ministry of Health and Family Welfare, Government of India, and PRS Legislative Research

**Figure: 4**  
**Scheme-wise Health Expenditure Analysis in India (2022-2025)**



**Source:** Ministry of Health and Family Welfare, Government of India, and PRS Legislative Research.

Comparison Against International and WHO Benchmarks

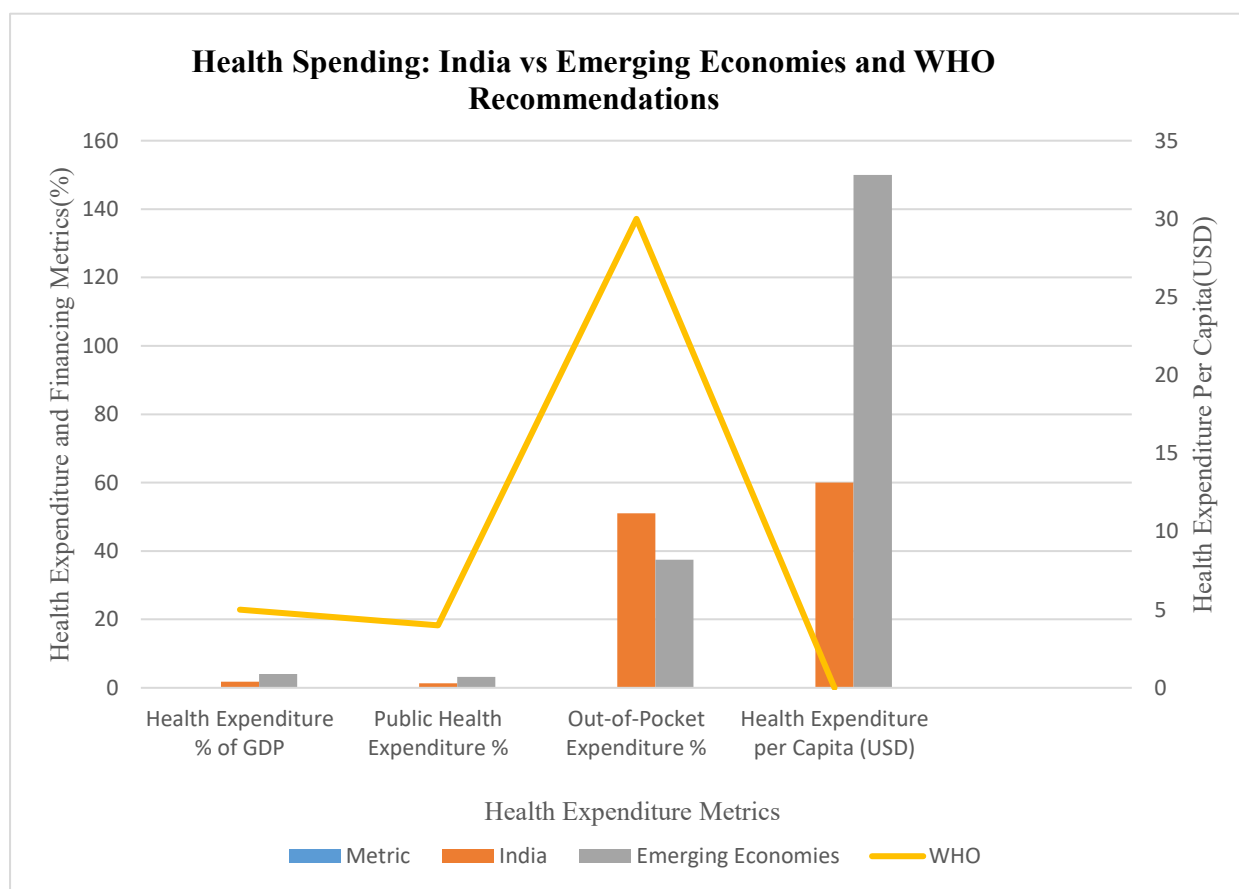
- India spends 1.9% of GDP on public health, less than both emerging economy peers (4%) and the WHO benchmark (5%).
- Per capita health spending is only \$60, with out-of-pocket costs at 47%, both far from global best practices.
- Greater government investment and reduced household spending are needed for India to meet international health standards

Table: 5

Health Spending: India vs Emerging Economies and WHO Recommendations

Metric	India	Emerging Economies	WHO
Health Expenditure % of GDP	1.8	4.0	5.0
Public Health Expenditure %	1.3	3.2	4.0
Out-of-Pocket Expenditure %	51	37.5	30
Health Expenditure per Capita (USD)	60	150	0

Source: PIB Press Releases, WHO and India Data Map, 2025.



\*Emerging economies commonly include Brazil, Russia, China, South Africa, Mexico, Indonesia, and Turkey.

Source: PIB Press Releases, WHO and India Data Map, 2025.

**Out-of-Pocket Expenditure and Financial Protection Indicators in India**

Recent household surveys show out-of-pocket expenditure (OOPE) remains high at around 47-51% of total health spending, imposing a heavy financial burden on Indian households.

Despite a gradual decline in OOPE over recent years and increased health insurance coverage (~40-50%), many vulnerable populations still lack adequate financial protection.

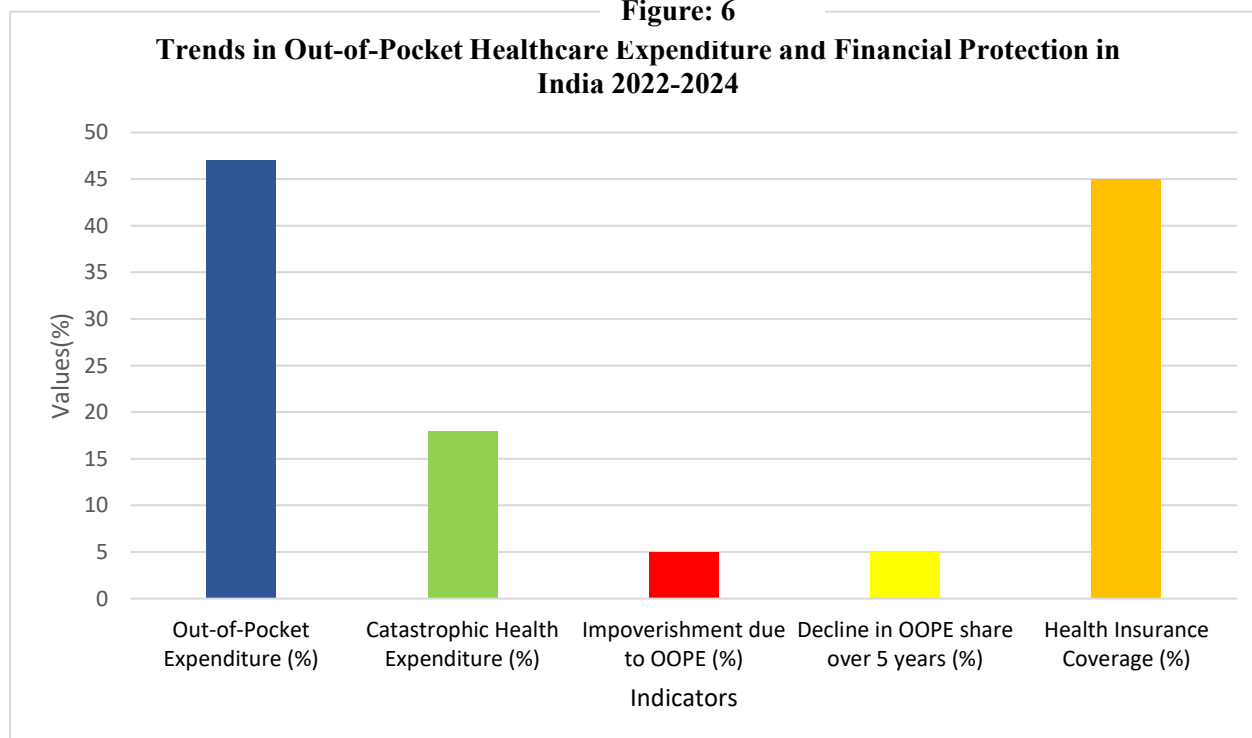
**Table: 6**

**Trends in Out-of-Pocket Healthcare Expenditure and Financial Protection in India (2022-2024)**

Indicators	Values (%)
Out-of-Pocket Expenditure (%)	47 – 51%
Catastrophic Health Expenditure (%)	15 – 20%
Impoverishment due to OOPE (%)	4 – 6%
Decline in OOPE share over 5 years (%)	~5%
Health Insurance Coverage (%)	40 – 50%

**Sources:** NFHS, NSSO, Government Health Reports, Empirical Studies 2022-24

**Figure: 6**



**Sources:** NFHS, NSSO, Government Health Reports, Empirical Studies 2022-24

**Trends in Government Health Expenditure and Insurance Coverage (2015–2024)**

- Government health expenditure in India increased from 1.1% to 1.9% of GDP between 2015 and 2024, showing a steady rise in public funding for health.
- This dual progress reflects policy emphasis on both higher government investment and widening financial risk protection.

- Despite improvement, government spending still falls short of the 2.5% target by 2025—indicating a need for further strengthening of public health financing.

**Table:7**

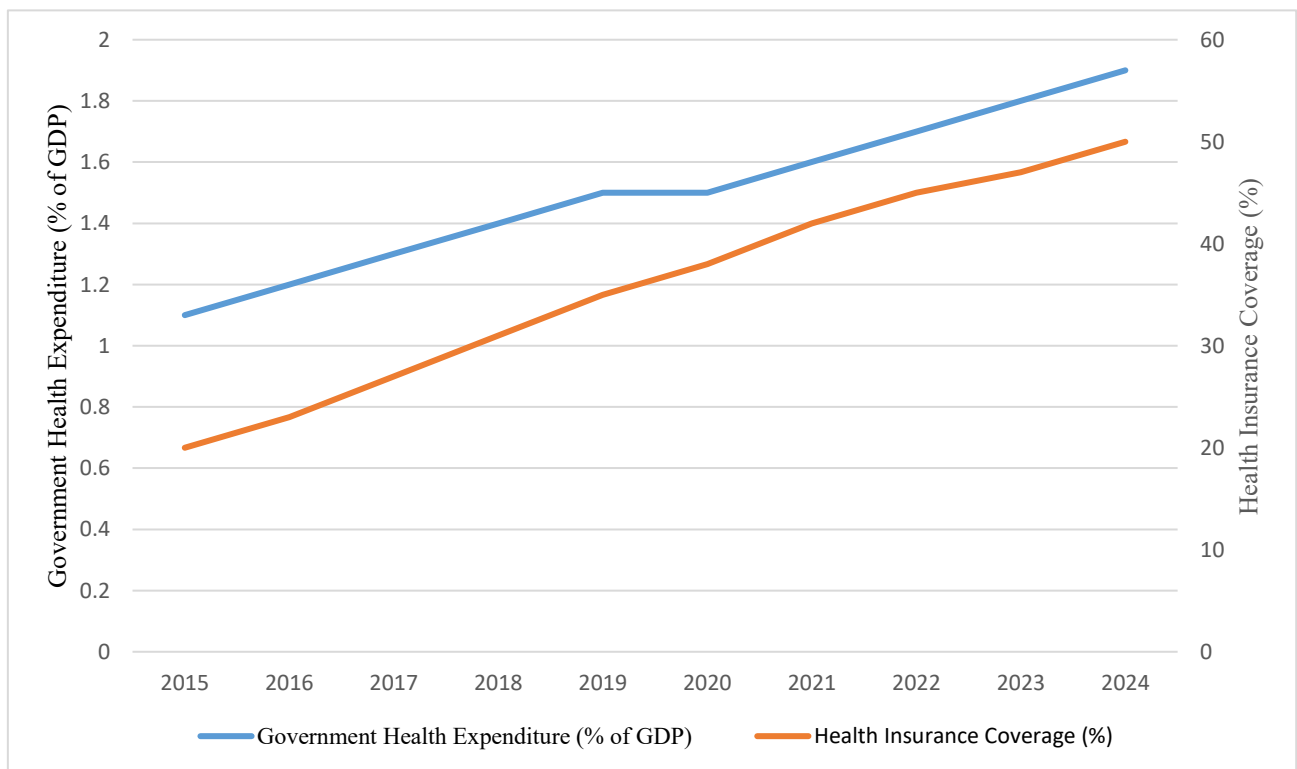
**Trends in Government Health Expenditure and Insurance Coverage in India (2015-2024)**

Year	Government Health Expenditure (% of GDP)	Health Insurance Coverage (%)
2015	1.1	20
2016	1.2	23
2017	1.3	27
2018	1.4	31
2019	1.5	35
2020	1.5	38
2021	1.6	42
2022	1.7	45
2023	1.8	47
2024	1.9	50

**Source:** PMFIAS: Healthcare Expenditure in India, PMC article 2024

**Figure: 7**

**Trends in Government Health Expenditure and Insurance Coverage in India (2015-2024)**



**Source:** PMFIAS: Healthcare Expenditure in India, PMC article 2024

**Analysis and Interpretation of Public Health Expenditure in India Post-2022-2025**

The data and findings emphasize a gradual but steady increase in government health expenditure in India after 2022. The government has prioritized health financing, moving toward the policy goal of allocating at least 2.5% of GDP to health. While the expenditure rose from about 1.1% in 2015 to 1.9% around 2024, the post-2022 years showed continued emphasis on strengthening the health budget to improve infrastructure, service delivery, and access.

Increased public spending post-2022 highlights efforts to reduce the out-of-pocket burden of health expenses on households, which has historically been a significant concern in India. By increasing budgetary allocations, the government aims to expand public facilities and programs catering to various health needs, including primary healthcare, disease control, and health insurance schemes.

The rising health expenditure is also aimed at improving financial protection mechanisms. The study's analysis reveals that increased public funding correlates with broader population coverage under government-supported health insurance schemes, promoting greater financial security for the vulnerable.

Despite these improvements, the findings indicate that some challenges still remain:

- The expenditure growth, though positive, is still below the recommended 2.5% target, requiring sustained political will and fiscal capacity enhancement.
- Geographic and socioeconomic disparities show uneven resource distribution and health outcomes, suggesting policy refinement is needed to ensure equitable access.
- The need to integrate health expenditure with broader development goals, including environmental sustainability and socio-economic progress, is highlighted to achieve holistic health outcomes

The implications of these findings underscore the importance of maintaining political will and ensuring consistent financial allocations to the health sector. Government commitments like the National Health Policy target of 2.5% GDP expenditure and schemes like Ayushman Bharat signal policy directions that support universal health coverage goals. Enhancing these efforts can further protect households from catastrophic health spending and improve population health outcomes.

Overall, the research underscores that government public expenditure in health post-2022 reflects proactive policy decisions conducive to strengthening health systems, although considerable work remains for universal coverage and equitable access. These trends align with national health priorities and international commitments like the Sustainable Development Goals (SDGs).

**Conclusion**

This study concludes that India's public health expenditure has steadily increased post-2022, with the government doubling down on financial commitments to health infrastructure, accessibility, and insurance coverage to alleviate household financial burden. Health spending rose from 1.1% of GDP in 2015 to about 1.9% in 2024, showing reinforced prioritization aligned with national objectives like the National Health Policy's 2.5% target.

Despite progress, significant regional disparities persist, especially in lesser-resourced states like Uttarakhand. The uneven allocation highlights the need for targeted intervention to promote equity and optimize resource use, ensuring that all demographic groups benefit from increased funding. The expansion of insurance coverage programs has contributed positively but gaps remain, particularly among informal sector workers who are vulnerable to catastrophic health expenditures.

Efficient spending by states, strengthened governance, and integration of digital health innovations are critical to transforming increased expenditure into improved health outcomes. Continued efforts in these domains will be decisive in meeting India's long-term health goals.

Sustainable growth in public health financing requires ongoing policy attention on equity, inclusion, and outcome measurement to achieve universal health coverage, reduce out-of-pocket spending, and improve population health broadly across geographic and socio-economic dimensions.

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