Journal DOI: 10.36713/epra0412 ISSN: 2277–7741

International Journal of
Asian Economic Light (JAEL) – Peer Reviewed Journal
SJIF Impact Factor (2026): 8.835 Volume: 14 | Issue: 6 | June 2026

TRENDS AND PATTERNS OF PUBLIC HEALTH EXPENDITURE IN INDIA: AN ANALYSIS OF HEALTH FINANCING INDICATORS

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Article DOI: https://doi.org/10.36713/epra28556
DOI No: 10.36713/epra28556

ABSTRACT

Health expenditure plays a vital role in strengthening healthcare systems, improving population health outcomes, and promoting sustainable economic development. This study examines the trends and growth patterns of public health expenditure in India over the period 2000–2022 using secondary data obtained from the World Bank and the World Health Organisation (WHO). The analysis focuses on major indicators of health financing, including Domestic General Government Health Expenditure (GGHE) per capita, GGHE as a percentage of Current Health Expenditure (CHE), Out-of-Pocket (OOP) expenditure, GGHE as a percentage of GDP, GGHE as a percentage of General Government Expenditure (GGE), CHE as a percentage of GDP, and per capita health expenditure measured in both Purchasing Power Parity (PPP) and current US dollars. Trend analysis with linear trend lines and Compound Annual Growth Rate (CAGR) techniques was employed to examine long-term changes in these indicators. The findings reveal a consistent upward trend in government health expenditure across all major indicators during the study period. Domestic General Government Health Expenditure per capita (PPP) increased substantially from US$17.75 in 2000 to US$106.83 in 2022, while government health expenditure per capita (current US$) rose from US$3.82 to US$31.10. Similarly, the government's share in current health expenditure increased steadily from 20.68% to 39.11%, reflecting enhanced public financing of healthcare. In contrast, Out-of-Pocket expenditure declined significantly from 71.70% to 45.98%, indicating a gradual reduction in households' financial burden for healthcare services. Government health expenditure as a percentage of GDP and as a percentage of total government expenditure also exhibited positive long-term growth, demonstrating increasing fiscal commitment toward the health sector. The CAGR estimates further confirm sustained positive growth in public health expenditure indicators, while OOP expenditure recorded a negative growth rate, signifying improved financial risk protection.

Overall, the results suggest that India has made substantial progress in expanding public investment in healthcare, particularly after the implementation of major health sector reforms and during the COVID-19 pandemic. Although government expenditure on health has increased considerably, the level of public financing remains modest compared with global benchmarks, indicating the need for sustained increases in public health investment. The study concludes that strengthening government health expenditure while reducing dependence on Out-of-Pocket payments is essential for achieving Universal Health Coverage (UHC), improving healthcare accessibility, ensuring financial protection, and supporting inclusive economic development in India.

KEYWORDS: *Public Health Expenditure; Health Financing; Government Health Expenditure; Out-of-Pocket Expenditure; Current Health Expenditure; Universal Health Coverage; India; Trend Analysis.*
JEL Classification: *H51, I13, I18, C22, O15*

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INTRODUCTION

Public health expenditure is a fundamental component of a country's healthcare system, contributing to improved population health, economic productivity, and social welfare. Adequate government investment in health not only enhances access to quality healthcare services but also reduces the financial burden on households by limiting out-of-pocket (OOP) expenditure. In developing countries such as India, where a large proportion of healthcare costs have traditionally been borne by households, strengthening public health financing has become a key policy priority.

Over the past two decades, India's health financing system has undergone significant changes through increased government spending, the implementation of the National Health Mission, and the introduction of large-scale health insurance schemes such as Ayushman Bharat. These initiatives have aimed to improve healthcare accessibility, promote financial risk protection, and advance the goal of Universal Health Coverage (UHC). Despite these efforts, public health expenditure in India remains relatively low compared with many emerging and developed economies. In contrast, out-of-pocket expenditure continues to account for a substantial share of total health spending.

Against this backdrop, the present study examines the trends and patterns of public health expenditure in India during the period 2000–2022 using key health financing indicators. By analysing changes in government health expenditure, current health expenditure, and out-of-pocket expenditure, the study seeks to assess the evolution of India's health financing system and provide policy insights for strengthening public investment in healthcare.

REVIEW OF LITERATURE

Guruswamy, Mazumdar, and Mazumdar (2008) examined public financing of health services in India using central and state government expenditure data for the period 1995–2006. The study found that public health expenditure as a proportion of GDP remained largely stagnant and that substantial inter-state disparities existed in health spending. The authors emphasised the need for increased public investment to improve healthcare access and equity.

Deolalikar, Jamison, Jha, and Laxminarayan (2008) analysed India's health financing system and argued that increasing public expenditure on health by about one percentage point of GDP could significantly improve population health through the universal provision of essential health interventions. Their study highlighted the importance of efficient allocation of additional public resources.

Shiva Kumar et al. (2011) discussed the challenges and opportunities of financing healthcare in India. The authors observed that low public health expenditure had resulted in excessive dependence on out-of-pocket payments, creating financial hardship and unequal access to healthcare. They recommended expanding government financing and strengthening financial risk protection to move towards universal health coverage.

Singh, Devi, and Yedla (2014) examined health financing in India and reported that public health expenditure remained inadequate relative to international standards. The study emphasised that greater public investment is essential to strengthen primary healthcare services, reduce household financial burden, and improve overall health outcomes.

The World Health Organisation (WHO) has consistently emphasised that sustainable public financing is fundamental to achieving Universal Health Coverage (UHC). According to the WHO, increasing government health expenditure and reducing out-of-pocket payments enhance equity, improve financial protection, and strengthen health system performance. The organisation also notes that India has made progress in reducing household health expenditure, but still has scope to increase public spending on health.

Recent evidence from India's health financing reforms indicates that government health expenditure has increased steadily, while the share of out-of-pocket expenditure has declined over the past decade. These improvements reflect the expansion of publicly financed health programmes and insurance schemes aimed at reducing the financial burden

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on households, although further increases in public investment are still required to meet national health financing targets.

The existing literature demonstrates that although India's public health financing has improved over time, public expenditure remains relatively low compared with international benchmarks. Most previous studies have focused on specific periods, financing reforms, or individual dimensions of health expenditure. Therefore, there remains a need for a comprehensive trend analysis covering multiple health financing indicators over the period 2000–2022. The present study addresses this gap by examining the long-term trends and patterns of public health expenditure in India using key health financing indicators.

OBJECTIVES OF THE STUDY

The present study aims to analyse the trends and patterns of public health expenditure in India during the period 2000–2022. The specific objectives are:

1. To examine the trends in public health expenditure in India using selected health financing indicators during the period 2000–2022.
2. To analyse the changing pattern of government health expenditure and out-of-pocket expenditure and assess their implications for financial risk protection.
3. To provide policy recommendations for strengthening public health financing and promoting equitable and sustainable healthcare in India.

DATA SOURCE AND METHODOLOGY

The present study is based entirely on secondary data collected from internationally recognised databases. Data on public health expenditure and health financing indicators for India covering the period 2000–2022 were obtained from the World Health Organisation (WHO) Global Health Expenditure Database (GHED) and the World Bank's World Development Indicators (WDI). These sources provide reliable and comparable annual data on health expenditure and financing across countries. The study adopts a descriptive research design to examine the trends and patterns of public health expenditure in India during the study period. The analysis is primarily based on descriptive statistical techniques and trend analysis. Annual data are presented using tables and line graphs to illustrate changes in health financing indicators over time. Percentage changes and growth trends are also analysed to assess the progress of government health expenditure and the changing burden of out-of-pocket expenditure.

The findings are interpreted to evaluate the evolution of India's health financing system and to draw policy implications for strengthening public health investment and improving financial protection in healthcare.

DESCRIPTIVE STATISTICS

Table 1.1 Descriptive Statistics Result

Variables	Mean	S. D	Skewness	Kurtosis	Minimum	Maximum	Range
Domestic General Government Health Expenditure per Capita, PPP (Current International $)	44.53	25.71	1.057	0.551	17.75	106.83	89.07
Domestic General Government Health Expenditure (% of Current Health Expenditure)	26.28	6.97	0.678	-0.703	17.98	40.40	22.42
Out-of-Pocket Expenditure (% of Current Health Expenditure)	64.02	9.33	-0.842	-0.549	45.11	74.11	29.00
Domestic General Government Health Expenditure (% of GDP)	0.918	0.169	1.388	1.529	0.724	1.352	0.628
Domestic General Government Health Expenditure (% of General Government Expenditure)	3.285	0.506	0.977	0.636	2.653	4.457	1.804

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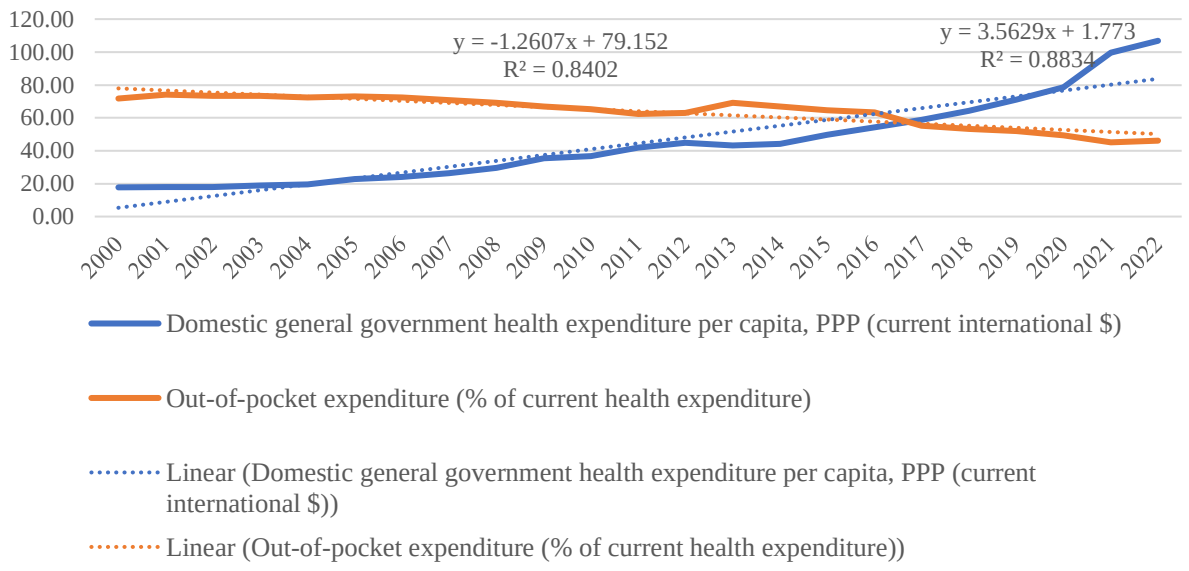
Current Health Expenditure (% of GDP)	3.575	0.410	0.192	-0.429	2.858	4.338	1.479
Current Health Expenditure per Capita, PPP (Current International $)	158.01	51.20	0.504	-0.478	85.83	273.15	187.32
Domestic General Government Health Expenditure per Capita (Current US$)	12.95	8.18	0.809	0.036	3.66	31.10	27.44
Current Health Expenditure per Capita (Current US$)	45.14	18.22	0.062	-1.008	18.48	79.52	61.04

Source- *Author's Own Calculation*

Fig. 1.1 Trends in Domestic General Government Health Expenditure per Capita (PPP) and Out-of-Pocket Expenditure in India



Source- *Author's calculations based on data*

Figure 1.1 illustrates the trend in Domestic General Government Health Expenditure per Capita, PPP (current international $) and Out-of-Pocket (OOP) Expenditure (% of Current Health Expenditure) in India during the period 2000–2022. The trend reveals a substantial increase in government health expenditure per capita over the study period, rising from 17.75 PPP international dollars in 2000 to 106.83 PPP international dollars in 2022. The positive linear trend equation ($y = 3.5629x + 1.773$) with a high coefficient of determination ($R^2 = 0.8834$) indicates a strong and consistent upward trend, suggesting that approximately 88.34% of the variation in government health expenditure per capita is explained by the passage of time. The sharp increase observed after 2017, particularly during 2020–2022, reflects enhanced public investment in the health sector, largely influenced by health sector reforms and the government's response to the COVID-19 pandemic.

In contrast, Out-of-Pocket (OOP) Expenditure exhibits a steady declining trend, decreasing from 71.70% of current health expenditure in 2000 to 45.98% in 2022. The negative linear trend equation ($y = –1.2607x + 79.152$) with an R^2 value of 0.8402 indicates a strong downward relationship over time, with approximately 84.02% of the variation in OOP expenditure explained by the time trend. The decline in household out-of-pocket spending signifies improved financial risk protection and a gradual shift towards greater public financing of healthcare. Overall, the opposing trends

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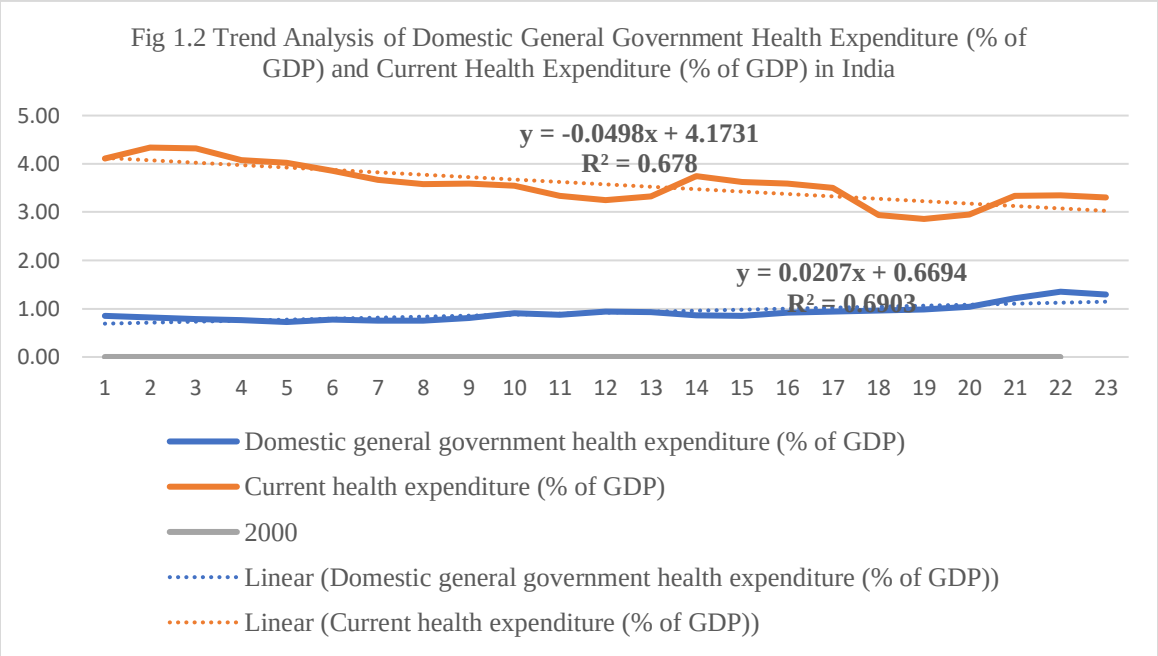
of rising government health expenditure and declining OOP expenditure indicate a positive transformation in India's health financing system, highlighting increased government commitment to healthcare financing while reducing the direct financial burden on households. These findings suggest progress towards achieving Universal Health Coverage (UHC) through strengthened public health investment and improved access to affordable healthcare services.



Source- *Author's calculations based on data*

Figure 1.2 illustrates the trend in Domestic General Government Health Expenditure (GGHE) as a percentage of GDP and Current Health Expenditure (CHE) as a percentage of GDP in India during the period 2000–2022. The figure shows that government health expenditure as a share of GDP followed a gradual upward trend, increasing from 0.85% in 2000 to 1.29% in 2022. The positive linear trend equation ($y = 0.0207x + 0.6694$) and the coefficient of determination ($R^2 = 0.6903$) indicate a moderate but consistent increase over time, with nearly 69.03% of the variation in government health expenditure explained by the time trend. The sharp rise observed during 2020–2022 reflects the increased fiscal commitment of the Government of India towards strengthening the healthcare system in response to the COVID-19 pandemic and subsequent health sector reforms.

In contrast, Current Health Expenditure (CHE) as a percentage of GDP exhibits a mild declining trend over the study period. The trend line equation ($y = –0.0498x + 4.1731$) with an R^2 value of 0.6780 suggests that approximately 67.8% of the variation in CHE as a share of GDP is explained by time. Although CHE fluctuated between 2.86% and 4.34% of GDP, its overall share of GDP declined slightly after the early 2000s before stabilising in recent years. The contrasting trends indicate that while public investment in health has steadily increased, overall health expenditure relative to GDP has not grown proportionately. This suggests that despite greater government participation in health financing, India continues to allocate a relatively modest share of its national income to healthcare. The findings underscore the need for sustained increases in public health expenditure to enhance health system resilience, reduce dependence on private spending, and accelerate progress towards Universal Health Coverage (UHC) and the Sustainable Development Goals (SDGs).

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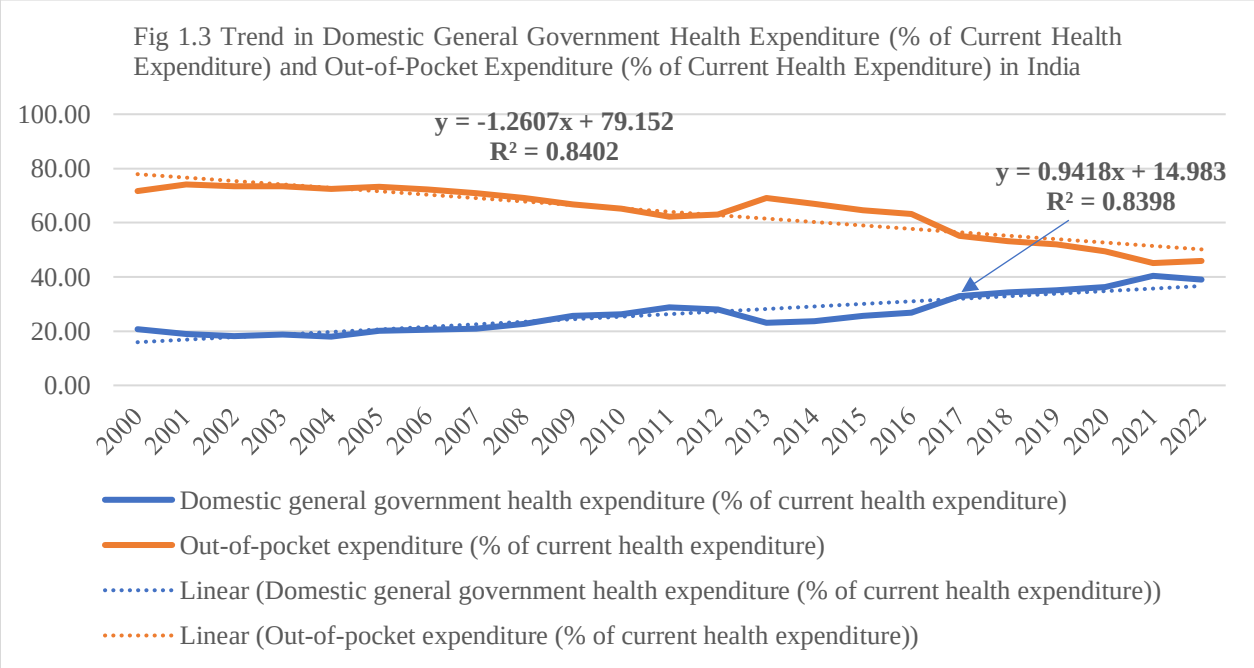

Source- *Author's calculations based on data*

Figure 1.3 presents the changing trend of Domestic General Government Health Expenditure (GGHE) as a percentage of Current Health Expenditure (CHE) and Out-of-Pocket (OOP) Expenditure as a percentage of Current Health Expenditure in India during the period 2000–2022. The two variables exhibit a clear inverse relationship throughout the study period. Government health expenditure increased steadily from 20.68% in 2000 to 39.11% in 2022, reflecting the growing role of public financing in the healthcare sector. The fitted linear trend line for GGHE shows a positive slope ($y = 0.9418x + 14.983$; $R^2 = 0.8398$), indicating a strong upward trend over time, with nearly 84% of the variation explained by the linear trend. This improvement became particularly noticeable after 2016, coinciding with increased public investment in health infrastructure, expansion of centrally sponsored health programmes, and enhanced government commitment toward achieving Universal Health Coverage (UHC). The rise accelerated during the COVID-19 pandemic, when additional public resources were allocated to strengthen health systems and improve access to essential healthcare services.

Conversely, Out-of-Pocket (OOP) expenditure declined substantially from 71.70% in 2000 to 45.98% in 2022, suggesting a gradual reduction in the financial burden borne directly by households. The negative linear trend ($y = -1.2607x + 79.152$; $R^2 = 0.8402$) demonstrates a consistent downward movement, with approximately 84% of the variation explained by the trend line. The simultaneous increase in the government's share of health financing and decline in OOP expenditure indicates that public expenditure has increasingly substituted private household spending over the study period. Although OOP expenditure remains relatively high by international standards, the observed trend reflects meaningful progress in strengthening financial risk protection and reducing catastrophic health expenditures. Overall, the figure provides strong evidence that India's healthcare financing system has gradually shifted towards greater public sector participation, thereby improving affordability, accessibility, and equity in healthcare financing while reducing dependence on direct household payments.

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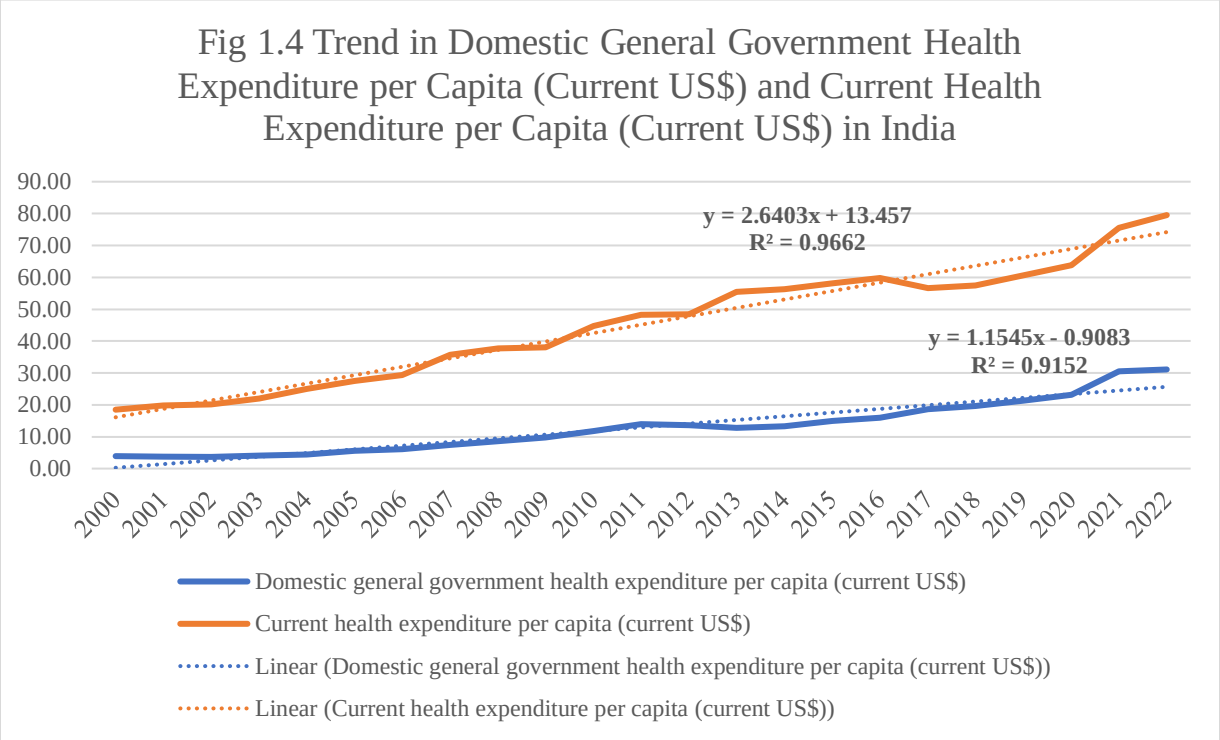

Source- *Author's calculations based on data*

Figure 1.4 illustrates the trend in Domestic General Government Health Expenditure (GGHE) per Capita (Current US$) and Current Health Expenditure (CHE) per Capita (Current US$) in India over the period 2000–2022. The figure shows a clear and consistent upward movement in both indicators, highlighting a substantial increase in health spending per person over the last two decades. Government health expenditure per capita rose steadily from US$ 3.82 in 2000 to US$ 31.10 in 2022, while total current health expenditure per capita increased even more significantly from US$ 18.48 to US$ 79.52 during the same period. The upward trend became particularly pronounced after 2010, with a sharp acceleration between 2020 and 2022, reflecting increased public and overall health spending during the COVID-19 pandemic and the government's intensified focus on strengthening healthcare infrastructure, disease surveillance, and public health services. The linear trend equations further confirm these patterns. Government health expenditure per capita follows a positive trend ($y = 1.1545x – 0.9083$) with a high coefficient of determination ($R^2 = 0.9152$), indicating that more than 91% of the variation is explained by the long-term time trend. Similarly, current health expenditure per capita exhibits an even stronger positive trend ($y = 2.6403x + 13.457$) with an R^2 value of 0.9662, suggesting that approximately 97% of the variation is explained by the linear trend. Overall, the figure demonstrates that India's investment in health has increased substantially over time, with total health expenditure growing faster than government expenditure. This indicates that although public financing has expanded considerably, overall health spending continues to be influenced by private expenditure. Nevertheless, the sustained rise in both indicators reflects the country's growing commitment to improving healthcare financing, expanding access to health services, and enhancing the overall capacity of the health system.

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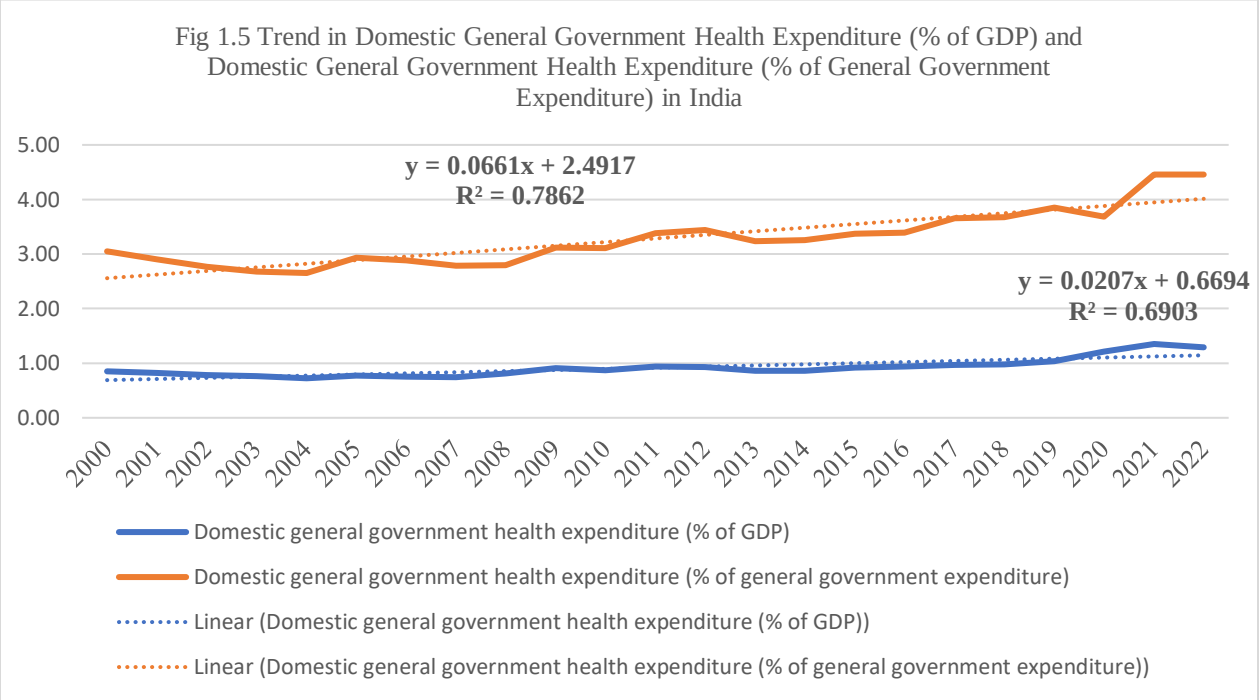

Source- *Author's calculations based on data*

Figure 1.5 illustrates the trend in Domestic General Government Health Expenditure (GGHE) as a percentage of GDP and Domestic General Government Health Expenditure as a percentage of General Government Expenditure (GGE) in India from 2000 to 2022. The figure indicates that both indicators have followed an overall upward trajectory, reflecting the government's gradually increasing commitment to financing the health sector over the past two decades. Government health expenditure as a share of GDP increased from 0.85% in 2000 to 1.29% in 2022, with the highest level of 1.35% recorded in 2021, suggesting that a larger proportion of the country's economic output has been allocated to public health, particularly during the COVID-19 pandemic when additional fiscal resources were directed towards strengthening healthcare infrastructure, disease surveillance, vaccination programmes, and emergency medical services. The positive linear trend ($y = 0.0207x + 0.6694$) with an R^2 value of 0.6903 indicates a moderate but consistent increase over time, implying that nearly 69% of the variation in government health expenditure as a percentage of GDP is explained by the long-term trend. Similarly, government health expenditure as a proportion of total government expenditure rose from 3.05% in 2000 to 4.46% in both 2021 and 2022, demonstrating that health has become a progressively higher budgetary priority within overall public spending. Although the increase has been gradual, the upward movement became more noticeable after 2015, reflecting greater policy emphasis on expanding public health investment through initiatives such as the National Health Mission, Ayushman Bharat, and increased allocations during the pandemic period. The corresponding trend equation ($y = 0.0661x + 2.4917$) and a relatively strong R^2 value of 0.7862 suggest that approximately 79% of the variation in this indicator is explained by the long-term trend. Overall, the figure demonstrates that India has steadily enhanced the role of public financing in the health sector by allocating a larger share of both national income and government expenditure to healthcare. While the progress is encouraging and reflects a stronger policy commitment toward achieving Universal Health Coverage (UHC), the levels of public health expenditure remain below those observed in many upper-middle- and high-income countries, indicating that sustained increases in government health investment will be essential to improve healthcare accessibility, quality, financial protection, and long-term health outcomes.

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Table 1.2: Summary of Trend Analysis Figures

Figure No.	Variables Compared	Trend Observed	Key Finding
Fig. 1.1	Domestic General Government Health Expenditure per Capita, PPP (Current International $) vs. Out-of-Pocket (OOP) Expenditure (% of Current Health Expenditure)	Government expenditure shows a strong increasing trend, while OOP expenditure exhibits a declining trend.	Indicates that higher public health spending is associated with a gradual reduction in households' direct health expenditure, improving financial protection.
Fig. 1.2	Domestic General Government Health Expenditure (% of GDP) vs. Current Health Expenditure (% of GDP)	Government health expenditure (% of GDP) increased gradually, whereas total health expenditure (% of GDP) remained relatively stable with slight fluctuations.	Reflects increasing public investment in health while maintaining overall health expenditure at a stable share of GDP.
Fig. 1.3	Domestic General Government Health Expenditure (% of Current Health Expenditure) vs. Out-of-Pocket (OOP) Expenditure (% of Current Health Expenditure)	The government's share of health financing increased steadily, whereas OOP expenditure declined consistently over the study period.	Demonstrates a structural shift from private household financing toward greater public financing of healthcare.
Fig. 1.4	Domestic General Government Health Expenditure per Capita (Current US$) vs. Current Health Expenditure per Capita (Current US$)	Both indicators display strong upward trends, with total health expenditure per capita growing faster than government expenditure per capita.	Highlights continuous growth in per capita health investment, particularly after 2010 and during the COVID-19 period.
Fig. 1.5	Domestic General Government Health Expenditure (% of GDP) vs. Domestic General Government Health Expenditure (% of General Government Expenditure)	Both indicators exhibit positive long-term trends with moderate year-to-year fluctuations.	Indicates increasing government budgetary priority for the health sector and greater commitment toward strengthening public healthcare financing.

Source: *Author's compilation based on World Development Indicators (World Bank), WHO Global Health Expenditure Database, 2000–2022*

Table 1.3: Compound Annual Growth Rate (CAGR) of Health Financing Indicators in India (2000–2022)

Sl. No.	Health Financing Indicator	2000	2022	CAGR (%)
1	Domestic General Government Health Expenditure per Capita, PPP (Current International $)	17.75	106.83	8.50
2	Domestic General Government Health Expenditure (% of Current Health Expenditure)	20.68	39.11	2.94
3	Out-of-Pocket Expenditure (% of Current Health Expenditure)	71.70	45.98	−2.00
4	Domestic General Government Health Expenditure (% of GDP)	0.85	1.29	1.91
5	Domestic General Government Health Expenditure (% of General Government Expenditure)	3.05	4.46	1.74
6	Current Health Expenditure (% of GDP)	4.11	3.31	−0.98

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7	Current Health Expenditure per Capita, PPP (Current International $)	85.83	273.15	5.40
8	Domestic General Government Health Expenditure per Capita (Current US$)	3.82	31.10	10.00
9	Current Health Expenditure per Capita (Current US$)	18.48	79.52	6.86

Source- *Author's calculations based on data*

The CAGR results in Table 1.3 indicate that Domestic General Government Health Expenditure per Capita (Current US$) recorded the highest annual growth rate (10.00%), followed by Domestic General Government Health Expenditure per Capita, PPP (8.50%) and Current Health Expenditure per Capita, PPP (5.40%). These findings suggest a substantial increase in public investment in healthcare over the study period. Government health expenditure as a share of current health expenditure and GDP also grew at moderate annual rates of 2.94% and 1.91%, respectively, reflecting a gradual strengthening of public health financing.

Conversely, Out-of-Pocket Expenditure declined at an annual rate of 2.00%, indicating improved financial protection for households and a reduced reliance on direct payments for healthcare. Similarly, Current Health Expenditure as a percentage of GDP recorded a slight negative CAGR (−0.98%), implying that although health expenditure increased in absolute terms, its share in national income did not expand proportionately. Overall, the CAGR analysis demonstrates a positive transition towards greater public financing of healthcare in India during 2000–2022.

Policy Recommendations

1. Increase Public Health Expenditure to at least 2.5–3.0% of GDP

The study reveals a positive trend in government health expenditure; however, public health spending remains relatively low as a percentage of GDP. The Government of India should progressively increase public health expenditure to at least 2.5–3.0% of GDP, as envisaged in the National Health Policy 2017. Higher public investment will strengthen healthcare infrastructure, improve service quality, and reduce the dependence of households on private healthcare expenditure.

2. Accelerate the Reduction of Out-of-Pocket (OOP) Expenditure

The declining trend and negative CAGR of Out-of-Pocket expenditure indicate gradual improvement in financial protection, but OOP payments remain substantial. Policymakers should expand publicly financed health insurance schemes such as Ayushman Bharat – PM-JAY, strengthen primary healthcare facilities, and ensure the availability of essential medicines and diagnostic services in public hospitals to further reduce catastrophic health expenditure among vulnerable households.

3. Improve Efficiency in Public Health Resource Allocation

Increasing health expenditure alone is insufficient unless resources are allocated efficiently. Greater emphasis should be placed on preventive healthcare, primary health centres, maternal and child health, disease surveillance, digital health infrastructure, and human resource development. Performance-based budgeting and evidence-based expenditure planning can improve the effectiveness and equity of public health spending.

4. Strengthen Fiscal Commitment of States toward Healthcare

Since health is primarily a State subject in India, greater fiscal responsibility should be shared between the Central and State Governments. States should increase the proportion of their annual budgets devoted to healthcare, particularly in underserved and economically weaker regions. A formula-based transfer mechanism linked to health outcomes can encourage higher public investment and reduce inter-state disparities in healthcare financing and service delivery.

5. Develop a Sustainable Health Financing Framework for Universal Health Coverage

The long-term upward trend in government health expenditure provides a strong foundation for achieving Universal Health Coverage (UHC). Future health financing policies should focus on establishing a sustainable financing framework through increased tax-based financing, enhanced budgetary allocations, improved financial governance, and regular monitoring of health expenditure indicators. Strengthening transparency, accountability, and outcome-

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based evaluation will ensure that increased public expenditure translates into better health outcomes, improved financial protection, and inclusive economic development.

CONCLUSION

This study examined the trend and growth pattern of public health expenditure in India during the period 2000–2022 using descriptive statistics, trend analysis, and Compound Annual Growth Rate (CAGR). The descriptive statistics reveal considerable variation in health financing indicators over the study period, reflecting the gradual transformation of India's healthcare financing system. Government health expenditure indicators exhibited positive mean values with moderate variability, while Out-of-Pocket (OOP) expenditure maintained a relatively high average, highlighting the continued dependence of households on direct health payments despite recent improvements. The distribution of most variables showed acceptable levels of skewness and kurtosis, suggesting that the data are appropriate for further statistical analysis. The trend analysis demonstrates a clear and sustained increase in public health expenditure across all major indicators. Domestic General Government Health Expenditure (GGHE) per capita, measured in both Purchasing Power Parity (PPP) and current US dollars, increased substantially over the study period, indicating a steady expansion of public investment in healthcare. Similarly, government health expenditure as a percentage of Current Health Expenditure (CHE), Gross Domestic Product (GDP), and General Government Expenditure (GGE) exhibited positive long-term trends, reflecting the growing priority accorded to the health sector in public budgeting. In contrast, Out-of-Pocket (OOP) expenditure as a percentage of current health expenditure showed a consistent downward trend, suggesting a gradual improvement in financial risk protection and a reduction in the direct financial burden on households. The sharp rise in government health expenditure after 2018, particularly during 2020–2022, further reflects the increased fiscal commitment made in response to the COVID-19 pandemic and the expansion of public health programmes. The Compound Annual Growth Rate (CAGR) analysis supports these findings by confirming positive long-term growth in almost all public health expenditure indicators. Government expenditure per capita recorded one of the highest growth rates, demonstrating sustained expansion in public health financing throughout the study period. Likewise, current health expenditure per capita increased consistently, reflecting greater overall investment in healthcare services. Conversely, the negative CAGR observed for Out-of-Pocket expenditure indicates a gradual decline in household dependence on direct healthcare payments, which is an important step toward achieving equitable health financing. Collectively, the trend and growth analyses indicate that India's health financing system has experienced significant structural improvement over the last two decades, with increasing government participation and declining reliance on private household expenditure.

Overall, the findings suggest that India has made notable progress in strengthening public health financing and expanding access to healthcare services. However, despite these encouraging developments, public health expenditure as a share of GDP remains below internationally recommended levels, indicating that additional fiscal commitment is required to meet the growing healthcare needs of the population. Sustained increases in government investment, efficient allocation of health resources, and continued efforts to reduce Out-of-Pocket expenditure will be essential for achieving Universal Health Coverage (UHC), improving health equity, enhancing financial protection, and promoting long-term human capital development and inclusive economic growth. The study, therefore, concludes that strengthening public health expenditure should remain a central policy priority for ensuring a resilient, accessible, and sustainable healthcare system in India.

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Journal DOI: 10.36713/epra0412 ISSN: 2277–7741

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