



# PRIORITIZING WELFARE: A COMPARATIVE ANALYSIS OF HEALTHCARE SPENDING IN INDIA AND MAJOR WORLD REGIONS

<sup>1</sup>Sachin Sharma , <sup>2</sup>Sunil Yadav , <sup>3</sup>Vikas Kumar

<sup>1</sup>Research Scholar, Department of Economics, Chaudhary Ranbir Singh University, Jind, Haryana

<sup>2</sup> Research Scholar, Department of Economics, Kurukshetra University, Kurukshetra, Haryana.

<sup>3</sup>Research Scholar, Department of Economics, Chaudhary Ranbir Singh University, Jind, Haryana

## Abstract

**India has experienced significant economic growth in recent years. Its healthcare expenditure as a proportion of its GDP has witnessed an upward trend in recent years, but it remains significantly lower than in many world regions and developed countries. This study aims to comparatively analyze Indian healthcare spending and its components with selected regions and countries around the world. For example, we find that Out-of-Pocket Expenditure (OOPE) for India has decreased significantly by 21.1% from 2000 to 2020 but still lags behind major world regions. Maldives, Singapore, and China lead the way in the world by shedding OOPE by 46.1%, 29.2%, and 25.3% for the same period respectively.**

**Keywords: welfare, growth, inequality, social inclusion, human capabilities, social rights, basic services, public spending priorities.**

**JEL Code: I15, I18, I30, I38, O10, O57.**

## Introduction

Comparisons between India and other countries are frequently conducted to assess India's position on the global scale. Often, the focus lies on determining India's "rank" in various aspects such as GDP per capita. The preoccupation in India with the country's rank in the world league can serve as a useful starting point for analysis. However, it is essential to acknowledge that India's impressive performance in terms of GDP or GNP growth rate does not necessarily align with its relatively modest progress in enhancing the quality of life, as reflected in standard social indicators (Drèze & Sen, 2013).

India has witnessed notable advancements in the health outcomes of its population, as reflected in key indicators. For instance, life expectancy at birth has experienced a substantial increase, reaching 69.6 years in 2020 compared to an expected 47.7 years in 1970. Additionally, there have been significant improvements in maternal health, with the maternal mortality ratio (MMR) declining from 301 to 130 per 100,000 live births between 2003 and 2014-16. Furthermore, the infant mortality rate (IMR) has shown a positive trajectory, decreasing from 68 per 1,000 live births in 2000 to 24 in 2016. Despite these achievements, progress in health outcomes has not been uniform across all states, and India faces a dual burden of disease and the challenges associated with an aging population. The leading causes of mortality in 2019 were identified as ischaemic heart disease, chronic obstructive pulmonary disease (COPD), and stroke (Selvaraj et al., 2022).

India is a developing country with a large and diverse population, and understanding how healthcare spending compares to other countries can shed light on the effectiveness and challenges of its healthcare system. India's healthcare delivery system is characterized by a mix of public and private sectors. The foundation for a government-funded, three-tiered public health system to provide preventive and curative healthcare services was laid through policy recommendations in the 1940s. However, starting in the 1980s, the private sector began to play a more prominent role in the healthcare landscape. Presently, nearly 70% of all outpatient visits and approximately 58% of all inpatient episodes are provided by for-profit or not-for-profit private

providers. Despite this, challenges persist in terms of the quality, accessibility, and affordability of healthcare services, as well as the availability of essential medicines and diagnostics. Disparities in health outcomes between states further compound these challenges. In response, several policy initiatives have been launched since the 2000s to strengthen India's healthcare system, aiming to achieve Universal Health Coverage (UHC) and improve health outcomes. Notably, the Ayushman Bharat program has been implemented to address these issues in both hospital and outpatient settings, but its impact is still in the early stages of evaluation (Selvaraj et al., 2022).

### Literature Review

India's overall health spending (public and private) is currently estimated to be 3.8% of its GDP, lower than the LMIC average of health spending share of GDP of around 5.2%. India's health system is overwhelmingly financed by out-of-pocket (OOP) expenditures incurred by households (around 63% of all health spending) (Selvaraj et al., 2022).

According to Berman et al. (2010), healthcare expenses have a significant impoverishing effect on households in India. It is estimated that around 39 million people are pushed into poverty each year due to out-of-pocket healthcare payments, exacerbating the financial burden on vulnerable populations. They also proposed a targeted healthcare financing mechanism, such as health insurance, to protect households from catastrophic healthcare expenditures and alleviate the impoverishing effect.

Berman & Ahuja (2008) also analyze data from various sources to assess the trends and patterns of health spending by the Indian government. They highlight the significant disparities in health financing across states and regions, with some areas receiving disproportionately low levels of funding. The study also delves into the challenges faced by the healthcare system in terms of inadequate infrastructure, limited access to services, and inefficient resource allocation. Berman and Ahuja emphasize the need for increased government investment in health, particularly targeting disadvantaged regions, to improve healthcare outcomes and reduce disparities in India.

In a study by Farahani et al. (2010), relationship between health spending and mortality rates across Indian states was analyzed. Their findings suggest that higher levels of public health spending are associated with reduced mortality probabilities, indicating that increased investment in healthcare at the state level has a positive effect on health outcomes. The study underscores the importance of adequate public funding for healthcare and highlights the potential benefits of directing resources towards improving health services and infrastructure in India.

The study by Balarajan et al. (2011) also highlights the limited financial protection provided by the healthcare system, as out-of-pocket expenditures remain high and contribute to financial hardships for many individuals and families. They emphasize the need for comprehensive health reforms that prioritize equity and aim to enhance healthcare access, improve service quality, and reduce the burden of healthcare costs on vulnerable populations in India.

The inadequacy of current funding mechanisms, such as out-of-pocket payments and private insurance has also been discussed by Kumar et al. (2011), which often result in financial burdens and limited access to care for vulnerable populations. Kumar et al. explore alternative financing models, including tax-based systems and social health insurance, highlighting their potential benefits and limitations. The authors propose policy interventions, such as pooling resources, enhancing efficiency, and promoting equitable distribution of healthcare services, as crucial steps towards ensuring accessible and sustainable healthcare for all.

In terms of the increase in healthcare spending, the study by (Mohanty et al., 2016) reveals a significant rise in household health expenditure in India from 1993 to 2012. Their findings suggest that the annual growth rate of real per capita household health spending was twice (6.14 %) the real per capita consumption expenditure (2.60 %) for the said period.

The study by (Karan et al., 2017) suggests that RSBY health insurance scheme for the poor launched in 2008 has been ineffective in reducing the burden of out-of-pocket spending on poor households. Similarly, the study by (Keane & Thakur, 2018) estimate

that in 2011-12, 4.1% of the population, or 50 million people, were in a state of “hidden poverty” due to medical expenses. Adding that, while poverty in India fell substantially since 1999 to 2011, the fraction of the remaining poverty that is due to medical costs has risen substantially.

**Data and Methodology**

Various estimates of health accounts are published by both the Indian government and the international agencies in reports such as “National Health Accounts Estimates for India 2019-20”(NHSRC, 2023) and “India Health System Review” by WHO (Selvaraj et al., 2022). For the sake of consistent analysis of expenditure indicators of India and its comparative analysis with other world regions, we have only used data from “Global Health Expenditure Database”(World Health Organization [WHO], 2023) in this paper.

Exploratory analysis and descriptive statistics have been used to understand the state of health expenditure within India and its relative position in rest of the world.

**Analysis**

A cross sectional analysis in 2020 shows that India when compared to major world regions has significantly higher share of Private Healthcare Expenditure (PHE) as percentage of Current Healthcare Expenditure (CHE) at around 62% (Fig.1), though the trend has slightly reduced in the past decade on a positive note (Fig. 2) with increasing share of government spending (GHE).

Specifically, the PHE has increased from 76.6% in 2000 to 62.4% in 2020.

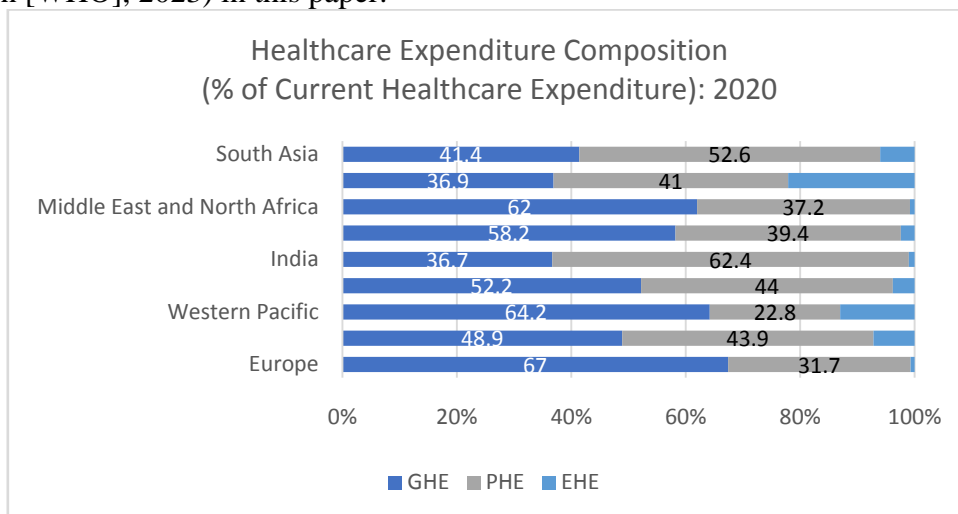


Figure 1. Healthcare Expenditure Composition(% of Current Healthcare Expenditure): 2020  
 Source: Author’s own calculations based on Global Healthcare Expenditure Database, WHO (2022).

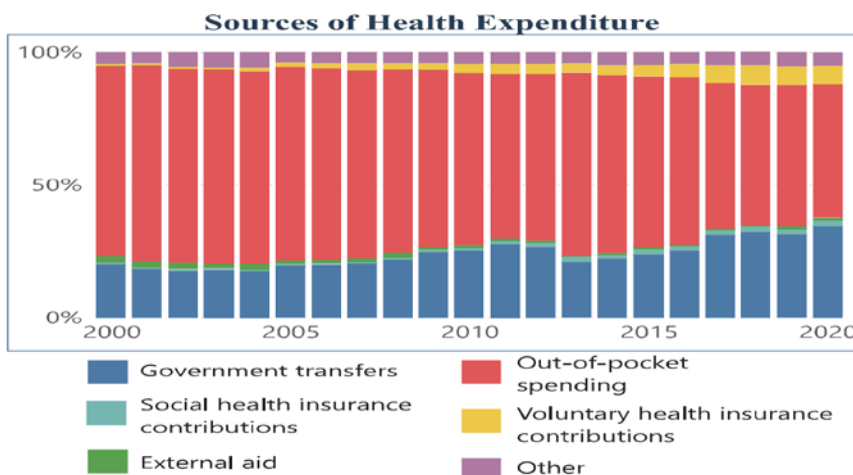
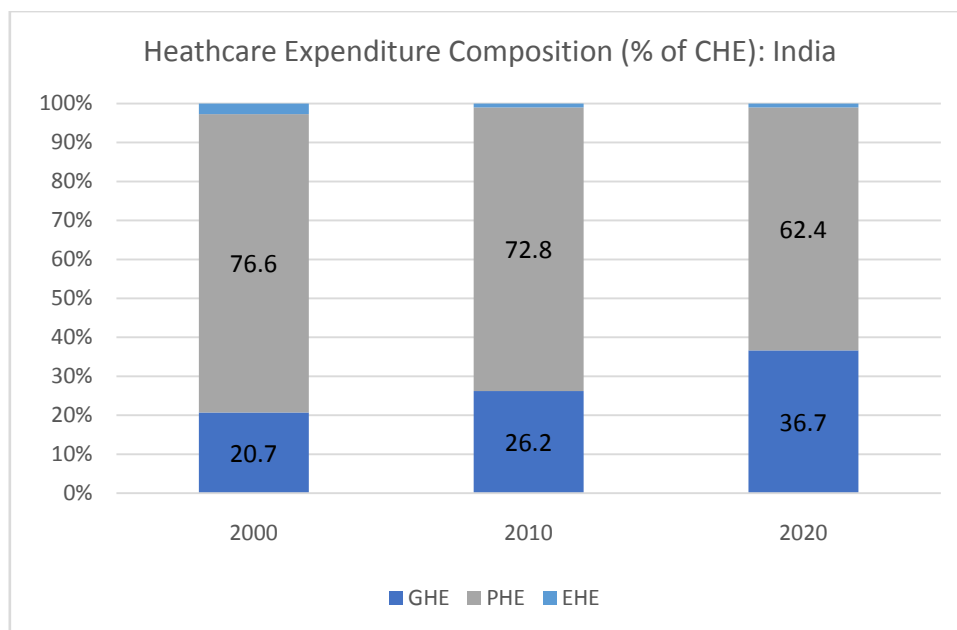


Figure 2. Sources of Healthcare Expenditure in India

Source: Global Healthcare Expenditure Database, WHO (2022).



Source: Author's own calculations based on Global Healthcare Expenditure Database, WHO (2022).

Table 1. Share of GHE, PHE and EHE for India and World Regions

Region	2000			2010			2020		
	GHE	PHE	EHE	GHE	PHE	EHE	GHE	PHE	EHE
Europe	63.4	35.8	0.8	67	31.7	0.7	64.5	34.5	1
South-East Asia	36.5	58.4	5	48.9	43.9	7.2	38.8	52.7	8.4
Western Pacific	65.4	27.1	7.5	64.2	22.8	13	57.7	26.1	16.2
Eastern Mediterranean	50.2	49.4	0.4	52.2	44	3.8	51.8	46	2.3
Latin America And The Caribbean	48.1	49.2	2.7	58.2	39.4	2.4	50.8	44.9	4.3
Middle East And North Africa	56.7	42.8	0.5	62	37.2	0.8	60.8	38.5	0.7
Sub-Saharan Africa	34.6	52.6	12.8	36.9	41	22.1	30.5	45.8	23.7
South Asia	38	56	6	41.4	52.6	6	32.2	60.6	7.2
India	20.7	76.6	2.7	36.7	62.4	1	26.2	72.8	1
China	22	78	0	54.7	45.3	0	51.9	48	0.1
United States Of America	44.4	55.6	0	56.8	43.2	0	48.9	51.1	0
Japan	80.4	19.6	0	84.2	15.8	0	81.9	18.1	0
Canada	72.9	27.2	0	75	25	0	69.9	30.1	0
Australia	71.8	28.2	0	75.1	24.9	0	72.4	27.6	0
Pakistan	35.2	64.1	0.7	35.2	58.5	6.3	21.8	72.7	5.6
Bangladesh	28.2	64	7.8	18.1	76.6	5.4	20.6	70.5	9
Viet Nam	34.9	60.9	4.3	45.1	54.1	0.8	39.6	58.1	2.2
Russian Federation	59.4	40.4	0.2	70.6	29.5	0	61.4	38.6	0

The Table 1 presents data on health expenditure as a percentage of total expenditure in different regions and countries for the years 2000, 2010, and 2020. The regions include Europe, South-East Asia, Western Pacific, Eastern Mediterranean, Latin America, and the Caribbean, Middle East and North Africa, Sub-

Saharan Africa, and South Asia. The data indicate shifts in health expenditure patterns over the years.

In Europe, Government Healthcare Expenditure (GHE) slightly increased from 63.4% in 2000 to 64.5% in 2020, with a corresponding decrease

in PrivateHealthcare expenditure (PHE). South-East Asia experienced a rise in GHE from 36.5% in 2000 to 38.8% in 2020, with notable fluctuations in PHE and EHE. The Western Pacific region witnessed a decrease in GHE from 65.4% in 2000 to 57.7% in 2020, with external aid (EHE) forming a major portion of the healthcare expenditure.

Other regions, including Eastern Mediterranean, Latin America and the Caribbean, Middle East and North Africa, Sub-Saharan Africa, and

South Asia, demonstrated varied trends in health expenditure over the observed period. Notably, Sub-Saharan Africa experienced a substantial decrease in GHE from 34.6% in 2000 to 30.5% in 2020, with significant rise in EHE by 10.9%.

In summary, the data underscore dynamic trends in health expenditure across regions and countries, reflecting changes in public health priorities and resource allocation over the past two decades.

Table 2. Out of Pocket Expenditure for India and World Regions

<b>Out of Pocket Expenditure (OOPE)</b>				
<i>Select Regions</i>	<b>2000</b>	<b>2010</b>	<b>2020</b>	<b>Difference (2000 to 2020)</b>
<i>South-East Asia</i>	52.1	46.7	37.9	-14.2%
<i>Sub-Saharan Africa</i>	46.5	39.9	34.8	-11.6%
<i>Latin America and the Caribbean</i>	39.7	35.4	30.1	-9.6%
<i>Eastern Mediterranean</i>	43.1	40.7	35.3	-7.8%
<i>South Asia</i>	52.6	56.2	47.2	-5.4%
<i>Europe</i>	30.8	29.1	26.2	-4.6%
<i>Western Pacific</i>	21.1	19.0	16.6	-4.4%
<i>Middle East and North Africa</i>	46.4	43.8	43.4	-3.0%
<i>Maldives</i>	63.0	40.1	16.9	-46.1%
<i>Singapore</i>	48.2	41.5	19.0	-29.2%
<i>China</i>	60.1	40.8	34.8	-25.3%
<i>India</i>	71.7	65.2	50.6	-21.1%
<i>Australia</i>	21.0	19.8	13.8	-7.2%
<i>United States of America</i>	15.1	12.4	9.9	-5.2%
<i>Canada</i>	16.6	15.5	12.4	-4.2%
<i>Japan</i>	15.9	14.6	12.6	-3.4%
<i>Russian Federation</i>	30.2	35.3	27.8	-2.4%
<i>Pakistan</i>	57.4	67.9	55.4	-1.9%
<i>Viet Nam</i>	37.2	37.4	39.6	2.4%
<i>Bangladesh</i>	61.8	68.0	74.0	12.2%
<i>Turkmenistan</i>	50.0	71.0	77.0	26.95%

The trends in Out-of-Pocket Expenditure (OOPE) across various regions and countries over the years 2000, 2010, and 2020 are given in Table 2. Notable findings include a consistent decline in OOPE in select regions such as South-East Asia, Sub-Saharan Africa, Latin America and the Caribbean, and Eastern Mediterranean, with percentage reductions ranging from -7.8% to -14.2%. Further, South Asia experienced a slight decrease in OOPE by -5.4%. Among individual countries, Maldives exhibited a substantial decrease of -46.1%, while Turkmenistan demonstrated a significant increase of 26.95%. Notable reductions were

observed in China, India, Singapore, and Australia, while slight decreases were noted in the United States, Canada, Japan, and the Russian Federation. On the other hand, Bangladesh and Vietnam experienced an increase in OOPE by 12.2% and 2.4%, respectively. These findings highlight varied trends in healthcare expenditure patterns, with some regions successfully reducing out-of-pocket burdens, while others experienced notable increases or relatively stable expenditures.

## Conclusion

The healthcare system in India is highly affordable at large compared to their counterparts in developed countries due to efficient practices adopted by healthcare providers which serves as a model for countries facing similar challenges at scale. But compared to developed nations and even Sub-Saharan Africa, people have to shell out much more out of their pockets for healthcare costs on average in India, which stands around almost half of their entire healthcare burden. Social and voluntary health insurance penetration along with government healthcare expenditure is still small compared to better faring regions of the world and provide an inefficient way for lower-middle income country like India to minimize its out-of-pocket expenditure (OOPE).

## References

- Balarajan, Y., Selvaraj, S., & Subramanian, S. V. (2011). Health care and equity in India. *The Lancet*, 377(9764), 505–515. [https://doi.org/10.1016/S0140-6736\(10\)61894-6](https://doi.org/10.1016/S0140-6736(10)61894-6)
- Berman, P., & Ahuja, R. (2008). Government Health Spending in India. *Economic and Political Weekly*, 43(26/27), 209–216.
- Berman, P., Ahuja, R., & Bhandari, L. (2010). *The Impoverishing Effect of Healthcare Payments in India: New Methodology and Findings*. 16.
- Drèze, J., & Sen, A. (2013). An Uncertain Glory: India and its Contradictions. In *An Uncertain Glory*. Princeton University Press. <https://doi.org/10.23943/9781400848775>
- Farahani, M., Subramanian, S. V., & Canning, D. (2010). Effects of state-level public spending on health on the mortality probability in India. *Health Economics*, 19(11), 1361–1376. <https://doi.org/10.1002/hec.1557>
- Karan, A., Yip, W., & Mahal, A. (2017). Extending health insurance to the poor in India: An impact evaluation of Rashtriya Swasthya Bima Yojana on out of pocket spending for healthcare. *Social Science & Medicine*, 181, 83–92. <https://doi.org/10.1016/j.socscimed.2017.03.053>
- Keane, M. P., & Thakur, R. (2018). *Health Care Spending and Hidden Poverty in India* (SSRN Scholarly Paper No. 3118615). <https://doi.org/10.2139/ssrn.3118615>
- Kumar, A. S., Chen, L. C., Choudhury, M., Ganju, S., Mahajan, V., Sinha, A., & Sen, A. (2011). Financing health care for all: Challenges and opportunities. *The Lancet*, 377(9766), 668–679. [https://doi.org/10.1016/S0140-6736\(10\)61884-3](https://doi.org/10.1016/S0140-6736(10)61884-3)
- Mohanty, S. K., Ladusingh, L., Kastor, A., Chauhan, R. K., & Bloom, D. E. (2016). Pattern, growth and determinant of household health spending in India, 1993–2012. *Journal of Public Health*, 24(3), 215–229. <https://doi.org/10.1007/s10389-016-0712-0>
- NHSRC. (2023). *National Health Accounts Estimates for India 2019-20*. National Health Systems Resource Centre (NHSRC), Ministry of Health and Family Welfare, Government of India. <https://nhsrccindia.org/sites/default/files/2023-04/National%20Health%20Accounts-2019-20.pdf>
- Selvaraj, S., Karan, K. A., Srivastava, S., Bhan, N., & Mukhopadhyay, I. (2022). *India health system review*. New Delhi: World Health Organization, Regional Office for South-East Asia. <https://apo.who.int/publications/i/item/india-health-system-review>
- World Health Organization [WHO]. (2023). *Global Health Expenditure Database* [Data set]. <https://apps.who.int/nha/database>