

Assessing Income-Based Inequalities in India's Education and Healthcare Systems

Aarohi Maheshwari
aarohipublish@gmail.com

ABSTRACT

This research paper examines the extent to which access to education and healthcare in India remains unequal across income groups and gender. Using the Human Capital Theory and the Capabilities Approach, the paper explores how disparities in these two sectors limit upward mobility and reinforce intergenerational poverty. The findings show that low-income households face significant barriers: inadequate schooling, poor healthcare quality, financial constraints and reliance on underfunded public services. Evidence from India's Empowered Action Group (EAG) states highlights persistent infrastructural deficits and gaps in the implementation of government programmes such as the Right to Education Act, the Midday Meal Scheme and the National Rural Health Mission. While these policies aim to reduce inequality, inconsistent funding, weak monitoring and limited public awareness diminish their effectiveness. The paper concludes that targeted reforms and stronger governance are essential for improving equitable access and achieving long-term development.

Keywords: income inequality, education access, healthcare inequality, public policy effectiveness, India

INTRODUCTION

Imagine a woman in India living with a chronic medical condition that prevents her from working. Although treatment exists, it is far beyond what she can afford, and the public healthcare system lacks the capacity to support her fully. Unable to pay for essential care, her health worsens, her income collapses and she becomes trapped in a cycle of vulnerability. This hypothetical story mirrors the reality faced by millions who are denied equal access to healthcare and, similarly, education, simply because of their socio-economic status or gender.

Certain basic necessities, such as proper education and access to healthcare, are things everyone should have access to in theory, but they don't. Several economic theories reinforce the importance of access to these basic necessities, as they provide the foundation for developing individual capabilities, which can translate into wider economic benefits. However, the problem lies in access to education and healthcare, where income is a major determinant. The severity of this unequal access to these resources is very

evident in a country like India, where income disparities do persist. The Gini Index for India in 2022 stood at 25.5 (World Bank, 2025), making it the fourth-most equal country in the world, with relatively low income inequality. However, a closer look at India's income statistics reveals the extent of hidden inequality. In the same year, the top 1% income holders earned, on average, 5.3 million, 23 times the average Indian income (INR 0.23 million). Average incomes for the bottom 50% and the middle 40% stood at INR 71,000 (0.3 times the national average) and INR 165,000 (0.7 times the national average), respectively (Kumar Bharti et al., 2024). In line with the aforementioned, this research paper aims to answer the following question: To what extent does access to education and healthcare in India remain unequal across income groups and gender?

This research paper adopts a literature-based analytical approach drawing on secondary evidence from academic studies, data sets and government reports published by national and international institutions. Sources were selected based on their relevance to three dimensions of the research paper: income-based disparities in access to education and healthcare, gender differences in access and the effectiveness of major government interventions intended to reduce these inequalities. Peer-reviewed studies were prioritised where available, while reports from institutions including the World Bank, OECD, NITI Aayog, the National Health Mission and the Ministry of Health and Family Welfare were used to provide national and state-level data and policy evidence. Particular attention is given to the Empowered Action Group (EAG) states because they contain a substantial share of India's poorer population and therefore provide an important context for examining how economic disadvantage interacts with access to essential services.

The paper contributes by examining education and healthcare inequality not as separate policy problems but as interconnected mechanisms through which economic disadvantage can reproduce itself across generations. By combining the Capabilities Approach with Human Capital Theory and evaluating evidence from both sectors alongside existing policy responses, the analysis highlights how deficiencies in one area may reinforce disadvantage in the other and why improvements and access alone may be insufficient without corresponding improvements in service quality and implementation.

LITERATURE REVIEW

Healthcare and education are two of the most critical sectors in capability discussions because they are fundamental investments in human capital. According to Amartya Sen's Capabilities Approach, achieving a good standard of living requires equipping individuals with the basic necessities and opportunities they value (Wells, 1999). This framework shifts attention from mere income levels to the real freedoms people possess. For instance, the well-being of an underprivileged child would be assessed not by their family's earnings but by the quality of education they receive and their ability to live a long, healthy life. Sen's theory also highlights the role of conversion factors, such as social norms, cultural expectations and institutional convictions, which determine how effectively resources like schooling or healthcare can be transformed into actual capabilities. These insights complement Human Capital Theory, which argues that

investments in education and healthcare generate a more productive workforce and support long-term economic growth (Patrinos, 2016). A healthier population enhances labour productivity and reduces disease burdens while an educated workforce drives innovation and civic participation. Evidence further underscores this relationship: a 1% improvement in a country's literacy rate can contribute to a 0.3% increase in the country's GDP (Bansal, 2023).

Because healthcare and education are merit goods, when they are consumed, the marginal social benefits (MSB) of these goods exceed the marginal private benefits (MPB) - as shown in Figure 1.

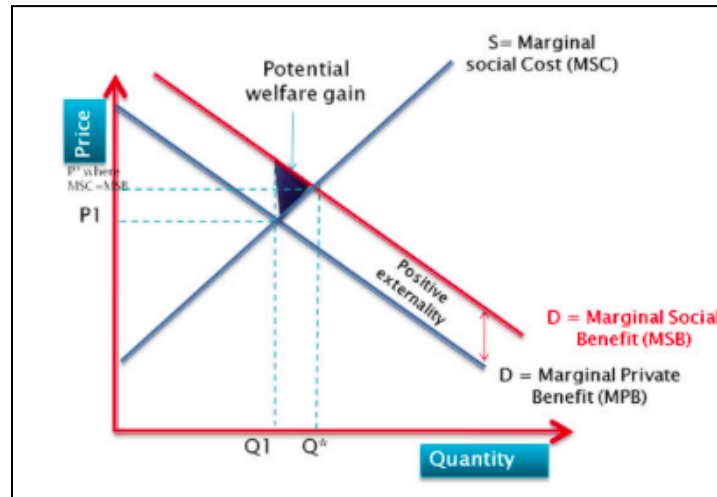


Figure 1. Positive Externalities Associated with Education and Healthcare

However, many times, individuals tend to underinvest in the consumption of education and healthcare and as a result, a market failure occurs. To correct this failure, government intervention in the form of public provision, subsidies and awareness campaigns is required.

Healthcare and education are strongly positively correlated. Higher educational attainment is associated with healthier habits and lifestyle choices. Moreover, higher educational attainment is linked to more positive mental health outcomes when considering depressive symptoms. For instance, an OECD (2025) report found that, on average, tertiary-educated individuals report more favourable indicators of mental well-being on this measure than those with lower attainment. Tertiary-educated adults (25-64 year-olds) report better self-perceived health than those with lower levels of attainment. On average, 51% of tertiary-educated adults rated their health as very good or excellent, compared with just 26% of those with lower levels of education. This improves the individual's overall well-being, allowing them to remain productive.

When this positive loop between health and education is disrupted, it reinforces and deepens poverty. Low-income families often cannot afford essential services such as quality schooling and reliable healthcare, and when they can, they must rely on public provisions that are frequently underfunded and

significantly weaker than private alternatives. As a result, children from these lower-income households enter school with untreated illnesses, poor nutrition or irregular attendance - all factors that may negatively affect their educational outcomes. In turn, limited educational attainment may restrict future earning potential, making it harder for the next generation to access adequate healthcare and perpetuating a cycle of poor health, poor education and low income. These self-reinforcing patterns are commonly referred to as the poverty circle, shown in Figure 2. Thus, the interdependence of these two sectors underscores how distributions to either one can magnify everyday inequalities across income groups.

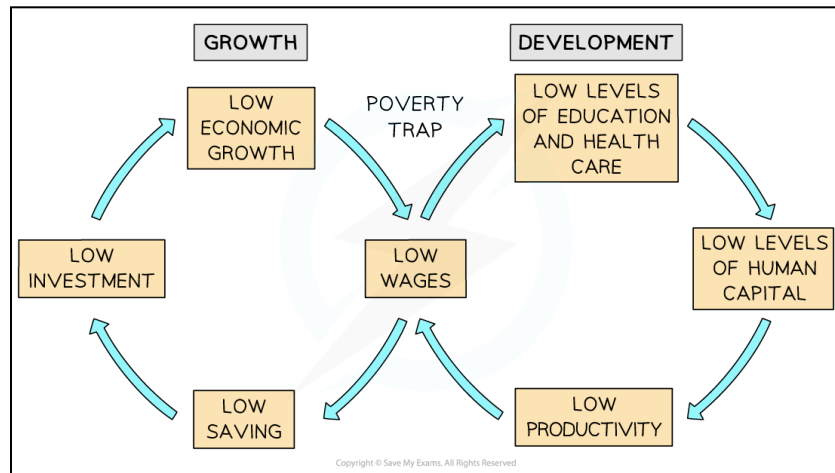


Figure 2. The Poverty Cycle Linking Education, Healthcare, Productivity and Income

AN IN-DEPTH ANALYSIS OF THE IMPACT OF INCOME INEQUALITY ON ACCESS TO EDUCATION AND HEALTHCARE IN INDIA

India was once known as the “Golden Bird” of the world because of its financial abundance. This was also one of the major reasons why the Indian subcontinent was such a disputed territory under threat of constant raids and sieges. Before colonisation, wealth disparity was significant, as most riches were concentrated among the ruling elites. Colonisation exacerbated this inequality, with the richest 1% holding just over 20% of national income. After independence in 1947, under Jawaharlal Nehru’s leadership, this figure was reduced to 12.5%. However, as the country progressed into the 21st century, the top 1%’s share rose to a startling 22.6% (Sharma, 2024), even higher than under colonial and fragmented rule. To understand these shifts in income disparity, it is essential to examine the forces driving the significant differences between the wealthy and the poor.

Currently, 61% of the country’s poor population lives in the Empowered Action Group (EAG) states (Bihar, Chhattisgarh, Jharkhand, Madhya Pradesh, Odisha, Rajasthan, Uttarakhand and Uttar Pradesh). Thus, observing these states will help us understand how income inequality has affected access to health and education.

As per the National Medical Journal of India, around half the inpatients (51% rural and 48% urban) of the EAG states do not access public sources of healthcare due to poor quality of services available in their areas, with Bihar, Madhya Pradesh and Odisha scoring the lowest level of satisfaction and availability of services (Kumar and Singh, 2016). Overall, according to the National Council of Applied Economic Research, poor households across India spent nearly 15% of their monthly income on healthcare compared to the richest households, who spend <1% of their income (Barik and Thorat, 2015), suggesting that poorer households face a substantially greater financial burden regarding health and how this deepens the wealth gap. This creates a barrier to entry for these households in accessing healthcare services; low-income households must deliberate extensively, which often translates into no or insufficient investment in healthcare. As mentioned in the previous section, when quality healthcare is not accessible to everyone, it leads to less-than-optimal consumption of these resources. This hampers productivity and the workforce's ability.

Taken together, these findings suggest that healthcare inequality operates through both the cost and quality of access rather than through income alone. Kumar and Singh's evidence from the EAG states identifies weaknesses in the availability and perceived quality of public healthcare, while Barik and Thorat demonstrate that healthcare expenditure places a substantially greater proportional burden on poor households. The findings are therefore complementary: where affordable public provision is perceived as inadequate, low-income households may face a choice between foregoing treatment and allocating a much larger share of their limited income to healthcare. This supports the Capabilities Approach because the formal existence of healthcare services does not necessarily translate into an effective capability to obtain treatment. However, much of this evidence is observational and varies in geographical scope, meaning that it demonstrates persistent associations between income, service quality and healthcare access rather than establishing income as the sole cause of unequal health outcomes.

The same applies to access to and quality of education. According to the OECD, enrolment of students aged 15-19 from EAG states in upper secondary education was 33% in 2023, one of the lowest among all countries (OECD, 2022). Without completing secondary or tertiary education, students possess fewer work skills and have less value in the labour market, leading to lower incomes. Too often in rural communities, children (both boys and girls) are forced to drop out to fulfil their 'roles' in the community. Boys are expected to go out and work and earn for the family rather than attain education, as the urgency for a higher income in the short-term is greater than the possibility of a higher income in the long-term when the boy is more educationally qualified for higher-paying jobs. For girls, it is the opposite, as conservative families would prefer the girl to stay at home and work, attending to children and household chores. They are either viewed as a source of income if they can procure more children who can earn in the future, or as a burden, as they need to be married off with a dowry, which costs the family. This brings in an aspect of the Poverty Cycle, where the family is stuck in generational poverty, as the children are unable to complete the full education they require for jobs with a greater salary.

Consistently focusing on bringing more children into the family to increase the number of workers, along with providing minimal education, suggests the family often struggles with worsening income inequality. Income may already be a hurdle to accessing education, but other demographic factors like gender further exacerbate this unequal access. Again, this trend does not necessarily appear the same way across all Indian states. Kerala has the highest Gender Parity Index (GPI) of 1.44, indicating a strong gender balance with more female students than male students. Odisha and Tripura have the lowest GPIs at 0.88 and 0.89, respectively (NITI Aayog, 2025). Each state shows varying outcomes across sections, reflecting differences in administration and management across India. These differences complicate any explanation based on household income alone. While financial constraints may restrict educational participation, the variation in gender parity across states suggests that social norms and differences in state-level administration also shape whether economic disadvantage translates into unequal educational access. Income and gender should therefore be understood as interacting sources of disadvantage rather than independent explanations, supporting Sen's emphasis on the social and institutional conditions that determine whether resources can be converted into genuine capabilities.

EVALUATING THE EFFECTIVENESS OF INDIA'S POLICIES IN REDUCING EDUCATION AND HEALTHCARE INEQUALITY

The government has introduced multiple policies to address problems such as income inequality and minority exclusion through legislation and other measures. For instance, the Right to Education Act, enacted in 2009 in support of Article 21A of the Indian Constitution, dictates that “The State shall provide free and compulsory education to all children of the age of six to fourteen years in such manner as the State may, by law, determine.” The overall target of this Act was to ensure that minorities are not discriminated against in education, as education plays a crucial role in reducing income inequality. It provides admission for 25% of children from weak and disadvantaged communities to grade 1 in private unaided schools. This strategy has improved access and expanded opportunities for minority groups. For instance, educational attainment among children with disabilities increased by 60% within 3 years of the Act's implementation (Varghese, 2022), giving them a chance to earn income in the future. The problem is that the Act's most significant provision applies to elementary-school children, and enrollment rates decline as grade level increases because of factors such as the government's focus on basic education rather than completing a full school education. This makes a difference in breaking the poverty cycle, as higher education is required for higher-paying jobs.

Even if schooling is subsidised, low-income families often struggle with related expenses such as books, transport and uniforms (Raveenthiranathan, Ramanarayanan and Thankappan, 2024). In light of this, the Midday Meal Scheme was introduced in 1995 with two primary aims: to provide free school lunches for children and encourage school attendance. By offering meals, the initiative aimed to ease households' financial burden by reducing the share of income spent on children's food. The first objective emphasises the importance of education, as regular school attendance helps children acquire knowledge and skills that enhance their employability. The second objective focuses on reducing household expenses to increase

net income. Additionally, the scheme addresses child undernutrition by providing nutritious meals. This support not only improves their health but also supports proper brain development, enabling them to function with strong cognitive abilities (Gharge et al., 2024). Under this scheme, the proportion of children enrolled in government schools increased by 7.3% from 2018 to 2022 (ASER, 2023). However, as discussed before, government-provided initiatives and services often lack adequate infrastructure and, specifically in India, consistent and effective hygiene. Importantly, this scheme was halted during COVID-19, when all schools shut down, creating a gap that low-income families scrambled to fill, as active income was also suspended at that time.

Another step to ensure a high standard of health and well-being for rural communities and minorities is the National Rural Health Mission, launched in 2005 to provide free, accessible healthcare to rural India. In 2021-2024, this mission employed over 12 lakh healthcare workers and achieved an 83% decline in the maternal mortality rate (Ministry of Health & Family Welfare Government of India, 2025), helping to fight income inequality by increasing human capital (through a greater number of live births) and providing more employment opportunities. That being said, despite government efforts, all facilities remain only partially accessible. For example, 10 of 37 district hospitals across seven states lack provisions for people with disabilities (National Health Mission, 2011). Further evaluation shows that this mission partially achieves its aim of low-cost healthcare by reducing the financial burden on low-income families through essential medications and treatments provided at no cost or at lower prices. One component is Ayushman Bharat, which provides financial aid to families struggling with health expenditure. The scheme provides Rs. 5 lakhs in health cover per family per year for secondary and tertiary care hospitalisation to over 12 crore poor and vulnerable families, who constitute the bottom 40% of the Indian population (NHA, 2019). Nonetheless, long wait times discourage families from investing in and registering for this scheme. Additionally, awareness of such financial programs is inadequate, with only 8.9% and 18.8% of beneficiaries in urban and rural areas, respectively, aware of the scheme's benefits (Dixit, Chauhan and Juneja, 2025).

Taken together, these policies show that government intervention has expanded formal access to education and healthcare but has been less successful in eliminating the broader inequalities that determine whether individuals can actually benefit from these services. The Right to Education Act addresses the direct barrier of school access, while the Midday Meal Scheme additionally reduces indirect household cost and links educational participation with child nutrition. Similarly, the National Rural Health Mission and Ayushman Bharat attempt to reduce geographical and financial barriers to healthcare. However, both sectors show a similar implementation gap. Infrastructural limitations, uneven service quality, indirect costs and low awareness can prevent formal entitlements from becoming effective access. The evidence therefore suggests that the central policy challenge is not simply the absence of government intervention but the uneven capacity of existing interventions to overcome the multiple disadvantages faced by low-income households. Viewed through the Capabilities Approach, providing an entitlement is insufficient if individuals lack the practical conditions required to convert it into improved education or health outcomes.

CONCLUSION

This paper examined the extent to which access to education and healthcare in India remains unequal across income groups and gender. The findings indicate that these inequalities are substantial and deeply structural.

Drawing on the Human Capital Theory and the Capabilities Approach, the analysis shows that meaningful access to education and healthcare is essential for individuals to develop their capabilities, achieve upward mobility and escape intergenerational poverty. Yet low-income households continue to face inferior healthcare quality, higher disease burdens and limited ability to afford treatment. Similarly, gender norms and financial constraints reduce girls' and women's opportunities for continuous, quality education, restricting their long-term economic prospects.

Evidence from India's EAG states further demonstrates how inadequate infrastructure, underfunded public services and weak implementation widen these gaps. Although policies such as the Right to Education Act, the Midday Meal Scheme and the National Rural Health Mission aim to bridge disparities, they fall short due to inconsistent funding, insufficient monitoring and limited public awareness.

Several limitations should be considered when interpreting these findings. Firstly, the study relies entirely on secondary evidence, so differences in methodology, geographical coverage and publication period across sources could limit direct comparison between findings. Evidence from the EAG states is particularly useful for examining disadvantaged populations, but it cannot necessarily be generalised to all Indian states where income levels, gender norms and the quality of public services vary considerably. Moreover, much of the evidence is observational, making it difficult to isolate the effect of income from related factors such as geography, cost, gender, infrastructure and household characteristics. Future research could therefore use household-level longitudinal data or primary research across multiple states to examine how these factors interact over time. Further research could also compare policy implementation across higher- and lower-performing states to identify which institutional factors allow education and healthcare programs to translate more effectively into improved outcomes for low-income households.

Overall, the extent of inequality remains significant, disproportionately affecting low-income groups and women. Strengthening governance, improving service quality and ensuring equitable distribution of resources are essential for India to reduce income- and gender-based disparities and move toward a healthier, more inclusive future.

REFERENCES

ASER (2023). *Annual Status of Education Report (Rural) 2022*.

Bansal, N. (2023). *Impact of Education Policy on India's GDP Growth: Strengthening the Foundation for a Thriving Nation*. [online] Investindia.gov.in. Available at: <https://www.investindia.gov.in/blogs/impact-education-policy-indias-gdp-growth-strengthening-foundation-thriving-nation>.

Barik, D. and Thorat, A. (2015). Issues of Unequal Access to Public Health in India. *Frontiers in Public Health*, 3(245). doi:<https://doi.org/10.3389/fpubh.2015.00245>.

Dixit, R., Chauhan, A. and Juneja, K. (2025). Awareness and Utilization of Ayushman Bharat Pradhan Mantri Jan Arogya Yojana (AB-NHPM) among Beneficiaries of Gautam Buddha Nagar District: A Comparative Study. *Indian Journal of Community Medicine*, 50(1), pp.213–219. doi:https://doi.org/10.4103/ijcm.ijcm_728_23.

Gharge, S., Vlachopoulos, D., Skinner, A.M., Williams, C.A., Iniesta, R.R. and Unisa, S. (2024). The effect of the Mid-Day Meal programme on the longitudinal physical growth from childhood to adolescence in India. *PLOS global public health*, 4(1), pp.e0002742–e0002742. doi:<https://doi.org/10.1371/journal.pgph.0002742>.

Kumar Bharti, N., Chancel, L., Piketty, T. and Somanchi, A. (2024). *INCOME AND WEALTH INEQUALITY IN INDIA, 1922-2023: THE RISE OF THE BILLIONAIRE RAJ*. [online] World Inequality Lab. Available at: https://wid.world/www-site/uploads/2024/03/WorldInequalityLab_WP2024_09_Income-and-Wealth-Inequality-in-India-1922-2023_Final.pdf.

Kumar, V. and Singh, P. (2016). Access to healthcare among the Empowered Action Group (EAG) states of India: Current status and impeding... *The National Medical Journal of India*, [online] 29(5), pp.267–273. Available at: https://www.researchgate.net/publication/312116537_Access_to_healthcare_among_the_Empowered_Action_Group_EAG_states_of_India_Current_status_and_impeding_factors

Ministry of Health & Family Welfare Government of India (2025). *National Rural Health Mission :: National Health Mission*. [online] nhm.gov.in. Available at: <https://nhm.gov.in/index1.php?lang=1&level=1&lid=49&sublinkid=969>.

National Health Mission (2011). *Evaluation Study of National Rural Health Mission (NRHM) In 7 States*.

NHA (2019). *About Pradhan Mantri Jan Arogya Yojana (PM-JAY)*. [online] nha.gov.in. Available at: <https://nha.gov.in/PM-JAY>.

- NITI Aayog (2025). *Expanding Quality Higher Education through States and State Public Universities*. [online] Available at: <https://www.niti.gov.in/sites/default/files/2025-02/Expanding-Quality-Higher-Education-through-SPUs.pdf>.
- OECD (2022). *Education GPS - India - Overview of the Education System (EAG 2021)*. [online] gpseducation.oecd.org. Available at: <https://gpseducation.oecd.org/CountryProfile?primaryCountry=IND&treshold=5&topic=EO>.
- OECD (2025). *Education at a Glance 2025*. [online] *OECD*. Available at: <https://doi.org/10.1787/1c0d9c79-en>.
- Patrinos, H.A. (2016). *Why education matters for economic development*. [online] World Bank Blogs. Available at: <https://blogs.worldbank.org/en/education/why-education-matters-economic-development>.
- Raveenthiranathan, L., Ramanarayanan, V. and Thankappan, K.R. (2024). Impact of free school lunch program on nutritional status and academic outcomes among school children in India: A systematic review. *BMJ open*, 14(7), pp.e080100–e080100. doi:<https://doi.org/10.1136/bmjopen-2023-080100>.
- Sharma, Y. (2024). *Is today's India more unequal than under British rule?* [online] Al Jazeera. Available at: <https://www.aljazeera.com/amp/economy/2024/4/29/is-modis-india-more-unequal-than-under-british-rule>
- Varghese, V.R. (2022). *Impact of the right to education on school enrolment of children with disabilities*. [online] *UNU-WIDER*. Available at: <https://doi.org/10.35188/UNU-WIDER/2022/225-6>.
- Wells, T. (1999). *Sen's Capability Approach*. [online] Internet Encyclopedia of Philosophy. Available at: <https://iep.utm.edu/sen-cap/>.
- World Bank (2025). *GINI index (World Bank estimate) - India | Data*. [online] data.worldbank.org. Available at: <https://data.worldbank.org/indicator/SI.POV.GINI?locations=IN>.