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Health Investments to Reduce Health Inequities in India: Do We Need More Evidence?

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Abstract

Large inequities in health outcomes and treatment-seeking behaviour continue to exist in India, across households, states and residence. A few large populous states continue to contribute the most to multi-dimensional poverty, including indicators for health outcomes. A significant contributor is the high out-of-pocket spending that continues to be a key feature of India's health sector, accompanied by one of the lowest levels of public investment on health. The COVID pandemic has brought out sharply the lack of preparedness of the country and its states to face a catastrophe of this kind. A resilient health sector can only be built by bridging the various gaps in key inputs into the sector – infrastructure, personnel, supplies and training. This investment is likely to bring down the demand for health services in the private sector and reduce spending on health services by households by making these affordable and accessible. A quantum jump in investment would also be required to offer health coverage that is truly universal in scope and coverage. Unless that happens, India would remain unprepared for the next calamity and continue with significant inequalities in health outcomes and access to services.

Keywords

Poverty, inequality, out-of-pocket spending, health outcomes, health financing

Introduction

The COVID pandemic has again highlighted the harsh truth about India: that there remains a huge socio-economic divide across groups based on residence, geography, class, caste, education and a whole host of other factors. Among the many heart-wrenching visuals that marked the highlights of the COVID period, two sets would remain etched in the minds of Indians: migrants walking hundreds of miles to reach

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their homes, hungry, ill and tired, and citizens scampering around desperately to get their sick relatives admitted to hospitals and procure oxygen cylinders.

While the two may seem unrelated, they are not. Though the COVID infection itself did not generally distinguish between the poor and the non-poor, the latter were better equipped to negotiate the system and had a higher probability of garnering resources for health as well as non-health requirements. Though many households were hit by loss of earning and employment, the poor remained the most vulnerable due to lack of social and health security.

While official estimates of poverty have not been brought out since 2011, other estimates indicate that about 28 per cent of Indians lived in multidimensional poverty in 2019 (United Nations Development Program [UNDP], 2019).

The report on multi-dimensional poverty (MDP) based on the fourth round of the National Family Health Survey (NFHS) for the years 2015-16 indicates that 33 per cent and 9 per cent of rural and urban Indians live in multidimensional poverty (National Institute of Transforming India [Niti] Aayog, 2021).

Given the decline in GDP and increase in unemployment during the pandemic, it is evident that poverty could only have increased and inequalities widened. A very recent statement by the RBI Governor indicates that growth rate of GDP for 2022-23 would be lower than initially estimated by the Finance Ministry, due to private consumption and contact-intensive services remaining below pre-pandemic levels (The Economic Times, 2022).

While one has already witnessed the education system falling apart and huge inequalities inserted among students due to the digital divide, the story would be similar for the health sector as well. Unfortunately, data remains unavailable to estimate the impact of the pandemic on the health sector and health-seeking behaviour of individuals. While the pandemic caught most countries off guard, the resilience of health systems determined to a large extent the impact of the pandemic and the ability of countries to reduce illness and death from COVID.

In India, there are large inequalities among states on various socio-economic indicators, including health outcomes. Southern states like Kerala and Tamil Nadu (TN) are considered much ahead of the other states in terms of health and educational outcomes. On the other hand, a group of states labeled as Empowered Action Group or EAG states comprising eight states¹ have often been the focus of government programmes and interventions due to their continued vulnerability status. Often, Assam is added to the EAG group for policy purposes. In this essay, we attempt to analyse why the pandemic might have seriously exacerbated the existing health inequalities in the system, requiring a rebooting of the health sector. We present evidence for the country as a whole, and also on the vulnerable states, especially Bihar and UP and take Tamil Nadu as a comparator, to understand the aspirational directions policies could take in the near future. A key policy knob—health financing—is analysed in detail, and we present our prognosis and recommendations about the future of health sector policy in India.

¹Bihar, Chhattisgarh, Jharkhand, Madhya Pradesh, Odisha, Rajasthan, Uttarakhand and Uttar Pradesh

Inequities Across States in Health Dimensions

There is already a large volume of literature about EAG states and their relative positions across a number of indicators. Government of India (GOI) has been initiating numerous programmes and schemes for making the EAG states come out of their backward status and catch up with the rest of the states. However, despite such efforts, we continue to see huge inequities between EAG and non-EAG states in health outcomes. Table 1 presents data on multidimensional poverty for EAG states,² and Kerala and Tamil Nadu as well for comparison.

States	Multi- dimensionally poor (%)	Percentage of total population who are multi- dimensionally poor and deprived in each indicator (%)		
		Nutrition	Child & adolescent mortality	Maternal health
Bihar	51.2	41.6	3.9	36.5
Jharkhand	42.2	34.4	2.7	26.5
Uttar Pradesh	37.8	30.5	3.8	25.3
Madhya Pradesh	36.7	29.0	2.7	20.1
Assam	32.7	25.5	2.2	17.8
Chhattisgarh	30.0	24.0	2.3	17.0
Rajasthan	29.5	23.3	2.1	17.1
Odisha	29.3	22.4	1.5	12.7
Uttarakhand	17.8	14.7	1.6	13.0
Tamil Nadu	4.5	3.6	0.3	1.7
Kerala	0.7	0.6	0	0.2

Table 1: Multidimensional poverty, EAG states including Assam, Kerala & Tamil Nadu, 2015-16

Source: Niti Aayog 2021

Among the major states, Bihar has 52 per cent of its population who are multidimensionally poor, followed by Jharkhand (42 per cent) and Uttar Pradesh (UP) (38 per cent) respectively. In the three health domains—nutrition, child & adolescent mortality and maternal health—most of the EAG states, but especially Bihar and UP, continue to be in the group that performs the worst. TN and Kerala, on the other hand, have very little MDP in comparison. The Niti Aayog also brings out an annual Health Index which is a weighted average of various indicators that attempts to measure the state of health, and tracks the overall and incremental changes across all states and Union Territories (UT). The latest report with 2018-19 as the base year and 2019-20 as the reference year indicates that among the larger states, Kerala, Tamil Nadu and Telangana were the three best performers in terms of overall performance (Niti Aayog, 2021). The worst performer was UP, with Bihar also in a similar situation in overall score. However, unlike Bihar, UP's incremental performance was quite good.

The same report indicates that states performed differently in the three main domains that went into constructing the health index—health outcomes, governance & information, and key inputs & processes. In the health outcomes domain, most of

²We include Assam in discussions on EAG states

the EAG states do very poorly, with Bihar and UP as the worst performers and Kerala at the top. For the domain on governance and information, the picture is somewhat mixed, with Assam doing very well, ahead of Kerala. Jharkhand is the worst performer in this group. Finally, for the domain on key inputs and processes, Tamil Nadu is at the top with Bihar at the other end.

For all the states and UTs, the MDP proportions are much higher for rural areas than urban areas: for example, for Bihar, the rural-urban numbers are 56 per cent and 24 per cent respectively.

Clearly, health inequalities persist in all dimensions within states, between rural and urban areas, and as the report also indicates across districts.

The contribution of health indicators in total MDP is shown in Figure 1 for the EAG states and for Kerala and TN.

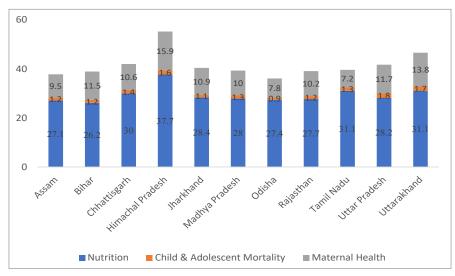


Figure 1: Contribution of each indicator to MPI score (%)

Source: Niti Aayog 2021

For all the states, including Kerala and TN, nutrition contributes the most to MDP, followed by maternal health. For more evidence on what literally ails the various states, Table 2 indicates the top 5 diseases that contribute to total disease burden in each of the states and for India. We now focus only on the two most vulnerable states—Bihar and UP—and TN, since TN and Kerala have similar trends.

The Global Burden of Disease (GBD) data for India indicates that both Bihar and UP continue to have maternal, neonatal and nutritional diseases as the top cause of disease burden (GBD, 2019). For TN, the top cause is cardiovascular diseases which is also the case for all-India. In fact, for TN, all the 5 top diseases contributing to total disease burden are non-communicable diseases and injuries (NCDI). For both Bihar

and UP the set of diseases classified as communicable continue to impose the most disease burden, indicating that these states need a public health approach to reduce their disease burdens.

Top 5	Bihar	Uttar Pradesh Tamil Nadu		India
Diseases				
I	Maternal, neonatal &	Maternal & neonatal	Cardiovascular	Cardiovascular
	nutritional diseases	& nutritional	diseases (19.6%)	diseases (13.9%)
	(13%)	diseases (14.1%)		
2	Cardiovascular	Respiratory	Diabetes & CKD	Maternal, neonatal
	diseases (11.3%)	infections & TB	(9.1%)	& nutritional
		(10.4%)		diseases- (9.9%)
3	Enteric infections	Cardiovascular	Neoplasms (6.2%)	Respiratory
	(9%)	diseases (9.5%)		infections & TB
				(7.7%)
4	Respiratory	Chronic respiratory	Unintentional injuries	Chronic
	infections & TB (8.8)	(7.7%)	(5.7%)	respiratory
				(6.3%)
5	Other non-	Enteric infections	Musculoskeletal	Neoplasms (5.8%)
	communicable	(7.4%)	disorders (5.6%)	
	(5.7%)			

Table 2: Global burden of diseases: Top 5 shares in terms of disease burden, 2019

Red: Communicable, maternal, neonatal and nutritional diseases Blue: Non-communicable diseases Green: Injuries Source: IHME GBD India 2019

Most of the burden of communicable diseases, continues to fall on the poorest sections of the population in any developing country, and India is no exception. Moreover, with changing disease profiles, there is increasing evidence that poverty also increases risk of death and disability from NCDIs as well (Johns Hopkins, 2018).

This short summary indicates that health outcomes for the poor remain a cause of concern, with a two-way relationship between poverty and disease occurrence.

Treatment-seeking Behaviour and Out-of-pocket Expenditure

National Sample Survey (NSS) 75th round enables us to understand treatment-seeking behaviour of households including out-of-pocket spending (OOPS) and allows additional insights into possible sources of health inequities across states.

Table 3 presents the self-reported out-patient (OPD) and inpatient or hospitalization (IPD) rates from the NSS and indicates that care increases with increases in income. So, while 5 per cent from the lowest quintile sought care for OPD in rural areas, more than 10 per cent sought care in the richest quintile. While this could be because of higher morbidity rates among the relatively well-off, evidence suggests otherwise, and indicates that economic means could be a major constraint in treatment-seeking behaviour.

Quintile	OPD (%)		IPD	(%)
	Rural	Urban	Rural	Urban
1	4.8	6.5	1.7	2.8
2	5.4	8.6	1.8	3.2
3	6.4	9.0	2.4	3.7
4	7.0	10.4	3.0	3.6
5	10.4	10.9	4.1	3.8
All	6.8	9.1	2.6	3.4

Source: NSS 75th round

Figure 2 shows where respondents went for hospitalization and the out-of-pocket spending incurred by them, in public and private facilities.

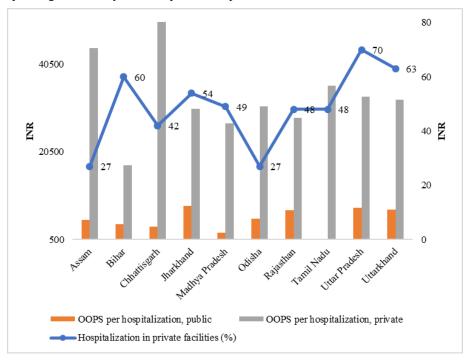


Figure 2: Out-of-pocket spending on hospitalization and % seeking private hospitals

Source: NSS 75th round

The first point to note is that a high proportion of respondents sought care from private facilities for hospitalization. In UP, 70 per cent of those needing hospitalization went to a private facility. Even TN, the comparator, had 48 per cent seeking care in private facilities. The result of these patterns of treatment-seeking behaviour is felt on respondent's out-of-pocket spending (OOPS) on hospitalization. The difference between OOPS between private and public facilities is substantial in almost all the states, including TN, though for TN and Madhya Pradesh (MP) respondents paid very

little while seeking care in public facilities. The difference is highest for Chhattisgarh and Assam.

While TN also shows the maximum difference between public and private OOPS, we need to understand to what extent such high expenditure might impact households.

When we look at the percentage break-up of ailments treated on medical advice by healthcare service provider, we find that in TN, only 8.8 per cent and 13 per cent went to private doctors or private clinics in rural and urban areas respectively; most of the respondents chose government hospitals for seeking medical advice, and this percentage was much higher for rural areas (63 percent) compared to urban areas (41 per cent). In Bihar and UP, this was just the reverse: for both rural and urban areas, medical advice was sought at private clinics and from private doctors by more than 60 per cent of the people seeking care.

The OOPS in per capita household consumption indicates how much households pay for health care out of their total consumption expenditure. Figures 2a and 2b present the ratio of average household consumption on health (OPD plus hospitalization) for each quintile between the two health NSS rounds for rural and urban areas separately, for the country as a whole.

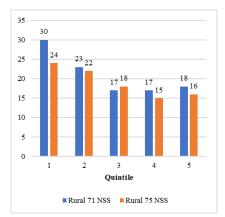


Figure 2a: Share of per capita consumption on health in household per capita total consumption (%) *Source*: NSS 71st and 75th round

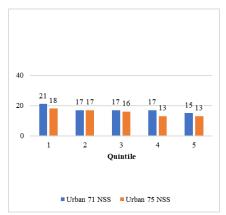


Figure 2b: Share of per capita consumption on health in household per capita total consumption (%)

The first point to note is that the rural areas are spending more on health than urban areas. For both the rounds, lowest quintiles in rural areas spend more than the lowest quintiles in urban areas. The second point is that lower quintiles spend more than upper quintiles on health—the ratio declines in the upper quintiles. Finally, and which is a positive development, the share of health in total consumption has gone down marginally for all the quintiles between the two rounds.

The existence of inequality in the burden of health care among rural residents and lower quintiles continues to be one of the most inequitable features of the health system in the country.

Explaining Treatment-seeking Behaviour

a. Infrastructure and Personnel

The choice of providers in Bihar and UP is easy to explain if one looks at the state of infrastructure and health personnel in these states, compared to TN. Figures 3, 4a and 4b indicate the shortfalls in these two variables in the three states.

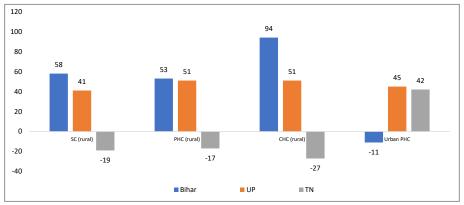
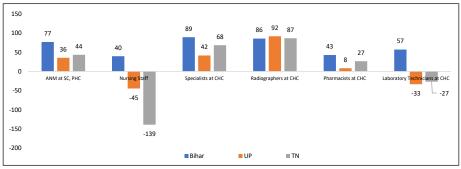
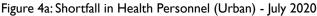


Figure 3: Shortfall in Health Facilities (July 2020)

Source: Rural Health Statistics 2019-20





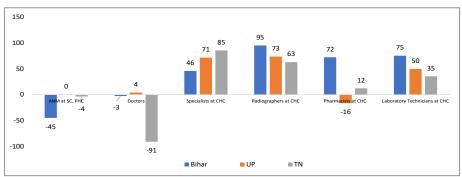


Figure 4b: Shortfall in Health Personnel (Rural) - July 2020

Source: Rural Health Statistics 2019-20

Both Bihar and UP show serious shortfalls in Sub-Centres (SC), Primary Health Centres (PHC), Community Health Centres (CHC); in contrast, TN has already achieved surplus infrastructure, explaining the high visits to government facilities in this state and very low visits in the other two.

The picture for health personnel is slightly different. TN also shows shortfalls in Auxiliary Nurse Midwives (ANMs), specialists, radiographers etc., but Bihar does much worse than UP in terms of government health personnel. UP has recently made up for lack of ANM and nursing staff and shows a much better situation compared to Bihar, especially for urban areas.

The missing health infrastructure and personnel in the government sector continues over the years, and contributes to high burden of OOPS on households, who are forced to visit private providers and facilities.

It should be pointed out that the TN numbers may be somewhat misleading since TN has arranged its health system in a much more efficient manner with superior outcomes. Tamil Nadu has a distinctive public health cadre in the district level, has a separate body for regulating procurement of drugs and has been implementing very efficiently the TN Health Systems Project over the years (Parthasarathi and Sinha, 2016). The quality and efficiency of public health services continue to be far better than many other states, and TN health services utilization are generally considered pro-poor, though there is some evidence that recently, the proportion of those in the poorest quintile using public facilities has gone down (Vaidyanathan, Muraleedharan, Sundararaman et al., 2022). This is probably also the reason why in the Niti Aayog estimates, TN does very well on key inputs and processes.

b. Health Coverage in EAG States

The key to avoiding high OOPS is through health coverage, and India—like many other countries—has been trying to move towards Universal Health Coverage (UHC). The health coverage has to be highest for the lowest quintiles and those living in rural areas, who are experiencing relatively higher burden of OOPS. The most recent initiative of the government towards this has been the launch of Ayushman Bharat (AB), which has essentially two arms: one to strengthen primary care through Health and Wellness Centres (HWCs) and the other is the health coverage scheme for the most vulnerable called the Prime Minister's Jan Arogya Yojana (AB-PMJAY). Most of the states have been running their own schemes for hospitalization which have since been merged with AB-PMJAY with a few exceptions.

Table 4 indicates the status of health coverage in rural and urban areas as reported in the 75th round of the NSS, and indicates that residents in EAG states are mostly not covered by any health coverage programme. The other notable point is that those in the top quintile in urban areas are much better covered compared to their rural counterparts, and in general urban non-coverage numbers are better than rural noncoverage numbers. However, there are exceptions. Chhattisgarh and Rajasthan seem to have done much better among the EAG states, and their rural non-coverage numbers are better than the urban ones. Finally, the non-coverage numbers for Tamil Nadu are comparable to the EAG states, with the exception of urban top quintile, who are best covered in the state.

State	Not covered scheme (%)	, 0	Not covered by coverage scheme (%) 5th quintile		
	Rural	Urban	Rural	Urban	
Assam	96.2	96.1	95.6	83.1	
Bihar	99.7	98.9	97.3	85.9	
Chhattisgarh	32.3	40.2	40.9	60.3	
Jharkhand	99.9	99.2	99.8	86.6	
Madhya Pradesh	99.8	98.7	99.0	84.8	
Odisha	80.5	92.3	95.6	90.1	
Rajasthan	56.6	74.6	63.4	71.5	
Tamil Nadu	98.0	89.8	81.2	64.9	
Uttar Pradesh	99.8	99.2	98.4	72.1	
Uttarakhand	99.8	99.6	92.4	62.4	
All India	89.8	90.2	78.1	66.9	

Table 4: Health coverage by quintiles, Rural & Urban

Source: NSS 75th round

It is difficult to predict the coverage numbers during the pandemic years – most programmes had to be halted or were slow to progress, and it remains to be seen if the health coverage has improved and OOPS has declined for the most vulnerable.

Resource Allocation for Addressing Inequities in the Health Sector

The poor infrastructure and personnel situation, and low health coverage explains well, the high OOPS expenditure of households that are likely to disproportionately impact the poor and the vulnerable across the country, but mostly in the EAG states. How could this have been avoided?

The most important policy knob is health financing. There is now solid evidence that health outcomes are better in countries with better public health financing, and low OOPS.

A recent study (Owusu, Sarkodie & Pedersen, 2021) examined the influence of health expenditure on infant and maternal deaths for the period 2000–2015 across 177 countries and found a negative effect of health expenditure on mortality across all percentiles. The study concludes that to attain Sustainable Development Goals (SDG)- 3, there is a need to increase health spending in especially lower middle-income countries. This finding corroborates earlier such findings (Boachie, Polajeva, & Frimpong, 2020), (Kiross, Chojenta, Barker et al., 2020) on the direct link between health outcomes and health financing.

India's low level of spending on the health sector is now also widely known and numerous articles have been written on the inability of the country to move out of the trap of low health spending. While the total health spending is slightly above 3 per cent (National Health Accounts [NHA], 2021), government health spending is only slightly

more than 1 per cent currently. Table 5 brings out the comparatively poor performance of India globally in its ability to raise resources for the latest comparable year, 2018.

Income Categories of Countries - World Bank	Government Health Spending as a % of GDP (2018)
High income	7.7
Upper middle income	3.3
Middle income	2.8
Low & middle income	2.8
Lower middle income	1.5
Low income	1.1
India	1.0

Table 5: Domestic government health spending in GDP (%)

Source: World Bank Open Data

While high-income countries spend on an average more than 7 per cent, this goes down with income levels to 1.1 per cent for low-income countries. India's spending of 1 percent of its GDP is lower than the average of the group it belongs to—lower middle-income countries.

In general, the higher is government spending on health, the lower is OOPS. Figure 5 uses World Bank data to plot government spending of countries out of their GDP with OOPS in current health expenditure. While the fit is not as close as one would hope, it still is a strongly negative one, indicating a fairly tight relationship between the two variables. India can only hope to reduce OOPS if it starts increasing its total government expenditure on health.

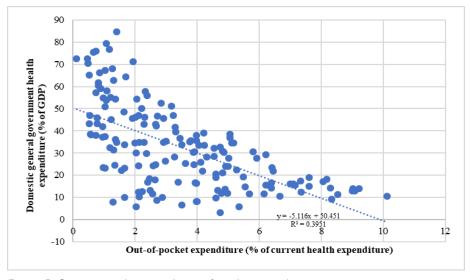


Figure 5: Govt expenditure and out-of-pocket spending across countries

Source: World Bank Open Data

High OOPS and low coverage indicates the ever-present challenge of the Indian health system—raising resources for building a resilient health sector and offering financial protection to its citizens from health shocks. The COVID-19 pandemic brought out clearly the urgent need to revive and strengthen the health sector (Gupta, 2020). A pandemic like COVID could have been dealt with more efficiently, with better overall allocations, and strengthening key components like public health investment.

While the health sector budget is key for investment on infrastructure and personnel, the public health component largely comprises drug control, food safety and standards, manufacture of vaccines, prevention and control of diseases, prevention of food adulteration, public health education and public health laboratories. Public health interventions have been universally successful in dealing with the threat of communicable diseases. So, it can be expected that states in the initial stages of epidemiological transition would direct more resources towards public health within a modest to high total public financing of the sector.

We analyse some of these parameters for Bihar, UP and Tamil Nadu (TN).

Table 6 presents the real per capita total health expenditure by the respective state governments over the last six years between 2014-15 and 2019-20. These numbers are derived from the state Demand for Grants.³

States	2014-15	2015-16	2016-17	2017-18	2018-19	2019-20	Compound growth rate (%)
Bihar	265	318	363	392	445	448	11
UP	442	455	509	526	546	554	5
TN	714	817	862	816	968	1092	9

Table 6: Per capita real total expenditure (INR), Dept. of Health & Family Welfare

Source: Author's calculations based on state Demand for Grants, Health & Family Welfare

Over the six years, Bihar showed the highest compound growth in per capita real total expenditure, followed by TN, while UP's growth was the lowest. However, Bihar's per capita real total expenditure on health in 2019-20, was a mere INR 448 compared to INR 1092 for TN. UP's was only marginally better at INR 554 and its growth rate was also much lower. Clearly, to catch up with TN, both the states have to increase their growth rates to much higher levels.

Real per capita expenditure on the public health component is a critical subcategory under total health expenditure, especially where the burden of communicable disease is very high. Both Bihar and UP have a disproportionate burden of communicable diseases. In 2019, Communicable, Maternal, Neonatal and Nutritional Diseases comprised 40 per cent, 40 per cent and 17 per cent of total disease burden (Disability Adjusted Life Years or DALYs) in Bihar, UP and TN respectively (GBD, 2019) indicating that states like Bihar and UP must continue to focus on preventable and communicable diseases. In the background of the pandemic, this becomes a greater priority.

³Demand for Grants are budget documents for each Ministry and Department within the Centre and State governments. These documents give the budget estimates of spending of all lineitems for the upcoming year, revised estimates for the previous year and actual spending incurred for the year before last.

Table 7, however, indicates the low prioritization of public health in total health expenditure of the governments of Bihar and UP. In 2019-20, these states spent INR 9 and INR 17 respectively on per capita real expenditure on the component public health, compared to INR 55 for TN. Investment on public health laboratories takes place under this head of expenditure, and indicates poor investment on diagnostics and laboratories, two areas of critical importance during outbreaks and pandemics.

States	2014-15	2015-16	2016-17	2017-18	2018-19	2019-20
Bihar	5	5	5	6	6	9
UP	16	16	15	20	18	17
TN	46	50	51	53	56	55

Table 7: Per capita real expenditure (in INR) on the public health component

Source: Author's calculations based on state Demand for Grants, Health & Family Welfare

While raising total resources and investing in critical areas like public health is going to remain the most important policy knob, it is also important to guard against inefficient spending, which will only waste precious resources.

Figure 6 plots Infant Mortality Rate (IMR) against per capita health expenditure for the various states for 2019-20. The figures shows that states do get different outcomes from the same level of spending, indicating the possibility of different efficiency in their health spending. For example, Tamil Nadu (TN), Haryana (HR), Odisha (OR) and Chhattisgarh (CG) have similar per capita spending, but very different outcomes in terms of IMR. Also, Kerala (KL) and Goa (GO) have both performed well and have almost similar IMR. However, Kerala is able to achieve good results with much lower per capita health spending.

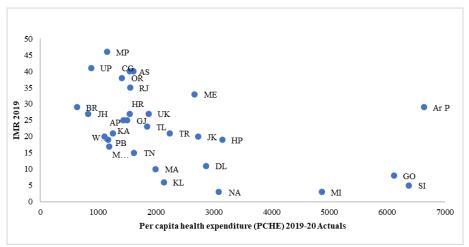


Figure 6 : Per capita health expenditure and IMR across states

Source: Authors calculations based on state Demand for Grants, Health & Family welfare 2021-22, SRS Bulletin 2019

The discussion above clearly brings out the need for a quantum jump in spending on health in the country. The National Health Policy in India (NHP, 2017) recommends spending 2.5 per cent of GDP, but at this point even this seems too inadequate. Most countries with UHC have been able to spend more than 3 per cent of their GDP on health. The COVID-19 experience has brought to the fore again the urgent need for a quantum jump in health financing. The resilience of the health sector hinges on how much a country prioritizes health by putting in adequate finances. Also, since India is now also supposedly on the path of UHC, its current level of spending is totally inadequate to move it towards UHC.

Table 8 indicates the levels that would be required if India truly wants to move towards UHC. While European countries like Norway and Germany spend almost 1/10th of their GDP on health, even countries in Asia like Thailand, China and Sri Lanka are able to do much better than India in terms of per capita spending as well as level of government spending out of GDP. Rwanda has made rapid progress towards UHC, and while its per capita spending is low, it is able to spend 2.6 per cent of its GDP on health.

Countries with significant UHC	Domestic Government Health Expenditure Per Capita, PPP (current international \$), 2019	Domestic Government Health Expenditure (% of GDP), 2019	
Norway	6194	9.0	
Germany	5238	9.1	
France	4137	8.3	
Japan	3847	9.0	
Turkey	925	3.4	
Brazil	610	3.9	
Thailand	524	2.7	
China	493	3.0	
Sri Lanka	269	1.9	
India	69	1.0	
Rwanda	58	2.6	

Table 8: Health financing indicators for countries with significant UHC

Source: World Bank Open Data

A recent World Health Organization report (WHO, 2020) indicates that health financing vulnerabilities that existed prior to 2020 will also affect health spending in the coming years post COVID. The report points out that countries like India that rely heavily on OOPS and are facing large economic contractions will find it hard to sustain their current levels of financing and address equity in health services. While OOPS may not increase substantially, that is mainly due to foregone care due to loss of income as well as lockdown, rather than a real drop in OOPS. The report also warns that such foregone care is likely to hit the poor much harder than others.

Clearly, India and its states need to not only defend their current levels of spending but increase spending substantially if inequities are to be addressed.

While the National Health Mission (NHM) and the Ayushman Bharat are two major landmark initiatives in the health sector, it is not clear whether the benefits have trickled down enough to make a major difference in inequities. The NHM was launched to make a difference to the way government health services—especially maternal and child health care services—are provided in the rural areas, including improvements in infrastructure. The NHM has been an important initiative of the government, which should be strengthened.

A Benefit Incidence Analysis (BIA) using 2014 NSS (Bowser, Patenaude, Bhawalkar et al., 2019) shows that government spending on public health care has not resulted in significantly pro-poor services, and that in-patient services are in particular not pro-poor, and there are significant disparities across states. A recent study (Selvaraj, Karan, Mao et al. 2021) uses two waves of the NSS and also employs BIA to find that NHM did benefit the poor, but in terms of health subsidies received forutilization of inpatient and outpatient services, the rich benefitted more. The study also finds that inequalities persist across all healthcare services in the private health sector.

Nonetheless, NHM remains an important programme with a huge potential to make further difference to the lives of millions of Indians living in rural India. Similarly, there are other programmes of the government on Tuberculosis (TB), non-communicable diseases, HIV/AIDS that yield direct benefits to people if scaled up and done well.

The PM-JAY for hospitalization coverage for the 40 per cent of the vulnerable population of the country also requires huge finances, which has not been forthcoming (Gupta & Roy, 2019).

In a meagre total allocation for health, it stands to reason that the allocations under specific heads will be in turn very small.

There have been studies that have indicated how much India should be spending on disease control programmes; some of those calculations yield numbers that are impossible to attain. The synergies in health sector programmes need to be exploited, so that separate allocations can be manageable and realistic. Thus, while India has been able to increase spending on TB prevention and control, OOPS on TB remains about half of the total expenditure in the country on TB (Su, Baena, Harley et al., 2020). Malaria has a similar story, possibly worse than that for TB, in that OOPS in malaria prevention and control remains high (Haakenstad, Harle & Tsakalos, 2019). If one takes spending on non-communicable diseases and injuries (NCDI), the total government spending remains very low at less than half a percent of GDP (Gupta & Ranjan, 2019). The COVID calamity has brought to the fore the need for health systems strengthening (HSS) which runs common across all disease control programmes; HSS would require funding and filling the various personnel, infrastructure and supply gaps and make all the existing disease control programmes much more efficient. In India, health being a state subject, health spending is majorly done by the states, at two-thirds of the total health spending (National Health Profile, 2021). Therefore, merely increasing funds in the Central government is not enough if correspondingly state governments are not able to raise resources for health. In any case, the last two Union budgets indicate that core health allocations of the MOHFW have been static or declining, and some major programmes like NHM are not getting adequate funding. While the 2021-22 budget expanded the scope of what was defined as "health and well-being", and included water, sanitation and nutrition, a detailed analysis revealed that core health sector allocations actually did not increase and in fact went down slightly. The same happened in the subsequent 2022-23 budget, though the definition reverted to the earlier one and health sector allocations of the Union government went down slightly.

Looking Ahead

Significant inequities in health outcomes and access to services continue in the country. The brunt of these inequities continue to fall on a few large populous states with large numbers of poor and significant inequalities between rural and urban areas. These states will be unable to come out of this low-level equilibrium without a significant shift in priorities. The health sector has yet to be prioritized in the country and the COVID pandemic has once again indicated the pitfalls of continuing with a weak health sector. The lack of investment in the health sector has translated into a weak government health system, with missing infrastructure, personnel and medical supplies. The resultant shift of care to the private sector has come at a high cost and India continues to report one of the highest OOPS among countries that are supposedly on the path of UHC. It is not necessary to launch large programmes of coverage that are neither universal in definition nor in coverage. Instead, it might be much better for the government to focus on the infrastructure the country created, that was to serve its people adequately. Either way, government investments have to increase-not incrementally—but with a quantum jump. That is the only way to improve equity in the health sector.

References

- Boachie, M.K., Põlajeva, T., & Frimpong, A.O. (2020). Infant mortality in low-and middleincome countries: Does government health spending matter? *Journal of Development Policy and Practice*, 5(1), pp. 54–73.
- Bowser, D., Patenaude, B., Bhawalkar, M., Duran, D., & Berman, P. (2019). Benefit incidence analysis in public health facilities in India: utilization and benefits at the national and state levels. *International journal for equity in health*, 18(1), pp. 1-11.
- ET Online. (2022, February 10). RBI projects 7.8% GDP growth for 2202-23. The Economic Times. Retrieved from: https://economictimes.indiatimes.com/news/economy/indicators/ rbi-projects-7-8-gdp-growth-for-2022-23/articleshow/89472081.cms

- Global Burden of Disease. (2019). International health metrics evaluation. Retrieved from: https://www.healthdata.org/disease-burden-India/data-visualizations
- Gupta I. (2020). Relying on serendipity is not enough: Building a resilient health sector in India. *Indian economic review*, 55(Suppl 1), 1–23. Advance online publication. https://doi. org/10.1007/s41775-020-00091-5
- Gupta, I., and Ranjan, A. (2019). Public expenditure on non-communicable diseases & injuries in India: A budget-based analysis. PloS one, 14(9), e0222086. https://doi.org/10.1371/ journal.pone.0222086
- Gupta, I., and Roy, A. (2019). What will determine the costs of Prime Minister's Jan Arogya Yojana? *Ideas for India*. Retrieved from: https://www.ideasforindia.in/topics/humandevelopment/what-will-determine-the-costs-of-prime-minister-s-jan-arogya-yojana.html
- Haakenstad, A., Harle, A.C., Tsakalos, G., Micah, A.E., Tao, T., Anjomshoa, M., ... & Dieleman, J.L. (2019). Tracking spending on malaria by source in 106 countries, 2000–16: an economic modelling study. The Lancet infectious diseases, 19(7), pp. 703–716.
- Johns Hopkins Bloomberg School of Public Health (2018, April 5). Poverty increases risk of non-communicable diseases in lower income countries. Retrieved from: https://publichealth. jhu.edu/2018/poverty-increases-risk-of-non-communicable-diseases-in-lower-incomecountries
- Kiross, G.T., Chojenta, C., Barker, D., & Loxton, D. (2020). The effects of health expenditure on infant mortality in sub-Saharan Africa: evidence from panel data analysis. *Health* economics review, 10(1), p. 5. https://doi.org/10.1186/s13561-020-00262-3
- National Health Accounts (NHA). 2021. Ministry of Health & Family Welfare, Government of India. Retrieved from: https://nhsrcindia.org/sites/default/files/2021-11/National%20 Health%20Accounts-%202017-18.pdf
- National Health Policy (NHP). 2017. Ministry of Health & Family Welfare, Government of India. Retrieved from: https://www.nhp.gov.in/nhpfiles/national health policy 2017.pdf
- National Health Profile. (2021). Central Bureau of Health Intelligence (CBHI). Retrieved from: http://www.cbhidghs.nic.in/showfile.php?lid=1147
- Niti Aayog Fourth Health Index Report. (2021). Retrieved from: https://social.niti.gov.in/hltranking
- Niti Aayog. (2021). National Multidimensional Poverty Index Baseline Report. Retrieved from: https://www.niti.gov.in/sites/default/files/2021-11/National MPI India-11242021.pdf
- Owusu, P.A., Sarkodie, S.A., & Pedersen, P.A. (2021). Relationship between mortality and health care expenditure: Sustainable assessment of health care system. Plos one, 16(2), e0247413.
- Parthasarathi, R., & Sinha, S.P. (2016). Towards a better health care delivery system: The Tamil Nadu model. *Indian journal of community medicine*: official publication of Indian Association of Preventive & Social Medicine, 41(4), pp. 302–304. https://doi. org/10.4103/0970-0218.193344
- Selvaraj, S., Karan, A.K., Mao, W., Hasan, H., Bharali, I., Kumar, P., & Chaudhuri, C. (2021). Did the poor gain from India's health policy interventions? Evidence from benefit-incidence analysis, 2004–2018. *International journal for equity in health*, 20(1), pp. 1–15.

- Su, Y., Baena, I.G., Harle, A.C., Crosby, S.W., Micah, A.E., Siroka, A., ... & Dieleman, J.L. (2020). Tracking total spending on tuberculosis by source and function in 135 low-income and middle-income countries, 2000–17: a financial modelling study. *The Lancet Infectious Diseases*, 20(8), pp. 929–942.
- United Nations Development Program. (2019). The Global Multidimensional Poverty Index (MPI) 2019. Retrieved from: https://www.hdr.undp.org/en/2019-MPI
- Vaidyanathan, G., Muraleedharan V. R., Sundararaman T., Dash, U., Rajesh M., Ranjan, A., Babu R., Iyer, H., Rajasulochna S. R., Chokshi, M., Mokashi, T., & Nair, A. (2022). Innovations in primary healthcare: A review of initiatives to promote maternal health in Tamil Nadu. *Journal of Health Management*. https://doi.org/10.1177/09720634221078697
- World Health Organization (WHO). (2020, December 10). Global spending on Health: Weathering the storm. Retrieved from: https://www.who.int/publications/i/item/9789240017788