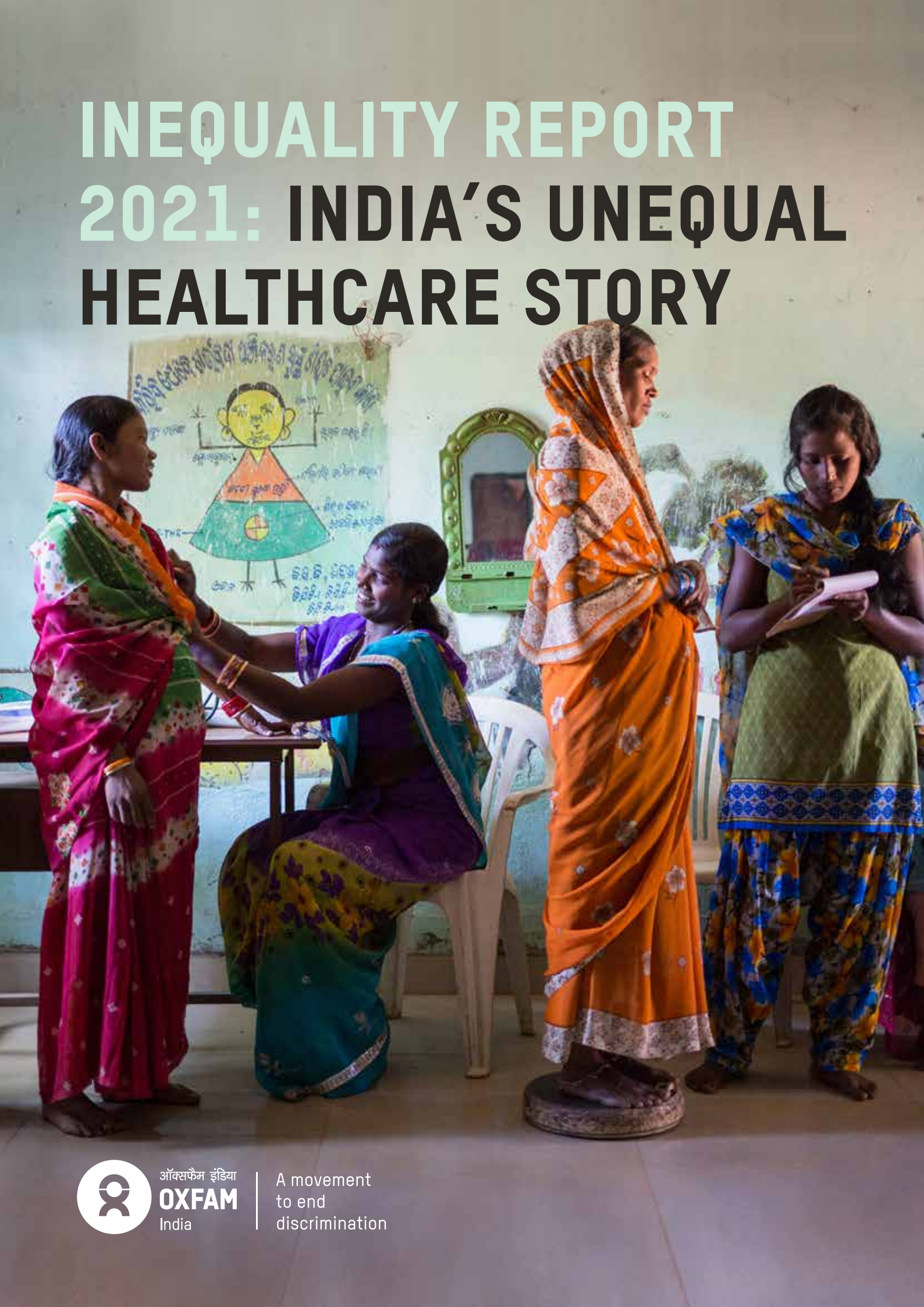
INEQUALITY REPORT 2021: INDIA'S UNEQUAL HEALTHCARE STORY



ऑक्सफैम इंडिया
OXFAM India

A movement to end discrimination

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Commissioning Editor

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FOREWORD

The emergence and rapid spread of the deadly virus COVID-19 last year brought the world to its knees and exposed the inadequacies of public healthcare systems in coping with such health emergencies. India was no exception to this. In the initial months, when the virus grew and raged through the country, there was shortage of PPE kits, masks, sanitizers, hospital beds, ICUs and other critical care facilities.

In the latter half of March 2020, India imposed one of the strictest lockdowns across the country bringing the economy to a standstill and crippling it. Approximately 93 percent of India's economy is in the informal sector with no job security, no security of wages and no social protection systems. Millions of informal sector workers—the blue collar workers—lost their jobs.

In the absence of transportation, food, income and housing, many migrants started the arduous journey of walking hundreds of miles back to their villages, thus precipitating a massive humanitarian crisis. Images of migrants walking back in the heat with no food or water was heart-wrenching. Many perished under the harsh conditions.

Migrants who did manage to reach their home states were put in inhuman quarantine centres with not even the basic facilities available. Indeed their basic human rights and dignity were wantonly trampled over and violated. Ironically, the government has no data on how many migrants died because of COVID-19 and the pandemic-induced difficulties from the lockdown.

Oxfam India has been working on issues of provisioning and strengthening public healthcare in the country for several years. Public healthcare is a great leveller and directly helps in reducing health inequalities. The pandemic was thus the springboard for developing the next India Inequality Report 2021 on Inequalities in Health in India.

Our analysis finds that existing socio-economic inequalities precipitate inequalities in the health system in India. Thus the general category performs better than the Scheduled Castes (SCs) and Scheduled Tribes (STs), Hindus perform better than Muslims, the rich perform better than the poor, men are better off than women, and the urban population is better off than the rural population on various health indicators.

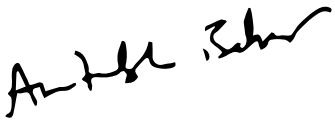
Over the last few decades, India has made great progress in healthcare provisioning. Yet, progressively, the trend has been towards supporting the growth of the private sector in healthcare. This growth has only exacerbated the existing inequalities leaving the poor and the marginalised with no viable healthcare provisions. High costs of health services and lack of quality leads to further impoverishment of the disadvantaged.

The public sector has prioritized secondary and tertiary care over primary care. Yet, experts acknowledge that primary care is the cornerstone of achieving equitable delivery and access to quality healthcare by all. While focus has been put on achieving Universal Healthcare in India; successive governments have selectively focused on the insurance model. Even with the best of intentions, the insurance model is limiting and financially poor people demonstrate low health seeking behaviour because of the high cost of health services in the country.

While the pandemic has been the catalyst for this year's India Inequality Report 2021, the report is not restricted to the inequalities precipitated by COVID-19. It goes far beyond to address structural inequalities and inadequacies of the government interventions to address the existing inequalities in the health system in India.

We believe, that unless the fundamentals of the healthcare system in India are addressed and inequalities reduced, such health emergencies will only aggravate existing inequalities and work as a detriment for the poor and the marginalised.

I hope you will read and engage with this report and support our fight to ensure equitable healthcare for all so that the poor and the marginalised, women and children do not suffer from lack of immunization, nutrition and other health services. We are committed to advocating for a healthy India with equal access to good quality health services for all.



Amitabh Behar
CEO, Oxfam India

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ABBREVIATIONS

ASHAs	Accredited Social Health Activists
CEA	Clinical Establishments Act
CHC	Community Health Centre
CPHC	Comprehensive Primary Healthcare
FFF	Family planning, female education, and food supplementation
GDP	Gross Domestic Product
GFHIS	Government-financed Health Insurance Schemes
GOBI	growth monitoring, oral rehydration therapy, breastfeeding, and immunization
GSDP	Gross State Domestic Product
HWC	Health and Wellness Centre
ICDS	Integrated Child Development Services
IMI	Intensified Mission Indradhanush
IMR	Infant Mortality Rate
IPHS	Indian Public Health Standards
NACP	National Aids Control Programme
NCD	Non-communicable Diseases
NFHS-3	National Family Health Survey
NHM	National Health Mission
NHP	National Health Policy
NRHM	National Rural Health Mission
NSS	National Sample Survey
OBCs	Other Backward Classes
OOPE	Out-of-Pocket Expenditure
PHC	Primary Health Centre
PM-JAY	Pradhan Mantri Jan Arogya Yojana
RSBY	Rashtriya Swastha Bima Yojana
SC	Scheduled Caste
SDG	Sustainable Development Goal
SoP	Statement of Purpose
ST	Scheduled Tribe
TB	Tuberculosis
TFR	Total Fertility Rate
U5MR	Under-Five Mortality Rate
UHC	Universal Health Coverage
WHO	World Health Organization

EXECUTIVE SUMMARY

'The more you look into health and health inequalities, you realize that a lot of it is not due to a particular disease—it's really linked to underlying societal issues such as poverty, inequity, lack of access to safe drinking water and housing.' (Former CEO of CARE, Helene D. Gayle)

Gayle's view on health perfectly echoes the subject of *Inequality Report 2021: India's Unequal Healthcare Story*—that health inequalities are linked to and reflect socioeconomic inequalities. Often times, it is the socioeconomically marginalised communities that suffer from ill-health the most. The ongoing pandemic has revealed that the health systems in most countries are under-prepared to cope with any major health emergency and its unequal impact on the have and the have-nots. With these insights in mind, this year's report provides a comprehensive analysis of the status of health across different socioeconomic groups to gauge the level of health inequality that persists in the country.

Chapter 1 introduces health inequality by analysing the unequal impact of the pandemic and the reasons behind it—a weak public healthcare system, which has yet to address the social determinants of health of various population groups.

Chapters 2-4 form the crux of the report and each of the chapters engages with a specific aspect of health inequality. **Chapter 2** studies the trends of the social determinants of health such as women's literacy, water and sanitation, and expenditure on healthcare.

Chapter 3 studies the progress of, and inequalities in, health interventions such as the provisioning of institutional deliveries, vaccination, Integrated Child Development Services (ICDS) services, antenatal, and postnatal care.

Chapter 4 examines the outcomes of health indicators such as life expectancy, child mortality, and child nutrition to gauge the impact that social determinants of health as well as government interventions have had in reducing inequality among diverse socioeconomic groups across these indicators.

The findings from these chapters demonstrate that the health status of a group of people is contingent upon the socioeconomic position it holds. The trends of various health indicators across the socioeconomic groups that the report has studied indicates that despite a considerable reduction in the gap between the privileged and the marginalised, inequality persists.

The General Category performs better than the SCs and STs, Hindus perform better than Muslims, the rich perform better than the poor, men are better off than women, and the urban population is better off than the rural population on various health indicators.

For instance, Muslims have been found to have lower female literacy rate, lower institutional births, high fertility rate, and poor nutrition. Similarly, SC and STs perform poorly than the general category in female literacy, sanitation, immunization, and nutrition, and the bottom 20 percent wealth quintile performs poorly across these indicators than the top 20 percent wealth quintile.

Female literacy rate has improved over the decade but the share of women enrolled in educational institutions decreases as one moves to higher levels of education. Increase in literacy rate has been accompanied by a declining total fertility rate (TFR), increased infant immunization, and a decline in percentage of adolescent mothers.

Improved water and sanitation prevent infections and promotes overall hygiene and good health. Hence, it is a welcome trend that access to improved water and sanitation has increased too.

Financing expenditure on healthcare poses a huge burden on households due to which poorer households have weaker health-seeking behaviour. The savings of an individual constitutes 81 percent of the share of financing hospitalization expenditure, followed by borrowing at 15 percent.

While trends of borrowing and sale of physical assets to finance health expenditure has drastically reduced over the decade, expenditure on healthcare is lower for the marginalised on account of poor health-seeking behaviour. High cost burden of accessing health services makes the poor more averse to seeking treatment.

Interventions for improving maternal and child health have resulted in the reduction of child mortality. However, despite showing improvement, nutrition still requires considerable government attention. Despite the introduction of programmes like ICDS, nutrient deficiency is evident with the high percentage of anaemic and wasted children.

Health status has definitely improved over the decade but it is imperative to examine the government interventions that have contributed to the current scenario, and the shortfalls in our health sector, which has allowed health inequalities to persist. **Chapter 5** traces the history of the priorities of the government since India signed the Alma Ata Declaration in 1978.

Social and economic inequalities continue being neglected despite the fact that addressing them is crucial to achieving health equality. Instead, India's healthcare sector saw an increase in private healthcare providers whereas public healthcare dwindled. Moreover, the government's investment in public healthcare has only been towards the provisioning of secondary and tertiary care. Therefore, primary health care, which has been accepted by the health community as the cornerstone for equitable health system, remains under-funded and the quality of care and available facilities remain below the threshold.

On the other hand, achieving Universal Health Coverage (UHC), which is to make quality public healthcare available to all sections of the society irrespective of their ability to pay, has been the agenda of the government since the 2000s. However, the government has selectively adopted the insurance model as a way to universalise healthcare instead of enhancing the primary health care system. As such, access to good quality public healthcare has remained fragmented and India is still far away from achieving universal coverage. The rich can avail healthcare from high-end private providers but the poor are stuck with a difficult choice. They either have to incur debts by availing health care from private providers or depend on a poor public healthcare system.

The final chapter **(Chapter 6)** examines the first and second wave of the pandemic. In the first wave, it looks at how states with higher expenditure on health and lower inequality resulted in lower confirmed cases and higher rates of recovery. It finds that the states' efforts to reduce inequalities and increase expenditure on health resulted in lower confirmed cases of COVID-19. Even though external factors like good hygiene and ability to socially distance also had an important role to play, states with higher expenditure on health had a higher recovery rate from COVID-19.

It also includes first-hand experiences of people across different caste and income groups with regard to the response of the government to capture the ability of COVID-19 positive patients to socially distance, the impact of the pandemic on mental health and the role of the government and healthcare systems in mitigating the impact of the virus. Ground experiences reveal inequalities in access to medical services and in public and mental health. The collated information highlights weak response from the government due

to a lack of adequate health infrastructure such as shortage of ambulances for transport to the hospital and advice to home isolate, without regard to living conditions and uncertainty of the treatment process, which affected the poor and marginalised adversely. COVID-19, thus, has not only been harder on poorer states, but on poorer and marginalised individuals, unable to socially distance or access health facilities in a country that caters to the rich and the privileged.

As the country struggled to get back to normal after the first wave, the second wave hit even harder. The second wave is characterised by infrastructure lapse, overcharging at hospitals, black marketing of medicines, and a vaccination drive that is not inclusive. In cities, the virus is affecting the middle and upper middle class more. On the other hand, the second wave has been harder for the rural populace as compared to the first. In the midst of it all, while India's vaccination drive attempted to tackle the second wave by inoculating its population, its execution was marred due to a) shortage of vaccine and b) the operations moving on to mobile applications making it accessible only to those who had internet or a smart phone.

The vaccination drive started in January 2021 and, by April, the Central Government had placed orders for 356 million doses of Covishield and Covaxin, while introducing its third phase that would cater to a population of 900 million. There was a huge demand and supply mismatch. The central government had allocated INR 35,000 crore in the 2021-22 budget for procurement of vaccines but promised free vaccine to a very small section of the population that included the healthcare and frontline workers, and people above 45 years of age.

The Vaccination Policy announced in the last week of April put the responsibility of procurement of vaccines on State Governments. It also allowed the private sector to procure and administer the vaccine as a paid service. The two together were expected to take care of the entire population minus the frontline and healthcare workers, and people above 45, with State Governments either administering the vaccine for free or charging a price depending on their budgetary capacity. It was only in June 2021 that the centre revisited its vaccine policy and decided to procure 75 percent of the doses of vaccines from the manufacturers and provide them to the State Governments free of cost. According to the revisited policy, private institutions such as private hospitals can buy the rest of the doses and can only charge up to a maximum of INR 150 per dose as service charge. While government-run centres are only now opening walk-in registrations, the vaccine strategy needs to be critically viewed from a gender lens to ensure that the digital divide and lack of information does not hinder the access of vaccines for women and other marginalised groups.

The government is promising to vaccinate the entire adult population of the country by 2021, with a pledge to produce at least two billion doses between August and December. Apart from vaccines, there is a need to tackle vaccine hesitancy which is also proving to be a big hurdle. Another challenge in these areas would also be in terms of having the health system capacity to deliver, requiring an efficient vaccine delivery plan.

The intention of this report is to trigger a discourse on the inequalities in health that India has witnessed during the pandemic and inherently known for a long time. We hope this report will add to the various voices that are demanding that the government takes concrete steps towards ensuring quality, affordable and accessible healthcare for all sections of the population.

RECOMMENDATIONS

It is against this backdrop of a weak public healthcare system, existing health inequalities and the ongoing pandemic that this report provides the following recommendations:

1. The right to health should be enacted as a fundamental right that makes it obligatory for the government to ensure equal access to timely, acceptable, and affordable healthcare of appropriate quality and address the underlying determinants of health to close the gap in health outcomes between the rich and poor.

2. The free vaccine policy should adopt an inclusive model to ensure that everyone, irrespective of their gender, caste, religion or location i.e. people living in hard-to-reach areas, gets the vaccine without any delay.

3. Increase health spending to 2.5 percent of Gross Domestic Product (GDP) to ensure a more equitable health system in the country; ensure that union budgetary allocation in health for SCs and STs is proportionate to their population; prioritize primary health by ensuring that two-thirds of the health budget is allocated for strengthening primary healthcare; state governments to allocate their expenditure on health to 2.5 percent of Gross State Domestic Product (GSDP); the centre should extend financial support to the states with low per capita health expenditure to reduce inter-state inequality in health.

4. Regions with higher concentration of marginalised population should be identified and public health facilities should be established, equipped and made fully functional as per the Indian Public Health Standards (IPHS).

5. Widen the ambit of insurance schemes to include out-patient care. The major expenditures on health happen through out-patient costs as consultations, diagnostic tests, medicines, etc. While the report does not endorse Government-financed Health Insurance Schemes (GFHIS) as a way to achieve UHC and stresses that insurance can only be a component of it, it is imperative that GFHIS widens its ambit to include out-patient costs as a way to reduce out-of-pocket expenditure (OOPE).

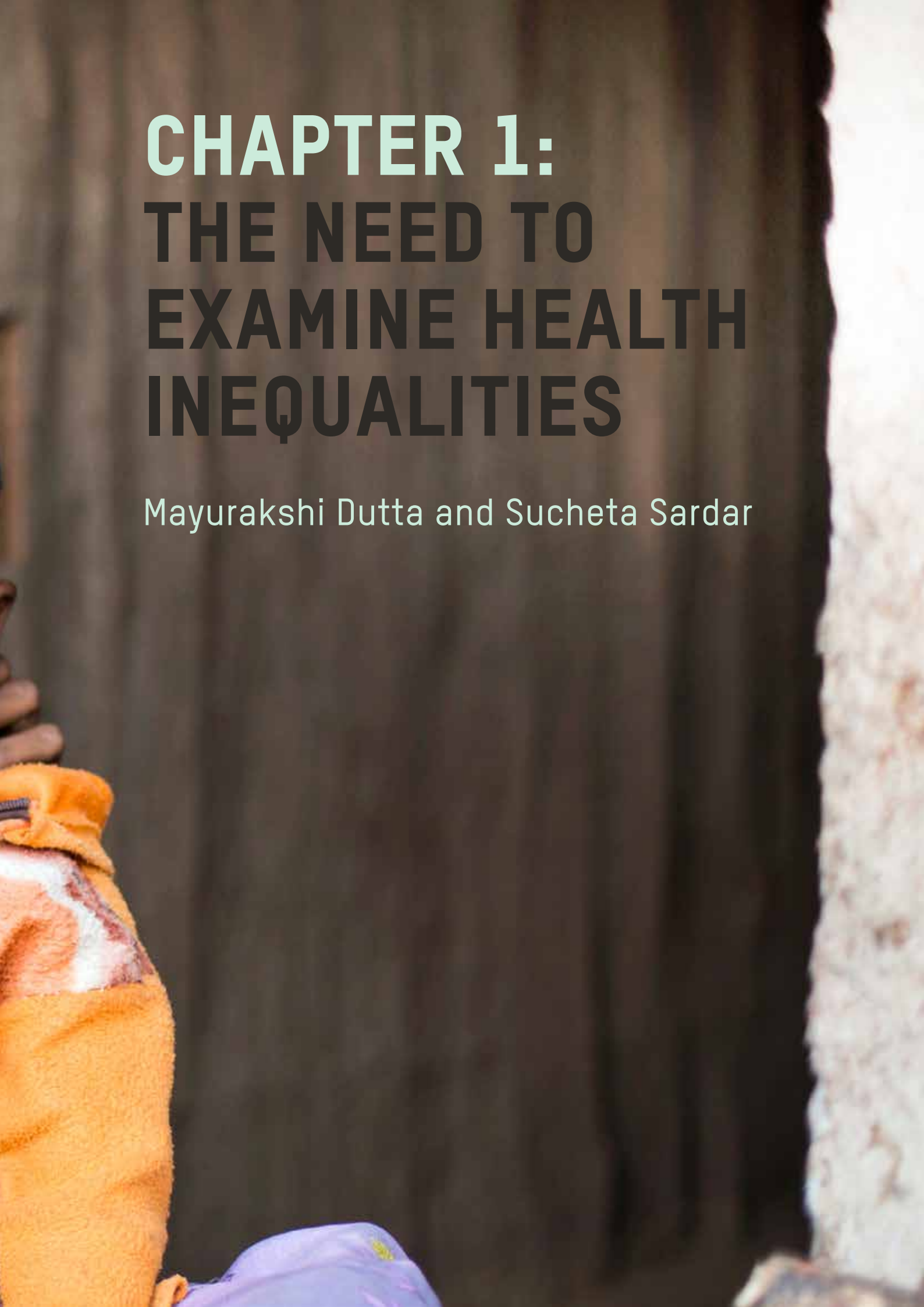
6. Institutionalize a centrally-sponsored scheme that earmarks funds for the provision of free essential drugs and diagnostics at all public health facilities.

7. Direct all states to notify the Patients' Rights Charter forwarded to them by the Ministry of Health and Family Welfare, and set up operational mechanisms to make these rights functional and enforceable by law.

8. Regulate the private health sector by ensuring that all state governments adopt and effectively implement Clinical Establishments Act or equivalent state legislation; extend the price capping policy introduced during the COVID-19 pandemic to include diagnostics and non-COVID treatment in order to prevent exorbitant charging by private hospitals and reduce catastrophic out-of-pocket health expenditure.

9. Augment and strengthen human resources and infrastructure in the healthcare system by regularising services of women frontline health workers especially Accredited Social Health Activists (ASHAs), establishing government medical colleges with district hospitals prioritising their establishment in hilly, tribal, rural and other hard-to-reach areas, enhancing medical infrastructure and establishing contingency plans for scenarios such as the second wave of the pandemic.

10. Inter-sectoral coordination for public health should be boosted to address issues of water and sanitation, literacy, etc. that contribute to health conditions. Specific roles and Statement of Purposes (SoPs) of departments/ ministries, and convergence plans need to be detailed out for reducing health inequality in the country.



CHAPTER 1: THE NEED TO EXAMINE HEALTH INEQUALITIES

Mayurakshi Dutta and Sucheta Sardar

THE ONGOING GLOBAL HEALTH EMERGENCY HAS PARALYSED ECONOMIES WORLDWIDE AND REVEALED THAT THE HEALTH SYSTEMS IN MOST COUNTRIES ARE UNDER-PREPARED TO COPE WITH ANY MAJOR HEALTH EMERGENCY.

It has posed large-scale health challenges as millions of people (172,430,557 as on 3 June 2021) have been infected and lakhs of casualties (3,706,682 as on 3 June 2021) have occurred.[1]

The importance of public health does not need elucidation as the pandemic has revealed that inadequate attention to public health can have disastrous consequences on the masses. High-income countries such as Canada, Sweden and Germany, despite their exceptional public health systems, have had to struggle to contain the pandemic by experimenting with a number of uncertain alternatives. Understandably, the struggle for middle and low-income countries, having weak public healthcare systems, limited finances and large populations has been grim.

India too, has been grappling with the pandemic and the health interventions have largely been deemed inadequate. There were more than 2.5 crore (28,441,986) positive cases and close to three lakh reported casualties (3,38,013) across the country as of 3 June 2021.[2] In fact, India has seen the world's second highest number of infected cases after the United States though its case fatality rate has been low (1.1 percent).[3]

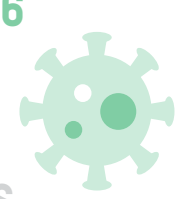
The case fatality rate in the US and France is at 1.8 percent, Germany and Belgium is at 2.4 percent and Italy is at 3 percent.[4] Theorists have propounded that the low case fatality rate of India is probably due to the demographic dividend, which is tilted more towards younger population with a median age of 28.4 as compared to high case fatality rate countries as Italy, which has a median age of 46.5.[5]

With the exponential increase in the daily number of cases in the second wave, the idea that young people are at a greater risk and are susceptible to the virus was surfacing. In fact, microbiologists explained that the impact on the young population has been more because of the mutation that the virus has undergone, making it more infectious and deadlier.[6] However, the comparative data from both the waves show that there has been no significant change in the age profile of those infected - 22.7 percent of people aged 31-40 were infected in the second wave whereas it was 21.2 percent in the first wave; and, 22.5 percent of people aged 21-30 were infected in the second wave whereas it was 21.21 percent in the first wave.[7]

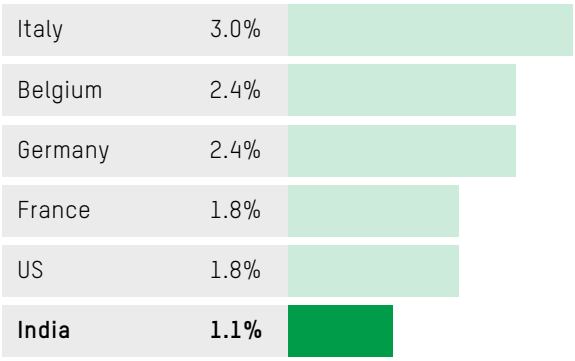
AS OF 3 JUNE 2021

2,84,41,986
INFECTED

3,38,013
CASUALTIES



CASE FATALITY RATE



1.1 UNEQUAL IMPACT OF COVID-19

India has been historically struggling with inequalities in health. It has negatively affected the health and the accessibility to healthcare of the populations marginalised as a result of their gender, caste, religion, location and economic standing. The experiences of different groups of people during the COVID-19 pandemic has proven that social and economic inequality leads to inequalities in health and access to healthcare.

The impact was severely felt during the second wave of the pandemic which has been incomparable in its scale with any global counterparts. Maria Van Kerkhove, the World Health Organization's COVID-19 technical lead, said, "We have seen similar trajectories of increases in transmission in a number of countries, [but] it has not been at the same scale, and it has not had the same level of impact and burden on the health care system that we've seen in India."[8]

Box 1.1. Defining Health Inequality

The World Health Organization (WHO) defines inequalities in health as 'differences in health between groups of people within countries and between countries'. These are avoidable and arise from unequal socioeconomic conditions within societies. Within the health discourse, the term 'social gradient of health' is used to refer to this phenomenon of socioeconomic inequalities being transformed into health inequalities. The idea is that the lower the socio-economic conditions of a strata, the worse their health.

While socioeconomic inequalities translate to inequalities in health, scholars such as Amartya Sen, Robert Fogel, and Angus Deaton have found that the health status of its population also impacts the economy of the country. They propound that the presence of inequalities in access to healthcare systems increases economic and wealth inequality in the country.[9]

Negative health outcomes have an inversely proportional relationship with labour productivity and economic security. Bad health often causes a decrease in labour productivity and increased economic burden on healthcare. On the other hand, good health lowers absenteeism rates and improves learning in school, increases productivity at work and leads to better life outcomes. Good nutrition and health have the potential to trigger economic growth and reduction in inequality.

Inequality in health and in access to healthcare systems has been further amplified by the weak public healthcare system, exploitative private players and government interventions that have failed to incorporate the specific needs of the poor and the marginalised groups in its action plans.

1.1.1 UNDER-PREPARED PUBLIC HEALTHCARE

The public healthcare system in India with its weak and understaffed infrastructure has been overburdened with the consistently rising cases. Private healthcare providers, on the other hand, were charging exorbitant prices, preventing the middle-class and the poor from getting diagnosed and treated until the government intervened to cap their prices.

Even then, private healthcare has remained inaccessible to the poor while the rich have easily availed its services. As such, the poor and the vulnerable have mostly been dependent on the

overburdened public healthcare facilities—with insufficient number of beds and inadequate human resources—for treatment or have gone without being diagnosed and treated.

The health system could gradually cope as the daily cases declined from the month of October in 2020 but was not prepared for the second wave which shook the country from April 2021 and was to be significantly worse than the experiences of the past year. India's failure to expand its health infrastructure proportionate to its population and the inherent inefficiency and shortage of healthcare delivery systems contributed to the weeks of crisis.[10] Hospitals were accommodating patients beyond their capacity, the acute shortage of oxygen supply brought uncertainty to COVID-19 victims with dwindling oxygen level and crematoriums were incessantly burning with those who lost the fight against this infectious virus. Oxygen and drugs were black marketed at such high prices that its procurement by the poor was impossible, denying them an equal shot at surviving the virus.[11]

A public health researcher and a professor, Keerty Nakray, from Jindal Global Law School has underscored the other side of the coin which ignited the grim and overburdened health situation that India has witnessed. [12] She refers to it as the 'complete collapse of the preventive side of public health'. By this, she means the precocious declaration of victory over the pandemic by the Prime Minister of India and the election rallies and religious gatherings which were devoid of the prescribed safety protocols. The message that the virus has been defeated spread across the system: "The health care people are not ready. No one's procured the oxygen. No one's gotten any sort of preparation done... When the virus came back, the system was wholly unprepared.", said an epidemiologist, Lakshminarayan, corroborating Nakray.

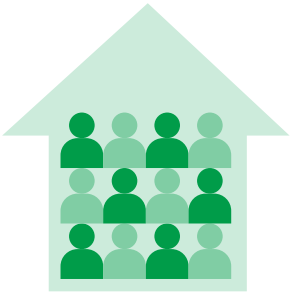
Media reported the rich escaping the havoc of the virus to safe locations in private jets costing millions while the middle class and the poor have hung to a thread struggling to get a hospital bed, oxygen and lifesaving drugs.[13]

1.1.2 THE POOR AND THE MARGINALISED FIND IT HARDER TO FOLLOW PROTOCOLS

Staying-at-home and social distancing have been additionally promoted by the government along with other safety measures such as wearing of masks and frequent handwashing to curb the spread of the virus. However, maintaining social distance and other sanitary prescriptions become extremely difficult to follow for people who live in cramped spaces and use community toilets. The average household size in India is 4.45[14] and 59.6 percent of India's population lives in a room or less.[15]

The precarious nature of living conditions of the marginalised and poor sections of the population makes it extremely difficult for them to follow sanitary prescriptions. Moreover, with no provisions for a separate room in case one has to quarantine, their distress has only increased. It has been easier for the rich and even the middle class to stay at home and follow safety protocols simply because of access to more space.

THE AVERAGE HOUSEHOLD SIZE IN INDIA IS 4.45 PERCENT AND 59.6 PERCENT OF INDIA'S POPULATION LIVES IN A ROOM OR LESS, MAKING SAFETY PROTOCOLS DIFFICULT TO FOLLOW.



1.1.3. NON-COVID ILLNESSES GO UNTREATED

With the lockdown aimed at checking the spread of COVID-19, health systems prioritized services related only to COVID-19. Human and material resources like hospitals, beds and intensive care units were diverted towards the management and treatment of COVID-19 patients.

Health services catering to non-Covid illnesses were halted, leading to unprecedented hardships and sufferings for chronic patients and those requiring immediate medical intervention such as pregnant women. Accessibility to non-Covid medical services were grimmer for patients in rural and hard-to-reach areas as compared to urban areas due to the unavailability of health centres in the vicinity and the lack of transportation facilities[16].

Disruptions in the availability of drugs for non-communicable diseases (NCD), tuberculosis (TB), contraceptive and other essential services were also reported.[17] Telemedicine—the practice of caring for patients remotely—for which guidelines were issued by the Government of India in March 2020 to facilitate access to medical advice made consultations easier. However, for those with no smart phones and internet connectivity, particularly in rural and hard-to-reach areas, seeking medical advice remained a difficult task.[18]

DISRUPTION OF IMMUNIZATION COULD AFFECT UP TO 20 MILLION CHILDREN.

The immunization drive was also disrupted. India vaccinates around 20 million children every year and its disruption might add to the largest number of unimmunized children in the world.[19]

The closure of government health facilities for non-Covid services and loss of livelihoods and incomes combined obstructed the poor from seeking medical care. This inability of the public healthcare services to accommodate the underserved population comprising of the poor, marginalised and women portrays the inefficiencies of the public healthcare system in India to make healthcare accessible and affordable to all.

1.2. OVERVIEW OF INDIA'S PUBLIC HEALTHCARE SYSTEM

The Health Survey and Development Committee, also known as the Bhore Committee (1946), laid the cornerstones of modern health in independent India with the goal of making healthcare services available to all citizens, notwithstanding their ability to pay. It endorsed targeted interventions for the vulnerable sections of the population through setting up primary health centres (PHCs), recognized rural-urban disparities and made the rural areas, with the district as a unit, the focal point of their proposed development plan.

Other committees such as the Mudaliar Committee (1962) and the Chadha committee (1964) recommended that each PHC, responsible for providing promotive, preventive and curative services, should cater to a population of 40,000 and the provisioning of one basic health worker per 10,000 populations, respectively.

THE NATIONAL HEALTH PROFILE IN 2017 RECORDED ONE GOVERNMENT ALLOPATHIC DOCTOR FOR EVERY 10,189 PEOPLE AND ONE STATE RUN HOSPITAL FOR EVERY 90,343 PEOPLE. INDIA ALSO RANKS THE LOWEST IN THE NUMBER OF HOSPITAL BEDS PER THOUSAND POPULATION AMONG THE BRICS NATIONS—RUSSIA SCORES THE HIGHEST (7.12), FOLLOWED BY CHINA (4.3), SOUTH AFRICA (2.3), BRAZIL (2.1) AND INDIA (0.5). INDIA ALSO RANKS LOWER THAN SOME OF THE LESSER DEVELOPED COUNTRIES SUCH AS BANGLADESH (0.87), CHILE (2.11) AND MEXICO (0.98).

However, public healthcare provisioning, particularly at the primary level has remained poor. The National Health Profile in 2017 recorded one government allopathic doctor for every 10,189 people and one state-run hospital for every 90,343 people.[20] India also ranks the lowest in the number of hospital beds per thousand population among the BRICS nations—Russia scores the highest (7.12), followed by China (4.3), South Africa (2.3), Brazil (2.1) and India (0.5). India also ranks lower than some of the lesser developed countries such as Bangladesh (0.87), Chile (2.11) and Mexico (0.98).[21]

Box 1.2. The Structure of India's Public Healthcare System

India's public healthcare system can be categorized into primary, secondary and tertiary level. The primary level comprises of sub-centres and PHCs and are the first points of contact between the community and the public healthcare system and forms the foundation of India's public healthcare.

Sub-centre: A sub-centre serves a population of 3,000 in hilly/hard-to-reach/tribal areas and a population of 5000 in plains. Sub-centres are staffed with at least one auxiliary nurse midwife/female health worker and one male health worker.

Primary Health Centre (PHC): It is a referral unit for six sub-centres and is the first point of contact between the village community and a medical officer. It serves a population of 20,000 in hilly/hard-to-reach/tribal areas and 30,000 in plain areas. It should be staffed by a minimum of a medical officer supported by 14 paramedicals and other staff as nurses, a laboratory technician and a pharmacist. It should also have 4-6 beds. Its goal is to provide integrated, curative and preventive healthcare to the rural population with an emphasis on preventive and promotive care.

Community Health Centre (CHC): The secondary level of healthcare comprises of CHCs and smaller sub-district hospitals. A CHC acts as a referral unit for PHCs and serves a population of 80,000 in hilly/ hard-to-reach/ tribal areas and 120,000 in plain areas. A CHC must have four medical specialists—surgeon, physician, gynecologist and paediatrician with 21 paramedical and other staff. It is supposed to have 30 beds, an operating theater, X-ray, labour room and laboratory facilities.

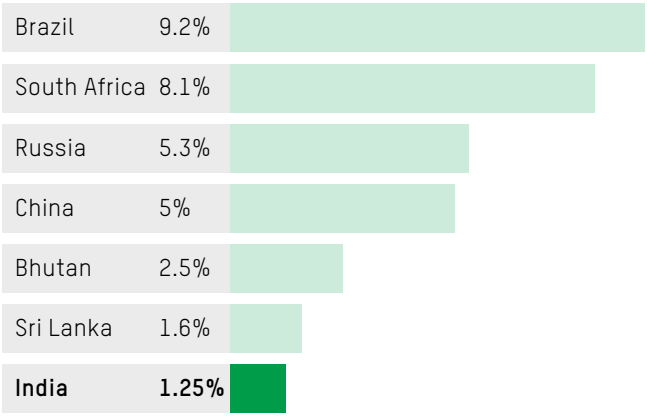
The tertiary level of healthcare includes district/general hospitals, medical colleges, and super-specialty hospitals under both government and private providers.

1.2.1 LOW BUDGET FOR HEALTH

The poor provisioning of public healthcare can be attributed to consistently low budget allocations. The current expenditure on health, by the centre and the state governments combined, is only about 1.25 percent of GDP which is the lowest among the BRICS countries—Brazil (9.2) has the highest allocation, followed by South Africa (8.1), Russia (5.3) and China (5).[22] It is also lower than some of its neighbouring countries such as Bhutan (2.5 percent) and Sri Lanka (1.6 percent).[23] The low priority given to health expenditure is also reflected in the share in total expenditure of the government, which is only 4 percent whereas the global average stands at 11 percent.[24]

In Oxfam's *Commitment to Reducing Inequality Report 2020*, India ranks 154th in health spending, fifth from the bottom.[25] This poor spending is reflected in the inadequate health resources and infrastructure. Only around 50,069 health and wellness centres (HWCs), which are envisaged to deliver comprehensive primary

EXPENDITURE ON HEALTH (% OF GDP)



THE LOW PRIORITY GIVEN TO HEALTH EXPENDITURE IS ALSO REFLECTED IN THE SHARE IN TOTAL EXPENDITURE OF THE GOVERNMENT, WHICH IS ONLY 4 PERCENT WHEREAS THE GLOBAL AVERAGE STANDS AT 11 PERCENT.

healthcare (CPHC) closer to homes, are functional. These centres are only 65 percent of the cumulative target for 2020-21.[26] Moreover, in 2019, less than 10 percent of PHCs were funded as per IPHS norms whereas the rest remained underfunded.[27]

Different studies have proved that low public health expenditure yields worse health outcomes. Studies by Barenberg et al.[28] investigated the impact of public health expenditure on Infant Mortality Rate (IMR)[29] and found a negative relationship between the two. Farahani et al.[30] evaluated the relationship between state-level public health spending of India and individual mortality across all age groups using household-level data from the third National Family Health Survey (NFHS-3) showing that a 10 percent increase in public spending on health decreases mortality by about 2 percent, with effects mainly concentrated on women, the young, and the elderly.

IN 2019, LESS THAN 10 PERCENT OF PHCS WERE FUNDED AS PER IPHS NORMS.

Bhalotra,[31] on the other hand, restricts the sample to rural households and finds a significant effect of health expenditure on IMR by using rural households' sample. Mohanty and Behera investigated the effects of public health expenditure on various proximate and ultimate health outcomes during 2005-2016 across 28 Indian states to find that per capita public healthcare expenditure has an adverse effect on infant and child mortality rate, as well as malaria cases, and a favourable effect on life expectancy, and immunization coverage across states.[32]

1.2.2. DEPENDENCE ON PRIVATE CARE PROVIDERS LEADS TO HIGH OOPE

India's low spending on public healthcare has left the poor and marginalised with two difficult options: suboptimal and weak public healthcare or expensive private healthcare. In fact, the out-of-pocket[33] health expenditure of 64.2 percent in India is higher than the world average of 18.2 percent[34]. Exorbitant prices of healthcare has forced many to sell household assets and incur debts.

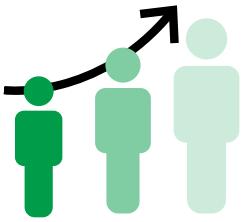
OVER 63 MILLION PEOPLE ARE PUSHED TO POVERTY EVERY YEAR DUE TO HEALTH COSTS ALONE, ACCORDING TO GOVERNMENT ESTIMATES.

Though asset selling has reduced to a certain extent, over 63 million people are pushed to poverty every year due to health costs alone, according to government estimates.[35] A study shows that around 74 percent of hospitalization cases are financed through savings while 20 percent of the cases are financed through borrowing.[36] In rural areas, however, the main source of healthcare financing continues to be selling of household assets and mortgaging ornaments to borrow at high interest rates, followed by income/ savings.[37] The increase in private healthcare providers along with the weak public healthcare system that has failed to address socioeconomic determinants of health has led to inequalities in health.

1.3 INEQUALITIES IN HEALTH

The signing of the Alma-Ata Declaration in 1978 shows that India acknowledges the impact social inequalities have on health. Even so, the status of health and access to healthcare has remained unequal. Different literatures have propounded that the burden of ill-health is borne disproportionately by people of lower socioeconomic status.[38]

THE GLOBAL AVERAGE FOR LIFE EXPECTANCY IS 72.6 YEARS BUT INDIA (69.42) REMAINS BELOW THE GLOBAL AVERAGE.



Jungari and Chauhan studied the inequalities in health status of women and children in India from NFHS-3 data to find that the STs and SCs from poor wealth quintile and North Indian women and children are at a greater disadvantage in all indicators of women and child health as compared to other groups.[39]

Moradhvaj and Saikia examined gender disparities in healthcare expenditure and healthcare financing strategy on girls and women aged 15 and above and found that average healthcare expenditures are lower for women in adult age groups compared to men regardless of the type of disease and duration of stay in the hospital.[40]

Inequalities in health also exist among countries. The status of health in India has improved over the years across many indicators such as IMR, Under-5 Mortality Rate, Maternal Mortality Rate but ranks lower in comparison to its neighbouring countries and BRICS counterparts.

For instance, the global average for life expectancy is 72.6 years but India (69.42) remains below the global average. It is also lower than the neighbouring countries Nepal (70.8), Bhutan (71.8), Bangladesh (72.6), and Sri Lanka (77) and its BRICS counterparts Brazil (75.9), China (76.9), and Russia (72.6).[41] Similarly, access to healthcare has improved from a rank of 153 in 1990 to 145 in 2016 but is lower than Bangladesh (132), Sri Lanka (71), Bhutan (134) and its BRICS countries Brazil (96), Russia (58), China and South Africa (127).[42]

1.4 INEQUALITY REDUCTION THROUGH UHC

UHC IS A HEALTH SYSTEM IN WHICH ALL INDIVIDUALS AND COMMUNITIES CAN ACCESS A FULL SPECTRUM OF ESSENTIAL AND QUALITY HEALTH SERVICES FROM HEALTH PROMOTION TO PREVENTION, TREATMENT, REHABILITATION, AND PALLIATIVE CARE, WITHOUT SUFFERING ANY FINANCIAL HARDSHIPS.

To ensure and improve access to quality healthcare services for all, the High Level Expert Group constituted by the Planning Commission of India in October 2010 recommended the implementation of UHC.[43] The WHO defines UHC as a health system in which all individuals and communities can access a full spectrum of essential and quality health services from health promotion to prevention, treatment, rehabilitation, and palliative care, without suffering any financial hardships.

It is thus, not just a health financing system or a mechanism to provide a minimum package of health services. It encompasses all components of the health system: health service delivery systems, the workforce, facilities and communications networks, technologies, information systems, quality assurance mechanisms, and governance and legislation. It simultaneously ensures a progressive expansion in coverage of health services and financial protection as more resources become available.

It also includes population-based services such as public health campaigns, adding fluoride to water, controlling mosquito breeding grounds, and so on. A comprehensive provisioning of public health as water, sanitation and primary healthcare is the most efficient and cost-effective way to achieve UHC around the world.

Evidence from Thailand and Sri Lanka, which have performed better than India with regard to universal access to healthcare, shows that these countries have a high public provisioning of services. Also, evidence from developed countries like Germany, Sweden, Canada and developing countries like Costa Rica reveal that successful insurance-based healthcare system was attained with high levels of public spending and government provisioning of healthcare services.[44]

The guiding principle behind UHC is non-exclusion and non-discrimination, comprehensive care, financial protection and protection of patient's rights and guarantees. The goal is to ensure that every citizen can avail good quality primary, secondary and tertiary healthcare while also reducing OOPE. If UHC in its truest sense is applied to India, its implications will be manifold.

Existing health inequalities could be reduced to a great extent through UHC as public health can reduce the disease burden and address social determinants of health and public healthcare will provide quality and affordable health services which will be accessible to economically and socially marginalised groups without incurring any financial shock. It has the potential to reduce inequalities in health.

In the words of Amartya Sen:[45]

'NO COUNTRY HAS EVER SUCCESSFULLY PROVIDED UNIVERSAL HEALTH COVERAGE WITHOUT THE STRONG SUPPORT AND COMMITMENT OF THE PUBLIC HEALTH SECTOR.'

However, the government of India has adopted health financing selectively through insurance as a way to achieve UHC (detailed in Chapter 5) without paying heed to infrastructural and workforce gaps of the public health sector. Insurance-based systems alone provide very little incentive for capacity building and for the promotion of primary and preventive care.[46]
It is against this backdrop of the pandemic, failing public healthcare system and existing health inequalities that the *Inequality Report 2021: India's Unequal Healthcare Story* is set. This report examines the status of inequality across various indicators of health among different sections of the population from 2005-06 to 2015-16. The report analyses the government interventions made in terms of health programmes and its impact on health inequality. It also includes ground experiences of people, particularly the marginalised groups, during the pandemic.

IT ALSO DOES AN ANALYSIS OF THE PERFORMANCE OF THE PUBLIC HEALTHCARE SYSTEM DURING THE PANDEMIC THROUGH THE EXPERIENCES OF THE MARGINALISED POPULATION.

1.5 METHODOLOGY AND DATA SOURCES

- The report has undertaken secondary analysis from Rounds 3 and 4 of NFHS and various rounds of National Sample Survey (NSS).
- Other sources include published academic literature, reports by CSOs, and government documents and schemes.
- To understand the COVID-19 situation and the access to healthcare during the pandemic, a cumulative number of confirmed and recovered cases has been taken for 13 fortnights from https://www.covid19india.org/.
- The expenditure on health is used to look at the impact that it has had on confirmed and recovered cases. The performance of states in terms of inequality is based on the score of Goal 10 of the SDGs as per the SDG India Index published by NITI Aayog. The analysis covers the impact of reduction in inequality and expenditure on health on confirmed and recovered cases of COVID-19.
- A primary survey has also been conducted across the states of Andhra Pradesh, Maharashtra, Uttar Pradesh, Delhi, Kerala, Bihar and Odisha to gauge the impact of COVID-19 on individuals, especially those belonging to SC, ST and Muslim communities.
- Other sources for COVID-19 data are Worldometer, Covid19 India.org, and Ministry of Health and Family Welfare.

1.6 CHAPTERIZATION

The report is divided into six chapters.

Chapter 1 introduces health inequality in India, which induced unequal impact of the pandemic. The chapter also discusses the reasons behind such inequality—a weak public healthcare system, which is yet to address the social determinants of health of various population groups.

Chapters 2, 3 and 4 each analyses different aspects of health to gauge the trend of inequality among various socioeconomic categories.

- Chapter 2 looks at the various factors in an individual's environment that impact their health and their access to health services;
- Chapter 3 looks at various maternal and child care interventions that have the potential to improve health outcomes, and how effective these have been; and
- Chapter 4 looks at inequality in health outcomes, and how the environmental and intervention indicators have influenced them.

Chapter 5 critically examines specific health programmes and the priorities of the government in understanding the role it has played in leading the health of its citizens to the current state as revealed in the earlier chapters.

Chapter 6 explores the link between health expenditure and inequality in states and the number of confirmed cases and recovery rate. It also includes ground experiences of people in terms of their ability to socially distance, impact of the pandemic on mental health and the role of the government and healthcare system in mitigating the impact of the virus collated through a primary survey.

The report, thus, provides a comprehensive analysis of the status of inequality in the country, the programmatic interventions of the government

and the current experiences of the marginalised community with the public healthcare system of India. The report also lists a set of recommendations to reduce inequality in health in India. The intention is to trigger a discourse on the inequalities in health that India has inherently known among CSOs, NGOs as well as the government and policy makers and to take a step towards a nation that has quality, affordable and accessible healthcare for all sections of the population.

REFERENCES

1 'Coronavirus Worldwide Graphs', (n.d.), Worldometer, accessed 25 March 2021, https://www.worldometers.info/coronavirus/worldwide-graphs/#total-cases

2 'India', (n.d.), Worldometer, accessed 25 March 2021, https://www.worldometers.info/coronavirus/country/india/

3 ANI, (2021), 'India's Covid-19 fatality rate drops to 1.44%', *The Times of India*, accessed 22 February 2021, https://timesofindia.indiatimes.com/india/indias-covid-19-fatality-rate-drops-to-1-44/articleshow/80197713.cms

4 Ibid.

5 'The mystery of India's low coronavirus death rate'. (2020). *The Times of India*, accessed 3 February 2021, https://timesofindia.indiatimes.com/india/the-mystery-of-indias-low-coronavirus-death-rate/articleshow/78599745.cms

6 Qureshi, Siraj, (2021), 'Doctors explain why young people are more affected in second wave of Covid-19', India Today, accessed 11 June, 2021, https://www.indiatoday.in/coronavirus-outbreak/story/doctors-explain-young-people-more-affected-second-wave-1811619-2021-06-06

7 Pandit, Ambika, (2021), 'Covid-19: Data dispels myth of young people being more at risk during the second wave', The Time of India, accessed 17 June, 2021, https://timesofindia.indiatimes.com/india/covid-19-data-dispels-myth-of-young-people-being-more-at-risk-during-2nd-wave/articleshow/83558847.cms

8 Schumaker, Erin, (2021), 'A 'complete collapse' of preventive health: How India's 2nd COVID wave exploded', ABC News, accessed 21 May, 2021 https://abcnews.go.com/Health/complete-collapse-preventive-health-indias-2nd-covid-wave/story?id=77316993

9 Singer B., and C. Ryff, (2001), 'The Influence of Inequality on Health Outcomes'. *New Horizons in Health: An Integrative Approach*, Washington DC : National Academies Press, accessed 17 December 2020, https://www.ncbi.nlm.nih.gov/books/NBK43780/

10 Narula, Anupam, (2021), 'The devastating second wave of Covid-19 in India has exposed potholes in the healthcare sector', Healthworld, accessed 14 June 2021, https://health.economictimes.indiatimes.com/health-files/the-devastating-second-wave-of-covid-19-in-india-has-exposed-potholes-in-the-healthcare-sector/4906

11 Karmakar, Debashish. (2021). 'Black marketing of drugs, oxygen cylinders: EOU gets 100 calls', The Times of India, https://timesofindia.indiatimes.com/city/patna/black-marketing-of-drugs-oxy-cylinders-eou-gets-100-calls/articleshow/82505122.cms

12 Schumaker, Erin, (2021).

13 Wealthy Indians flee India by private jets as Covid wreaks havoc', (2021), Live Mint, accessed 21 May, 2021, https://www.livemint.com/news/india/wealthy-indians-flee-india-by-private-jets-as-covid-wreaks-havoc-11619486788641.html

14 Census of India, (2011), 'HH Series: Household Tables', Government of India, accessed 17 December 2020 https://censusindia.gov.in/Tables_Published/HH-Series/hh_series_tables_20011.html

15 Imran Khan, Mohd, and Anu Abraham, (2020), 'No "Room" for Social Distancing: A Look at India's Housing and Sanitation Conditions', *Economic and Political Weekly*, Vol. 55, Issue No. 16, accessed 17 December 2020, https://www.epw.in/engage/article/no-room-social-distancing-lowdown-indias-housing

16 Onmanorama staff, (2020), 'Kerala reels under shortage of essential drugs for critically ill, organ transplant Recipients'. *Onmanorama*, accessed 3 February 2020, https://www.onmanorama.com/kerala/top-news/2020/04/05/essential-drugs-kerala-lockdown-shortage-insulin-critically-ill.html

17 Ibid.

18 Duggal R., (2020), 'Behind the curve: India's failing response to COVID-19'. India: Chila Institute, accessed 3 February 2021, https://www.indiachinainstitute.org/2020/06/17/behind-the-curve/

19 Mohal P. and S. Mohan, (2020), 'On Covid-19, Bharat looks and thinks differently than India', *Deccan Herald*, accessed 3 February 2020, https://www.deccanherald.com/specials/sunday-spotlight/on-covid-19-bharat-looks-and-thinks-differently-than-india-939925.html

20 Sharma, S., (2017), 'India's public health system in crisis: Too many patients, not enough doctors', *Hindustan Times*, accessed 3 February 2021, https://www.hindustantimes.com/india-news/public-health-system-in-crisis-too-many-patients-not-enough-doctors/story-39XAtFSWGf00e4qRKcd8f0.html

21 OECD Data, (n.d.), 'Hospital Beds', *OECD*, accessed 27 February 2020, https://data.oecd.org/healtheqt/hospital-beds.htm and Conceição, Pedro, (2020), 'The next frontier Human development and the Anthropocene', New York: UNDP, accessed 17 December 2020, http://hdr.undp.org/sites/default/files/hdr2020.pdf

22 National Health accounts Estimates for India, (2016-17), accessed 3 February 2021. http://nhsrcindia.org/sites/default/files/FINAL%20National%20Health%20Accounts%202016-17%20Nov%202019-for%20Web.pdf

23 Mehra, P.,(2020), 'India's Economy needs big dose of health spending', *Live mint*, accessed 3 February, 2020, https://www.livemint.com/news/india/india-s-economy-needs-big-dose-of-health-spending-11586365603651.html

24 Sinha, D., (2021), 'Rs 1.3 Lakh Crore – a.k.a. What's Expected of the Health Budget This Year', *Wire*, accessed on 3 February 2021, https://thewire.in/health/budget-2021-health-expectations

25 Lawson, M., (2020) 'Fighting inequality in the time of Covid-19: The Commitment to Reducing Inequality Index 2020', United Kingdom: Oxfam GB, accessed 3 February 2021, https://d1ns4ht6ytuzzo.cloudfront.net/oxfamdata/oxfamdatapublic/2020-10/CRII%202020%20Report.pdf

26 Shukla, R., and Kapur, A., (2021), 'Accountability Initiative', New Delhi: Centre for Policy Research, accessed 3 February 2021, https://accountabilityindia.in/publication/ayushman-bharat-2/

27 National Health Mission, (n.d.), 'Quarterly NHM MIS Report', Ministry of Health and Family Welfare, accessed 3 February 2021, https://nhm.gov.in/index4.php?lang=1&level=0&linkid=457&lid=686

28 Barenberg Andrew J., Deepanker Basu, and Ceren Soylu, (2017), 'The Effect of Public Health Expenditure on Infant Mortality: Evidence from a Panel of Indian States, 1983–1984 to 2011–2012', *The Journal of Development Studies*, Vol. 53, Issue 10, accessed 3 February 2021, https://www.tandfonline.com/doi/abs/10.1080/00220388.2016.1241384

29 Deaths per 1000 live births of children under one year of age.

30 Farahani M., V. Subhramanian, and D. Canning, (2010), 'Effects of state-level public spending on health on the mortality probability in India', *National Library of Medicine*, Vol 19 Issue 11, accessed 3 February 2021, https://pubmed.ncbi.nlm.nih.gov/19937613/

31 Bhalotra S., (2007), 'Spending to save? State health expenditure and infant mortality in India', *National Library of Medicine*, Vol 16, Issue 9, accessed 3 February 2021, https://pubmed.ncbi.nlm.nih.gov/17668889/

32 Mohanty R., and D. Behera, (2020), 'How Effective is Public Healthcare Expenditure in Improving Health Outcome? An Empirical Evidence from the Indian States', NIPFP Working paper series, accessed 3 February 2021, https://www.nipfp.org.in/media/medialibrary/2020/03/WP_300_2020.pdf

33 Out-of-pocket payments are defined as direct payments made by individuals to healthcare providers at the time of service use.

34 The World Bank, (n.d.), 'Out-of-pocket expenditure (% of current health expenditure)', accessed 17 December 2020, https://data.worldbank.org/indicator/SH.XPD.OOPC.CH.ZS

35 Ministry of Health & Family Welfare, (2014), 'National Health Policy Draft, 2015', Government of India, accessed 17 December 2020, https://www.indiaspend.com/wp-content/uploads/2020/06/Draft_National_Hea_2263179a.pdf

36 Jena, B., and M. Roul, (2020), 'Estimates of Health Insurance Coverage in India: Expectations and Reality', *Economic and Political Weekly*, Vol 55, Issue 37, accessed 3 February 2021, https://www.epw.in/journal/2020/37/notes/estimates-health-insurance-coverage-india.html

37 Ibid.

38 Mackinko J., B. Starfield, and L. Shi, (2003), 'The contribution of primary care systems to health outcomes within Organization for Economic Cooperation and Development (OECD) countries, 1970-1998', *National Library of Medicine*, Vol 38, Issue 3, accessed 3 February 2021, https://pubmed.ncbi.nlm.nih.gov/12822915/

39 Jungari S. and B. Chauhan, (2017), 'Caste, Wealth and Regional Inequalities in Health Status of Women and Children in India', *Contemporary Voice of Dalit*, accessed 3 February 2021, https://journals.sagepub.com/doi/10.1177/2455328X17690644

40 Moradhvaj, and N. Saikia, (2019). 'Gender disparities in healthcare expenditures and financing strategies (HCFS) for inpatient care in India'. *SSM - Population Health*, 9, 100372. https://doi.org/10.1016/j.ssmph.2019.100372

41 Conceição, Pedro, (2020).

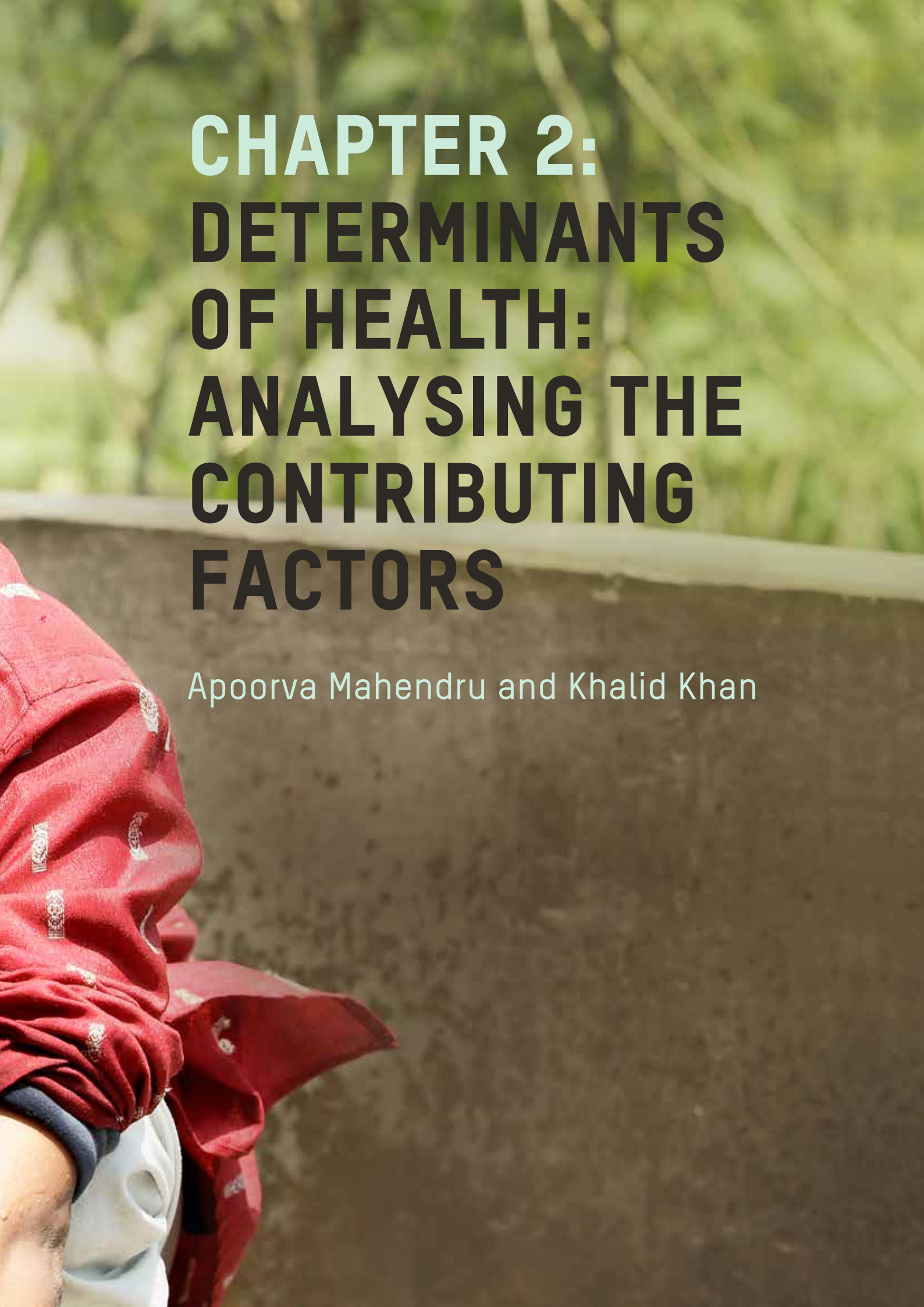
42 Yadavar S., (2018), 'India worse than Bhutan, Bangladesh in healthcare, ranks 145th globally', *Business Standard*, accessed 3 February 2021, https://www.business-standard.com/article/current-affairs/india-worse-than-bhutan-bangladesh-in-healthcare-ranks-145th-globally-118052400135_1.html

43 Planning Commission, (2010), 'High Level Expert Group Report on Universal Health Coverage for India', accessed 23 February 2020, http://phmindia.org/wp-content/uploads/2015/09/Plg-Commission-HLEG-Report-on-Health-for-12th-Planrep_uhc0812.pdf

44 Budget Track, (2011), Vol 8 Track 2, accessed 3 February 2021, https://www.cbgaindia.org/wp-content/uploads/2016/03/BT_Vol_8_Track_2.pdf

45 Anonymous, (2017), 'Amartya Sen rues lack of good healthcare in India', *India News*, accessed 3 February 2021, https://www.hindustantimes.com/india-news/amartya-sen-rues-lack-of-good-healthcare-in-india/story-YmbTqX9sCbirWYmd93uL1J.html

46 Watkins D.A., D.T. Jamison, T. Mills, T. Atun, K. Danforth, A. Glassman, S. Horton, P. Jha, M.E. Kruk, O.F. Norheim, J. Qi, A. Soucat, S. Verguet, D. Wilson and A. Alwan, (2017), 'Universal Health Coverage and Essential Packages of Care', *Disease Control Priorities: Improving Health and Reducing Poverty*, 3rd edition, Washington (DC): National Library of Medicine, The International Bank for Reconstruction and Development, The World Bank, accessed 3 February 2021, https://pubmed.ncbi.nlm.nih.gov/30212154/



CHAPTER 2: DETERMINANTS OF HEALTH: ANALYSING THE CONTRIBUTING FACTORS

Apoorva Mahendru and Khalid Khan

KEY FINDINGS

LITERACY RATE FOR WOMEN IN THE GENERAL CATEGORY IS 18.6 PERCENT HIGHER THAN SC WOMEN AND 27.9 PERCENT HIGHER THAN ST WOMEN.

INEQUALITY IS EVIDENT IN THE ATTAINMENT OF FEMALE LITERACY WITH A GAP OF 55.1 PERCENT BETWEEN THE TOP AND BOTTOM 20 PERCENT OF POPULATION IN 2015-16.

TWO OUT OF THREE HOUSEHOLDS HAVE ACCESS TO IMPROVED, NON-SHARED SANITATION FACILITIES IN THE GENERAL CATEGORY, WHILE SC HOUSEHOLDS ARE 28.5 PERCENT BEHIND THEM, AND ST ARE 39.8 PERCENT BEHIND THEM.

WHILE 93.4 PERCENT OF HOUSEHOLDS IN THE TOP 20 PERCENT HAVE ACCESS TO IMPROVED SANITATION, ONLY 6 PERCENT HAVE ACCESS IN THE BOTTOM 20 PERCENT, A DIFFERENCE OF 87.4 PERCENT.

ONE IN EVERY INR SIX SPENT ON HOSPITALIZATION BY HOUSEHOLDS IS FINANCED THROUGH BORROWINGS.

LESS THAN ONE-THIRD OF HOUSEHOLDS IN THE COUNTRY WERE COVERED BY A GOVERNMENT INSURANCE SCHEME IN 2015-16.

HEALTH IS A CRUCIAL FACTOR IN THE DEVELOPMENT OF A COUNTRY, AND POOR HEALTH CAN BE DETRIMENTAL TO THIS PROCESS.[1] HOWEVER, WHEN LOOKING AT THE HEALTH STATUS OF A COUNTRY, AGGREGATES IGNORE THE INHERENT INEQUALITIES IN THE HEALTH SYSTEM.

For instance, IMR among the rich (19.8) and the poor (56.3) paints a different picture than the average IMR of 40.7 for the country. This is because the health of an individual is determined by a number of social and economic factors that affect access and quality of healthcare received.[2] These socio-economic inequities manifest in caste, class and gender and affect the availability of health services and quality care.[3] Studies suggest a social group bias to health outcomes in India, leading to inequalities in health indicators.[4]

Therefore, Chapters 2 to 4 undertake an analysis of inequalities in health indicators in India based on gender, caste, religion, region and wealth to understand the impact of social and economic determinants on the health of an individual. This exercise becomes even more important in the backdrop of the current COVID-19 crisis, which has brought the healthcare sector to its knees as it struggles to meet the health needs of the citizens and the demands of the pandemic.

To understand how a health emergency like COVID-19 brought our health system to a halt, these chapters examine the environmental, intervention and outcome indicators surrounding health inequalities that existed before the pandemic hit.

This chapter analyses the progress of and inequality in different environmental factors that impact the health of an individual. More specifically, it analyses the status and inequalities in female education, water and sanitation, expenditure on healthcare by households and their sources of financing.

2.1. FEMALE EDUCATION

Education leads to better health by creating opportunities for decent work and higher income, which would in turn, make access to health resources easier and affordable. [5] Moreover, people with higher levels of education are likely to understand their health needs better, follow instructions and advocate for the health needs of their families and communities resulting in healthier neighbourhoods and higher quality of life.[6]

It improves health awareness and health-seeking behaviour and thereby positively affects health outcomes. Education, specifically of women, has a direct effect on improving the health outcome at the level of the household as educated women are known to take informed healthcare decisions.[7] Women's education also plays a vital role in improving Sexual and Reproductive Health (SRHR), including contraceptive use.

Data from different rounds of NSS and NFHS suggest gradual improvement in the literacy rate of women. This increase has been accompanied by declining TFR, increased infant immunization and a decline in percentage of adolescent mothers, further supporting the positive relationship between female education and improved health outcomes.[8]

2.1.1. GEOGRAPHY:

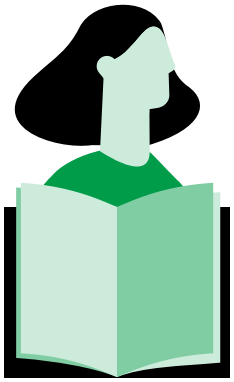
The utilization of healthcare services is poor for groups that are not literate. Research has shown that people with lower literacy are more likely to use emergency services and be hospitalized instead of using preventive services such as diagnostic tests and taking medications.[9] It gets exacerbated in rural areas.[10]

Significant inequality continues to persist in female education though the urban-rural gap of 29 percent in 2005-06 came down to 19.9 percent in 2015-16. Literacy levels in rural areas are low for girls mostly due to the reluctance of parents to educate their daughters, the responsibility of daily chores that falls on the females of the household and financial constraints often leading to girls dropping out of school.[11]

2.1.2. SOCIAL GROUPS:

Women's literacy has also improved across social groups but SCs and STs lag behind the general category.[12] The gap has reduced over the decade but the literacy rate for women in the general category is still 18.6 percent higher than SC women and 27.9 percent higher than ST women.

THE GAP HAS REDUCED OVER THE DECADE BUT THE LITERACY RATE FOR WOMEN IN THE GENERAL CATEGORY IS STILL 18.6 PERCENT HIGHER THAN SC WOMEN AND 27.9 PERCENT HIGHER THAN ST WOMEN.



2.1.3. RELIGION:

The reduction in inequality is observed among religious groups too. While the female literacy rate among Muslims is lower than all religious groups, inequality has reduced over time. The other religious minorities are in a better position than Hindus and Muslims, evident from the fact that the literacy rate for Sikhs and Christians is over 80 percent each while that of Hindus and Muslims is 68.3 and 64.3 percent, respectively.

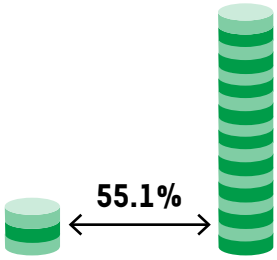
2.1.4. WEALTH GROUP:

The literacy rate by wealth quintile shows a decline in inequality by wealth. However, in spite of the decline, there exists a gap of 55.1 percent between the top and bottom 20 percent of the population in 2015-16.

However, mere improvement in the literacy rate may not improve the health status of a household if the years of schooling does not cross the middle and higher level of education. The 75th round of NSS data on education shows that as the level of education increases, the number of women enrolled declines.

Among women, 28 percent had completed middle and secondary education while only 9.8 percent had completed higher secondary education and 8.4 percent had achieved a graduate degree in 2017-18. The share in higher secondary and higher education is even lower among women belonging to rural areas and those belonging to marginalized communities.[13]

IN 2015-16, THERE EXISTED A GAP OF 55.1 PERCENT IN THE LITERACY RATE BETWEEN THE TOP AND BOTTOM 20 PERCENT OF THE POPULATION.



2.2. WATER AND SANITATION

Unsafe drinking water and sanitation expose an individual to multiple health problems as incidences of communicable diseases such as diarrhoea and dengue increases neonatal and child mortality rates,[14] and impacts life expectancy. Poor water, sanitation and hygiene conditions were responsible for 100,000 deaths from diarrhoeal diseases in under-five children in 2015 in India.[15]

The benefit of an improved source of water[16] goes hand-in-hand with the benefit of improved sanitation.[17] They prevent infections and promote overall hygiene and good health. The lack of access to improved water and improved sanitation facility forces people to rely on unprotected sources of water and to use community toilets or practice open defecation, respectively. Studies show that women dependent on poor sanitation facilities are more susceptible to hookworm infection resulting in maternal anaemia,[18] which in turn leads to adverse pregnancy outcomes.[19]

Access to improved water and sanitation has increased over the previous decade. Access to improved water has increased by 2.3 percent reaching 89.9 percent; access to improved sanitation has increased by 19.3 percent reaching 48.4 percent.

POOR WATER, SANITATION AND HYGIENE CONDITIONS WERE RESPONSIBLE FOR 100,000 DEATHS FROM DIARRHOEAL DISEASES IN UNDER-FIVE CHILDREN IN 2015 IN INDIA.

2.2.1. GEOGRAPHY:

Access to improved water has been more in urban areas than rural areas by 1.8 percent even after urban areas witnessed a decline of 3.9 percent over the decade. This declined access to improved water in urban areas is worrisome and can be partly attributed to rising pollution levels in surface and groundwater resulting in poor water quality.[20] In fact, one of the projected impacts of climate change is to exacerbate the issues of scarcity of water and equitable access to clean water.[21]

The inequality is starker for sanitation facilities where percentage of households with improved sanitation that are not shared is almost double in urban areas as compared to rural areas. This points to a lack of sanitation facilities in rural households up until 2015-16 and the prevailing practice of open defecation.

2.2.2. SOCIAL GROUPS:

Access to improved sources of water is almost equal for all groups except STs who are approximately 10 percent behind the rest. The inequality is even more glaring for sanitation where 65.7 percent households have access to improved, non-shared sanitation facilities in the general category while SC households are 28.5 percent behind them and ST are 39.8 percent behind them.

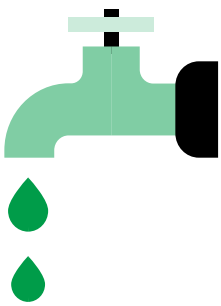
65.7 PERCENT HOUSEHOLDS HAVE ACCESS TO IMPROVED, NON-SHARED SANITATION FACILITIES IN THE GENERAL CATEGORY WHILE SC HOUSEHOLDS ARE 28.5 PERCENT BEHIND THEM AND ST ARE 39.8 PERCENT BEHIND THEM.

2.2.3. RELIGION:

The improvement is highest among Christians (an increase of 9.7 percent) who were lagging behind Hindus and other religious minorities in 2005-06 and inequality among the religious groups has gone down significantly. However, only 84 percent of the Christian households had access to improved sources of water even in 2015-16 when it was as high as 98.4 percent, 89.6 percent and 92.8 percent among Sikhs, Hindus and Muslims respectively.

Sikhs have the highest percentage of households for improved sanitation as well (83.6), followed by Christians (67.5), Muslims (53.2) and then Hindus (46.4). Studies suggest that cultural factors, like offering prayer five times a day has rendered them a practice of physically cleaning themselves, thus playing an important role in Muslims performing better in sanitation than Hindus.[22]

WHILE 93.4 PERCENT OF HOUSEHOLDS IN THE TOP 20 PERCENT HAVE ACCESS TO IMPROVED SANITATION, ONLY 6 PERCENT HAVE ACCESS IN THE BOTTOM 20 PERCENT—A DIFFERENCE OF 87.4 PERCENT.



2.2.4. WEALTH GROUPS:

Inequality is not very high for improved water sources. There is a 2.7 percent difference between the top and bottom 20 percent of households. However, this difference is glaring for access to improved sanitation. While 93.4 percent of households in the top 20 percent have access to improved sanitation, only 6 percent have access in the bottom 20 percent—a difference of 87.4 percent.

Box 2.1. India Strides towards Swachhata

A major mission of the NDA government was to make India open-defecation free (ODF) by 2019. This has resulted in significant increase in the sanitation coverage, both in rural and urban areas. Under the Swachh Bharat Abhiyan, launched in 2014, households could avail reimbursements to the tune of INR 12,000 in rural[23] and INR 15,000 in urban[24] areas from the government for constructing toilets at the household level. As per the government's Swachh Bharat Mission dashboard, the toilet coverage has reached 99.95 percent and the government has announced the whole country to be ODF in 2019, with the exception of a few ULBs in West Bengal.[25]

However, this claim has been subject to extensive debate.[26] NSO data shows discrepancy in the villages that have been announced as ODF under SBM and villages that have access to a latrine. Also, even though six lakh villages have been declared ODF, 10 percent of these have not undergone first-level verification.[27] Moreover, at least 15 percent of households have no access to toilets in the verified and ODF-declared villages of Jharkhand, Bihar and Odisha. Another 15 percent in Jharkhand, Odisha and Goa have toilets but are unhygienic. These statistics bring to question the validity of the ODF claim by the government.

2.3. HEALTH EXPENDITURE BY HOUSEHOLDS

The high expenditure on health is a matter of concern as it increases the chances of falling into poverty. The risk is higher among the marginalised and vulnerable population.[28] It also prevents the poor from accessing health services.

The average medical expenditure per hospitalization case[29] has tripled between 2004 and 2017. The expenditure was as high as INR 20,135 in 2017-18. The increase in household expenditure on health as a percentage of the total household budget can be attributed to improved health-seeking behaviour due to greater health awareness[30] and increase in cost of healthcare.

2.3.1. GEOGRAPHY:

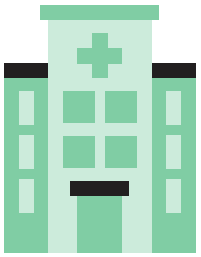
The expenditure on hospitalization increased notably in both rural and urban areas between 2004 and 2017-18. However, it was higher in urban areas with the urban-rural inequality increasing over the decade.

2.3.2. SOCIAL GROUPS:

The average medical expenditure has increased across all social groups although significant inequality persists. The expenditure incurred by the general category was 2.2 times higher than STs, 1.7 times higher than SCs and 1.5 times higher than Other Backward Classes (OBCs) in 2017-18, which is roughly the same as the corresponding figures in 2004.

2.3.3. RELIGION:

The trend seen among social groups is observed for religious groups too. Though average expenditure among Hindus is higher than Muslims it is lower than Christian and Sikh households. The expenditure incurred by Hindus was 1.1 times higher than Muslims in 2004 which increased to 1.3 times in 2017-18.



81 PERCENT OF THE TOTAL HOSPITALISATION EXPENDITURE IS COVERED THROUGH THE SAVINGS OF THE HOUSEHOLD WHILE ONE IN EVERY INR SIX SPENT IS THROUGH BORROWING.

2.3.4. WEALTH GROUPS:

The average health expenditure among the bottom 40 percent households by consumption quintiles is 30 percent lower than the top 20 percent of the households. However, the inequality between the lower quintile and the top 20 percent has reduced between 2004 and 2017-18.

It is also important to examine the source of financing the health expenditure of households. The dependence of households on their income or saving (from here on, referred to as savings) for financing their health expenditure has been very high as observed from the NSS data on health as of 2017-18. Of the total hospitalization expenditure, 81 percent is covered through the savings of the household.

2.3.5. SOURCE OF FINANCING:

A welcome observation is the declining share of borrowing and sales of physical assets as a major source of finance for hospitalization cases. While selling physical assets is negligible, one in every INR six spent on hospitalization is still through borrowing.

Urban areas depend more on savings whereas rural areas depend more on borrowings to finance their hospitalization expenses. Differences among social and religious groups are not glaring but SCs and OBCs depend more on borrowing as compared to STs and the general category while Christians depend the most on borrowing among the religious groups.

Among the wealth quintiles, borrowing is higher for the bottom 20 percent than the top 20 percent but is highest for the middle 20 percent. The comparatively lower dependence on borrowing of the bottom 20 percent than the middle 20 percent could be due to the aversion to seek healthcare and/ or unavailability of accessible health facilities for the bottom 20 percent and better health-seeking tendencies among the middle 20 percent.

The high expenditure on hospitalization is worrisome and requires government intervention. However, lower expenditures among the marginalised indicates poor health awareness and health-seeking behaviour. Poor health-seeking behaviour could either be due to the unavailability of health facilities or the high cost of healthcare. Moreover, the need to borrow further dissuades the marginalised from accessing healthcare.

2.4. HEALTH INSURANCE COVERAGE OF THE GOVERNMENT

The high cost burden of medical expenditure on households can, arguably, be eased through an inclusive insurance system that includes inpatient and outpatient care, laboratory tests, medicines, consultations, etc.

The central and state governments have rolled out several insurance schemes. Unfortunately, they cover inpatient care only though most of the expenditure made on health is incurred due to illnesses that do not require hospitalization and other out-patient costs such as doctor visits, diagnostic tests and medicines. More than 50 percent of OOPE is utilized in purchasing medicines and another 10 percent in medical and diagnostic labs.[31]

However, less than one-third of the households (29 percent) have member(s) covered under the GFHIS in 2015-16 though they constitute a major share of the total insurance coverage. Half of those insured are covered by a state health insurance scheme and more than a third are covered under Rashtriya Swastha Bima Yojana (RSBY). The Employee State Insurance Scheme (ESIS) or Central Government Health Scheme also covers a notable share of the population.

MORE THAN **50 PERCENT** OF OOPE IS UTILIZED IN PURCHASING MEDICINES AND ANOTHER **10 PERCENT** IN MEDICAL AND DIAGNOSTIC LABS.

2.4.1. GEOGRAPHY:

The percentage of households insured has increased during 2005-06 and 2015-16 both in urban and rural areas to 29 percent and 28.2 percent respectively.

2.4.2. SOCIAL GROUPS:

In 2015-16, nearly 31 percent of households were insured in SC, ST and OBC households whereas only 23.7 percent households in the general category were insured.

2.4.3. RELIGION:

Inequality of Muslim and Sikh households with Hindu households has increased during 2005-06 and 2015-16. In 2005-06, only 2 percent Muslim households, 5 percent Hindu households and 7 percent Christian and Sikh households were insured. This gap widened in 2015-16 when insurance coverage among Christian households increased considerably to 44.6 percent while it increased to only 29.9 percent for Hindu households and 20.1 and 20.9 percent for Muslim and Sikh households, respectively.

2.4.4. WEALTH GROUPS:

Coverage by wealth quintile was highest for the middle 20 percent (32.4 percent) which was 10.8 percent higher than the bottom 20 percent and 1.9 percent higher than the top 20 percent.

The low coverage of the GFHIS highlights the failure of the insurance system to adequately cover all households. A one-size-fits-all approach of the insurance system does not work in the Indian context where healthcare infrastructure remains weak, consumers' needs, cost of healthcare and availability of services are case-specific and cost of medicines and consultations exceeds the cost of hospitalization.[32]

2.5. A LONG WAY TO GO

The indicators discussed in this chapter reflect that the environment of an individual and their household, are among the key factors determining one's health status. Overall, urban areas have fared better than rural areas. While there is certainly improvement in social and religious groups over the decade, inequality continues to persist as SCs and STs lag behind the general category. Muslims, while having better access to water and sanitation facilities, lag behind in female literacy and have low expenditure on healthcare reflecting low health-seeking behaviour and poor access to health services.

In such circumstances, the role of government becomes very crucial in ensuring equitable access to health services irrespective of the socio-economic background. More than two-thirds of households are not covered by any insurance. However, with more than 50 percent of the OOPE being spent on purchasing medicines and another 10 percent on medical and diagnostic labs, our insurance system needs to expand its scope to include inpatient and outpatient care, laboratory tests, medicines, consultations, etc., thereby reducing the burden on the poor and the marginalised.

REFERENCES

1 Barro, Robert J., (2013), 'Health and Economic Growth'. *Annals of Economics and Finance*, 14(2), 329–366.

2 Baru, R., A. Acharya, S. Acharya, A. Kumar, and K. Nagaraj, (2010), 'Inequities in Access to Health Services in India: Caste, Class and Region', *Economic and Political Weekly*, 45(38), 49-58.

3 ibid

4 Barooah, Vani, (2010), 'Inequality in health outcomes in India: the role of caste and religion', *Munich Personal RePEc Archive*, Paper No. 19832.

5 https://aus.libguides.com/apa/apa-no-author-date. 'Why Education Matters to Health: Exploring the Causes', (2015), *Centre for Society and Health*, accessed 24 February 2021, https://societyhealth.vcu.edu/work/the-projects/why-education-matters-to-health-exploring-the-causes.html

6 Ibid.

7 Saurabh, Suman, Sonali Sarkar, and Pandey, Dhruv K., (2013), 'Female Literacy Rate is a better Predictor of Birth Rate and Infant mortality Rate in India'. *J Family Med Prim Care*, Vol. 2, Issue 4, 349–353 and Alexander, Ashok, (2018), 'Educating girls can improve India's health outcomes', *Livemint*, accessed 24 February 2021, https://www.livemint.com/Opinion/6EvW7MxzLpcdsk2aifu59N/Educating-girls-can-improve-Indias-health-outcomes.html

8 Population Reference Bureau, (2011), 'The Effect of Girls' Education on Health Outcomes: Fact Sheet', accessed 24 February 2021, https://www.prb.org/girls-education-fact-sheet/

9 https://aus.libguides.com/apa/apa-no-author-date, (2015).

10 Ranjan Kumar Prusty, Jitendra Gouda and Manas Ranjan Pradhan, (2015), 'Inequality in the Utilization of Maternal Healthcare Services in Odisha, India'. *International Journal of Population Research*, accessed 24 February 2021, https://doi.org/10.1155/2015/531485

11 Venkatesan, Srinivasan, (2010), 'A Study on School Drop-outs in Rural Settings', *Journal of Psychology*, Vol. 1, 47-53, accessed 24 February 2021, 10.1080/09764224.2010.11885445.

12 In NFHS 4, social groups are divided among SC, ST, OBC and Others. Others, here, is assumed to be the general category which refers to people belonging to privileged castes.

13 Jagadeeswari, V., (2014), 'Constraints of SC and ST Women Students and their intensity in Pursuing Higher Education', *Indian Journal of Applied Research*, 4(2), 5-8, accessed 24 February 2021, https://www.worldwidejournals.com/indian-journal-of-applied-research-(IJAR)/recent_issues_pdf/2014/February/February_2014_1391258453_a81fc_50.pdf

14 Kumar, Praveen and Nalini Singhal, (2020), 'Mapping Neonatal and Under-5 Mortality in India', *The Lancet*, Vol. 395, 1591-1593, accessed 24 February 2021, https://www.thelancet.com/pdfs/journals/lancet/PIIS0140-6736(20)31050-3.pdf

15 UNICEF, (n.d.), 'Strengthening sustainable WASH programming', UNICEF India, accessed 24 February 2021, https://www.unicef.org/india/what-we-do/water-sanitation-hygiene

16 Improved drinking water source is a source that, by nature of its construction, adequately protects the water from outside contamination, in particular from faecal matter (WHO, UNICEPT Joint Monitoring Report 2012). Common examples: piped household water connection, public standpipe, borehole, protected dug well, protected spring, rainwater collection. NFHS 3 (2005-06) and NFHS 4 (2015-16) followed this definition of improved sources of water.

17 The improved sanitation facilities include flush/ pour flush toilet, piped sewers systems, septic tanks, pit latrines, ventilated pit latrines/ biogas latrines, pit latrines with slab twin pit/ composting toilets, available at household level (not shared with others).

18 Strunz, Eric C., David G. Addiss, Meredith E. Stocks, Stephanie Ogden, Jürg Utzinger, and Matthew C. Freeman, (2014), 'Water, sanitation, hygiene, and soil-transmitted helminth infection: a systematic review and meta-analysis,' *PLoS Medicine*, 11(3), e1001620.

19 Bora, Reeta, Corey Sable, Julian Wolfson, Kanta Boro, and Raghavendra Rao, (2014), 'Prevalence of anemia in pregnant women and its effect on neonatal outcomes in Northeast India,' *The Journal of Maternal-Fetal & Neonatal Medicine*, 27(9), 887-891.

20 Ali, Q.S. Wamiq, (2019), 'Water crisis in urban India: an alarming situation', *Corporate Sustainability and Responsibility*, accessed 24 February 2021, https://indiacsr.in/water-crisis-in-urban-india-an-alarming-situation/#:~:text=In%20urban%20areas%2C%2096%25%20have,%25%20for%20sanitation%5B5%5D.

21 Mukheibir P., (2010), 'Water access, water scarcity, and climate change', *Environ Manage*, 45(5), 1027-39, accessed 24 February 2021, doi: 10.1007/s00267-010-9474-6.

22 Banerjee, A.N., N. Banik, and A. Dalmia, (2017), 'Demand for household sanitation in India using NFHS-3 data'. *Empir Econ*, 53, 307–327 , accessed 24 February 2021, https://link.springer.com/article

23 Swachh Bharat Mission-Grameen, (n.d.), 'Frequently asked questions', Ministry of Jal Shakti, accessed 24 February 2021, https://swachhbharatmission.gov.in/SBMCMS/faq.htm

24 Ministry of Housing and Urban Affairs, (2017), 'Guidelines for Swachh Bharat Mission-Urban', New Delhi: Government of India, accessed 24 February 2021, http://swachhbharaturban.gov.in/writereaddata/SBM_GUIDELINE.pdf

25 Sharma, Nidhi, (2019), 'December 31 set as new deadline for urban India to get ODF status', *The Economic Times*, accessed 24 February 2021, https://economictimes.indiatimes.com/news/politics-and-nation/december-31-set-as-new-deadline-for-urban-india-to-get-odf-status/articleshow/71846447.cms#:~:text=On%20October%202%2C%20Prime%20Minister,urban%20India%20being%20declared%20ODF

26 The Hindu Data Team, (2020), 'Is rural India 100% open defecation-free like Swachh Bharat data concludes?', *The Hindu*, accessed 24 February 2021, https://www.thehindu.com/data/data-mismatch-is-rural-india-100-open-defecation-free-like-swachh-bharat-data-concludes/article30460909.ece
https://theprint.in/pageturner/excerpt/declaring-india-odf-doesnt-mean-much-if-there-is-no-cross-verification-with-big-data/376063/

27 Agarwal, Kabir, (2019), 'Six Charts Show That India Is Not Yet Open Defecation Free', *The Wire*, accessed 24 February 2021, https://thewire.in/government/six-charts-show-that-india-is-not-yet-open-defecation-free

28 Sangar, Shivendra, Varun Dutta, and Rama Thakur, (2019), 'Burden of Out-of-pocket health expenditure and its impoverishment impact in India: evidence from National Sample Survey', *Journal of Asian Public Policy*, accessed 24 February 2021, 10.1080/17516234.2019.1601065

29 This includes bed charges, doctor's/surgeon's fees, total amount paid for medicines, diagnosis tests, attendant charges, physiotherapy, personal medical appliances, and blood, oxygen etc. during the stay at the hospital within the reference period of last 365 days. This does not include non-medical expenses and expenditure on child-birth. This amount reimbursed is also not considered. So this represents overall expenditure per case. *Source:* NSS.

30 Sengupta, Keya, (2015), 'Health Expenditure and its Impact on Health Status,' *Proceedings of International Academic Conferences 2804594*, International Institute of Social and Economic Sciences, accessed 24 February 2021, https://ideas.repec.org/p/sek/iacpro/2804594.html.

31 Rao, Nivedita, (2018), 'Who is Paying for India's Healthcare?', *The Wire*, accessed 24 February 2021, https://thewire.in/health/who-is-paying-for-indias-healthcare

32 Dror, David M., (2007), Why 'One-Size-Fits All' Health insurance Products are Unsuitable for Low-Income Persons in the informal Economy in India, *Asian Economic Review*, 49(1), accessed from SSRN: https://ssrn.com/abstract=1017094

ANNEXURES

Table 2.1. Female Literacy by Geography

LITERACY RATE	URBAN	RURAL	TOTAL
2005-06 (15-49 years)	74.8	45.5	55.1
2015-16 (15-49 years)	81.4	61.5	68.4

Source: NFHS

Table 2.2. Female Literacy by Social Group

LITERACY RATE	SC	ST	OBC	OTHERS	ALL
2005-06 (15-49 years)	43.8	33.4	51.8	71.6	55.1
2015-16 (15-49 years)	62.3	53.0	67.7	80.9	68.4

Source: NFHS

Table 2.3. Female Literacy by Religious Group

LITERACY	HINDU	MUSLIM	CHRISTIAN	SIKH	ALL
2005-06 (15-49 years)	54.9	49.5	75.9	71.9	55.1
2015-16 (15-49 years)	68.3	64.3	80.8	81.1	68.4

Source: NFHS

Table 2.4. Women Literacy by Wealth Group

IMPROVED	LOWEST	SECOND	MIDDLE	HIGHER	HIGHEST	TOTAL
2005-06	18.6	34.6	50.2	70.9	90.4	55.1
2015-16	37.4	56.3	68.9	81.0	92.5	68.4

Source: NFHS

Table 2.5. Percentage of Households with Improved Water Sources

	IMPROVED	PIPED WATER INTO RESIDENCE	HOUSEHOLDS WITH PUBLIC TAPS OR STANDPIPES
2005-06	87.6	24.5	17.5
2015-16	89.9	30.2	15.9

Source: NFHS

Table 2.6. Percentage of Households with Improved Water Sources by Geography

IMPROVED	URBAN	RURAL	TOTAL
2005-06	95	84.5	87.9
2015-16	91.1	89.3	89.9

Source: NFHS

Table 2.7. Percentage of Households with Improved Water Sources by Social Group

IMPROVED WATER	SC	ST	OBC	OTHERS	TOTAL
2005-06	89.3	70.4	87.5	91.4	87.6
2015-16	91.5	81.4	90.1	91.2	89.9

Source: NFHS

Table 2.8. Percentage of Households with Improved Water Sources by Religious Group

IMPROVED	HINDU	MUSLIM	CHRISTIAN	SIKH	TOTAL
2005-06	87.1	92.5	74.0	99.1	87.6
2015-16	89.6	92.8	83.7	98.4	89.9

Source: NFHS

Table 2.9. Percentage of Households with Improved Water Sources by Wealth Group

IMPROVED	LOWEST	SECOND	MIDDLE	HIGHER	HIGHEST	TOTAL
2005-06	78.9	85.2	88.5	91.5	94.2	87.6
2015-16	88.6	90.1	89.8	89.9	91.3	89.9

Source: NFHS

Table 2.10. Percentage of Households with Improved, Not Shared Sanitation and Flush Toilet

	IMPROVED, NOT SHARED	FLUSH TOILET
2005-06	29.1	39.1
2015-16	48.4	53.2

Source: NFHS

Table 2.11. Percentage of Households with Improved, Not Shared Sanitation by Geography

	URBAN	RURAL	TOTAL
2005-06	52.8	17.6	29.1
2015-16	70.3	36.7	48.4

Source: NFHS.
Note: flush toilet of all types

SOCIAL GROUPS

Table 2.12: Percentage of Households with Improved, Not Shared Sanitation by Social Group

	SC	ST	OBC	OTHERS	TOTAL
2005-06	18.2	10.5	24.5	46.8	29.1
2015-16	37.2	25.9	48.4	65.7	48.4

Source: NFHS
Note: flush toilet of all types

RELIGIOUS GROUPS

Table 2.13: Percentage of Households with Improved, Not Shared Sanitation by Religious Group

	HINDU	MUSLIM	CHRISTIAN	SIKH	TOTAL
2005-06	27.1	32.0	52.3	56.7	29.1
2015-16	46.4	53.2	67.5	83.6	48.4

Source: NFHS
Note: flush toilet of all types

WEALTH

Table 2.14: Percentage of Households with Improved, Not Shared Sanitation by Wealth Group

	LOWEST	SECOND	MIDDLE	HIGHER	HIGHEST	TOTAL
2005-06	1.3	6.1	15.8	42.3	80.5	29.1
2015-16	6.0	23.1	45.0	74.4	93.4	48.4

Source: NFHS
Note: septic tank and flush

Table 2.15: Average Medical Expenditure Per Hospitalization Case by Type of Hospitalization (INR)

YEAR	AVERAGE EXPENDITURE (CURRENT PRICE)	AVERAGE EXPENDITURE (CONSTANT PRICE: 2004-05)
2004	6,643	6,643
2017	20,135	10,991

Source: National Sample Survey on Social Consumption in India: Health (71st and 75th round) and National Sample Survey on Morbidity and Healthcare (60th round)

Table 2.16: Share of Expenditure from Income and Saving, Borrowing, Sale of Asset

YEAR	INCOME/SAVING (PERCENT)	BORROWING (PERCENT)	SALE (PERCENT)
2004	47.7	45.9	NA
2017	81.0	15.2	0.38

Source: National Sample Survey on Social Consumption in India: Health (52nd, 71st and 75th round) and National Sample Survey on Morbidity and Healthcare (60th round)

Table 2.17: Average Medical Expenditure Per Hospitalization Case by Type of Hospitalization by Geography

YEAR	RURAL	URBAN	TOTAL
	Current Price		
2004	5797	8882	6758
2017-18	16676	26476	20135
	Constant Price: 2004		
2004	5797	8882	6758
2017-18	9103	14452	10991

Source: National Sample Survey on Social Consumption in India: Health (71st and 75th round) and National Sample Survey on Morbidity and Healthcare (60th round)

Table 2.18: Average Medical Expenditure Per Hospitalization Case by Type of Hospitalization, Social Group

YEAR	ST	SC	OBC	OTHERS	TOTAL
	Current Price				
2004	4068	4859	6223	8734	6758
2017-18	12368	16118	18049	26903	20135
	Constant Price: 2004				
2004	4068	4859	6223	8734	6758
2017-18	6751	8798	9852	14685	10991

Source: National Sample Survey on Social Consumption in India: Health (71st and 75th round) and National Sample Survey on Morbidity and Healthcare (60th round)

Table 2.19: Average Medical Expenditure Per Hospitalization Case by Type of Hospitalization, Religion

YEAR	HINDU	MUSLIM	CHRISTIAN	SIKH	TOTAL
	Current Price				
2004	6723	5878	6744	13224	6758
2017-18	20575	15797	22280	28910	20135
	Constant Price: 2004				
2004	6612	5817	6673	12898	6643
2017	11231	8623	12162	15781	10991

Source: National Sample Survey on Social Consumption in India: Health (71st and 75th round) and National Sample Survey on Morbidity and Healthcare (60th round)

Table 2.20: Average Medical Expenditure Per Hospitalization Case by Type of Hospitalization, Consumption Group

YEAR	0-20	20-40	40-60	60-80	80-100	TOTAL
			Current Price			
2004	4012	4891	5236	7591	12845	6758
2017-18	13974	14334	16036	19067	33291	20135
			Constant Price: 2004-05			
2004	4012	4891	5236	7591	12845	6758
2017	7628	7824	8753	10408	18172	10991

Source: National Sample Survey on Social Consumption in India: Health (71st and 75th round) and National Sample Survey on Morbidity and Healthcare (60th round)

Table 2.21: Share of Expenditure from Income and Saving, by Geography

YEAR	RURAL	URBAN	TOTAL
2017-18	79.5	83.8	81.0

Source: National Sample Survey on Social Consumption in India: Health (52nd, 71st and 75th round) and National Sample Survey on Morbidity and Healthcare (60th round)

Table 2.22: Share of Expenditure from Income and Saving, Social Group

YEAR	ST	SC	OBC	OTHERS	TOTAL
2017-18	83.2	79.2	79.8	83.4	81.0

Source: National Sample Survey on Social Consumption in India: Health (52nd, 71st and 75th round) and National Sample Survey on Morbidity and Healthcare (60th round)

Table 2.23: Share of Expenditure from Income and Saving, Religion

YEAR	HINDU	MUSLIMS	CHRISTIAN	SIKH	TOTAL
2017-18	81.1	80.1	77.4	84.3	81

Source: National Sample Survey on Social Consumption in India: Health (52nd, 71st and 75th round) and National Sample Survey on Morbidity and Healthcare (60th round)

Table 2.24: Share of Expenditure from Income and Saving, Consumption Quintile

YEAR	0-20	20-40	40-60	60-80	80-100	TOTAL
2017-18	81.1	80.0	78.8	80.5	84.2	81.1

Source: National Sample Survey on Social Consumption in India: Health (52nd, 71st and 75th round) and National Sample Survey on Morbidity and Healthcare (60th round)

FINANCING FROM BORROWING

Table 2.25: Share of Expenditure from Borrowing, Geography

YEAR	RURAL	URBAN	TOTAL
2017-18	16.8	12.3	15.2

Source: National Sample Survey on Social Consumption in India: Health (71st and 75th round) and National Sample Survey on Morbidity and Healthcare (60th round)

Table 2.26: Share of Expenditure from Borrowing, Social Groups

YEAR	ST	SC	OBC	OTHERS	TOTAL
2017-18	13.2	17.5	16.6	12.2	15.2

Source: National Sample Survey on Social Consumption in India: Health (71st and 75th round) and National Sample Survey on Morbidity and Healthcare (60th round)

Table 2.27: Share of Expenditure from Borrowing, Religion

YEAR	HINDU	MUSLIMS	CHRISTIAN	SIKH	TOTAL
2017-18	15.2	14.7	18.6	14.2	15.2

Source: National Sample Survey on Social Consumption in India: Health (71st and 75th round) and National Sample Survey on Morbidity and Healthcare (60th round)

Table 2.28: Share of Expenditure from Borrowing, Consumption Quintile

YEAR	0-20	20-40	40-60	60-80	80-100	TOTAL
2017-18	14.6	16.3	17.8	15.9	12.2	15.2

Source: National Sample Survey on Social Consumption in India: Health (71st and 75th round)and National Sample Survey on Morbidity and Healthcare (60th round)

Table 2.29: Percentage of Household Members with Insurance

	TOTAL
2005-06	4.9
2015-16	28.7

Source: NFHS

Table 2.30: Percentage of Households with Insurance by Geography

IMPROVED	URBAN	RURAL	TOTAL
2005-06	10.4	2.2	4.9
2015-16	28.2	29.0	28.7

Source: NFHS

SOCIAL GROUP

Table 2.31: Percentage of Households with Insurance by Social Group

	SC	ST	OBC	OTHERS	TOTAL
2005-06	3.4	2.6	3.8	8.1	4.9
2015-16	31.1	30.8	30.5	23.7	28.7

Source: NFHS

RELIGION

Table 2.32: Percentage of Households with Insurance by Religious Group

	HINDU	MUSLIM	CHRISTIAN	SIKH	TOTAL
2005-06	5.1	2.1	7.3	6.6	4.9
2015-16	29.9	20.1	44.6	20.9	28.7

Source: NFHS

WEALTH

Table 2.33: Percentage of Household Members with Insurance by Wealth Group

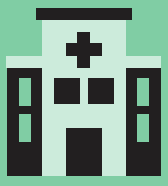
	LOWEST	SECOND	MIDDLE	HIGHER	HIGHEST	TOTAL
2005-06	0.14	0.65	2.2	5.1	16.4	4.9
2015-16	21.6	28.5	32.4	30.6	30.5	28.7

Source: NFHS

CHAPTER 3: IMPACT OF HEALTH INTERVENTIONS IN INDIA

Pravas Ranjan Mishra

KEY FINDINGS



THOUGH THE GAP IN THE INSTITUTIONAL DELIVERY OF RURAL-URBAN, CASTE, RELIGION AND INCOME GROUPS HAS BEEN DECLINING OVER THE DECADE, INEQUALITY PREVAILS ACROSS THESE CATEGORIES.

DESPITE IMPROVEMENT IN CHILD IMMUNIZATION, THE RATE OF FEMALE CHILD IMMUNIZATION CONTINUES TO BE BELOW THAT OF THE MALE CHILD, AND IMMUNIZATION OF CHILDREN IN URBAN AREAS IS MORE THAN IN RURAL AREAS. IMMUNIZATION OF SCs AND STs IS BEHIND THAT OF OTHER CASTE GROUPS.

THE CHILD IMMUNIZATION OF HIGH WEALTH QUINTILE GROUP IS MUCH HIGHER THAN OF LOW WEALTH QUINTILE.

MORE THAN 50 PERCENT OF CHILDREN STILL DO NOT RECEIVE FOOD SUPPLEMENTS IN THE COUNTRY.

THE PERCENTAGE OF MOTHERS WHO HAVE RECEIVED FULL ANTENATAL CARE HAS DECLINED FROM 37 PERCENT IN 2005-06 TO 21 PERCENT IN 2015-16.

FULL ANTENATAL CARE FOR URBAN AREAS IS CLOSE TO TWO TIMES THAT OF RURAL AREAS.

IN THE FIFTY YEARS SINCE INDEPENDENCE, INDIAN HEALTHCARE AND HEALTHCARE DELIVERY SYSTEMS HAVE HAD REMARKABLE SUCCESSES LARGELY DUE TO THE VISION OF EQUITY, INCLUSIVITY AND THE DOMINANT ROLE PLAYED BY THE PUBLIC SECTOR, SPEARHEADED BY THE LEADERSHIP AT THE NATIONAL LEVEL.[1]

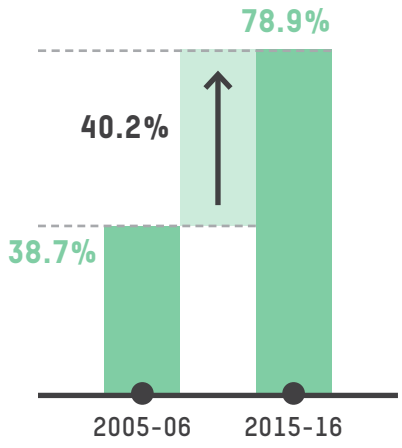
In the last two decades, despite millions of Indians being alleviated from poverty and significant improvement in health systems and health outcomes, health of children and mothers, especially those belonging to vulnerable socioeconomic groups remains a critical area of concern. Even when benchmarked against countries with similar levels of economic development, India is noted as deficient on several critical health indicators.[2]

This chapter attempts to explain the progress and inequalities on health interventions as manifested on the ground. These interventions constitute the inputs that along with environmental parameters, as discussed in the preceding chapter, determine health outcomes. Intervention indicators comprise institutional deliveries, vaccination, ICDS services, anaemia among pregnant women and antenatal care. The analysis in this chapter is also carried out across the socially-defined categories of gender, region, caste, class and religion.

3.1 INSTITUTIONAL AND HOME BIRTHS

Deliveries in hospitals or health centres and those by Skilled Birth Attendants (SBAs) significantly lower the risk of maternal and neonatal deaths, attributable to prematurity, intrapartum or postpartum complications. The share of institutional deliveries in India has increased from 38.7 percent in 2005-06 to 78.9 percent in 2015-16, indicating a rise of 40.2 percent in a decade.

THE SHARE OF INSTITUTIONAL DELIVERIES IN INDIA HAS INCREASED FROM 38.7 PERCENT IN 2005-06 TO 78.9 PERCENT IN 2015-16, INDICATING A RISE OF 40.2 PERCENT IN A DECADE.



This increase in institutional deliveries can be attributed to implementation of various schemes like the JSSK (Janani Shishu Suraksha Karyakram), National Ambulance services, and Mother–Child tracking system under the National Rural Health Mission (NRHM) during this period, as discussed in the chapter on policies and programmes.[3]

3.1.1 GEOGRAPHY:

However, recently released NFHS-5 data for 17 states and 5 union territories suggests there are interstate variations in the institutional deliveries.

INSTITUTIONAL BIRTHS IN ST HOUSEHOLDS WAS 15 PERCENT BELOW THE GENERAL CATEGORY IN 2015-16. THERE IS A 35 PERCENT GAP IN INSTITUTIONAL BIRTHS BETWEEN THE LOWEST AND HIGHEST 20 PERCENT WEALTH QUINTILE GROUPS IN 2015-16.

In the states of Kerala and Goa, and the union territories of Lakshadweep and Andaman & Nicobar Islands, the percentage of institutional births is above 99 percent. On the other hand, in Bihar, only about 76 percent of the births were institutional—the least among states excluding the north-eastern states. Except for Sikkim, all the remaining north-eastern states reported less than 90 percent institutional deliveries[4]. This can be attributed to a lack of basic health facilities in these northeastern states and Bihar.

Despite this improvement, institutional delivery rate is higher in urban than rural areas. The figures for rural and urban areas in 2015-16 are 89 and 75 percent, respectively. The findings of NFHS-5 for some states also suggests that there is a rural–urban divide in institutional deliveries.

The percentage of institutional births in urban parts of Mizoram was 98.8 percent whereas in the rural areas it was 72.5 percent, which is among the lowest. Meanwhile, in Nagaland, the only state with less than 80 percent institutional births, the share of such births in urban areas is 65 percent compared to just 38.8 percent in rural areas.

Social groups: Though institutional births for SC and ST households have shown remarkable improvement from 2005-06 to 2015-16, inequality persists with ST households 33 percent below the general category in the year 2005-06. This gap has declined to 15 percent by 2015-16.

3.1.2. RELIGION:

In terms of religious categories, too, we can see incidences of inequality as Muslim households have lower institutional births as compared to other religious groups. This can be explained partially in terms of lower access of Muslims to public healthcare system. Though there has been a significant improvement since the previous decade, a gap of at least 10 percent prevails.

3.1.3 WEALTH GROUPS:

Among the wealth quintiles, there is a 35 percent gap in institutional births between the lowest and highest 20 percent wealth quintile groups in 2015-16. Though this is significant, it is an improvement from 2005-06 when the gap was double at 71 percent, highlighting the stark inequality in access to healthcare among the rich and the poor.

Thus, though the gap in the institutional delivery of rural-urban, caste, religion and income groups has been declining over the decade, inequality does prevail.

3.2. IMMUNIZATION

Apart from ensuring safe delivery, immunization is the most cost effective way to reduce child mortality rate. Children's vaccination, and in particular measles and tetanus vaccination, is associated with substantial reductions in child mortality. It is estimated that children in clusters with complete vaccination coverage have a relative risk of mortality that is 0.73 times less than that of children in a cluster with no vaccinations.[5]

National Health Policy (NHP) (2002) envisages an adequate, affordable and sustainable standard of health for the total population. Provision of universal immunization of children against preventable diseases is one of the major components of this policy. The Government of India had launched Mission Indradhanush in December 2014 with the target to fully immunize 90 percent of children, focusing on districts having low coverage and situated in hard-to-reach areas.

To further intensify the immunization programme, the Government of India implemented the Intensified Mission Indradhanush (IMI) on 8 October 2017 with the goal to improve immunization coverage in select districts and cities to ensure full immunization to more than 90 percent by December 2018. The Government of India has introduced IMI 2.0 to achieve further reductions in deaths among children under five years of age, and achieve the Sustainable Development Goal (SDG) of ending preventable child deaths by 2030.

The objective of this programme is to ensure reaching the unreached with all available vaccines and accelerate the coverage of children and pregnant women in 272 districts in 27 states and at block level (652 blocks) in Uttar Pradesh and Bihar among hard-to-reach and tribal populations from December 2019 to March 2020.[6] The NHP (2017)[7] has also reiterated the target to fully immunize more than 90 percent of newborns up to one year of age by 2025.

The number of fully immunized children aged 12-23 months, as reported in NFHS-3 was 43.5 percent in 2005-06. However, NFHS-4 records 62 percent of the children as fully immunized in 2015-16, indicating significant scaling up of the operations for immunization.

NFHS-5 has recorded substantial improvement of full immunization drive among children aged 12-23 months across states/ UTs/ districts. In almost three-fourths of districts, 70 percent or more children aged 12-23 months are fully immunized against diseases. This can be attributed to the flagship initiative of Mission Indradhanush launched by the government since 2015.[8]

3.2.1 GENDER:

The percentage of children aged 12-23 months fully immunized does not witness a huge gender gap. Furthermore, the gap has declined over the years, and has dropped to 0.2 percent by 2015-16. Though the inequality of immunization has declined over the years, the rate of female child immunization continues to be below that of the male child.

3.2.2 GEOGRAPHY:

Though, there has been improvement in child immunization in both rural and urban areas over the years 2005-06 and 2015-16, immunization of children in urban areas is more than that in rural areas.

3.2.3. SOCIAL GROUPS:

A similar trend is observed among the social groups. SC households remained below the national average till 2005-06 but surpassed it in 2015-16 by 1.2 percent. However, immunization in ST households is still 6.2 percent below the average despite a significant improvement from 31.3 percent in 2005-06 to 55.8 percent in 2015-16. Immunization of SCs and STs is lagging behind that of the other caste groups in these two years, that is, 2005-06 and 2015-16.

IMMUNIZATION IN ST HOUSEHOLDS IS 6.2 PERCENT BELOW THE NATIONAL AVERAGE.

3.2.4. RELIGION:

Muslims are also lagging behind the national average at different points of time under consideration but the gap from the average is steadily declining. The rate, however, is the lowest across all socio-religious groups, being lower than those of SC and ST population as well. Lagging behind in vaccinations can be harmful, as they protect children from life threatening illnesses like polio, measles, rubella, diphtheria, tetanus, etc.

3.2.5. WEALTH GROUPS:

The percentage of fully immunized children has gone up over the years but the rate varies across the three wealth quintiles. The percentage of child immunization for the lowest wealth quintile was 24.4 percent in 2005-06. It increased to 52.8 percent indicating improvement in immunization status. Though, there is

decline of 1 percent in child immunization of highest wealth quintile group between the years 2005-06 and 2015-16, it is still is 16 percent higher than the lowest wealth quintile. This indicates prevalence of inequality in child immunization across different wealth groups.

3.3. CHILD HEALTH AND DEVELOPMENT

ICDS has been one of the successful intervention programmes of the government of India. Improvement in the health and nutritional status of children of 0–6 years and pregnant and lactating mothers through provision of food supplements is the key objective of the mission.

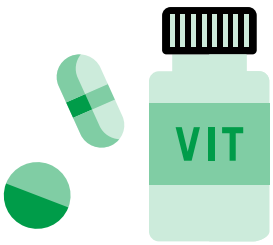
Following the objectives of the National Policy for Children in 1974, the ICDS programme was launched on 2 October 1975 to provide a set of services to children between zero to six years of age, and to pregnant and lactating mothers. Nutritional norms were defined for malnourished children. In 2005-06, NFHS-3 indicated change in the calorie and nutritional requirements of children, which had been decided during 1975.

As per NFHS-3 in 2005-06, only 11.9 percent children received food supplements as a part of the ICDS programme. It has gone up sharply to 48.1 percent in 2015-16. Although improvement over the situation prevailing in 2005-06 is discernible, more than 50 percent of children are still not receiving food supplements in the country.

3.3.1 GEOGRAPHY:

Children receiving food supplements under ICDS has increased in rural and urban areas. However, the increase has been rather unequal. The rural-urban gap was only 1.1 percent in 2005-06, which reached 17.4 percent by 2015-16. The food supplements received by urban children is less than that received by children in rural areas.

MORE THAN 50 PERCENT OF CHILDREN ARE NOT RECEIVING FOOD SUPPLEMENTS IN THE COUNTRY.



3.3.2. SOCIAL GROUPS:

Food supplements received by SC and ST households continue to remain above the average and the gap from the average has risen from 2005-06 to 2015-16. This is also because of a high incidence of overlap between children who are poor and children who belong to marginalised castes. Nonetheless, it is evident that a significant percentage of children are not receiving food supplements under ICDS.

3.3.3. RELIGION:

Among religious groups, Muslims lag behind the overall average. Almost 40 percent Muslim children received food supplements in 2015-16, but the magnitude of the improvement from 2005-06 was less among Muslims than Hindus and Christians. The percentage among Christians was higher than the overall average in 2015-16.

3.3.4. WEALTH GROUPS:

The inequality in receiving food supplements is significant among wealth groups also. However, the percentage is lowest for the highest wealth group and highest in the middle wealth group. The period during 2005-06 and 2015-16 witnessed improvement among wealth groups also but disparities followed a similar pattern. Percentage of children in the middle wealth group receiving food supplements was highest followed by the bottom and highest wealth group, in that order.

3.4. MATERNAL HEALTH

Maternal health is another area of policy concern in the context of fighting malnutrition and improving health outcomes of mother and child. There are several factors affecting the maternal health outcomes. Nutritional status of women is one of the significant ones. In 1998-99, 26.5 percent of pregnant women were anaemic, which increased alarmingly to 57.9 percent in 2005-06.[9] It has declined to 50.5 percent in 2015-16. One in every two pregnant women in India being anaemic poses a serious health challenge, both for the mother and the child.

3.4.1. GEOGRAPHY:

In the years 2005-06 and 2015-16, the number of pregnant anaemic women in rural areas was more than the urban areas. It is also found that the gap between rural and urban areas is increasing for the above mentioned years. Pregnancy and childbirth complications are the leading causes of maternal mortality worldwide, as an estimated 810 women lose their lives daily from preventable pregnancy and/or childbirth-related causes.

Over 94 percent of those maternal deaths occur in low- and middle-income countries (including India).[10] Many are due to a lack of appropriate care during pregnancy and childbirth and because of inadequate services for identifying and managing complications. Antenatal care check-ups and medical follow-ups are extremely important for the health of both mother and child. Unfortunately, there has not been significant progress made in this regard. The percentage of mothers who have received full antenatal care has declined from 37 percent in 2005-06 to 21 percent in 2015-16.

Rural-urban gap in full antenatal care was 33.7 percent during the year 2005-06. Though, during 2015-16, the gap significantly declined to 15 percent, full antenatal care for urban areas is close to two times of the rural areas.

810 WOMEN LOSE THEIR LIVES DAILY FROM PREVENTABLE PREGNANCY AND/OR CHILDBIRTH-RELATED CAUSES.

3.5. WHERE DO WE GO FROM HERE?

The importance of equitable access is also underlined in Goal 10 of the SDGs.[11] Health input indicators determine long-term health outcomes. Thus, equality in the health inputs for different marginalised groups is the prerequisite for attainment of sustainable development. The analysis depicted the existence of inequality among different religious groups.

Despite significant improvement in most of the intervention indicators, Muslims are lagging behind in institutional birth and child nutrition programmes. Though, improvement has taken place, STs and SCs are still behind the national average of immunization.

Rural-urban inequality in full antenatal care has been increasing over the last decade. Though there is a decreasing gap among wealth quintiles, stark inequality has been observed in immunization. Thus, these evidences of inequality indicators would certainly create hurdles in facing health emergencies like COVID-19 in India.

REFERENCES

1 Thomas and Sudhakar, (2000), 'Health-care inequalities: an Indian perspective', *The Lancet*, December, accessed on 21 February 2021, https://www.thelancet.com/pdfs/journals/lancet/PIIS014067360092021X.pdf

2 NITI Aayog, World Bank and MoHFW, (2019), 'Healthy States, Progressive India', accessed on 21 February 2021, http://social.niti.gov.in/uploads/sample/health_index_report.pdf

3 Janani Shishu Suraksha Karyakaram (JSSK) was launched by the Government of India in June 2011 to eliminate OOPEs for both pregnant women and sick infants, MCTS cell has been established at NIHFW from 1 October 2012. The cell has been working under the Statistics & Demography Department with the guidance and direction of MoHFW and NIHFW.

4 Mohan, Pavitra. K., (2020), 'NFHS-5: Share of Institutional Births & C-Sections increase in most States', accessed on 20 February 2021, https://factly.in/nfhs-5-share-of-institutional-births-c-sections-increase-in-most-states/

5 McGovern, Mark E. and David Canning (2015), 'Vaccination and All-Cause Child Mortality from 1985 to 2011: Global Evidence From the Demographic and Health Surveys', accessed on 20 February 2021, https://www.ncbi.nlm.nih.gov/pmc/articles/PMC4757942/

6 National Health Portal, Government of India, accessed on 20 February 2021, https://www.nhp.gov.in/mission-indradhanush1_pg

7 MoHFW, Government of India, (2017), 'National Health Policy', accessed on 21st February 2021, Link: https://www.nhp.gov.in/nhpfiles/national_health_policy_2017.pdf

8 Accessed on 20 February 2021, https://pib.gov.in/PressReleasePage.aspx?PRID=1680702

9 GoI (2007), National Family Health Survey (NFHS-3), India; 2005- 2006. Ministry of Health and Family Welfare Government of India. International Institute for Population Sciences, accessed on 24 February 2021. Data is available for 2005-06, but published in 2007. Available from: http://www.rchiips.org/NFHS/pdf/India

10 World Health Organization, (2019), 'Maternal Mortality', accessed on 21 February 2021, https://www.who.int/en/news-room/fact-sheets/detail/maternal-mortality

11 United Nations, Sustainable Development Goals, accessed on 21 February 2021, https://www.un.org/sustainabledevelopment/development-agenda/

ANNEXURES

Table 3.1. Percentage of Institutional to Total Deliveries by Residence

YEARS	URBAN	RURAL	ALL
2005-06	67.5	28.9	38.7
2015-16	88.7	75.1	78.9

Source: NFHS

Table 3.2. Institutional Births by Caste

YEARS	SC	ST	OBC	OTHER	DON'T KNOW	TOTAL
2005-06	32.9	17.7	37.7	51	43.4	38.7
2015-16	78.3	68	79.8	82.9	73.6	78.9

Source: NFHS

Table 3.3. Institutional Births by Religion

YEARS	HINDU	MUSLIM	CHRISTIAN	TOTAL
2005-06	39.1	33	53.4	38.7
2015-16	80.8	69.2	78.5	78.9

Source: NFHS

Table 3.4. Institutional Births by Wealth

YEARS	LOWEST	SECOND	MIDDLE	FOURTH	HIGHEST	TOTAL
2005-06	12.7	23.5	39.2	57.9	83.7	38.7
2015-16	59.6	75.1	85	90.5	95.3	78.9

Source: NFHS

Table 3.5. Child Immunization by Sex

YEARS	MALE	FEMALE	TOTAL
2005-06	45.3	41.5	43.5
2015-16	62.1	61.9	62

Source: NFHS

Table 3.6. Child Immunization by Residence

YEARS	RURAL	URBAN	TOTAL
2005-06	38.6	57.6	43.5
2015-16	61.3	63.9	62

Source: NFHS

Table 3.7. Child Immunization by Caste

YEARS	SC	ST	OBC	OTHERS	TOTAL
2005-06	39.7	31.3	40.7	53.8	43.5
2015-16	63.2	55.8	61.9	64.5	62

Source: NFHS

Table 3.8. Child Immunization by Religion

YEARS	HINDU	MUSLIM	CHRISTIAN	TOTAL
2005-06	44.4	36.3	56.3	43.5
2015-16	63	55.4	61.7	62

Source: NFHS

Table 3.9. Child Immunization by Wealth

YEARS	LOW	MEDIUM	HIGH	TOTAL
2005-06	24.4	46.9	71	43.5
2015-16	52.8	64.2	70	62

Source: NFHS

Table 3.10 Food Supplements Received in All NFHS Rounds

YEARS	RURAL	URBAN	TOTAL
2005-06	12.1	11	11.9
2015-16	53	35.6	48.1

Source: NFHS

Table 3.11. Food Supplements Received by Caste

YEARS	SC	ST	OBC	OTHER	TOTAL
2005-06	14.4	15.6	9.9	11.5	11.9
2015-16	53.2	60.4	45.6	42.7	48.1

Source: NFHS

Table 3.12. Food Supplements Received by Religion

YEARS	HINDU	MUSLIM	CHRISTIAN	TOTAL
2005-06	12.2	9.9	11.5	11.9
2015-16	49.3	40.4	53.2	48.1

Source: NFHS

Table 3.13. Food Supplements Received by Wealth

YEARS	LOW	MEDIUM	HIGH	TOTAL
2005-06	10.7	13.8	6	11.9
2015-16	47.8	54.6	31.1	48.1

Source: NFHS

Table 3.14. Anaemic Pregnant Women by Residence

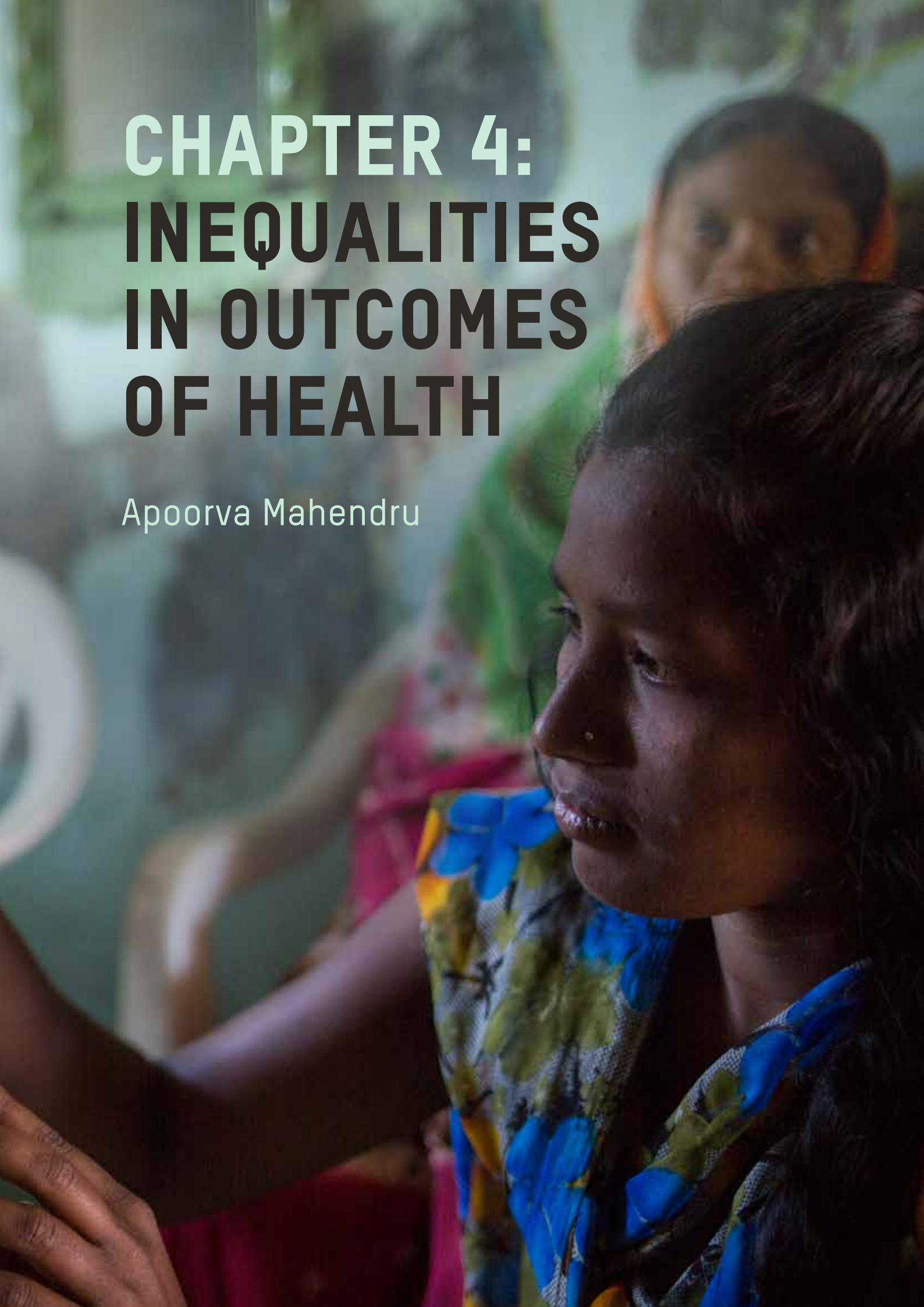
YEARS	RURAL	URBAN	TOTAL
2005-06	59	54.6	57.9
2015-16	52.2	45.8	50.5

Source: NFHS

Table 3.15. Full Antenatal Care by Residence

YEARS	RURAL	URBAN	TOTAL
2005-06	27.7	62.4	37
2015-16	16.7	31.1	21

Source: NFHS



CHAPTER 4: INEQUALITIES IN OUTCOMES OF HEALTH

Apoorva Mahendru

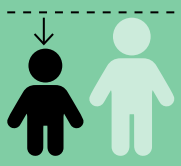
KEY FINDINGS

THE TFR IS ALMOST 2.1 AND MEETS THE STANDARDS OF THE REPLACEMENT FERTILITY LEVEL.

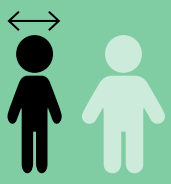
TEENAGE CHILDBEARING HAS GONE DOWN SIGNIFICANTLY FROM 16 PERCENT IN 2005-06 TO 8 PERCENT IN 2015-16: A 50 PERCENT DECLINE.

OVER THE COURSE OF 10 YEARS, PEOPLE NOT AVAILING MEDICAL SERVICES HAS DECLINED FROM 15.1 TO 12.4 OUT OF EVERY 1000, REFLECTING AN 18 PERCENT INCREASE IN INDIANS SEEKING SOME FORM OF HEALTHCARE WHEN THEY REPORT BEING SICK.

IMR HAS DROPPED TO 32 IN 2018, WHICH IS CLOSER TO THE WORLD AVERAGE OF 28.9. UNDER-FIVE MORTALITY RATE (U5MR) HAS DROPPED TO 36 IN 2018, CLOSE TO THE WORLD AVERAGE OF 38.6.



THE DIFFERENCE BETWEEN STUNTED CHILDREN IN SC AND ST HOUSEHOLDS AND THOSE IN HOUSEHOLDS BELONGING TO THE GENERAL CATEGORY IS 12.6 AND 13.6 PERCENT, RESPECTIVELY.



PERCENTAGE OF WASTED CHILDREN (DEFICIENT IN WEIGHT-FOR-HEIGHT) HAS INCREASED FROM 19.8 TO 21 PERCENT BETWEEN 2005-06 AND 2015-16.

ONE IN EVERY TWO CHILDREN ARE ANAEMIC IN INDIA (50 PERCENT), WITH THREE OUT OF EVERY FIVE CHILDREN ANAEMIC IN SC AND ST HOUSEHOLDS (60 PERCENT).

HEALTH OUTCOMES ARE A PRODUCT OF DETERMINANTS AND INPUTS THAT CONTRIBUTE TO THE HEALTH STATUS OF INDIVIDUALS. ALONG WITH ONE'S ENVIRONMENT, ACCESS TO PUBLIC HEALTHCARE SYSTEMS POSITIVELY AFFECT HEALTH OUTCOMES.

That being said, one can observe high incidences of inequality in health outcomes in a country. This is due to the social gradient in health, which refers to a phenomenon where people with stronger socioeconomic backgrounds have better health than those who are less advantaged.[1] This is essentially a Western construct,[2] and it is only recently that developing countries are starting to investigate it.

India, for instance, has a paucity of disaggregated data. However, the general trend that we observed in the previous two chapters, also supported by various studies, is that the general category is higher on the social ladder than the SCs and STs, Hindus are better off than Muslims, the rich are better off than the poor, men are better off than women, and the urban population is better off than the rural population on various health indicators.[3]

This chapter, thus, examines the outcomes in health, building on the health status discussed in Chapters 2 and 3, to gauge the progress that India has made in the last 10 years. The idea that spearheads this discussion is that social gradient is an impediment to equitable growth in the country.

4.1. LIFE EXPECTANCY

The analysis begins with life expectancy—one of the most frequently used indicators for determining the health status in a country. In 10 years between 2005 and 2015, life expectancy in India has improved by four years, from 65 to 69 years. This increase can be attributed to higher earnings, better standards of living and improvements in most of the indicators of health, education and basic amenities.[4] However, the increase in life expectancy is not uniform across all population sub-groups.

4.1.1. GENDER:

Life expectancy of females in India is higher than that of males as is the case in most countries. While male life expectancy went up by 3.2 years in 10 years to 66.9, female life expectancy went up by 3.5 years to 70. The gap between male and female life expectancy has also increased from 2.8 to 3.1 years. Studies[5] confirm the growing health advantage of Indian females over males since the 1980s. This is attributed to external and non-communicable disease related mortality among adult and elderly males.

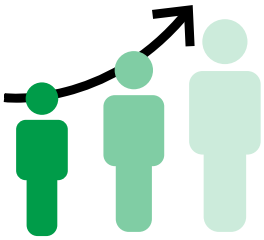
4.1.2. GEOGRAPHY:

Life expectancy in urban areas is higher than rural areas. However, the urban-rural gap has reduced over the last 10 years. A gap of 5.2 years in 2005 has reduced to 4.8 years by 2015.

4.1.3. WEALTH GROUPS:

Inequality is even starker by wealth quintiles. Using temporal data for the period 2011-15, an analysis[6] of inequality in life expectancy at birth in India reveals

RICH, ON AVERAGE, LIVE 7.5 YEARS MORE THAN THE POOR. SIMILARLY, ON AVERAGE, AN UPPER CASTE WOMAN LIVES 15 YEARS LONGER THAN A DALIT WOMAN.



that life expectancy based on wealth is 65.1 years for the bottom 20 percent of the households, while it is 72.7 years for the top 20 percent, with a difference of 7.6 years. The rich, on an average, live seven and a half years more than the poor. Similarly, on an average, an upper caste woman lives 15 years longer than a Dalit woman.[7] These glaring inequalities in life expectancy highlight the social gradient in health.

4.2. FERTILITY

Increasing life expectancy tends to be accompanied by a falling TFR known as 'The Demographic Stretch of the Arc of Life' where countries shift from high to low levels of mortality and fertility.[8] Studies[9] also suggest that while education is one of the foremost determinants of declining fertility, low levels of child mortality coupled with a preference for a male child, also contribute to the fall in fertility rate.

The TFR, which refers to the total number of children expected to be born to a woman in her lifetime, as per the current age specific fertility rates, has seen a dramatic reduction over the years.[10] The TFR is almost 2.1 and, therefore, meets the standards of the replacement fertility level.[11]

Fertility rates in a country are closely related to the inherent social and cultural norms[12] due to which a difference in the fertility rates across various groups can be observed.

4.2.1. GEOGRAPHY:

For instance, while TFR has declined in rural and urban areas alike, even in 2015-16 rural TFR was 2.4, about 40 percent higher than urban TFR. This fits the conventional behaviour of TFR, which is inversely related to the socioeconomic condition of any community, explaining the existing inequality in fertility rates. Additionally, improved healthcare and SRHR allow women to control childbirth and/or have children later in life.[13]

4.2.2. SOCIAL GROUPS:

Similar trends for caste and religious groups can be observed. Even though all caste groups have witnessed a decline in their TFR from 2005-06 to 2015-16, STs have the highest fertility rate at 2.5, followed closely by SCs and OBCs at 2.3 and 2.2, respectively, while the general category has the lowest at 1.9.

4.2.3. RELIGION:

Similarly, Muslims have the highest TFR at 2.6, while TFR for Hindus, Christians and Sikhs is 2.1, 2 and 1.6, respectively. The high rates of fertility in Muslim women is a result of lower level of power and autonomy among them, reflecting more rigid forms of patriarchy among Muslim communities. Muslim households are also consistently less likely to use contraception.[14]

STs HAVE THE HIGHEST FERTILITY RATE AT 2.5, FOLLOWED CLOSELY BY SCs AND OBCs AT 2.3 AND 2.2, RESPECTIVELY, WHILE THE GENERAL CATEGORY HAS THE LOWEST AT 1.9.

The reasons for the overall reduction in TFR are manifold, including delayed childbearing. Teenage childbearing has gone down significantly in recent years, which is a huge feat as younger maternal age is associated with lower birth-weight, adult height, and gestational age.[15] The percentage of women in the age group of 15 to 19 reportedly being mothers or pregnant has dropped down from 16 percent in 2005-06 to 8 percent in 2015-16, a 50 percent decline. There are clear disadvantages in terms of health outcomes for teenage childbearing and continued measures to delay the first pregnancy should be undertaken.

4.3. MORBIDITY

The status of chronic ailments and their treatments indicate the resilience of healthcare systems and the effectiveness of health interventions. Evidence suggests that as income increases in developing economies, people seeking care for ailments also increase.[16] Over the course of 10 years, Indians seeking some form of healthcare when they report being sick has increased by 18 percent.[17]

A similar trend in medically treated cases of TB can be seen as well. India has the largest number of TB deaths in the world with more than 1200 people dying every day,[18] higher than the deaths caused by COVID-19 so far. Percentage of TB cases being medically treated has increased from 93.9 percent to 96.5 percent in 10 years.

4.3.1. GENDER:

The prevalence of TB has been higher in males than females in the past decade. The percentage of those receiving medical treatment is also higher for males. Inequality was higher between males and females in 2005-06 with a 4 percent difference in cases of TB that got medically treated. This gap has significantly narrowed to 0.7 percent difference by 2015-16.

4.3.2. GEOGRAPHY:

The number of cases of TB in rural areas is also higher than that in urban areas, though this gap has been reducing over the years. There was a gap of 3.2 percent in 2005-06 but by 2015-16, only a gap of 0.7 percent remained, reflecting declining inequalities due to increased health awareness and access.

4.4. CHILD MORTALITY

IMR and U5MR determine the probability of a child's survival and directly affect life expectancy. They also reflect the social, economic and environmental conditions in which children (and others in the society) are growing up.[19]

4.4.1. IMR

Over the span of the last 10 years, the IMR, defined as deaths per 1,000 live births of children under one year of age, has dropped from 57 in 2005-06 to 40.7 in 2015-16. The latest data from the Registrar General of India shows that it dropped to 32 in 2018, which is closer to the world average of 28.9[20]. However, India is far behind the UN's SDG 3, which stipulated IMR target

ONE IN EVERY 31 INFANTS STILL DIE WITHIN THEIR FIRST YEAR.

THOUGH IMR HAS WITNESSED SIGNIFICANT DECLINE IN TWO YEARS, SCs STILL HAVE IMR 13.1 HIGHER THAN THE GENERAL CATEGORY, WHILE INFANT DEATHS IN STs ARE 12.3 MORE.

for 2020 as eight per thousand live births.[21] It is of grave concern that one in every 31 infants still dies within their first year.

4.4.1.1. Gender:

The IMR for male infants is higher than female infants in 2015-16 by 5.4, while it was higher for females in 2005-06 by 1.4.

4.4.1.2. Geography:

Rural IMR is worse than urban. For every two infant deaths in urban areas, there are three infant deaths in rural areas. This data shows that the urban-rural inequality is yet to be bridged though IMR has declined in urban and rural areas alike.

4.4.1.3. Social groups:

IMR is worst for SCs, followed by STs, OBCs and then the general category. Though IMR has witnessed significant decline in two years, SCs still have a 13.1 higher IMR than the general category, while infant deaths in STs are 12.3 more.

4.4.1.4. Religion:

The IMR by religion shows that it is the highest for Hindu households, followed by Muslim households, with Sikhs and Christians having relatively lower IMR. IMR by Hindu households is 1.6 times higher than Muslims at 41.6 and 40 for Hindu and Muslims, respectively in 2015-16. Christian and Sikh households had IMR at 25 and 29.7 respectively.

4.4.1.5. Wealth groups:

The IMR by wealth shows increasing inequality as we move from high to low wealth categories. Though there has been a notable decline over the last one decade, infant deaths in bottom 20 percent households is still close to three times of the IMR of top 20 percent households. The gap between the bottom and the top wealth quintile has decreased from 41.2 to 36.5 during 2005-06 and 2015-16.

4.4.2. U5MR

U5MR, defined as the deaths per 1,000 live births of children below five years of age, has dropped from 74.3 in 2005-06 to 49.7 in 2015-16. The latest data from the Registrar General of India shows that it has further dropped to 36 in 2018, below the world average of 38.6.[22] India's National Health Profile has set a target for U5MR of 23 to be achieved by 2025.[23] U5MR needs to reduce further by about one-third of its latest estimates in the next five years to meet the national targets.

4.4.2.1. Gender:

The U5MR for males was slightly higher than females dropping from 9.5 in 2005-06 to 3.7 in 2015-16.

4.4.2.2. Geography:

The urban-rural inequality is more significant for U5MR. Throughout the decade, there have been 16 under-five deaths in rural areas for every 10 deaths in urban areas.

THROUGHOUT THE DECADE, THERE HAVE BEEN 16 UNDER-FIVE DEATHS IN RURAL AREAS FOR EVERY 10 DEATHS IN URBAN AREAS.

4.4.2.3. Social groups:

The U5MR was highest for STs. Between 2005-06 and 2015-16, U5MR declined by 32.2 for SCs and 38.5 for STs. U5MR for SCs, STs, OBCs remains higher than the general category by at least 12.

4.4.2.4. Religion:

Similar to IMR, U5MR is also highest for Hindu households, followed very closely by Muslim households, and has reached almost at the average U5MR levels by 2015-16. Child mortality in Hindu households is higher for those belonging to SC or ST than other Hindu households.[24] This intersection between religion and social groups has caused high incidences of child mortality in Hindu households.

4.4.2.5. Wealth groups:

In terms of wealth, there has been a constant decline in U5MR from 2005-06 to 2015-16. The gap between the bottom and top wealth quintile reduced from 66.7 percent to 49.1 percent during the last one decade. Though this is a significant decline, this prominent difference in U5MR points to the stark inequalities that exist between the rich and the poor. In spite of the government's efforts to improve availability and quality of health, public health services are utilized by economically better-off groups more than disadvantaged ones.[25] Additionally, the U5MR among the bottom wealth quintile is far higher than the overall U5MR.

4.5. CHILD NUTRITION

According to the *Global Nutrition Report 2018*, India is home to almost one-third of all the wasted and stunted children in the world. Nigeria, on second position, has four times less number of wasted and stunted children as compared to India.

4.5.1. STUNTING

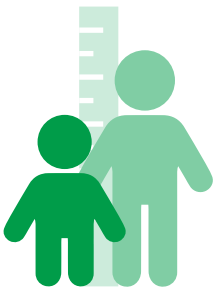
One of the causes of child mortality can be a lack of nutrition.[26] The nutritional status of children and deficiencies in child growth can be assessed through incidence of stunting, wasting, etc., which also indicate inequalities in human development.[27] Children with growth retardation are at a higher risk of suffering from illnesses or death.

4.5.1.1. Geography:

The percentage of stunted[28] children (deficient in height-for-age) has decreased from 48 percent to 38.4 percent between 2005-06 and 2015-16 in India. However, there still exists a gap between the percentage of stunted children in urban and rural areas, which has increased over time. For every 10 children who are stunted in urban areas, there were 13 rural children in 2005-06 and 2015-16.

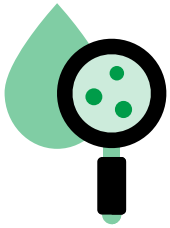
4.5.1.2. Social groups:

The percentage of stunted children in SC and ST households have been the highest as compared to other castes. The difference between stunted children in SC and ST households and those in households belonging to the general category is 12.6 and 13.6 percent, respectively.



THE DIFFERENCE BETWEEN STUNTED CHILDREN IN SC AND ST HOUSEHOLDS AND THOSE IN HOUSEHOLDS BELONGING TO THE GENERAL CATEGORY IS 12.6 AND 13.6 PERCENT, RESPECTIVELY.

EVEN AS LATE AS 2015-16, AT LEAST 50 PERCENT OF CHILDREN WERE ANAEMIC, IRRESPECTIVE OF THE INCOME OF THE HOUSEHOLD.



4.5.1.3. Religion:

For religious minorities, the percentage of stunted children are highest in Muslim households, followed closely by Hindu households. Inequality can be observed especially when compared to percentage of children stunted in Christian and Sikh households, where difference from average is of 8.5 and 15 percent, respectively.

4.5.1.4. Wealth groups:

In terms of wealth, there is a stark difference in stunted children in top and bottom 20 percent. In 2005-06 and 2015-16, percentage of stunted children in bottom 20 percent is more than double the percentage of stunted children in top 20 percent.

4.5.2. WASTING

Growth retardation can be in the form of deficiency in height as mentioned above or can be in the form of deficiency of weight, measured by percentage of children wasted in the country, a matter of great concern in India.

The percentage of wasted[29] children (deficient in weight-for-height) has increased from 19.8 to 21 percent between 2005-06 and 2015-16. Given that nutrition coverage through ICDS and immunization has increased, an increase in the percentage of wasted children indicates a gap in government interventions towards improving child health to effectively penetrate the lowest rungs of the population.

4.5.2.1. Geography:

Wasted children are also higher for rural areas as compared to urban areas, though by 2015-16 only a gap of 1.4 percent remained.

4.5.2.2. Social groups:

Percentage of wasted children have been highest in ST households, a gap of 8.4 percent from the general category while children wasted in SC households have been 2.2 percent higher.

4.5.2.3. Religion:

In terms of religion, we observe only slight differences, with highest wasted children being in Hindu households and lowest in Sikh households with a gap of 4.9 percent from the average.

4.5.2.4. Wealth groups:

In terms of wealth quintiles, there is a difference of 6.3 percent between the percentage of wasted children in bottom 20 and top 20 wealth quintiles.

4.5.3. ANAEMIA

On a positive note, the percentage of anaemic children is on a decline, down from 69.5 in 2005-06 to 58.5 in 2015-16. However, one in every two children remains anaemic.

4.5.3.1. Geography:

Rural areas have higher percentage of anaemic children than urban areas. In 2005-06, the rural-urban gap was of 8.5 percent, which declined to 3.5 percent by 2015-16.

4.5.3.2. Social groups:

Percentage of anaemic children is highest in ST households, followed by SC households, a difference

of 9.1 and 6.4 percent from the general category, respectively, with three out of five children anaemic in SC and ST households.

4.5.3.3. Religion:

Among religious categories, we do not see a huge difference in anaemic children, except in Christian households where percentage of anaemic children is lower than average by 13.7 percent.

4.5.3.4. Wealth groups:

In terms of wealth, percentage of anaemic children is higher in low-income households. The gap between the bottom and top 20 percent of households was of 12.2 percent in 2015-16, down from 20.2 percent in 2005-06. But even as late as 2015-16, at least 50 percent of children were anaemic, irrespective of the income of the household.

4.6. THERE IS HOPE YET

India has witnessed improvements in its health outcomes since the last decade. The increase in life expectancy and the decline in incidences of TB as an indicator of general health shows better living standards. The outcome indicators of child mortality and nutrition have shown improvements but there is still a long way to go. Wasting has worsened in the last decade and anaemia among children is still prevailing at an alarming rate.

Over the last decade, there have been considerable improvements in health outcomes across all socioeconomic categories. There has been commendable improvement in TFR and teenage childbearing over the years. Percentage of cases of TB that have been medically treated also increased. Such improvements in health outcomes can be attributed to increased awareness through education among citizens.[30] The general trend is that performance of indicators is better for males as compared to females. While the gap is declining, high incidences of inequality persist with marginalised groups being worse off compared to the privileged.

4.7. INEQUALITY IN HEALTH

Chapters 2, 3 and 4 have traced the progress of health status in India in the last decade. While female literacy rate has improved over the decade, share of women decreasing as one moves to higher levels of education is a cause of serious concern. Girls' education has a direct bearing on improving health outcomes at the household level.

Increase in literacy rate has been accompanied by declining TFR, increased infant immunization and a decline in percentage of adolescent mothers, further supporting the linkages between girls' education and improved health status. Access to water and sanitation has increased too, however, more than half the households do not have access to improved forms of sanitation.

Financing healthcare expenditure poses a huge burden on households, due to which the marginalised have weaker health-seeking behaviour. Moreover, savings constitute 81 percent of the share of hospitalization expenditure, while one in every INR six spent on hospitalization is still through borrowing.

More than two-thirds of households are not covered by any insurance. However, with more than 50 percent

of the OOPE being spent on purchasing medicines and another 10 percent in medical and diagnostic labs, our insurance system needs to expand in its scope to include inpatient and outpatient care, laboratory tests, medicines, consultations, etc.

Interventions for improving maternal and child health have certainly reaped fruits, which can further be seen in the indicators of child mortality and nutrition that have shown improvement in the previous decade. However, nutrition still requires serious attention from the government. While programmes like ICDS have been introduced, nutrient deficiency is evident in the high percentage of anaemic and wasted children.

Moreover, the rich, general category, urban and male have performed even better on all these indicators than those lower on the socioeconomic ladder. Be it literacy rate, sanitation facilities, immunization, stunted or anaemic children, population belonging to the SC and ST groups is lagging way behind the general category.

Similarly, Muslims are marginalised and have lower female literacy rate, lower institutional births, high fertility rate and poor nutrition. Poverty is also a huge deterrent in equitable access to healthcare with the bottom 20 percent wealth quintile performing poorly on indicators of female literacy, sanitation, immunization, life expectancy, mortality and child nutrition.

Though this gap among the privileged and the marginalised has been reducing, it can be further reduced through increasing benefits for the poor, promoting access to primary care and ensuring UHC.[31] Various factors play a role in enabling access to medical services, including interventions from the government, which will be discussed in detail in Chapter 5.

While accessing medical services is crucial, individuals often opt to not seek treatment. Factors affecting the probability of people seeking treatment include financial independence, living arrangements, and a degree of mobility.[32] This is also why we see rural areas performing worse on almost all health indicators. Access to healthcare facilities is fairly urban biased.[33]
Hence, the rural population faces the additional burden of poor access, which results in them forming a larger share of the unhealthy population. Though this scenario is improving, there is also a disproportionate dependence on private healthcare facilities with 75 percent of outpatient care and 55 percent inpatient care being exclusively private.[34]

This needs further probing. While health status has definitely improved over the decade, it is imperative to examine the government interventions that have contributed to the current scenario, and the shortfalls in our health sector that have exacerbated health inequalities.

For this, Chapter 5 examines the various policies and programmes pertaining to the health sector that have been introduced over the years to improve access to health services.

REFERENCES

1 Donkin, A.J., (2014), 'Social gradient', *The Wiley Blackwell Encyclopedia of Health, Illness, Behavior, and Society*, 2172-2178, accessed 25 February 2021, https://doi.org/10.1002/9781118410868.wbehibs530

2 Borooah, V., (2010), 'Inequality in health outcomes in India: the role of caste and religion', MPRA Paper No. 19832, Belfast: University of Ulster, accessed 25 February 2021, https://mpra.ub.uni-muenchen.de/19832/1/MPRA_paper_19832.pdf

3 Maity, B., (2017), 'Comparing health outcomes across Scheduled Tribes and Castes in India', *World Development*, Vol. 96, 163-181, accessed 25 February 2021, https://ashoka.edu.in/static/doc_uploads/eco/2017/02/Bipasha_Maity.pdf

4 OECD, (2021), 'Life expectancy at birth (indicator)', accessed 25 February 2021, 10.1787/27e0fc9d-en https://data.oecd.org/healthstat/life-expectancy-at-birth.htm#:~:text=Life%20expectancy%20at%20birth%20is%20one%20of%20the%20most%20frequently,access%20to%20quality%20health%20services.

5 Canudas-Romo, Vladimir, and Saikia, Nandita, (2013), 'Gender Gap in Life Expectancy in India, 1970-2006', Working Paper No. 322, Institute of Economic Growth, New Delhi: University of Delhi, accessed 25 February 2021, http://www.iegindia.org/upload/publication/Workpap/wp322.pdf

6 Asaria, M., S. Mazumdar, S. Chowdhury, P. Mazumdar, A. Mukhopadhyay, and I. Gupta, (2019), 'Socioeconomic inequality in life expectancy in India', *BMJ Global Health*, Vol. 4, Issue 3, e001445, accessed 25 February 2021, https://gh.bmj.com/content/bmjgh/4/3/e001445.full.pdf

7 Basu, Tomojit (2020), *Time to Care: Wealth Inequality and Unpaid Care Work for Women in India*, New Delhi: Oxfam India, accessed on 2 September 2020, https://www.oxfamindia.org/sites/default/files/2020-01/India%20supplement.pdf

8 Pablos-Mendez, A., S.R. Radloff, K. Khajavi, and S.A. Dunst, (2015), 'The demographic stretch of the arc of life: Social and cultural changes that follow the demographic transition', *Global Health: Science and Practice*, Vol. 3, Issue 3, 341-351, accessed 25 February 2021, https://www.ncbi.nlm.nih.gov/pmc/articles/PMC4570009/#:~:text=The%20demographic%20stretch%20is%20the%20result%20of%20a%20complex%20interplay,sexuality%20measurement%20is%20far%20from

9 Drèze, J., and M. Murthi, (2000), 'Fertility, education and development: Further evidence from India', New Delhi: Delhi School of Economics, accessed 25 February 2021, http://econdse.org/wp-content/uploads/2012/09/JD-Fertility-Education-and-Development-Further-Evidence-from-India.pdf

10 It is calculated as the sum of age-specific fertility rates to women in the age group 15-49 years. An age- specific fertility rate is calculated as the ratio of annual births to women at a given age to the population of women at the same age or age-group, in the same year. TFR of about 2.1 children per woman is called replacement-level fertility. This value represents the average number of children per woman needed for each generation to exactly replace itself.

11 If replacement level fertility is sustained over a sufficiently long period, each generation will exactly replace itself without any need for the country to balance the population by international migration.

12 Krishnan, Pramila, (2001), 'Cultural Norms, Social Interactions, and the Fertility Transition in India', Royal Economic Society Annual Conference 2002, 117, Royal Economic Society, UK: University of Cambridge, accessed 25 February 2021, http://repec.org/res2002/Krishnan.pdf

13 S., Rukmini, (2019), 'Contrasting trends in India's fertility transition', *The Mint*, accessed 25 February 2021, https://www.livemint.com/news/india/india-s-fertility-transition-both-slowing-and-growing-1564383234747.html

14 Morgan, S.P., S. Stash, H.L. Smith and K.O. Mason, (2002), 'Muslim and non-Muslim differences in female autonomy and fertility: evidence from four Asian countries', *Population and Development Review*, 28(3), 515-537, accessed 24 February 2021, https://doi.org/10.1111/j.1728-4457.2002.00515.x and International Institute for Population Sciences (IIPS) and ICF, (2017), *National Family Health Survey (NFHS-4), 2015-16*, India, Mumbai: IIPS, accessed 03 December 2020, http://rchiips.org/nfhs/NFHS-4Reports/India.pdf

15 Fall, Caroline H.D., Clive Osmond, Dominic S. Haazen, Harshpal Singh Sachdev, Cesar Victora, Reynaldo Martorell, Aryeh D. Stein, Linda Adair, Shane Norris, Richter Shane, Linda M. and COHORTS investigators, (2016), 'Disadvantages of having an adolescent mother', *Lancet Global Health*, Vol. 4, Issue 11, e787-e788, accessed 25 February 2021, 10.1016/S2214-109X(16)30263-7

16 Ravi, Shamika, Rahul Ahluwalia, and Sofi Bergkvist, (2016), 'Health and Morbidity in India (2004-2014),' Brookings India Research Paper No. 092016, accessed 25 February 2021, https://www.think-asia.org/bitstream/handle/11540/9062/health-morbidity_sr052017.pdf?sequence=1

17 Ibid

18 Singh, Pratyush, (2020), 'Non-COVID-19 Patients Are Paying the Price of India's Efforts Against the Coronavirus', *The Wire*, accessed 28 August 2020, https://science.thewire.in/health/healthcare-non-coronavirus-patients/

19 World Health Organization, (n.d.), 'Infant mortality rate (probability of dying between birth and age 1 per 1000 live births)', accessed 28 August 2020, https://www.who.int/data/gho/indicator-metadata-registry/imr-details/1#:~:text=Infant%20mortality%20rate%20is%20an,mortality%20rates%20of%20that%20period.

20 World Bank, (n.d.), 'Mortality rate, infant (per 1,000 live births)', accessed 28 August 2020, https://data.worldbank.org/indicator/SP.DYN.IMRT.IN

21 The Wire Staff, (2020), 'India's Infant Mortality at 32 per 1,000 Live Births, Kerala in Single Digits', *The Wire*, accessed 28 August 2020, https://thewire.in/health/india-infant-mortality-rate

22 World Bank, (n.d.).

23 Sanghera, Tish, (2018), 'India's Under-5 Mortality Now Matches Global Average, but Bangladesh, Nepal Do Better', *IndiaSpend*, accessed 28 August 2020, https://www.indiaspend.com/indias-under-5-mortality-now-matches-global-average-but-bangladesh-nepal-do-better/#:~:text=Aspercent20partpercent20ofpercent20thepercent20Sustainable,aimpercent20ofpercent2023percent20bypercent202025.

24 Kim Choe, Minja, Norman Y. Luther, Arvind Pandey, Damodar Sahu and Jagdish Chand, (1999), 'Identifying Children with High Mortality Risk', *National Family Health Survey Bulletin*, No. 12, accessed 25 February 2021, https://scholarspace.manoa.hawaii.edu/bitstream/10125/3469/NFHSbull012.pdf

25 Mohanty, S.K. and P.K. Pathak, (2008), 'Rich–poor gap in utilization of reproductive and child health services in India, 1992–2005', Vol. 41, 381–398, accessed 25 February 2021, 10.1017/S002193200800309X

26 Panda, B.K., S.K. Mohanty, I. Nayak, Vishal Dev Shastri and S.V. Subramanium, (2020), 'Malnutrition and poverty in India: does the use of public distribution system matter?', *BMC Nutr*, 6(41), accessed 25 February 2021, https://doi.org/10.1186/s40795-020-00369-0

27 The Global Health Observatory, (n.d.) 'Wasting among children under 5 years of age', World Health Organization, accessed 28 August 2020, https://www.who.int/data/gho/indicator-metadata-registry/imr-details/302

28 The percentage of children under five years whose height for age is below two standard deviations from the WHO Child Growth Standards.

29 The percentage of children under five years whose weight for height is below two standard deviations from the WHO Child Growth Standards. For 1992-93, this is for under 4 years of age, and for 1998-99 it is for under 3 years of age.

30 Elgarten, Taylor, (2017), 'How to improve health in developing countries', The Borgen Project, accessed 25 February 2021, https://borgenproject.org/improve-health-in-developing-countries/#:~:text=Investing%20in%20Education%3A%20One%20of,demand%20better%2Dquality%20health%20services

31 Ibid.

32 Vani, Barooah, (2010), 'Inequality in health outcomes in India: the role of caste and religion', Newtownabbey, Northern Ireland: University of Ulser, *Munich Personal RePEc Archive*, Paper No. 19832, accessed 25 February 2021, https://mpra.ub.uni-muenchen.de/19832/1/MPRA_paper_19832.pdf

33 Barik, Debasis and Amit Thorat, (2015), 'Issues of Unequal Access to Public Health in India', *Frontiers in Public Health*, Vol. 3, accessed 25 February 2021, https://www.frontiersin.org/articles/10.3389/fpubh.2015.00245/full

34 Ravi, Shamika, et al., (2016).

ANNEXURES

Table 4.1. Life Expectancy by Gender

	MALE	FEMALE	TOTAL
2005-06	63.7	66.5	65
2015-16	66.9	70	69

Source: SRS Life Tables

Table 4.2. Life Expectancy by Residence

	RURAL	URBAN	TOTAL
2005-06	63.8	69	65
2015-16	67.1	71.9	69

Source: SRS Life Tables

Table 4.3. TFR by Residence

	RURAL	URBAN	TOTAL
2005-06	2.98	2.06	2.68
2015-16	2.4	1.75	2.18

Source: NFHS

Table 4.4. TFR by Caste

	STs	STs	OBCs	OTHERS	TOTAL
2005-06	2.9	3.1	2.8	2.3	2.68
2015-16	2.3	2.5	2.2	1.9	2.18

Source: NFHS

Table 4.5. TFR by Religion

	HINDU	MUSLIM	CHRISTIAN	SIKH	TOTAL
2005-06	2.6	3.4	2.3	1.9	2.68
2015-16	2.1	2.6	2.0	1.6	2.18

Source: NFHS

Table 4.6. Percentage of Adolescent Mothers

TEENAGE MOTHERS	TOTAL
2005-06	16.0
2015-16	7.9

Source: NFHS

Table 4.7. Prevalence of TB (per 1,00,000 people) by Residence and Gender

	PREVALENCE OF TB					CASES MEDICALLY TREATED					PERCENTAGE OF CASES MEDICALLY TREATED				
	Rural		Urban		Total	Rural		Urban		Total	Rural		Urban		Total
	Male	Female	Male	Female		Male	Female	Male	Female		Male	Female	Male	Female	
2005-06	634	371	385	247	445	602	337	364	246	418	94.9	90.8	94.5	99.5	93.9
2015-16	445	244	318	198	316	431	234	308	191	305	96.8	95.9	96.8	96.4	96.5

Source: NFHS

Table 4.8. IMR by Gender

	MALE	FEMALE	TOTAL
2005-06	56.3	57.7	57
2015-16	43.3	37.9	40.7

Source: NFHS

Table 4.9. IMR by Residence

	URBAN	RURAL	TOTAL
2005-06	41.5	62.2	57
2015-16	28.5	45.5	40.7

Source: NFHS

Table 4.10. IMR by Caste

	SCs	STs	OBCs	OTHERS	TOTAL
2005-06	66.4	62.1	56.6	48.9	57
2015-16	45.2	44.4	42.1	32.1	40.7

Source: NFHS

Table 4.11. IMR by Religion

	HINDU	MUSLIM	CHRISTIAN	SIKH	TOTAL
2005-06	58.5	52.4	41.7	45.6	57
2015-16	41.6	40	25	29.7	40.7

Source: NFHS

Table 4.12. IMR by Wealth

	LOWEST	SECOND	MIDDLE	FOURTH	HIGHEST NEO-BUDDHIST	TOTAL
2005-06	70.4	68.5	58.3	44.0	29.2	57
2015-16	56.3	47.2	39.2	29.6	19.8	40.7

Source: NFHS

Table 4.13. U5MR by Gender

	MALE	FEMALE	TOTAL
2005-06	69.7	79.2	74.3
2015-16	51.5	47.8	49.7

Source: NFHS

Table 4.14. U5MR by Residence

	URBAN	RURAL	TOTAL
2005-06	51.7	82	74.3
2015-16	34.4	55.8	49.7

Source: NFHS

Table 4.15. U5MR by Caste

	SCs	SCs	OBCs	OTHERS	TOTAL
2005-06	88.1	95.7	72.8	59.2	74.3
2015-16	55.9	57.2	50.8	38.5	49.7

Source: NFHS

Table 4.16. U5MR by Religion

	HINDU	MUSLIM	CHRISTIAN	SIKH	TOTAL
2005-06	76	70	52.8	52.1	74.3
2015-16	50.5	49.9	32.2	34.9	49.7

Source: NFHS

Table 4.17. U5MR by Wealth

	LOWEST	SECOND	MIDDLE	FOURTH	HIGHEST	TOTAL
2005-06	100.5	89.6	71.9	51.2	33.8	74.3
2015-16	71.7	57.3	46.2	34.9	22.6	49.7

Source: NFHS

Table 4.18. Stunted Children by Residence

	RURAL	URBAN	TOTAL
2005-06	50.7	39.6	48
2015-16	41.2	31	38.4

Source: NFHS

Table 4.19. Stunted Children by Caste

	SCs	STs	OBCs	OTHER	TOTAL
2005-06	53.9	53.9	48.8	40.7	48
2015-16	42.8	43.8	38.7	31.2	38.4

Source: NFHS

Table 4.20. Stunted Children by Religion

	HINDU	MUSLIM	CHRISTIAN	SIKH	TOTAL
2005-06	48	50.3	39	29.8	48
2015-16	38.5	39.8	29.9	23.4	38.4

Source: NFHS

Table 4.21. Stunted Children by Wealth Quintiles

	LOWEST	SECOND	MIDDLE	FOURTH	HIGHEST	TOTAL
2005-06	59.9	54.3	48.9	40.8	25.3	48
2015-16	51.4	43.5	36.5	29.2	22.2	38.4

Source: NFHS

Table 4.22. Wasted Children by Residence

	RURAL	URBAN	TOTAL
2005-06	20.7	16.9	19.8
2015-16	21.4	20	21

Source: NFHS

Table 4.23. Wasted Children by Caste

	SCs	STs	OBCs	OTHERS	TOTAL
2005-06	21	27.6	20	16.3	19.8
2015-16	21.2	27.4	20.5	19	21

Source: NFHS

Table 4.24. Wasted Children by Religion

	HINDU	MUSLIM	CHRISTIAN	SIKH	TOTAL
NFHS 3	20.3	18.4	15.5	11	19.8
NFHS 4	21.5	19.4	18.5	16.1	21

Source: NFHS

Table 4.25. Wasted Children by Wealth Quintiles

	LOWEST	SECOND	MIDDLE	FOURTH	HIGHEST	TOTAL
2005-06	25.0	22.0	18.8	16.6	12.7	19.8
2015-16	24.2	21.7	20.2	19.3	17.9	21

Source: NFHS

Table 4.26. Anaemic Children by Residence

	URBAN	RURAL	TOTAL
2005-06	63	71.5	69.5
2015-16	56	59.5	58.5

Source: NFHS

Table 4.27. Anaemic Children by Caste

	SCs	STs	OBCs	OTHER	TOTAL
2005-06	72.2	76.8	70.3	63.8	69.5
2015-16	60.6	63.3	58.6	54.2	58.5

Source: NFHS

Table 4.28. Anaemic Children by Religion

	HINDU	MUSLIM	CHRISTIAN	SIKH	TOTAL
2005-06	69.7	69.7	60	63.8	69.5
2015-16	58.7	59.5	44.8	56.3	58.5

Source: NFHS

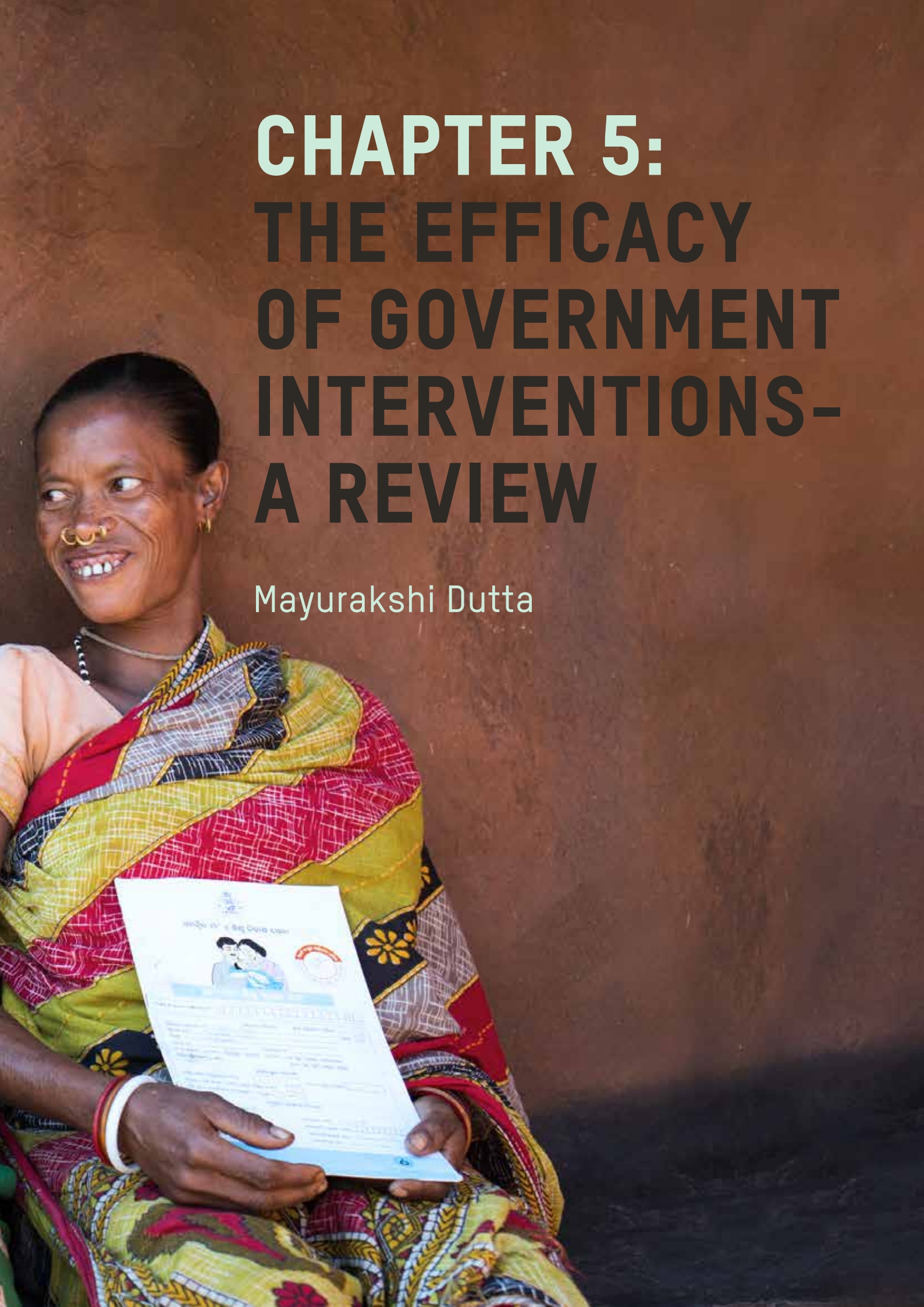
Table 4.29. Anaemic Children by Wealth Quintiles

	LOWEST	SECOND	MIDDLE	FOURTH	HIGHEST	TOTAL
2005-06	76.4	73.6	69.3	64.8	56.2	69.5
2015-16	64.0	59.7	58.9	54.4	51.8	58.5

Source: NFHS

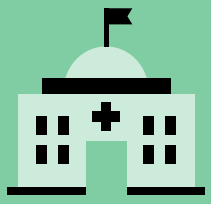
CHAPTER 5: THE EFFICACY OF GOVERNMENT INTERVENTIONS- A REVIEW

Mayurakshi Dutta



KEY FINDINGS

THE CURRENT HEALTH STATUS OF THE COUNTRY IS A TESTAMENT TO THE UNFULFILLED DREAM OF 'HEALTH FOR ALL'. THE RIGHT TO THE HIGHEST ATTAINABLE HEALTH IS FAR FROM BEING REALIZED. THIS HOLDS ESPECIALLY TRUE FOR THE SOCIALLY AND ECONOMICALLY MARGINALISED.



IN THE 2021-22 BUDGET, THE HEALTH MINISTRY HAS BEEN ALLOCATED A TOTAL OF INR 76,901 CRORE, A DECLINE OF 9.8 PERCENT FROM INR 85,250 CRORE FROM THE REVISED ESTIMATES OF 2020-21.

PUBLIC FUNDS FOR HEALTH HAVE ALSO BEEN INVESTED SPECIFICALLY ON SECONDARY AND TERTIARY CARE RATHER THAN IN THE PROVISIONING OF PRIMARY HEALTHCARE; PRIVATE HEALTHCARE PROVIDERS ARE BURGEONING; THE RESULT HAS BEEN A WIDENING OF HEALTH INEQUALITIES ALONG CASTE, CLASS, GENDER AND GEOGRAPHY.

HEALTH INSURANCE SCHEMES ARE BEING PROMOTED AS A WAY TO ACHIEVE UHC AND TO REDUCE OOPE. BUT EVIDENCE SHOWS THAT THE LIMITED SCOPE AND COVERAGE OF THE INSURANCE SCHEMES CANNOT ADDRESS THE ALL-ENCOMPASSING REQUIREMENTS OF UHC.

IT CAN ONLY BE ACHIEVED THROUGH THE BUILDING OF A STRONG PUBLIC HEALTH SYSTEM THAT ADDRESSES THE UNDERLYING SOCIAL DETERMINANTS OF HEALTH AND AN ACCESSIBLE AND AFFORDABLE PRIMARY HEALTHCARE SERVICE OF WHICH GFHIS CAN ONLY BE A COMPONENT.

5.1. INEQUALITY IN HEALTH

An individual's well-being is greatly influenced by various social determinants—conditions in which people live, grow, work, social norms and economic and political systems—and research has shown that health equity and social justice are interlinked.[1]

Therefore, the experience of a socially and economically privileged individual in receiving healthcare will vary greatly from an individual who is poor and marginalised in a country plagued by health inequalities.

Despite a significant reduction in inequalities across various indicators, India continues to experience inequalities in health. The analysis of social and economic determinants of health (Chapter 2) has shown mixed outcomes—literacy for women has increased over time but girls continue to drop-out in higher levels of education; inequalities in access to improved water and sanitation among different social groups has reduced but STs still considerably lag behind.

Analysis of health outcomes (Chapter 4) as life expectancy, fertility and child mortality shows that performance of indicators are better for males than females and though the gap between social groups is declining, high incidences of inequality still persist. Government interventions in maternal and child health (Chapter 3) have significantly improved across various groups but Muslims, SCs and STs have not fared well in institutional births, immunization and post-natal care.

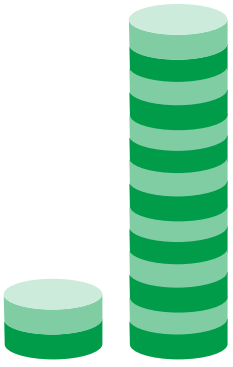
Inequalities in health expenditure (Chapter 2) among different groups have not reduced in the last decade. Therefore, the poor and the marginalised population has mostly been dependent on a sub-optimal and understaffed public healthcare system or the informal, poor quality and exploitative private system while incurring catastrophic expenditure whereas the rich has high-end private formal healthcare at its disposal.

It is a cause of great concern, now more than ever, as the gulf between the rich and the poor is rising—India has 119 billionaires while 130 million people live below the poverty line of US$ 1.90 per day.[2] To make matters worse, the ongoing COVID-19 pandemic has challenged the public healthcare system to its core running the risk of undoing important milestones achieved. It has also exacerbated existing socioeconomic inequalities.

A review of literature[3] on health inequalities in India found that there is a dearth of studies on government interventions and programmes. Underscoring its importance in influencing health policy, it recommends that studies on health inequalities focus on the evaluation of policies and health programmes. This chapter, therefore, reviews a few government interventions through the years to analyse their effectiveness in reducing the inequalities in health.

The chapter begins with the promising Alma Ata Declaration, which is the first agreement which recognized inequalities in health and to which India was a signatory. It analyses the National Health Mission aimed to correct the inequalities in health further exacerbated by the rise of the private health sector.

It finally examines the efficacy of the strategy to achieve UHC through the introduction of government sponsored health insurance schemes in the backdrop of a weak and understaffed public healthcare system.



INDIA HAS 119 BILLIONAIRES WHILE 130 MILLION PEOPLE LIVE BELOW THE POVERTY LINE OF US$ 1.90 PER DAY.

5.2. TRACING THE HISTORY

India signed the Alma Ata Declaration at the International Conference on Primary Healthcare held in September, 1978, organized by the WHO and UNICEF. Its significance lies in the translation and formalization into policy the recognition that health is a reflection of social determinants.[4] The Declaration[5] stated:

THE ALMA ATA DECLARATION STATED THAT THE EXISTING GROSS INEQUALITY IN THE HEALTH STATUS OF THE PEOPLE, PARTICULARLY BETWEEN DEVELOPED AND DEVELOPING COUNTRIES AS WELL AS WITHIN COUNTRIES, IS POLITICALLY, SOCIALLY, AND ECONOMICALLY UNACCEPTABLE AND IS, THEREFORE, OF COMMON CONCERN TO ALL COUNTRIES.

It proposed the concept of PHC to make 'practical, scientifically sound, and socially acceptable methods and technology…universally accessible to individuals and families in the community through their full participation and at a cost that the community and country can afford to maintain at every stage of their development…'.[6]

Its goal was to reduce inequalities in health by making healthcare accessible and affordable to all—'Health for All by 2000'. It envisioned to bring healthcare closer to people and the community through the setting up of PHCs as the first and the closest level of healthcare.

ITS GOAL WAS TO REDUCE INEQUALITIES IN HEALTH BY MAKING HEALTHCARE ACCESSIBLE AND AFFORDABLE TO ALL—'HEALTH FOR ALL BY 2000'.

Box 5.1. Primary Healthcare: What it entails

The WHO holds that primary healthcare is rooted in a commitment to social justice and equity and in the recognition of the fundamental right to the highest attainable standard of health. It provides whole-person care for health needs throughout the lifespan, not just for a set of specific diseases.

Primary healthcare ensures people receive comprehensive care—ranging from promotion and prevention to treatment, rehabilitation and palliative care—as close as feasible to people's everyday environment. One of its aspects is to systematically address the broader determinants of health (including social, economic, environmental, as well as people's characteristics and behaviours) through evidence-informed public policies and actions across all sectors.

The Commission on the Social Determinants of Health adds that the Alma Ata Declaration promoted primary healthcare as its central means towards good and fair global health—not simply health services at the primary care level (though that was important), but rather a health system model that acts also on the underlying social, economic and political causes of poor health.[7]

India's first NHP (1983), in a way, was a response to the International Declaration, which proposed reorientation of the existing health programmes along the goals of the latter. Children and mothers were recognized as 'high-risk' groups and it stressed the need to identify other vulnerable groups, mental health emerging as a major area of concern in this context.

The delivery of primary healthcare became one of the objectives since the sixth five-year plan (1980-85). The ninth five-year plan too emphasized the need to

'improve access to and enhance the quality of Primary Healthcare in urban and rural areas by providing an optimally functioning primary healthcare system as a part of Basic Minimum Services.'[8]

The current health status of the country, however, is a testament to the dream of 'Health for All' being unfulfilled. The right to the highest attainable health is far from being realized. This holds especially true for the socially and economically marginalised.

The 1990s was about liberalizing and privatizing the economy. Its impact within the health sector was in the rise of private healthcare providers and Public Private Partnerships (PPP). Provisioning of healthcare was delegated to the private sector and public spending on healthcare remained consistently low. Both the second and the latest NHP expresses a clear and greater engagement with and incentivization of the private sector.

HEALTH IS INCREASINGLY BEING SEEN BY THE GOVERNMENT AS AN AREA OF INVESTMENT AND THE INDIAN HEALTH INDUSTRY IS EXPECTED TO TOUCH US$ 372 BILLION BY 2022.

In fact, the latest NHP has been criticized for its emphasis on reducing the role of public healthcare system and delegating a greater role to the providers of private healthcare services.[9] Similarly, both the National Population Policy (2001) and the NRHM advocated for higher private sector participation to deliver services and achieve the envisaged goals.[10] Health is increasingly being seen by the government as an area of investment and the Indian health industry is expected to touch US$ 372 billion by 2022.[11]

Box 5.2. What is a PPP?

The WHO defines PPP as 'an effective way to capitalize on the relative strengths of the public and private sectors to address problems that neither could tackle adequately on its own, in particular in respect to diseases that particularly affect developing countries…'.[12] The private sector can encompass all non-government agencies like the corporate sector, self-help groups, individuals and community based organizations, etc.

In the recent years, PPP has garnered a lot of attention and triggered discussions on its benefits and drawbacks in India's healthcare system. Opinions are divided. One group believes that quality and accountability of PPPs should be welcomed and used to reduce the financial burden in the health sector and supplement resources, skills and expertise within a formal planning and monitoring system functioning under state governance. This could restrain the private sector's urge for profit maximization and ensure equity to make services available to the poor.[13]

The other group is skeptical of this model. Research has shown that the private health sector in low and middle income countries undermined universality by serving higher income groups, and ran the risk of providing low quality healthcare with lower efficiency but higher costs. It is also found to frequently violate medical standards of practice and record poorer patient outcomes, although it has an edge in terms of timeliness and providing a hospitable environment to patients.[14]

This view is particularly significant in a country like India, which falls under the lower middle-income category with 27.5 percent of its population living below the poverty line.[15] Most of the poor also belong to the socially marginalised categories of Dalits, Adivasis, Muslims and women. As such, the private sector and PPPs runs the risk of excluding socially marginalised groups from accessing healthcare, therefore exacerbating the already existing inequalities in health.

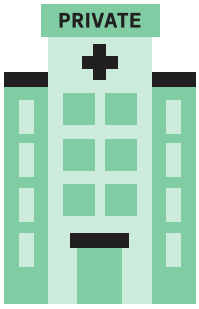
5.3. THE PUBLIC-PRIVATE DICHOTOMY

The weak public healthcare system combined with the push towards privatization resulted in the burgeoning of the private healthcare institutions in the country. The private health sector ranges from urban-based corporate hospitals and solo practitioners to rural-based faith healers and local medicine men and women.[16]

It is unregulated and exorbitant cost is its defining characteristic. The urban-rich can easily afford private healthcare but the rural population and the poor have to either depend on the weak public healthcare system or incur debts and catastrophic expenditure by purchasing private healthcare.

The private health sector provided only 5-10 percent of total patient care when India gained independence. Today, it accounts for 66 percent of hospitalization and non-hospitalization cases and 33 percent of institutional births. This growth has been boosted by government concessions and has attracted domestic and foreign companies to set up tertiary care and super speciality hospitals.[17]

Within the country, the private formal sector has a distinct customer base. They are the urban-rich. Dehury et al.[18] writes that private hospitals 'cater to a pool of patient community having health insurance, corporate tie-ups and referrals from general physicians. Usually, the paying capacity of these patients [are] higher than the common Indian citizen...these hospitals cater to the Indian elite class and organized sector workers having all financial protection.'



THE PRIVATE HEALTH SECTOR ACCOUNTS FOR **66 PERCENT** OF HOSPITALIZATION AND NON-HOSPITALIZATION CASES AND **33 PERCENT** OF INSTITUTIONAL BIRTHS. THIS GROWTH HAS BEEN BOOSTED BY GOVERNMENT CONCESSIONS.

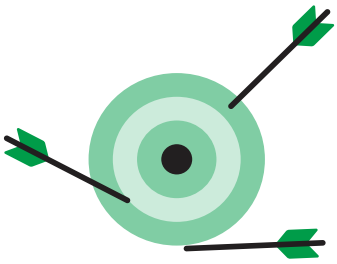
Moreover, to maximize profits, private hospitals have set the trail to attract foreign patients as a way to expand the domestic market. This comes with government backing through fiscal and policy incentives as the NHP (2002) writes:

'TO CAPITALISE ON THE COMPARATIVE COST ADVANTAGE...IN THE SECONDARY AND TERTIARY SECTOR, THE POLICY WILL ENCOURAGE THE SUPPLY OF SERVICES TO PATIENTS OF FOREIGN ORIGIN ON PAYMENT. THE RENDERING OF SUCH SERVICES ON PAYMENT IN FOREIGN EXCHANGE WILL BE TREATED AS "DEEMED EXPORTS" AND WILL BE MADE ELIGIBLE FOR ALL FISCAL INCENTIVES EXTENDED TO EXPORT EARNING.'[19]

As such, the private health sector has emerged as a medical destination for curative healthcare with world-class care and drugs at a price significantly lower than in developed countries.

The private sector is geared towards profits whereas the public provisioning of health services ensures that the poor and the marginalised have equal access to quality healthcare services closer to home. India's public health provisioning has, however, been weak. The public expenditure on health by the central government as a percentage of GDP was a mere 0.32 percent in 2019-20.

The combined expenditure by state and central government was about 1.16 percent of the GDP in 2019, rising marginally by 0.02 percent from 2018—falling far behind the goal of making health expenditure 2.5 percent of the GDP. The per capita health expenditure is highest in Arunachal Pradesh at INR 9854 and lowest in Bihar at INR 697. In the 2021-22 budget, the health ministry has been allocated a total of INR 76,901 crore, a decline of 9.8 percent from the revised estimates of 2020-21 at INR 85,250 crore.



THE PUBLIC EXPENDITURE ON HEALTH BY THE CENTRAL GOVERNMENT AS A PERCENTAGE OF GDP WAS A MERE 0.32 PERCENT IN 2019-20. THE COMBINED EXPENDITURE BY STATE AND CENTRAL GOVERNMENT WAS ABOUT 1.16 PERCENT OF THE GDP IN 2019 RISING MARGINALLY BY 0.02 PERCENT FROM 2018—FALLING FAR BEHIND THE GOAL OF MAKING HEALTH EXPENDITURE 2.5 PERCENT OF THE GDP.

Instead of the CPHC of Alma Ata that was contended to be unattainable, the Government of India has been focusing on a selective form of primary healthcare that would address the country's most severe public health problems. Prevalence of morbidity, mortality, and feasibility of control (including efficacy and cost) were identified to guide the selection of priorities. Therefore, four vertical programmes were prioritized: growth monitoring, oral rehydration therapy, breastfeeding, and immunization (GOBI).

Family planning, female education, and food supplementation (FFF) were eventually included. According to Magnussen et al., 'This narrow selection of specific conditions for these population groups was designed to improve health statistics, but it abandoned Alma Ata's focus on social equity and health systems development.'[20]

Public funds for health has also been invested specifically in secondary and tertiary care rather than in the provisioning of primary healthcare.[21] The ramifications are unresolved public health and infrastructural challenges. The National Health Profile of 2019 shows that the health service infrastructure comprises of 1.58 lakh sub centres, 26 thousand PHCs and 5.6 thousand CHCs. As per the Rural Health Statistics 2019, there is a shortfall of 43,736 sub-centres (23 percent), 8764 PHCs (28 percent) and 2865 CHCs (37 percent) across the country.

THE GOVERNMENT OF INDIA HAS BEEN FOCUSING ON A SELECTIVE FORM OF PRIMARY HEALTHCARE. GROWTH MONITORING, ORAL REHYDRATION THERAPY, BREASTFEEDING, IMMUNIZATION (GOBI), FAMILY PLANNING, FEMALE EDUCATION AND FOOD SUPPLEMENTATION (FFF).

The total number of government hospitals are 25.8 lakh and the total number of beds in government hospitals are 7.14 lakh. Against the WHO recommended standard of five beds per 1,000 people, the Indian figure stands at 0.54 beds per 1,000 people. Child nutrition and low-birth weights, high rates of neonatal and maternal mortality, growth in NCD such as obesity, diabetes, and tobacco use, leading to cancer and other diseases are a few health challenges that are yet to be resolved.[22]

1.58 LAKH SUB CENTRES, 26 THOUSAND PHCs AND 5.6 THOUSAND CHCs. THERE IS A SHORTFALL OF 43,736 SUB-CENTRES (23 PERCENT), 8764 PHCs (28 PERCENT) AND 2865 CHCs (37 PERCENT) ACROSS THE COUNTRY.

In fact, the Planning Commission in 2011 had observed that expenditure in secondary and tertiary care was drawing away attention from primary health services.[23] Research studies[24] substantiate this position and it is argued that '[s]ubstantial proportions of the health budgets have been spent on…high-end tertiary medical services—all of which largely benefits the middle classes and detracts from the provision of public health services.'

Studies[25] have also attributed India's high disease burden to the government's exclusive focus on the urban-oriented curative medical model. Godwin writes, 'This is exactly contrary to the very notions of equity in which poverty is the greatest disability and possessing adequate purchasing power being a chief privilege.'[26]

As such, primary healthcare, which was supposed to bring healthcare delivery closer to the community and

address the underlying reasons for ill-health through inter-sectoral coordination took a backseat. The government's focus on 'a heavily medicalized and high-tech curative medical interventions'[27] has derailed the goal to make quality and affordable public healthcare accessible to all irrespective of their ability to pay.

The result has been a widening of health inequalities along caste, class, gender and geography. The rich and the privileged now have at its disposal high-end medical care whereas the poor either incur catastrophic expenditure, depend on a suboptimal public healthcare or worse, stay sick and uncared for.

THE GOVERNMENT'S FOCUS ON 'HEAVILY MEDICALIZED AND HIGH-TECH CURATIVE MEDICAL INTERVENTIONS' HAS DERAILED THE GOAL TO MAKE QUALITY AND AFFORDABLE PUBLIC HEALTHCARE ACCESSIBLE TO ALL IRRESPECTIVE OF THEIR ABILITY TO PAY.

5.4. IS THE NATIONAL HEALTH MISSION (NHM) AN ATTEMPT TO RIGHT THE WRONG?

To fix the growing gap between the rich and the poor and across regions, the NRHM was launched in 2005. The goal was to provide 'effective healthcare to rural population throughout the country with special focus on 18 states, which have weak public health indicators and/or weak infrastructure.'[28]

NRHM was operated across all villages in 18 states through approximately 2.5 lakh village-based ASHA, Panchayat Representative/s, Anganwadi workers, etc., who acted as a link between the health centers and the villagers. Similarly, National Urban Health Mission was launched in 2013 with a focus on the urban poor.

Both the programmes were subsumed under the NHM in 2013 with the goal to achieve UHC. It was along the lines of WHO's new focus as reflected in Goal 3 of the SDGs replacing the concerns of the Alma Ata's primary healthcare.

The objective of the NHM was to make public health services such as women's health, child health, drinking water, sanitation and hygiene, nutrition and immunization universally available. It also stated as its objective the accessibility to an integrated CPHC.
The challenge, however, lies in the successful implementation of NHM. To make the goals of NHM a reality, there needs to be a strong public health infrastructure in place, even in hard-to-reach areas. Sufficient medical supplies, equipment, drugs and trained medical staff in health centres should be the standard. On the contrary, public health centres remain understaffed with limited supplies.

Kapil and Choudhury[29] give an example to explain the difficulty in making healthcare universally accessible with India's current state of infrastructure, '...for making institutional deliveries a reality it would require availability of...roads and transport facilities from the villages to the hospital where patient-friendly, trained, proactive staff with support facilities are available... Beneficiaries still have to travel long distances to reach these health centers to avail facilities.'

Primary healthcare continues to be inequitable and a majority of the population has limited access to free, quality healthcare. According to Nayyar et al., '...Andhra Pradesh has a primary health centre (PHC) shortfall of four percent, Uttar Pradesh of 30 percent, Bihar of 39 percent and Madhya Pradesh of 41 percent.'[30]

As a result of inadequately funded public healthcare services, a large part of the population goes to the

private sector, incurring heavy OOPE. Moreover, health programmes have mostly been siloed and vertical with a focus on specific disease cure and prevention instead of having a horizontal approach, which understands health not as an independent entity but situated in and determined by social, environmental and economic forces.

The NHM also has as its focus the healthcare needs of the marginalised population. The first move towards making healthcare available to the marginalised is in their identification. A review[31] by the Government of Odisha on the NHM's ability to address health equity, however, found that there has only been a limited identification of vulnerable groups and their needs.

The expenditure within the programme is also not based on differential health status of various population sub-groups and regional specifications. It lacks the assessment of per capita allocation and utilization of funds to various vulnerable groups.
The review also underscores loopholes that fail to provide easy access to quality healthcare within the programme. For example, the Janani Suraksha Yojana provides financial incentives to women below the poverty line for institutional delivery.

However, it does not translate to direct financial relief because the incentive is provided as a reimbursement. Therefore, a poor patient might not have sufficient funds to make a payment at the time of availing health services.

NHM, in policy, attempts to align itself with the vision of a CPHC. But inherent loopholes, challenges in implementation, weak infrastructure and insufficient supply of drugs and medical supplies have posed a challenge in its realization to reduce inequalities in health and achieve UHC.

Beyond NHM, health insurance schemes at the central and the state-level are lately being propounded as a way to achieve UHC. However, health insurance finds its roots in newly independent India.

5.5. THE RISE OF GOVERNMENT-FUNDED HEALTH INSURANCE SCHEMES IN INDIA

Eventually, the non-implementation of the Alma-Ata vision, neo-liberal economic strategies and privatization of healthcare led to a dwindling public health sector with inadequate funds, suboptimal quality, weak infrastructure and a high disease burden. The pressure to deliver results in the health sector led politicians, administrators and even researchers to question the strategies of the government.

Although health policy experts pushed for higher resource allocation on the state health programmes, politicians needed quick tangible results that investment in long-term health programmes cannot provide.[32] They reflected the strong political interest that backed proliferation of GFHIS, especially at the state level.[33]

THE 2000s SAW THE PROLIFERATION OF GFHIS INSTEAD OF CONVENTIONAL HEALTH PROGRAMMES TO ADDRESS THE NATION'S DISEASE BURDEN.

As such, the concern that the existing paradigm was responsible for the poor results, and the fact that the private sector had already gained a strong foothold led to the idea of increasing 'public funding for the purchase of private healthcare, implemented through health insurance companies.'[34]

Though GFHIS began soon after Independence through the introduction of Employees' State Insurance Scheme in 1952 and Central Government Health Scheme in 1954, the 2000s saw the proliferation of GFHIS.

In fact, the 10th Five Year Plan (2002-07) outlined a framework of an alternative healthcare financing system. This framework would have addressed the nation's disease burden or the matter of strengthening the infrastructure of primary healthcare. It included health insurance, to make essential, need-based and affordable healthcare available to all instead of conventional health programmes.

The Universal Health Insurance Scheme (2003) especially for families at or below the poverty line and the Aam Aadmi Bima Yojana (2007) for rural landless households were rolled out country-wide. The states of Madhya Pradesh and Andhra Pradesh also rolled out state-specific health insurance schemes, namely the Deen Dayal Antyoday Upchar Yojna (2004) and the Aarogyasri Programme (2007), respectively.

In 2008, the central government introduced RSBY for hospital-based healthcare to bring the households below poverty line under insurance coverage. RSBY and the Senior Citizen Health Insurance Scheme were subsumed under the Ayushman Bharat-Pradhan Mantri Jan Arogya Yojana (PM-JAY), which was launched in 2018 with the goal of contributing to UHC by bringing the uninsured poor and the vulnerable populations under its ambit.

THE UNIVERSAL HEALTH INSURANCE SCHEME (2003) ESPECIALLY FOR FAMILIES AT OR BELOW THE POVERTY LINE AND AAM AADMI BIMA YOJANA (2007) FOR RURAL LANDLESS HOUSEHOLDS WERE ROLLED OUT COUNTRY-WIDE. THE STATES OF MADHYA PRADESH AND ANDHRA PRADESH ALSO ROLLED OUT STATE SPECIFIC HEALTH INSURANCE SCHEMES, NAMELY THE DEEN DAYAL ANTYODAY UPCHAR YOJNA (2004) AND AAROGYASRI PROGRAMME (2007) RESPECTIVELY.

Ayushman Bharat is undoubtedly the largest health insurance scheme in the world. It is stipulated to provide insurance cover up to INR of half a million per family per year for secondary and tertiary care in hospitals. The states have the choice to implement it in insurance mode, trust mode or a mixed mode of insurance and trust. The states implementing the scheme through the insurance mode can select an insurance company, public or private, through an open tendering process.[35]

Box 5.3. HWCs under Ayushman Bharat

The PM-JAY was rolled out to achieve the vision of UHC. Beyond the financial protection that it aims to provide to the BPL households, its goal is to establish 1,50,000 HWCs by transforming existing sub centres and PHCs.

The HWCs will provide CPHC by bringing healthcare closer to the homes of people covering both maternal and child health services and NCD, including free essential drugs and diagnostic services. While the focus of the government has been in the provisioning of selective primary healthcare, the newer vision of providing CPHC reminds one of the long lost vision of the Alma Ata.

Initially, INR 6400 crore was earmarked for this scheme, which was reduced to INR 3200 crore. The National Health Authority reports that as of 5 October, 2020, there have been 1,08,99,888 hospital admissions under this scheme. However, it only covers in-patient costs of hospitalization. As such, coverage of expenses that are incurred as a result of outpatient care remains out of coverage, leading to high OOPE.

The average OOPE amounts to INR 2,394 per hospitalization. Second, the amount of claim paid per individual is INR 11,545.[36] Whereas, the average medical expenditure per hospitalization case was about INR 16,676 in rural India and INR 26,475 in urban

THE AVERAGE OOPE AMOUNTS TO **INR 2,394** PER HOSPITALIZATION DESPITE BEING COVERED. SECONDLY, THE AMOUNT OF CLAIM PAID PER INDIVIDUAL IS **INR 11,545**. WHEREAS, THE AVERAGE MEDICAL EXPENDITURE PER HOSPITALIZATION CASE WAS ABOUT **INR 16,676** IN RURAL INDIA AND **INR 26,475** IN URBAN INDIA INDICATING A SHORTFALL IN THE AMOUNT OF CLAIMS PAID. THIRDLY, THE NUMBER OF CLAIMS PAID AMOUNTS TO ONLY **65 PERCENT** OF THE TOTAL ADMISSIONS. THIS INDICATES THAT **35 PERCENT** OF THE POPULATION THAT HAS AVAILED HEALTHCARE UNDER THIS INSURANCE REMAINS OUT OF COVERAGE.

India. This indicates that despite the claim of reducing OOPE of those insured under this scheme, data shows that the amount of claims paid per hospitalization case falls short in covering the total cost of the individual.

Third, the number of claims paid amounts to only 65 percent of the total admissions. This indicates that 35 percent of the population that has availed healthcare under this insurance remains out of coverage. Therefore, if full coverage of all its 50 crore beneficiaries is the goal of the scheme, the cost of the scheme is going to be substantial, and will prove to be economically unfeasible in the long run. As of 2020, there are eight operational central GFHIS in the country.[37]

Similarly, state governments started introducing GFHIS instead of expanding conventional health programmes to address public health problems in the country. Currently, there are 49 state-specific GFHIS in India.[38] The beneficiaries under these schemes fall under five main categories: i) government employees, ii) low-income and BPL families/farmers, iii) families that are not covered under RSBY or are eligible for a RSBY top-up, iv) pregnant women and v) residents of a state.

There are about nine schemes that cover government employees, ten for low-income and below poverty line families/ farmers, seven for families that are not covered under RSBY or provides a top-up for RSBY, six for pregnant women and eight that cover all residents of a state.[39] Six schemes are for miscellaneous card holders and cancer patients.

Box 5.4. The main characteristics of the GFHIS are:

- cashless treatment;
- hospitalization and surgical expense for secondary and tertiary treatments;
- choice of empaneled public or private hospitals;
- fully covered by state/central governments or co-payments made by the beneficiaries;
- can be availed within or outside the state of the beneficiary.

Most of the GFHIS are instances of PPP where costs are shared between the state governments and the insurance companies. For example, Andhra Pradesh's Aarogya Raksha scheme was rolled out in collaboration with the New India Insurance Company and private clinics. Gujarat government's Chiranjivi Yojana scheme is one of the most high-profile PPPs that the country has seen. Enrolled trust hospitals, gynecologists and obstetricians sign MOUs with the District Health Society to provide maternity services to the beneficiaries.

AS OF 2020, THERE ARE **EIGHT** OPERATIONAL CENTRAL GFHIS IN THE COUNTRY, AND **49** STATE-SPECIFIC GFHIS IN INDIA.

Box 5.5. The Chiranjivi Yojana

Most of the insurance schemes of the central government cover only hospitalization and surgical expenses. However, Gujarat government's Chiranjivi Yojana covers the total costs of institutional delivery for families below the poverty line. It provides access to a benefit package covering both direct and indirect costs, including free delivery, free medicines, and reimbursement of transport cost.

In addition, it offers financial support to the attendants as compensation for the lost wages. Studies show that the beneficiaries saved more than INR 3,000 in delivery-related expenses and were generally satisfied with the scheme. Also a sharp increase was recorded in institutionalized births (32.7 percent) and a decrease in the MMR (38 percent) in the state during the period from 2005-06 to November 2013 that can largely be attributed to the scheme. It has been the recipient of Asia Innovation Award and Prime Minister's Award, 2009.

In other cases, state governments incentivize the registered private hospitals to offer services stipulated under the scheme. Under Thayi Bhagya in the state of Karnataka, for instance, registered hospitals are paid INR 300,000 per 100 deliveries, which includes normal delivery, complicated deliveries, caesarean, forceps deliveries, etc., of which 10 percent that is, INR 30,000 is paid in advance.

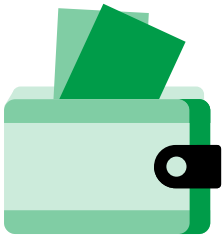
Similarly, Delhi's Mamta scheme provides INR 4000 to private hospitals providing comprehensive care to pregnant women, which includes antenatal care, institutional delivery, new born care and postnatal care. There are also partial packages under which hospitals are given INR 3000 for institutional delivery and INR 2000 for antenatal care.

The strong presence of private players in the health sector has been enticing enough for governments (union and state) to move towards a model of PPP as seen both through GFHIS and providing incentives to private healthcare providers. The NHP of 2017 also emphasizes on a larger role for the private sector, as noted above.

5.6. CHALLENGES OF GFHIS IN ACHIEVING UHC

The main drive of these schemes is to reduce the OOPE on healthcare and to achieve UHC. However, the GFHIS with its limited coverage of inpatient care is ineffective in reducing OOPE, which is mostly incurred from out-patient care.

This is particularly true for 'the relatively larger population of poor and other economically vulnerable (second poorest quintile and middle class) sections [who] bear a high burden of health spending on account of outpatient care', particularly drugs.[40] In fact, medical poverty owing to high OOPE increased from 32.5 million in 1999–2000 to 55 million in 2017.[41] A study revealed that around 8 percent of the



MEDICAL POVERTY OWING TO HIGH OOPE INCREASED FROM 32.5 MILLION IN 1999–2000 TO 55 MILLION IN 2017. A STUDY REVEALED THAT AROUND 8 PERCENT OF THE POPULATION FELL BELOW THE POVERTY LINE DUE TO OOP HEALTH EXPENDITURE IN WHICH OUTPATIENT CARE WAS THE MAIN CONTRIBUTING FACTOR (5.8%).

ONLY 14 PERCENT OF BOTH SC AND ST HOUSEHOLDS ARE REGISTERED WITH THE PM-JAY.

population fell below the poverty line due to OOPE on health of which outpatient care was the main contributing factor (5.8 percent).[42]

Evidence also suggests that despite the rise in GFHIS, financial risk protection has not increased. The target-specific model of insurance schemes is 'designed to address low-frequency high-value hospitalization expenses'.[43] Moreover, target-specific models are usually plagued by identification errors.

For instance, in the erstwhile RSBY, half of the households enrolled actually belonged to the non-poor category. Errors at targeting is also said to be exacerbated by the blind sighted design and plan of implementation of the GFHIS towards the gender, age, caste, disability status or religion of the target beneficiaries.[44] Only 14 percent of both SC and ST households are registered with the PM-JAY.

Moreover, a study[45] on public financing of health coverage found that schemes with larger pools have lower per beneficiary costs. It underscores that low-cost schemes with narrow coverage areas are targeted towards the BPL population whereas high-cost, centrally-run schemes cater to relatively better-off people and cover all kinds of care—primary, secondary and tertiary, including high-end specialized care and surgery.

The limited coverage of hospitalization has been called the 'major design flaw'. On its narrow focus, Selvaraj and Karan[46] writes:

'A HOSPITALISATION EPISODE IS SEEN AS A ONE-OFF SOLUTION TO HEALTH PROBLEMS, WHILE PREVENTION AND PROMOTION IS RELEGATED TO THE BACKGROUND. PRIVATE PROVIDERS FIND IT LUCRATIVE TO TURN SIMPLE AILMENTS INTO HOSPITALISATION EPISODES, WHICH OTHERWISE WOULD HAVE BEEN TREATED AT THE OUTPATIENT CARE LEVEL. INDEED, SEVERAL SUCH HOSPITALISATION EPISODES COULD HAVE BEEN WELL PREVENTED HAD THE PRIMARY CARE BEEN STRENGTHENED. SUCH INSURANCE PROGRAMMES LACK AN OVERALL VISION FOR THE HEALTH SYSTEM AND ITS POPULATION THAT IT SEEKS TO COVER, DUE TO COMPARTMENTALISATION OF CARE INTO SECONDARY AND TERTIARY CARE. HEALTHCARE IS NOT VIEWED AS A CONTINUUM OF CARE, RATHER SEEN AS A COMPARTMENTALISED CARE.'

The rise of GFHIS has directed a huge portion of government spending in feeding the insurance system.

IN 2018, '[WHILE THE] NATIONAL HEALTH PROTECTION SCHEME (NHPS) [WAS] ANNOUNCED WITH AN INITIAL ALLOCATION OF ₹2,000 CRORES, THERE [WAS] A 2.1 [PERCENT] REDUCTION IN BUDGETARY ALLOCATION FOR THE NATIONAL HEALTH MISSION.'[47]

Instead of strengthening the provisioning of PHC, which has the capacity to reduce inequalities in health, insurance schemes are being promoted. It, therefore, raises serious doubts about the capacity of GFHIS alone to achieve UHC when the challenges of the country's weak public healthcare system, the unregulated private healthcare and the ever-increasing inequalities in health among different population sub-groups and regions remains unaddressed.

5.7. INSURANCE VERSUS ASSURANCE

The National Health Assurance Mission was launched in 2015 with the aim of providing accessible and affordable healthcare to every citizen through access to knowledge and information on matters such as preventable diseases, assurance on availability of essential drugs and a package of diagnostics, which are essential.

Health insurance remains one of the important components and Union Health Minister Harsh Vardhan declared, 'We need to make insurance a revolution.' The assurance mission, again, instead of attempting to ramp up the public healthcare infrastructure, inclines towards an insurance-based healthcare system with a push towards PPP.[48] This approach is problematic because health insurance has a very limited scope and does not address the inherent problem areas in the healthcare system.

The problem areas of GFHIS may be identified as follows:[49]

i. Lack of focus on public health, which will lead to a high disease burden in the country, therefore leading to illness, debility and death.

ii. Unregulated private healthcare and insurance companies, which might induce failure of consumer protection.

iii. Fiscal cost: Schemes are often introduced without any fiscal analysis and will eventually prove to be expensive in the long run.

Understandably, GFHIS does not reduce disease burden at the household level and does not contribute to the creation of a healthy population because primary healthcare falls outside its ambit. It is limited in its approach since it only provides financial assistance for hospitalization in case of an ailment. None of the GFHIS cover outpatient component of advanced care. Cost of medicines, too, are not covered. Though the aim of the GFHIS is to reduce catastrophic expenditure, the limited nature of the current schemes to only cover hospitalization charges ignore the high OOPE that households incur for doctor and hospital visits, consultations, diagnostic tests, common ailments and long-term outpatient care.

Importantly, health assurance differs from health insurance[50] in three major ways:

i. It goes beyond healthcare by covering effective illness cure and disease prevention. It is comprehensive in its approach and provides public healthcare.

ii. The assurance framework ensures a smooth functioning health system that encompasses physical infrastructure, drugs, equipment and supportive services, effective health information system as well as financial protection to reduce personal expenditure. It requires high inter-sectoral coordination, good governance and managerial efficiency.

iii. Financial protection within an assurance framework goes beyond the limited financial coverage that GFHIS provides. It requires a combination of various financing mechanisms such as tax-funded free provision of essential health services to all citizens; employer-provided health insurance for additional services; government-funded social insurance programmes that provide the unorganized workforce and poor with additional services not covered in the universal free package; and private insurance for those who desire and can afford to purchase services.

The rich already have world-class healthcare at its disposal. There is a need to ensure that the poor and the marginalised can access quality and affordable healthcare as close to their homes as possible. Evidently, GFHIS can only be a component of a larger assurance-based healthcare system and cannot be the be-all and end-all of healthcare.

In fact, if UHC is the goal, there needs to be a move beyond insurance to a comprehensive assurance-based model with a strong foundation of primary healthcare. Moreover, to achieve the goals of NHM, challenges of availability, accessibility and affordability will have to be tackled. It is only then that India's population will have a chance at equal access to healthcare and good health.

5.8. SUCCESS STORIES

Evolution of the healthcare system in India shows remarkable achievements on several fronts. Programme interventions to reduce communicable diseases through immunization have been noteworthy. Promotion of family planning measures in a traditional and culture based society has been considered commendable.

However, many of the success stories such as the National AIDS Control Programme (NACP) and the Pulse Polio Immunisation Programme have been vertical programmes that have invested considerable money and human resource in treating one particular disease. The total budgetary allocation for the fourth phase of NACP for one year alone was approximately INR 2859 crores[51] and the Pulse Polio Programme allocated a total of INR 349 crores in the year 2017-18 to the states.

Without dismissing the importance of preventing and treating specific diseases, similar investments to strengthen the overall health infrastructure and healthcare provisioning is desirable. For instance, investing in improved water and sanitation facilitates, which requires inter-sectoral coordination with the Water and Sanitation department, would prevent many water-borne diseases. Moreover, prevention of a disease is far more cost-effective than treating a disease.

Among the states, Kerala recorded the highest Human Development Index among the Indian states in 2011 based on its performance on three key fronts: low IMR, low maternal mortality rate and high literacy rate. More recently, it topped NITI Aayog's list for the best performing state in the health sector with an overall score of 74.01.

Its success on the health front can be attributed to investment in infrastructure, decentralized governance and community engagement with a special focus on public health and primary healthcare. According to The Primary Health Care Performance Initiative:[52]

'KERALA INVESTED IN INFRASTRUCTURE TO CREATE A MULTI-LAYERED HEALTH SYSTEM, DESIGNED TO PROVIDE FIRST-CONTACT ACCESS FOR BASIC SERVICES AT THE COMMUNITY LEVEL AND EXPANDED INTEGRATED PRIMARY HEALTHCARE COVERAGE TO ACHIEVE ACCESS TO A RANGE OF PREVENTIVE AND CURATIVE SERVICES…[,] EXPANDED THE NUMBER OF MEDICAL FACILITIES, HOSPITAL BEDS, AND DOCTORS…[AND] PUBLIC HEALTH AND SOCIAL DEVELOPMENT INITIATIVES… AIDED IN CREATING THE ENVIRONMENT FOR A STRONG AND EFFECTIVE PRIMARY CARE SYSTEM.'

Maharashtra, which ranks third in NITI Aayog's health index, has experienced an impressive 15 percentage point decline in stunting, reducing the burden of undernutrition to a great extent, a health disorder usually associated with poor socio-economic conditions. Between 2005 and 2012, the prevalence of stunting among children aged 0 to 2 years declined from 39 to 24 percent[53].

This success largely owes to the Rajmata Jijau Mother-Child Health and Nutrition Mission that's been functional in the state since 2005. Another report found that strong economic performance, improved spending and interventions, good governance and better social determinants of health contributed to the reduction of stunting in the state.[54]

The success stories, both at national and state levels, reveal that India has the resources and capability to improve public health and healthcare systems and effectively tackle the challenge of high morbidity and mortality in different age groups and reduce inequality among the various socioeconomic categories. Indeed, the government must consider moving beyond GFHIS and address the significant deficits and inadequacies that exist in the healthcare system for achieving the goal of UHC in the country.

5.9. LIGHT AT THE END OF THE TUNNEL

India signed the Alma-Ata Declaration and pledged to address social determinants of health and provide CPHC to resolve inequalities in health. Eventually, the promise dwindled and a selective form of primary healthcare was adopted. GOBI, FFF and high-end curative care emerged as the priority of the governments whereas other aspects of primary healthcare such as addressing the social determinants of health, community participation, awareness, and quality and affordable health services closer to home, which have been widely acknowledged as the foundation of any effective and inclusive healthcare system, have been left at the margins.

Weak public health, ineffective governance, poor public healthcare and the rise of the private sector have become the defining characteristics of the contemporary healthcare system. It has led to an increase in inequalities of health.

Successive governments, unwilling to address these problems and wanting swift, tangible results, which vertical health programmes within NHM could not provide, moved towards the introduction of GFHIS with the support of private players. These were introduced with the aim of reducing the OOPE of the population and to achieve UHC. However, the empirical investigation in the chapter shows that the limited scope and coverage of the GFHIS cannot address the all-encompassing requirements of UHC.

It can only be achieved through the building of a strong, accessible and affordable primary healthcare—not simply health services at the primary care level, but a health system model that also addresses the underlying social, economic and political causes of poor health. GFHIS can only be a component of this comprehensive model.

The ongoing pandemic has also revealed the weaknesses and strengths of the country's healthcare system. Chapter 6 provides a comprehensive analysis of the impact of the pandemic on the health systems of various states and first-hand experiences of those infected. Various good practices undertaken by the state governments such as the successful regulation of the pricing on COVID-19 treatment of private hospitals proves that government presence and intervention can make a change for good.

The goal of UHC is important for a country like India where high disparities in health exist across gender, states, economic status and social identities. Current programmes have been unable to effectively reduce inequalities in health and the goals of Alma Ata remain unattained.

A move towards UHC should be through a comprehensive assurance based model of healthcare with strong foundations in primary healthcare to reduce inequalities in health and make healthcare accessible and affordable to all sections of the population. It is only then that the goal of 'Health for All' can be truly achieved.

REFERENCES

1 Coovadia, Hoosen and Friedman, Irwin, (2015), 'Reducing health inequalities in developing countries'. *Oxford Textbook of Global Public Health* (6 edn), accessed 6 August 2020, https://oxfordmedicine.com/view/10.1093/med/9780199661756.001.0001/med-9780199661756-chapter-9

2 BI India Bureau, (2020), 'These 119 Indian billionaires are worth over $300 billion right now, according to Forbes', *Business Insider India*, accessed 3 January 2021, https://www.businessinsider.in/india/news/checkout-the-list-of-total-billionaires-in-india-with-net-worth-according-to-forbes/articleshow/78161500.cms and World Data Lab, (n.d.), 'World Poverty Clock', Federal Ministry for Economic Cooperation and Development, accessed 3 January 2021, https://worldpoverty.io/map

3 Bhan, N., K.D. Rao, and S. Kachwaha, (2016), 'Health inequalities research in India: a review of trends and themes in the literature since the 1990s', *International Journal for Equity in Health*, Vol. 15, Issue 1, 166, accessed 6 August 2020, https://doi.org/10.1186/s12939-016-0457-y

4 Rifkin S.B., (2018), 'Alma Ata after 40 years: Primary Healthcare and Health for All-from consensus to complexity', *BMJ Global Health*, 3(Suppl 3), e001188, accessed 7 August 2020, https://doi.org/10.1136/bmjgh-2018-001188

5 World Health Organisation. (n.d.). 'WHO called to return to the Declaration of Alma-Ata', accessed 22 November 2020, https://www.who.int/teams/social-determinants-of-health/declaration-of-alma-ata

6 Ibid.

7 Rifkin S.B., (2018).

8 Singh, A.R. and S.A. Singh, (2004), 'The Goal: Health for All-the Commitment: All for Health', *Mens sana Monographs*, Vol. 2, Issue 1, 97–110, accessed 6 August 2020, https://www.ncbi.nlm.nih.gov/pmc/articles/PMC3400322/

9 Vikas Bajpai, (2018), 'National Health Policy, 2017: Revealing Public Health Chicanery', *Economic and Political Weekly*, Vol. 53, Issue 28, accessed 6 August 2020, https://www.epw.in/journal/2018/28/perspectives/national-health-policy-2017.html

10 Rao, P.H., (2012), 'The Private Health Sector in India: A Framework for Improving the Quality of Care', *ASCI Journal of Management*, Vol. 41, Issue 2, pp. 14–39, accessed 24 August 2020, https://asci.org.in/journal/Vol.41(2011-12)/41_2_phrao.pdf

11 Dabade, Gopal, (2018), '40 Years After Alma-Ata, What Can We Do to Achieve "Health for All"?', *The Wire*, accessed 7 August 2020, https://thewire.in/health/alma-ata-declaration-who-india-healthcare

12 The World Health Organisation, (n.d.). 'Public Private Partnerships (PPPs)', accessed 24 August 2020, https://www.who.int/intellectualproperty/topics/ppp/en/

13 Khushbu B. Thandani, (2014), 'Public Private Partnership in the Health Sector: Boon or Bane', *Procedia - Social and Behavioral Sciences*, Vol. 157, accessed 24 August 2020, https://www.sciencedirect.com/science/article/pii/S1877042814058534#:~:text=Public%20Private%20Partnership%20(PPP)%20is,by%20overcoming%20the%20visible%20limitations and Das, Abhijit, (2007), 'Public-private partnerships for providing healthcare services', *Indian Journal of Medical Ethics*, Vol 4, Issue 4, accessed 24 August 2020, https://doi.org/10.20529/IJME.2007.069

14 Basu, Sanjay, Jason Andrews, Sandeep Kishore, Rajesh Panjabi, and David Stuckler, (2012), 'Comparative Performance of Private and Public Healthcare Systems in Low- and Middle-Income Countries: A Systematic Review', *Plos Medicine*, accessed 24 August 2020, https://doi.org/10.1371/journal.pmed.1001244

15 Department of Social Justice and Empowerment, (n.d.), 'State-Wise Percentage of Population Below Poverty Line by Social Groups, 2004-05,' accessed 1 September 2020, http://socialjustice.nic.in/UserView/index?mid=76672

16 Nandraj, Sunil, V.R. Muraleedharan, Rama V. Baru, Rama, Imrana Qadeer, and Ritu Priya, (2001), 'Private Health Sector in India: Review and Annotated Bibliography', Mumbai: Centre for Enquiry into Health and Allied Themes, Chennai: Foundation for Sustainable Development, Indian Institute of Technology and Delhi: Centre of Social Medicine and Community Health Jawaharlal Nehru University, accessed 24 August 2020, http://www.cehat.org/uploads/files/phsi.pdf

17 P.H. Rao, (2012).

18 Dehury, R.K., J. Samal, S. Coutinho, and P. Dehury, (2019), 'How Does the Largely Unregulated Private Health Sector Impact the Indian Mass?' *Journal of Health Management*, Vol. 21, Issue 3: 383–393, accessed 24 August 2020, https://doi.org/10.1177/0972063419868561

19 S.K. Godwin, (2004), 'Medical Tourism: Subsidising the Rich', *Economic and Political Weekly*, Vol. 39, Issue 36, 3981-3983, accessed 22 February 2021, from http://www.jstor.org/stable/4415494

20 Magnussen, L., J. Ehiri, P. Jolly, P. (2004). 'Comprehensive Versus Selective Primary Health Care: Lessons for Global Health Policy', *Health Affairs*, Vol. 23, Issue 3, accessed 22 February 2021, 167–176. doi:10.1377/hlthaff.23.3.167

21 Das Gupta, Monica, (2005), 'Public Health in India: An Overview'. Development Research Group, The World Bank, Working Paper 3787, accessed 26 August 2020, https://papers.ssrn.com/sol3/papers.cfm?abstract_id=873895

22 India Research Center, (n.d.), 'Improving Health in India', Harvard School of Public Health, accessed 26 August 2020, https://www.hsph.harvard.edu/india-center/improving-health-in-india/

23 Planning Commission, (2012), 'Annual Report, 2011-12', accessed 26 August 2020, https://niti.gov.in/planningcommission.gov.in/docs/reports/genrep/ar_engl112.pdf

24 Ibid.

25 S.K. Godwin, (2004), 'Medical Tourism: Subsidising the Rich'. *Economic and Political Weekly*, Vol. 39, Issue 36, 3981-3983, accessed 22 February 2021, http://www.jstor.org/stable/4415494

26 Ibid.

27 Ibid.

28 Kapil, Umesh and Panna Choudhury, (2005), 'National Rural Health Mission (NRHM): Will it make a Difference?', *Indian Pediatrics*, 42:783-786, accessed 22 February 2021, https://www.indianpediatrics.net/aug2005/aug-783-786.htm#:~:text=The%20goals%20of%20the%20NRHM,communicable%20and%20non%2Dcommunicable%20diseases%2C

29 Ibid.

30 Nayyar, Anjali, Pahwa, Dhruv, Kurian, Oomen C., and Saran Sameer, (2018), 'The road to universal health coverage', Observer Research Foundation, accessed 26 February 2020, https://www.orfonline.org/research/the-road-to-universal-health-coverage/

31 Gopalan, Saji Sarawathy. (2009). 'Review of Health Equity', Department of Health & Family Welfare Government of Orissa, accessed 26 August 2020, http://www.nrhmorissa.gov.in/writereaddata/Upload/Documents/Review%20of%20Health%20Equity.pdf

32 Ibid.

33 Forgia Gerard La and Nagpal, Somil, (2012), Government-Sponsored Health Insurance in India: Are You Covered?, World Bank Publications, The World Bank, number 11957, accessed 22 August 2020, https://doi.org/10.1596/978-0-8213-9618-6

34 Ila Patnaik, Shubho Roy and Ajay Shah Ajay, (2018), 'The rise of government-funded health insurance in India'. National Institute of Public Finance and Policy, Working Paper 231, accessed 22 August 2020 http://www.nipfp.org.in/publications/working-papers/1826/

35 Press Information Bureau, (2019), 'Private Insurance Companies in Ayushman Bharat'. Ministry of Health and Family Welfare, accessed 22 August 2020, https://pib.gov.in/Pressreleaseshare.aspx?PRID=1578922

36 It was calculated by dividing the total amount of claims paid by the number of claims paid.

37 See Table 5.1.

38 Ibid.

39 For instance, Goa's Deen Dayal Swasthya Seva Yojana cover persons residing in the state for five years or more.

40 Prachi Salve, (2018), 'Out-of-pocket health expenses plunge 55 mn Indians into poverty in 2017', *Business Standard*, accessed 22 August 2020, https://www.business-standard.com/article/current-affairs/out-of-pocket-health-expenses-plunge-55-mn-indians-into-poverty-in-2017-118071900115_1.html

41 Dash, A. and S.K. Mohanty, (2019), 'Do poor people in the poorer states pay more for healthcare in India?', *BMC Public Health*, Vol. 19, Issue 1020, accessed 22 February 2021, https://doi.org/10.1186/s12889-019-7342-8

42 Sangar, Shivendra, Varun Dutt, and Ramna Thakur, (2019), 'Burden of out-of-pocket health expenditure and its impoverishment impact in India: Evidence from National Sample Survey', *Journal of Asian Public Policy*, accessed 22 February 2021, 10.1080/17516234.2019.1601065.

43 Selvaraj, Sakthivel and Karan Anup K., (2012), 'Why Publicly-Financed Health Insurance Schemes Are Ineffective in Providing Financial Risk Protection', Economic and Political Weekly, Vol. 47, Issue 11, 60-68, accessed 22 February 2021, https://www.epw.in/system/files/pdf/2012_47/11/Why_PubliclyFinanced_Health_Insurance_Schemes_Are_Ineffective_in_Providing_Financial_Risk_Protection.pdf

44 Ghosh, Soumitra, (2018), 'Publicly Financed Health Insurance Schemes', *Economic and Political Weekly*, Vol. 53, Issue 22, accessed 22 February 2021, https://www.epw.in/journal/2018/23/commentary/publicly-financed-health-insurance-schemes.html

45 Gupta, Indrani and Samik Chowdhury, (2014), 'Public Financing for Health Coverage in India Who Spends, Who Benefits and At What Cost?', *Economic and Political Weekly*, Vol. 49, Issue 35, 59-63, accessed 22 February 2021, https://www.epw.in/system/files/pdf/2014_49/35/Public_Financing_for_Health_Coverage_in_India.pdf

46 Selvaraj, Sakthivel and Karan Anup K., (2012).

47 Ghosh, Soumitra, (2018).

48 Singh, Jyotsna, (2015), 'National Health Assurance Mission likely to favour insurance model of healthcare'. *Down to Earth*, accessed 22 February 2021, https://www.downtoearth.org.in/news/national-health-assurance-mission-likely-to-favour-insurance-model-of-healthcare-46036

49 See Patnaik et al.

50 Reddy, K. Srinath, (2014), 'Assurance, not insurance', *The Indian Express*, accessed 22 February 2021, https://indianexpress.com/article/opinion/columns/assurance-not-insurance/

51 Allocations for five years was INR 14,295.

52 PHCPI. (n.d.). 'Kerala, India: Decentralized Governance and Community Engagement Strengthen Primary Care', accessed 22 February 2021, https://improvingphc.org/promising-practices/kerala

53 D'Alimonte, Mary, Jack Clift, Suneeta Singh, Kriti Kaushal, James and Levinson, (2016), *Documentation of Rajmata Jijau Mother-Child Health and Nutrition Mission in Maharashtra: Pushing the Nutrition Agenda Forward*, New Delhi: Unicef India.

54 Haddad, L., N. Nisbett, I. Barnett, and E. Valli, (2014), *Maharashtra's Child Stunting Declines: What is Driving Them? Findings of a Multidisciplinary Analysis*. Brighton: IDS.

ANNEXURES

Table 5.1. GFHIS rolled out by the central government

HEALTHCARE SCHEME	LAUNCH
Employee State Insurance Scheme	1952
Central Government Health Scheme	1954
Rashtriya Aarogya Nidhi Scheme	1993
Retired Employees Liberalised Health Scheme	1997
Exservicemen Contributory Health Scheme	1997
Janani Suraksha Yojana	2005
Jansankhya Sthirta Kosh, Santushti Yojna	2005
PM-JAY	2018

Source: Patnaik et al; updated by author

Table 5.2. GFHIS rolled out by the states

STATE	HEALTHCARE SCHEMES	LAUNCH YEAR
Andaman and Nicobar Islands	Andaman and Nicobar Islands Scheme for Health Insurance	2015
Andhra Pradesh	Working Journalists Healthcare Scheme Arogya Raksha	2015 2017
Arunachal Pradesh	Chief Minister Arogya Arunachal Yojana	2014
Assam	Assam Arogya Nidhi Atal Amrit Abhiyan	2012 2016
Chhattisgarh	Mukhyamantri Swasthya Bima Yojana	2011
Delhi	Mamta Scheme Delhi Arogya Kosh Delhi Arogya Nidhi Delhi Government Employees Health Scheme	2008 - - 1997
Goa	Deen Dayal Swasthya Seva Yojana Goa Mediclaim	2016 1989
Gujarat	Chiranjivi Yojana Bal Sakha Scheme Mukhyamantri Amrutam Yojana	2005 2009 2012
Haryana	Mukhyamantri Mufat Ilaj Yojana	2014
Himachal Pradesh	Rashtriya Swasthya Bima Plus Mukhyamantri State Healthcare Scheme Himcare	2010 2015 2019
Jammu and Kashmir	J&K Government Employees Group Mediclaim Insurance Scheme	2014
Karnataka	Yeshasvini Vajpayee Arogyashree Scheme Thayi Bhagya Scheme Rajiv Arogya Bhagya Jyothi Sanjeevini Arogya Karnataka Programme	2003 2009 2010 2013 2014 2018
Kerala	Comprehensive Health Insurance Scheme	2008
Madhya Pradesh	Deen Dayal Upchaar Yojana Vijaya Raje Jananai Kalyan Bima Yojana	2004 2006

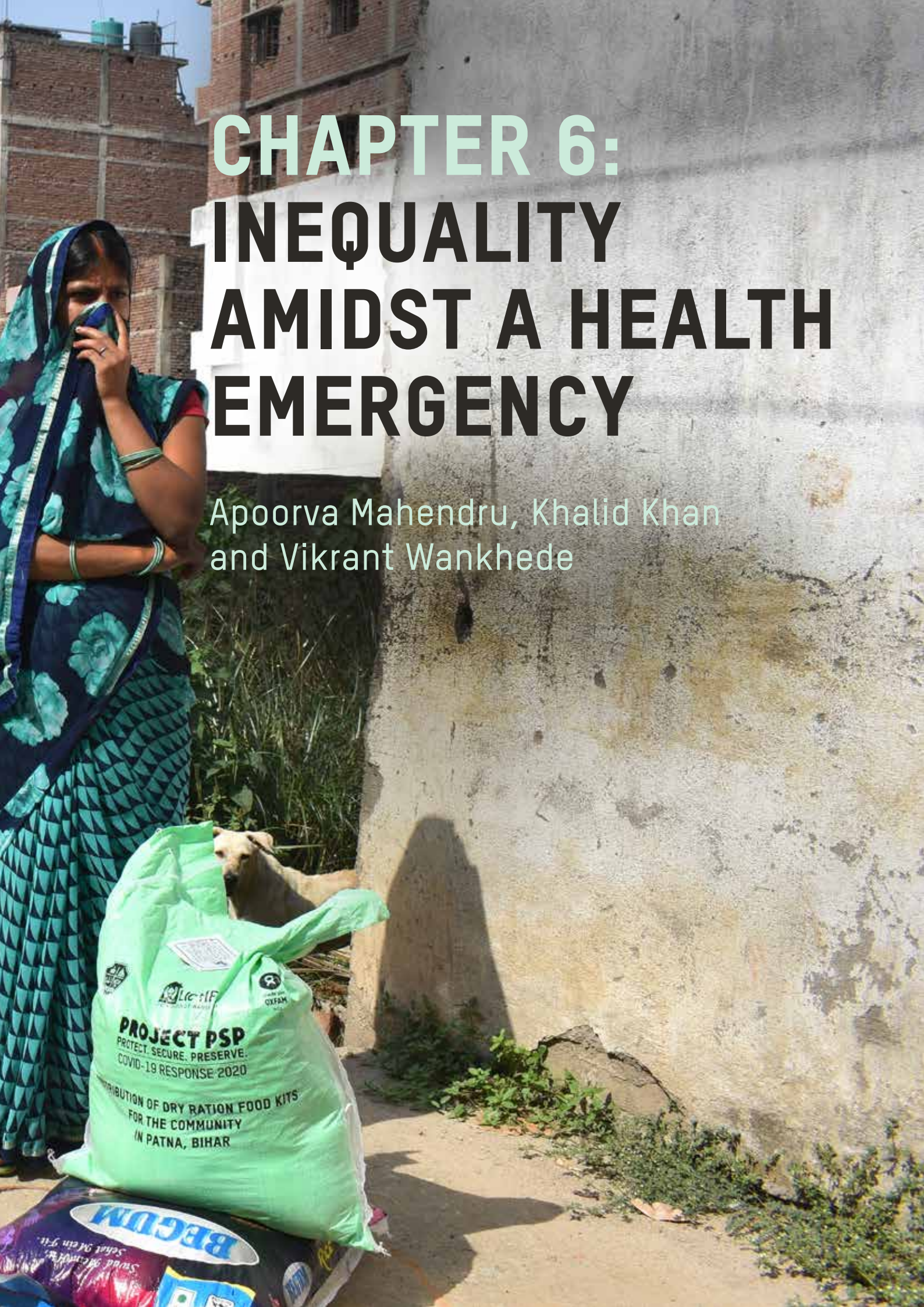
Maharashtra	Rajiv Gandhi Jeevandayee Arogya Yojana	2012
Meghalaya	Megha Health Insurance Scheme	2012
Mizoram	Mizoram Healthcare Scheme	2008
Odisha	Biju Krushak Kalyan Yojana Niramaya Scheme Biju Swasthya Kalyan Biju Gadi Chalak Bima Yojana	2013 2015 2018 2017
Punjab	Punjab Government Employees and Pensioners Health Insurance Scheme	2015
Rajasthan	Bhamashah Swasthyta Bima Yojana	2014
Tamil Nadu	Chief Minister's Comprehensive Health Insurance Scheme New Health Insurance Scheme	2011 2016
Telangana	Rajiv Arogyasri Scheme Journalists Health Scheme	2007 2016
Tripura	Tripura Health Assurance Scheme for Poor	2014
Uttar Pradesh	Mukhya Mantri Jan Arogya Abhiyan	2019
Uttarakhand	U-Health Card Mukhyamantri Swasthya Bima Yojana	2010 2015
West Bengal	Swasthyasathi Ayushmati	2016 -

Total 48.

Source: Patnaik et al; updated by author

CHAPTER 6: INEQUALITY AMIDST A HEALTH EMERGENCY

Apoorva Mahendru, Khalid Khan and Vikrant Wankhede



KEY FINDINGS

STATES ATTEMPTING TO REDUCE INEQUALITIES AND WITH HIGHER EXPENDITURE ON HEALTH HAD LOWER CONFIRMED CASES OF COVID-19.

STATES WITH HIGHER EXPENDITURE ON HEALTH HAD HIGHER RECOVERY RATE FROM COVID-19.

BASED ON INCOME BRACKET, PERCENTAGE OF RESPONDENTS IN HIGHER-INCOME GROUPS WHO HAD TO ARRANGE FOR TRANSPORT THEMSELVES WAS HALF OF THOSE IN LOW-INCOME GROUPS.

PERCENTAGE OF RESPONDENTS IN LOW-INCOME BRACKETS FACING DISCRIMINATION IN THE COMMUNITY DUE TO BEING COVID POSITIVE WAS FIVE TIMES THAN THOSE IN HIGH-INCOME BRACKETS.

OVER 50 PERCENT OF SCS AND STS FACED DIFFICULTIES IN ACCESSING NON-COVID MEDICAL FACILITIES COMPARED TO 18.2 PERCENT IN THE GENERAL CATEGORY.

PERCENTAGE OF SCS USING AN UNSAFE SOURCE OF WATER WAS THREE TIMES OF GENERAL CATEGORY FOR OPEN WELLS AND FOUR TIMES FOR OPEN SPRINGS OR STREAMS.

AMONG FEMALE RESPONDENTS, 33.9 PERCENT EXPERIENCED ANXIETY, IRRITATION AND ANGER, AND SLEEP-DEPRIVATION DURING THE LOCKDOWN AS COMPARED TO 18.2 PERCENT MALES.

THE VACCINATION DRIVE IGNORES THE DIGITAL DIVIDE IN THE COUNTRY. ENTERING THE PANDEMIC, ONLY 15 PERCENT RURAL HOUSEHOLDS HAD AN INTERNET CONNECTION, SMARTPHONE USERS IN RURAL INDIA WERE ALMOST HALF OF URBAN INDIA. MORE THAN 60 PERCENT WOMEN ACROSS 12 STATES HAD NEVER USED THE INTERNET. SCS AND STS WITH SMARTPHONES STOOD AT 25 AND 23 PERCENT, RESPECTIVELY, WHILE 43 PERCENT UPPER CASTE HAD ACCESS TO A SMARTPHONE.

THE NUMBER OF COVID CASES DOUBLED IN THE SECOND WAVE. THE SECOND WAVE HIT THE MIDDLE CLASS MORE WITH 90 PERCENT OF ALL CASES IN MUMBAI CONCENTRATED IN HIGH-RISE BUILDINGS, WHILE 10 PERCENT WERE IN SLUMS.

INDIA RANKS 155 OUT OF 167 COUNTRIES ON BED AVAILABILITY, AND HAS 5 BEDS AND 8.6 DOCTORS PER 10,000 OF ITS POPULATION. RURAL INDIA HOUSES 70 PERCENT OF THE POPULATION, WHILE IT HAS 40 PERCENT OF THE BEDS IN THE COUNTRY

INTRODUCTION

The previous chapters have highlighted how inequality had already existed in our health systems way before the pandemic hit. The inequitable access to health services and the lack of affordability had marginalised those at the bottom of the socioeconomic ladder. The rise of the private sector in the midst of a poor public healthcare system made quality care inaccessible to the poor, while the rich could easily access these health services. Low expenditure on health and a weak health infrastructure system had left the country unprepared for the COVID-19 pandemic.

The 2019 Global Health Security Index measures countries' pandemic preparedness on a score of 1-100 based on their ability to prevent, detect, mitigate and cure diseases. The index ranks India at 57 out of 195 countries,[1] indicating that strengthening the health infrastructure could have better prepared the country for the pandemic.

This chapter attempts to look at the first and second wave of the pandemic and how it impacted India. While the first wave was comparatively controlled, it affected the poor and marginalised more, having a severe economic impact on their income and jobs. On the other hand, not only did the second wave severely impact the economic status in the country, rendering one crore Indians jobless[2], it led to a huge health infrastructure lapse with hospitals not being able to manage the influx of patients. This chapter will look at the two waves in more detail.

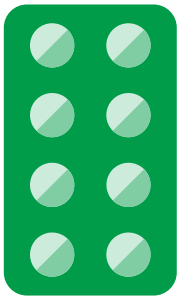
SECTION 1: FIRST WAVE OF THE PANDEMIC

6.1. PREPAREDNESS FOR THE PANDEMIC

Public health and environmental sanitation being the exclusive responsibility of government,[3] the centre and states adopted different mechanisms to control the pandemic. Given the significant disparities in state capacities, confirmed and recovered cases as well as fatalities are widely different across states.

The present section examines how states with higher expenditure on health and lower inequality resulted in lower confirmed cases and higher rates of recovery in the first wave. The confirmed and recovered cases of COVID-19 cover the months from March to September 2020. This helps us gauge the spread of the virus across the states and their capacity to handle the spread during the initial months of the pandemic in the country.

However, merely looking at aggregate level data of the states does not adequately highlight the inequalities of access to health services due to socioeconomic factors. Hence, ground-level experiences of people across different caste and income groups with regard to response of the government are captured by a primary telephonic survey through a structured questionnaire from 768 respondents that are infected with or have recovered from COVID-19.



THE AVAILABILITY OF FREE MEDICINES IN PUBLIC HEALTHCARE FACILITIES HAS DECLINED FROM 31.2 PERCENT TO 8.9 PERCENT FOR INPATIENT CARE, AND FROM 17.8 PERCENT TO 5.9 PERCENT FOR OUTPATIENT CARE OVER THE LAST TWO DECADES.

The sample, which is spread across seven states, has been chosen on the basis of multi-stage cluster sampling. While, at the first stage, all the states were divided into three sub-groups based on their size of GSDP, in the second stage, these sub-groups were further categorized based on their per capita health expenditure.

In the third stage, these groups were further categorized by the number of confirmed cases. While the macro-level analysis of the confirmed cases, recoveries and casualties covers all the states, the telephonic survey covers seven states namely Andhra Pradesh, Maharashtra, Uttar Pradesh, Delhi, Kerala, Bihar and Odisha.

6.2. IMPACT OF INEQUALITY ON CONFIRMED AND RECOVERED CASES

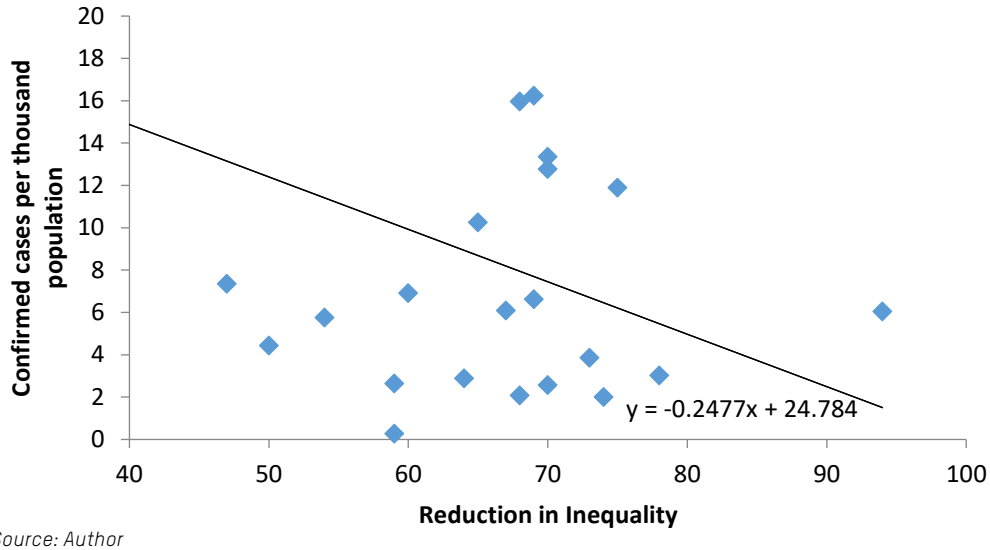
As examined in Chapters 2, 3 and 4, inequalities in access to quality healthcare was prevailing even in 2015-16, with the marginalised communities trailing far behind the privileged. To understand the impact of inequality on the spread of COVID-19, this section analyses the relationship between confirmed and recovered cases at the state level with inequality.

As part of the SDGs, an index to measure Reduced Inequalities (Goal 10) was constructed covering household expenditure in urban and rural areas, labour force participation of the transgender community and utilization of funds allocated for the development of SCs and STs. The index measures the performance of states on the aforementioned indicators against a National target value to be achieved by 2030.[4]

The index ranks states based on highest Reduced Inequalities to lowest Reduced Inequalities. States like Meghalaya, Mizoram and Telangana have the highest scores and states of Arunachal Pradesh and Uttar Pradesh have the lowest scores on the index. This prevailing inequality affects access to health services and quality care.

Confirmed cases of COVID-19 have a negative relationship with this index (Figure 6.1.). This means that with more and more reduction in inequality, the confirmed cases will also decline. In other words, the states that have been attempting to reduce inequalities in the past few years have also experienced a lower number of COVID positive cases.

Figure 6.1. Reduction in Inequality and Confirmed Cases

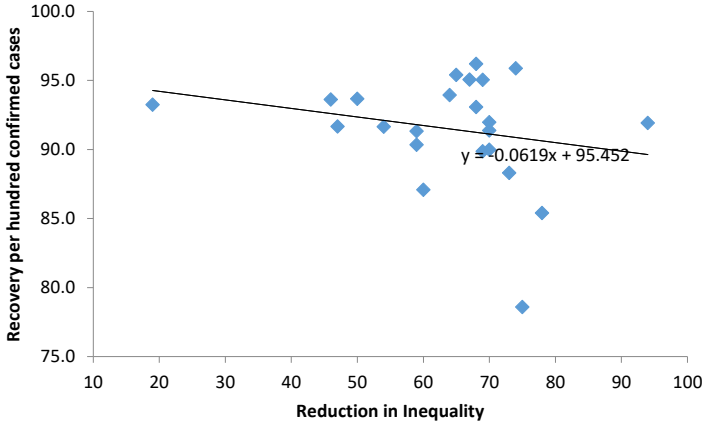


Source: Author

However, it is interesting to note that States that have been attempting to reduce inequalities in the past few years have lower recovery rate from COVID-19, as seen in Figure 6.2. This is possibly because the Reduced Inequality Index does not take into account indicators measuring health inequalities.

Hence, factors like ability to socially distance, access to good hygiene like improved water and sanitation, which are important determinants of recovery from COVID-19,[5] are not considered. To have a holistic image of the relationship between inequality and recovery from the virus, a more comprehensive index is, thus, required.

Figure 6.2. Reduction in Inequality and Recovery Rate



Source: Author

THE COMBINED EXPENDITURE ON HEALTH BY STATE AND CENTRAL GOVERNMENT WAS ABOUT 1.16 PERCENT OF THE GDP IN 2019.

6.3. IMPACT OF HEALTH EXPENDITURE ON CONFIRMED AND RECOVERED CASES

While SDGs aim at a 2.5 percent expenditure of the country's GDP, this goal has not yet been achieved. As pointed out in Chapter 5, the combined expenditure on health by state and central government was about 1.16 percent of the GDP in 2019. This is far behind the stipulated goal, and investment in health needs to be fuelled to improve access to quality healthcare and improve the health infrastructure.

There exists a negative relationship, albeit weak, between confirmed cases and expenditure on health. This implies that states with higher expenditure on health as a percentage of GSDP witness lower confirmed cases of COVID-19. Similarly, there is a positive relationship between recovered cases and expenditure on health. This means that states spending more on health also witness a higher recovery from COVID-19.

As discussed in the previous section, the recovery of cases also depends on other factors like maintaining personal hygiene, immunity, etc. However, it should also be noted that significant inequalities exist among various caste and income groups on the expenditure on hospitalization, as seen in Chapter 2.

This is because the marginalised also have poor health-seeking behaviour, and often evade seeking medical treatment due to poor access to affordable and quality healthcare. Higher expenditure on health addresses these concerns.

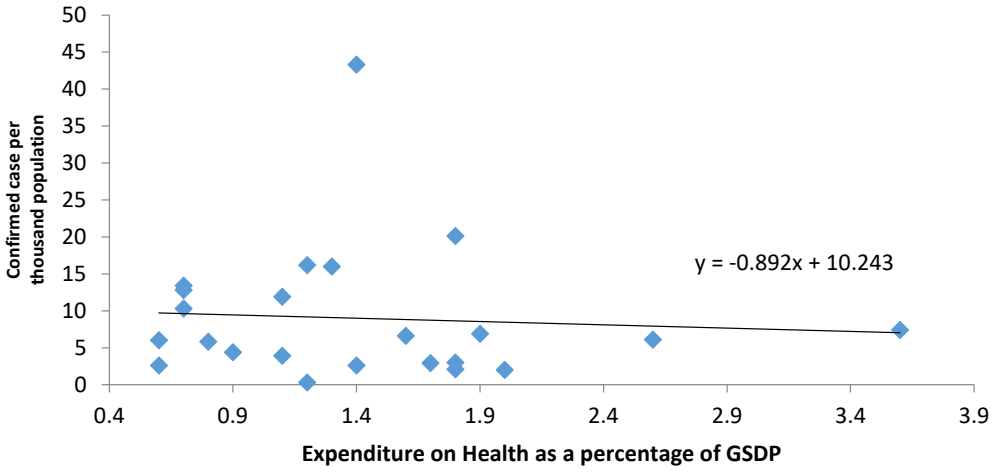
Overall, we observe that states' efforts to reduce inequalities and increase expenditure on health also has an impact on controlling the spread of the pandemic. While recovery rates depend on many other factors like ability to social distance and hygiene,

expenditure on health improves the rate of recovery from COVID-19 as well.

Sections 6.2 and 6.3 assessed the impact of inequalities and health expenditure at the state level. However, access to basic health facilities at the ground level is influenced by factors like caste and income. While many states have started to register a decline in the number of cases, it is imperative to look at recovery through an inequality lens.

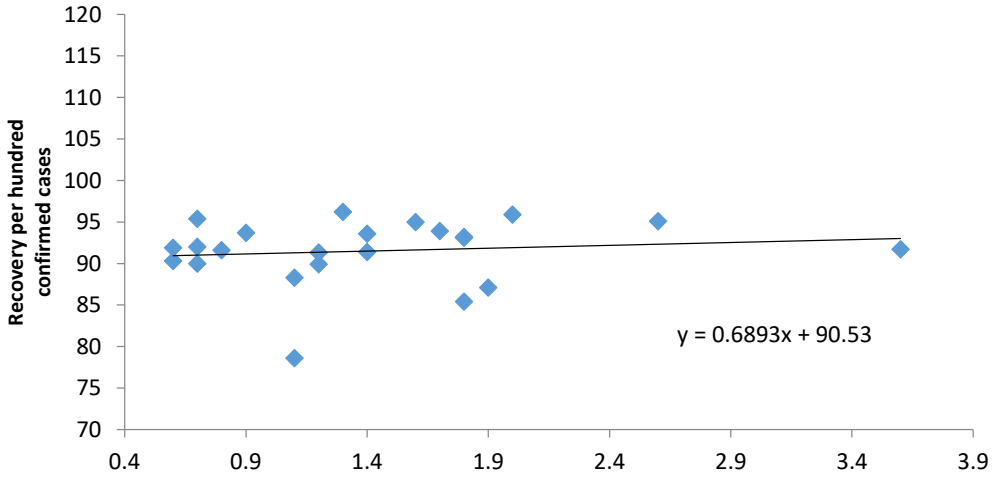
Though access to health services and adhering to social distancing norms is necessary to fight the pandemic, it also depends on various socioeconomic factors. In other words, ground-level evidence suggests that there is unequal access to services and facilities by different caste and income groups, which will be discussed in the remaining sections.

Figure 6.3. Expenditure on Health and Confirmed Cases



Source: Author

Figure 6.4. Expenditure on Health and Recovered Cases



Source: Author

6.4. GROUND-LEVEL EVIDENCE OF INEQUALITY DURING FIRST WAVE OF COVID-19

In addition to national and state level trends on COVID-19, it is necessary to capture the ground-level realities during the pandemic, especially those marginalised due to their socioeconomic conditions. A primary survey was conducted across seven states and attempts to capture the ability of COVID-19 positive patients to socially distance, the impact of the pandemic on mental health and the role of the government and healthcare system in mitigating the impact of the virus.

6.5. SURVEY METHOD

For the purpose of this survey, a household is considered as a unit of study. A two-stage sampling process was followed; first, a stratified sampling process, followed by random sampling. In Stage 1, states were divided (29 states plus the National Capital) into three sub-groups based on their GSDP. Accordingly, top 10, middle 10 and lowest 10 states were identified.

In Stage 2, the above-mentioned sub-groups were further divided into two sub-groups each based on the per capita health expenditure in the state. Therefore, the top 10 states were divided into top 5 and bottom 5 based on the per capita expenditure on health in the state. A similar process is followed for the middle 10 and bottom 10 states. This gave us 6 new sub-groups.

In Stage 3, the states in each of the 6 sub-groups were ranked based on the confirmed COVID-19 cases as on 31 August 2020. Once, Stage 3 was complete, we began by selecting the states. For comparability, the bottom 10 states of India were not included in our sample, which involved small states and Special Status Category states to ensure limited skewedness in the sample.

From the other two groups, three states each were selected based on random sampling. The National Capital was selected as the seventh state, therefore bringing our total sample of states to seven.

Box 6.1. About the respondents

Majority of our respondents belong to the Hindu community (71.9 percent), followed by Muslims (18.5 percent) and Christians (6.5 percent). With respect to caste, 29 percent are SCs, 11.1 percent STs, 35.8 percent OBCs, and 23.4 percent are from the General Category. Of the respondents, 54.9 percent are male and 45.1 percent are female.

A majority of our respondents belong to the lower income categories, with 50 percent of the households earning anywhere between minimum wage to INR 15,000 per month, followed by 27.2 percent who earn between INR 15,001 to INR 30,000, and INR 12.8 percent earning INR 30,001 to INR 45,000 per month (Table 6.2).

A significant number of the respondents (18.2 percent) rely on daily wage work for survival. Of them, 15 percent are involved in private menial jobs in offices and elsewhere; 12.2 percent and 11.7 percent are running medium and small businesses, respectively. A majority of the SC respondents are daily wage earners (21.1 percent) and in low paying government jobs (12.3 percent). Similarly, most ST respondents are daily wage earners (17.6 percent). SCs, STs and OBCs, 31.3 percent, 11.8 percent and 36.67 percent, respectively, relied on additional sources of income.

The states identified therefore include Andhra Pradesh, Maharashtra, Uttar Pradesh, Delhi, Kerala, Bihar and Odisha. Within these states, the district selection was based on the following criteria:

1. Districts with high number of COVID-19 cases to facilitate interviews of families that had at least one or more members that had been infected by the virus.
2. Districts with high concentration of SC, ST or Muslim population.

6.6. ISSUES FACED DURING HOSPITALIZATION

Respondents and/or the members of their family faced a hoard of issues during hospitalization for COVID-19. However, the experiences during hospitalization varied across income groups. With regard to the question on arrangement of transportation to the hospital, it is found that among the lowest income bracket, that is, households with a monthly income of INR 15,000 or less, 30 percent had to arrange for transport themselves.

Percentage for highest income bracket, that is households with a monthly income of INR 75,000 and above, was half that of low-income groups. This implies that higher income groups could access government facilities better during the pandemic, hence they did not need to arrange transport themselves as much as low-income groups.

While 35.1 percent respondents belonging to households with a monthly income of INR 30,000 or less experienced discrimination from their neighbours or community due to being tested positive for the virus, this was only 7.3 percent for the highest income bracket. Additionally, 23.9 percent with income of INR 30,000 or less raised issues related to the attitude of the medical staff towards them, while those in the highest income bracket did not face any issues in this regard. One of the reasons for this, as pointed out in Chapter 5, is that private facilities, which are more accessible to the rich, provide a hospitable environment to patients.

Other issues faced during hospitalization pertained to a slow response from the government and poor quality of food served at the hospital. In households with income of INR 30,000 or less, 14.8 percent and 22.2 percent faced issues of slow response and quality of food served, respectively. The respondents belonging to the highest income bracket, on the other hand, did not face issues of slow response and only 4.8 percent expressed concern over the quality of food served. This highlights the quality of care accessible to the poor versus the rich.

AMONG THE LOWEST INCOME BRACKET, THAT IS HOUSEHOLDS WITH A MONTHLY INCOME OF INR 15,000, 30 PERCENT HAD TO ARRANGE FOR TRANSPORT THEMSELVES.

6.7. PUBLIC HEALTH DURING THE FIRST WAVE

Of the respondents, 24.3 percent expressed a need to access non-Covid medical services during the pandemic. Of those facing difficulty in accessing these non-Covid medical services, 18.2 percent belonged to the general category. Among the marginalised, 47.4 percent OBCs faced difficulty in accessing these services while 50.7 percent of SCs and STs faced similar difficulties.

As discussed in Section 6.1, access to improved water and sanitation is also an important determinant in the fight against COVID-19. The findings of the survey suggest that 21.5 percent of the SC respondents depended on open wells for water while this was true for only 7.8 percent from the general category.

Similarly, while only 3.9 percent of those belonging to the general category depended on springs or streams for water consumption, the figure for SCs was four times that of the general category. This highlights the inequalities in access to improved sources of water and sanitation, where the marginalised depend more on unsafe sources.

WHILE ONLY 3.9 PERCENT OF THOSE BELONGING TO THE GENERAL CATEGORY DEPENDED ON SPRINGS OR STREAMS FOR WATER CONSUMPTION, THE FIGURE FOR SCs WAS FOUR TIMES THAT OF THE GENERAL CATEGORY.

6.8. COVID-19 AND MENTAL HEALTH

Isolation, quarantine and social distancing were some of the unique aspects of the pandemic and has had a direct bearing on mental health. Households with an income of INR 30,000 or less experienced feelings of anxiety (41.4 percent) and sleep deprivation (32.3 percent) more than the higher income groups where 12.2 percent experienced anxiety and 22 percent experienced sleep deprivation due to the pandemic.

33.9 PERCENT FEMALE RESPONDENTS SAID THAT THEY EXPERIENCED FEELINGS OF ANXIOUSNESS, ANGER, IRRITATION AND SLEEP DEPRIVATION. ON THE OTHER HAND, THE SAME WAS TRUE FOR 18.2 PERCENT MALES

Issues related to mental health could be higher for lower-income groups since job loss was also higher for them. As per Oxfam India's Supplement to the Global Inequality Report (2021), out of the total 122 million who lost their jobs in the month of April, 75 percent were in the informal sector. These workers are engaged in small businesses and casual labour and are at a high risk of being pushed into poverty.[6] With the economy on lockdown, casual labourers and daily wage earners did not enjoy the luxury of work from home that the privileged did.

Another stark finding is that 33.9 percent female respondents said that they experienced feelings of anxiousness, anger, irritation and sleep deprivation. On the other hand, the same was true for 18.2 percent males, which is half of that of female respondents. This is because of an increase in women's unpaid care work burden at home, increase in cases of domestic

violence, and probability of re-employment of women lesser than that of men post-lockdown.[7]

The first wave was, thus, packed with inter-state and socio-economic inequalities. Section 2 explores inequalities in the second wave of the pandemic.

SECTION 2: SECOND WAVE OF THE PANDEMIC

In a matter of two months starting mid-March, the total number of cases of COVID-19 in the country had doubled to 2.1 crore.[8] In addition, the number of deaths have doubled during the time as well, reaching 2.3 lakhs by May 6, when cases had peaked.[9]

ONE IN EVERY THREE NEW COVID-19 CASES IN THE WORLD WAS FROM INDIA.

As the second wave worsened, one in every three new COVID-19 cases in the world was from India.[10] Delhi, one of the hardest hit cities by the second wave, had one person dying every four minutes from COVID.[11] Other cities that were hit hard by the second wave were Mumbai, Pune and Bengaluru, witnessing a surge in the number of COVID cases. Mumbai and Pune account for 14 percent of Maharashtra's population, but accounted for approximately one in every three cases in the state. As per an Indian Express analysis[12], 90 percent of all cases in Mumbai are concentrated in high-rise buildings, while 10 percent are in slums, in spite of the slum population living in a tightly packed housing situation.

The middle class was able to shelter themselves in the first wave due to the imposition of a lockdown, while the vulnerable and poor communities suffered.[13] However, the second wave has hit the middle class and upper middle class harder.[14] As the economy opened up and citizens started traveling and resumed work, the second wave engulfed them as well.

Those at the forefront of the battle suffered too with death tally of doctors in the second wave reaching close to 250 by mid-May, whereas in the entire year of 2020, 730 doctors had died due to COVID-19.[15]

The second wave has been deadlier than the first wave of the pandemic, with people dying due to a lack of hospital beds, unavailability of oxygen cylinders, inability to afford the exorbitant medical fees of private hospitals, black marketing of medicines, black fungus affecting around 12,000 immunocompromised patients and a hoard of other issues.[16,17] The second wave has also penetrated the rural population where the surge in cases has been difficult to handle due to a lack of quality medical infrastructure and human resource.[18] By May, approximately one in every two cases was in the rural areas, while states like Uttar Pradesh and Rajasthan had 75 percent of their cases in rural areas.[19] Across the rural parts of the country, families are being wiped out, mainly due to a lack of oxygen, bodies are floating in the Ganges due to a surge in the cost of cremation and farmlands are left unattended due to a lack of workers.[20]

Moreover, the ongoing vaccination drive, which heavily relies on access to the internet for registration and booking slots, ignores the vast digital divide that persists.

ENTERING THE PANDEMIC, ONLY 15 PERCENT RURAL HOUSEHOLDS HAD AN INTERNET CONNECTION[21] WHILE MORE THAN 60 PERCENT WOMEN ACROSS 12 STATES HAD NEVER USED THE INTERNET.[22] SMARTPHONE USERS IN RURAL INDIA WERE ALMOST HALF OF URBAN INDIA, AND SCS AND STS WITH SMARTPHONES STOOD AT 25 AND 23 PERCENT, RESPECTIVELY, WHILE 43 PERCENT UPPER CASTES HAD ACCESS TO A SMARTPHONE.[23]

The second wave of the pandemic has shed light on the importance of investing in healthcare and upscaling medical infrastructure, all the while building resilient economic systems that do not exclude the poor in times of a shutdown.

6.9. INFRASTRUCTURE LAPSE

The second wave of infection, with daily rise in cases going as high as 400,000 a day, overwhelmed the country's health system and crematoriums. It prompted the country's overseas allies to send reinforcements in the form of ventilators and oxygen cylinders, among others. The second wave has also been particularly dangerous because it has been dominated by the new variant of the virus that is very contagious leading to a much higher rate of transmission. It has led to an increased demand for intensive care that is only possible in a hospital setting.[24]

The Principal Scientific Advisor to the Central government, K VijayRaghavan, admitted that the "sense of urgency" to amp up the current health infrastructure declined after the first wave of infections, but that no efforts would have sufficed to upgrade the infrastructure in a year to a level that was required for the second wave.[25] India's health infrastructure has been of concern since pre-pandemic times.

As per the Human Development Report 2020, India ranks 155 out of 167 countries on bed availability.[26] With only five beds and 8.6 doctors per 10,000 of its population, India's inadequate health infrastructure and low investment in healthcare has been subject to criticism for quite some time. This is even more concerning considering the Human Development Report of 2010, when India had six doctors and nine hospital beds per 10,000 of its population.[27] Instead of infrastructure improving in a decade, it has gotten worse. The rural-urban divide in health infrastructure is also a cause for concern. While rural India houses 70 percent of the population[28], it has only 40 percent of the beds in the country leading to an acute shortage of beds in rural India in the second wave.[29] The pandemic has highlighted the existing problems within the health systems of the country. Not only is infrastructure inadequate, but privatization and overcharging even in the middle of a global crisis has made the poor and marginalised even more vulnerable.

INDIA RANKS 155 OUT OF 167 COUNTRIES ON BED AVAILABILITY.

The second wave was characterized by chaos and a complete breakdown of the health delivery system. Lack of beds and doctors, people struggling for oxygen cylinders, plasma therapy, and for medicines like Remdesivir and Tocilizumab, which were also subject to black marketing were the order of the day. The privileged and the rich could access social media and the internet to search for resources or tap into their connections with the higher ups but the poor struggled, yet again, to get access.

The second wave has also been characterized by delays in getting test reports[30] and false negatives with estimates suggesting that one out of every five symptomatic COVID-19 patients are testing negative in RT-PCR tests.[31] This was extremely problematic until the directive issued by the government in end of April that a symptomatic patient need not submit a positive test report to get admission in hospitals[32]. Many serious patients were denied admission in hospitals due to having false negatives in their RT-PCR test.

6.10. VACCINATION

India started its vaccination drive on January 16, 2021, covering an estimated 30 million healthcare and front-line workers. The second phase was launched on March 1, 2021 aiming to cover people above 45 with comorbidities and those above 60, expanding it to everyone above 45 from April 1 onwards, which would cover around 300 million people.[33] With the rise in cases due to the second wave, the government then launched the third phase of its vaccination drive for 18-44 year olds as well starting May 1, 2021, adding 600 million more.

The procurement of vaccines by the government has been under scrutiny. Until March of 2021, orders had been placed for about 200 million doses, which was not adequate for the second phase of the vaccination. Until the end of April, the central government had placed orders for 356 million doses of Covishield and Covaxin, while planning to add 600 million more people to the drive from May 1 onwards.[34] Hence, there was a huge demand and supply mismatch.

The central government had allocated INR 35,000 crore in the 2021-22 budget for procurement of vaccines but promised free vaccine to a very small section of the population that included the healthcare and front-line workers, and people above 45 years of age. Additionally, as per the vaccine policy announced in the last week of April, the responsibility of procurement of vaccines was on State Governments and private players, putting them at a disadvantage in the global race of procurement. The two together were expected to take care of the entire population minus the frontline and healthcare workers, and people above 45, with State Governments either administering the vaccine for free or charging a price depending on their budgetary capacity. In June of 2021, the centre revisited its vaccine policy for procuring COVID-19 vaccines. The Centre will now procure up to 75 percent of the doses of vaccines from the manufacturers and provide them to the State Governments free of cost. Private institutions can buy the rest of the doses and may charge up to a maximum of INR 150 per dose as service charge.[35]

As of June 12, 14.9 percent of the population of the country has had at least one jab and 3.4 percent had gotten both the doses. However, access to vaccines is variable across regions, gender, etc. As of May 26, 2021, 8.3 crore males have been vaccinated as compared to 7.3 crore females.[36] There is also a rural-urban divide in vaccination. In May 2021, 30 doses were administered per 100 persons in urban India, while only 12.7 were administered in rural India.[37] This divide had to do with the huge inequality in access to vaccines where registration and booking of slots was taking place digitally, excluding a large section of the population from getting vaccinated, especially in Rural India. With on-the-spot registration for the vaccine at government-run centres starting in June, the digital divide in vaccine registration is likely to go down.

The government is promising to vaccinate the entire adult population of the country by December 2021, with a pledge to produce at least two billion doses between August and December.[38] This is an ambitious target and requires authorities to convince people to get their shots, especially in small towns and rural areas, where there is a degree of vaccine hesitancy.[39] Another challenge in these areas would also be in terms of having the health system capacity to deliver, requiring an efficient vaccine delivery plan.

6.11. FACTORS RESPONSIBLE FOR SECOND WAVE

The second wave took everyone by a storm, and there are various reasons for the surge in cases in the second wave. This section discusses some of the reasons given by experts on the surge in cases:

1. Violation of protocols[40]: It is no surprise that the second wave hit the country in the middle of election rallies, mass religious gatherings and opening up of travel. Social distancing and safety protocols were violated: instances of failure to wear masks, failure to maintain distance and huge crowds gathering in one place were witnessed. As a result, cases inevitably increased.

2. Mutations and new symptoms: The B.1.617 variant in India has a higher growth rate than other variants, suggesting increased transmissibility, as per the WHO.[41] Another variant, called B.1.1.7, is found in large numbers in Northern India and could have been contributing to the surge in cases.[42] Additionally, the cases in the second wave witnessed new symptoms like headache, diarrhea, etc. making it harder to detect the virus.[43]

3. Slow roll out of vaccination[44]: Another reason for the surge in cases, as per Raghuram Rajan, could be the slow roll out of vaccines. As the first wave simmered down, the urgency of vaccination also declined. The complacency could have contributed to the surge in cases.

Box 6.2: best practices

In the midst of it all, certain practices emerged that helped fight the second wave of the virus, some of which are discussed below:

1. Door-to-door testing[45]: Uttar Pradesh deployed door-to-door COVID-19 testing teams in rural areas, visiting homes in 97,941 villages to test everyone with COVID-19 symptoms.

2. Drive-through vaccination: As inoculation is the only way through this pandemic, cities have come up with drive-through vaccination drives that will enable even the elderly and persons with disabilities to get the vaccination without leaving their vehicles. Mumbai, Odisha, Bhopal, Delhi, Noida and Gurugram are currently undertaking this initiative.[46]

3. Jahan Vote, Wahan Vaccination[47]: Delhi Government introduced a 'Jahan Vote, Wahan Vaccination' campaign with the aim to vaccinate all those above 45 years of age within four weeks. The beneficiaries will be required to visit their designated polling stations to get vaccinated.

4. Decentralization: Mumbai was able to handle the surge in cases in the second wave much better than Delhi. Deaths in Mumbai were one-fourth of that in Delhi. This is due to its governance and public planning. Mumbai undertook a decentralized system of planning with neighborhood war rooms to tackle issues of each locality.[48] Taking note from them, Bengaluru is setting up committees in each of its 198 wards to better manage the pandemic.[49]

5. Door-to-door vaccination[50]: Bikaner, Rajasthan, commenced its door-to-door vaccination drive from June 14, 2021. Once 10 people have signed up, the vaccine van will leave for people's homes.

6. Vaccination on wheels[51]: Kolkata Municipal Corporation in cooperation with the Health and Transport departments of West Bengal launched 'vaccination on wheels' by turning a bus into a vaccination centre. This bus will travel to different markets in Kolkata to vaccinate priority groups, including vegetable and fish sellers, who are unable to leave their business for hours to go for vaccination.

6.12. WHERE DO WE GO FROM HERE?

States' efforts to reduce inequalities and higher expenditure on health resulted in lower confirmed cases of COVID-19 in the first wave. Even though external factors like good hygiene and ability to socially distance also had an important role to play, states with higher expenditure on health had a higher recovery rate from COVID-19.

The findings from the survey by Oxfam India presents inequalities in access to medical services, and in public and mental health. Percentage of respondents in higher-income groups that had to arrange for transport themselves to go to the hospitals was half of those in low-income groups. Similarly, respondents in lower income groups faced discriminatory attitude from the community and the medical staff and issue related to slow response and quality of the food served.

The impact of the pandemic on the mental health of the respondents was worse for the low-income groups as compared to the high-income groups, and worse for females than males.

The marginalised castes, that is, the SCs, STs and OBCs faced more issues in accessing non-Covid medical services as compared to the general category and relied more on unsafe sources of water.

Hence, the inequalities in access to quality care that persisted before the pandemic have percolated into the impact of the pandemic as well. Those who are higher on the socioeconomic ladder have been able to safeguard themselves against the impact of the first wave of the pandemic much better than those at the bottom. In such a scenario, government intervention is necessary to mitigate the unequal impacts of the pandemic. COVID-19 has not only been harder on poorer states, but also on poorer and marginalised individuals, unable to socially distance or access health facilities.

As the country struggled to get back to normal after the first wave, the second wave hit even harder, with a surge in cases and deaths, mutations in the virus accompanied by symptoms that were hard to detect, false negatives in RT-PCR tests and a huge infrastructure lapse in the country. In cities, the virus is affecting the middle and upper middle class more. On the other hand, the second wave has been harder for the rural populace as compared to the first. Given the poor health infrastructure in rural India, citizens struggle to get access to medical resources, while complications like black, white and yellow fungus continue to ensue. The second wave peaked in the beginning of May, and is now slowly starting to simmer down. With the economy suffering yet another blow, and the poor and marginalised struggling to make ends meet, the second wave brought the country to its knees.

The country's health infrastructure continues to be weak and is a major contributing factor in the second wave getting out of hand. Health being a state subject needs to be at the centre of the development plans of the states, with adequate support from the Central Government. While SDG goals stipulate expenditure on health to be 2.5 percent of the country's GDP, this needs to be translated at the state level through the centre's support.

Best practices like drive-through vaccinations and decentralization models, among others, in various cities across the country are creating examples of inclusive governance and planning that are modelled to cater to the entire population. With 250 million doses of Sputnik expected to be imported, and a rise in the production of Covaxin and Covishield, one can only hope that the aim to vaccinate all by the end of 2021 will be achieved, with the government ensuring one crore vaccinations every day from the middle of July.[52]

The vaccine strategy needs to be viewed from a gender lens to ensure that the digital divide and lack of information does not hinder the access of vaccines for women and others. Ensuring all front-line workers are vaccinated is also imperative in the fight against the virus. The vaccination strategy should expand to become more equitable and inclusive to prepare the country for the third wave.

REFERENCES

1 Surbhi Bhatia and Sneh Alexander, (2020), 'Covid-19 shows why we need a healthcare reboot for India', accessed 21 February 2021, https://www.livemint.com/politics/policy/will-covid-19-prompt-health-reboot-11585497828527.html

2 PTI, (2021), 'Second wave rendered 1 crore Indians jobless; 97% households' incomes declined in pandemic: CMIE', accessed June 2, 2021, https://indianexpress.com/article/india/second-wave-rendered-1-cr-indians-jobless-97-pc-households-incomes-declined-in-pandemic-cmie-7339301/

3 Das Gupta, Monica and Manju Rani, (2004), 'India's Public Health System How Well Does It Function at the National Level?', World Bank Policy Research Working Paper 3447, accessed 21 February 2021, https://openknowledge.worldbank.org/bitstream/handle/10986/14215/WPS3447.pdf?sequence=1&isAllowed=y

4 Niti Aayog, (2018), 'SDG India Index, Baseline report, 2018', https://in.one.un.org/wp-content/uploads/2018/12/SDX-Index-India-21-12-2018.pdf

5 George Butler, Rogerio G. Pilotto, Youngki Hong, Emelly Mutambatsere, (June 2020), 'The Impact of COVID-19 on the Water and Sanitation Sector', No Place?International Finance Corporation, accessed 21 February 2021, https://www.ifc.org/wps/wcm/connect/industry_ext_content/ifc_external_corporate_site/infrastructure/resources/the+impact+of+covid-19+on+water+and+sanitation

6 Shekar, K.C., and K. Mansoor, (2020), 'COVID-19: Lockdown Impact on Informal Sector in India', Transport, Vol. 13, Issue 86.6, 13-4, accessed 21 February 2021, https://practiceconnect.azimpremjiuniversity.edu.in/covid-19-lockdown-impact-on-informal-sector-in-india/

7 Dutta, Mayurakshi and Sardar, Sucheta, (2021), The Inequality Virus- Davos India Supplement, New Delhi: Oxfam India.

8 The Hindu Net Desk, (2021), 'Coronavirus Updates|May 6, 2021', accessed May 30, 2021, https://www.thehindu.com/news/national/coronavirus-live-may-6-2021-updates/article34496116.ece

9 The Hindu Net Desk, (2021), 'Coronavirus Updates|May 6, 2021', accessed May 30, 2021, https://www.thehindu.com/news/national/coronavirus-live-may-6-2021-updates/article34496116.ece

10 Alia Chughtai and Mohammed Haddad, (2021), 'India's second COVID wave in maps and charts', accessed May 30, 2021, https://www.aljazeera.com/news/2021/4/27/indias-second-covid-wave-in-maps-and-charts

11 Neha Arora, Sanjeev Miglani and Tanvi Mehta, (2021), 'Indians rush for vaccines as coronavirus toll tops 200,000', accessed May 20, 2021, https://www.reuters.com/world/india/indias-total-deaths-covid-19-passes-200000-mark-2021-04-28/

12 Laxman Singh, (2021), 'In Mumbai, 90% cases of Covid in non-slums, high rises or buildings', accessed May 30, 2021, https://indianexpress.com/article/cities/mumbai/mumbai-covid-19-cases-7280734/

13 Ashutosh Joshi and Dhwani Pandya, (2021), 'India's Urban Affluent Hit by Virus Wave After Earlier Dodge', accessed May 25, 2021, https://www.bloomberg.com/news/articles/2021-04-23/india-s-urban-affluent-hit-by-new-virus-wave-after-dodging-first

14 Ashutosh Joshi and Dhwani Pandya, (2021), 'India's Urban Affluent Hit by Virus Wave After Earlier Dodge', accessed May 25, 2021, https://www.bloomberg.com/news/articles/2021-04-23/india-s-urban-affluent-hit-by-new-virus-wave-after-dodging-first

15 Bindu Shajan Perappadan, (2021), 'COVID-19 surge: Bihar, U.P., Delhi top list of deaths among doctors in second wave, says IMA', accessed May 30, 2021, https://www.thehindu.com/news/national/covid-19-surge-bihar-up-delhi-top-list-of-deaths-among-doctors-in-second-wave-says-ima/article34577689.ece

16 Vikas Pandey (2021), 'Covid-19 in India: Patients struggle at home as hospitals choke', accessed June 5, 2021, https://www.bbc.com/news/world-asia-india-56882167

17 Kess Rowe, (2021), 'The 'black fungus' epidemic hitting COVID-19 patients in India', accessed June 14, 2021, https://www.gavi.org/vaccineswork/black-fungus-epidemic-hitting-covid-19-patients-india

18 Samrat Sharma (2021), 'Fighting rural pandemic with shortage of doctors, health and isolation centres', accessed June 5, 2021, https://www.indiatoday.in/diu/story/fighting-rural-pandemic-shortage-doctors-health-isolation-centres-1802977-2021-05-15

19 Sumant Sen and Vignesh Radhakrishnan, (2021), 'Data | COVID-19 cases surge in rural India even as vaccination rates are lower than urban areas', accessed June 14, 2021, https://www.thehindu.com/data/data-covid-19-cases-surge-in-rural-india-even-as-vaccination-rates-are-lower-than-urban-areas/article34607195.ece

20 Bibhudatta Pradhan, Ruth Pollard, Shruti Srivastava, and Sudhi Ranjan Sen, (2021), ''Entire Families' Wiped Out by Covid's Carnage in Rural India', accessed June 14, 2021, https://www.bloombergquint.com/coronavirus-outbreak/-entire-families-wiped-out-by-covid-19-s-carnage-in-rural-india

21 Ministry of Statistics and Programme Implementation. Household Social Consumption on Education in India NSS 2017-18. New Delhi: National Statistical Office, (2019) accessed 03 December, 2020 https://bit.ly/2VzERQA

22 GoI (2021), National Family Health Survey (NFHS-5), India; 2019-20. Ministry of Health and Family Welfare Government of India. International Institute for Population Sciences, accessed on June 6, 2021. Data is available for 2019-20, but published in 2021. Available from: http://rchiips.org/NFHS/NFHS-5_FCTS/NFHS-5%20State%20Factsheet%20Compendium_Phase-I.pdf

23 Manjesh Rana (2021), 'Explained: How the digital divide impacts young India's vaccination chances', accessed June 7, 2021, https://indianexpress.com/article/explained/how-the-digital-divide-impacts-young-indias-vaccination-chances-7347012/

24 Neha Arora, Sanjeev Miglani and Tanvi Mehta, (2021), 'Indians rush for vaccines as coronavirus toll tops 200,000', accessed May 20, 2021, https://www.reuters.com/world/india/indias-total-deaths-covid-19-passes-200000-mark-2021-04-28/

25 Amitabh Sinha, (2021), 'K VijayRaghavan: Can't ramp up infrastructure in a year for wave so intense', accesed May 30, 2021, https://indianexpress.com/article/india/k-vijayraghavan-health-infrastructure-coronavirus-second-wave-7293042/

26 Rema Nagarajan, (2021), '5 hospital beds/10k population: India ranks 155th in 167', accessed May 30, 2021, https://timesofindia.indiatimes.com/india/5-hospital-beds/10k-population-india-ranks-155th-in-167/articleshow/79769527.cms

27 UNDP. 2010. Human Development Report 2010: The Real Wealth of Nations - Pathways to Human Development. New York. http://hdr.undp.org/en/content/human-development-report-2010

28 Richard Mahapatra, (2021), 'Census 2021: India's Urban-rural conundrum', accessed June 14, 2021, https://www.downtoearth.org.in/blog/urbanisation/census-2021-india-s-urban-rural-conundrum-67221

29 Ministry of Health and Family Welfare, (2018), 'Hospitals in the Country', Press Information Bureau, July 24, 2018, accessed June 14, 2021, https://pib.gov.in/PressReleasePage.aspx?PRID=1539877

30 Sonali Acharjee (2021), 'India's covid collapse, part 4: How the delay in test results accelerated spread of the virus', accessed June 14, 2021, https://www.indiatoday.in/magazine/cover-story/story/20210517-india-s-covid-collapse-part-4-how-the-delay-in-test-results-accelerated-spread-of-the-virus-1800972-2021-05-10

31 Jay Mazoomdaar, (2021), 'Explained: Why are several people with Covid symptoms testing negative?', accessed May 25, 2021, https://indianexpress.com/article/explained/covid-tests-rt-pcr-coronavirus-negative-result-7297329/

32 Richa Singh, (2021), 'Test report not essential for hospitalisation: Govt tells Delhi High Court', accessed May 15, 2021, https://www.hindustantimes.com/cities/delhi-news/test-report-not-essential-for-hospitalisation-govt-tells-delhi-high-court-101619465822379.html

33 Rakesh Sood, Kriti Kapur and Oommen C Kurian, "India's Vaccine Rollout: A Reality Check," ORF Special Report No. 139, May 2021, Observer Research Foundation.

34 Rakesh Sood, Kriti Kapur and Oommen C Kurian, "India's Vaccine Rollout: A Reality Check," ORF Special Report No. 139, May 2021, Observer Research Foundation.

35 G. Ananthakrishnan, (2021), 'Explained | Why did the Centre reverse its COVID-19 vaccine policy?', accessed June 14, 2021, https://www.thehindu.com/sci-tech/health/explained-why-did-the-centre-reverse-its-covid-19-vaccine-policy/article34800727.ece

36 Geeta Punhani, (2021), 'Gender gap in Covid jab', accessed June 2, 2021, https://indianexpress.com/article/opinion/gender-gap-in-covid-jab-7338976/

37 Vignesh Radhakrishnan, (2021), 'Vaccination in rural India trails urban areas even as cases surge', accessed June 6, 2021, https://www.thehindu.com/news/national/vaccination-in-rural-india-trails-urban-areas-even-as-cases-surge/article34589734.ece

38 Shruti Menon, (2021), 'India coronavirus: Can all adults get vaccinated in 2021?', accessed June 14, 2021, https://www.bbc.com/news/world-asia-india-55571793

39 Saheli Roy Choudhury, (2021), 'India's ambitious vaccine targets alone will not help immunize its massive population', accessed June 14, 2021, https://www.cnbc.com/2021/06/14/india-covid-crisis-making-vaccines-readily-available-is-a-challenge.html

40 Coronavirus Outbreak, News, ANI (2021), 'Second Wave Of COVID-19: Experts Discuss Reasons Behind Surge In COVID Cases And Vaccination In India', accessed May 30, 2021, https://swachhindia.ndtv.com/second-wave-of-covid-19-experts-discuss-reasons-behind-surge-in-covid-cases-and-vaccination-in-india-58202/

41 Neha Arora, Sanjeev Miglani and Tanvi Mehta, (2021), 'Indians rush for vaccines as coronavirus toll tops 200,000', accessed May 20, 2021, https://www.reuters.com/world/india/indias-total-deaths-covid-19-passes-200000-mark-2021-04-28/

42 Amitabh Sinha, (2021), 'Explained: Covid-19 variants and India's surge', accessed May 30, 2021, https://indianexpress.com/article/explained/explained-variants-and-the-covid-surge-7306408/

43 Coronavirus Outbreak, News, ANI (2021), 'Second Wave Of COVID-19: Experts Discuss Reasons Behind Surge In COVID Cases And Vaccination In India', accessed May 30, 2021, https://swachhindia.ndtv.com/second-wave-of-covid-19-experts-discuss-reasons-behind-surge-in-covid-cases-and-vaccination-in-india-58202/

44 India Today Web Desk, (2021), 'https://www.indiatoday.in/business/story/raghuram-rajan-explains-why-covid-2nd-wave-took-india-by-surprise-1798699-2021-05-04', accessed May 30, 2021, https://www.indiatoday.in/business/story/raghuram-rajan-explains-why-covid-2nd-wave-took-india-by-surprise-1798699-2021-05-04

45 Zee Media Bureau, (2021), 'Uttar Pradesh deploys door-to-door COVID-19 testing teams in rural areas, WHO lauds efforts', accessed June 14, 2021, https://zeenews.india.com/india/uttar-pradesh-deploys-door-to-door-covid-19-testing-teams-in-rural-areas-who-lauds-efforts-2361221.html

46 Sangeeta Ojha, (2021), 'Drive-in Covid-19 vaccination centres in these cities in India. Full list', accessed May 30, 2021, https://www.livemint.com/news/india/drivein-covid-19-vaccinations-centres-in-india-full-list-of-cities-11621318002085.html

47 Coronavirus Outbreak, News, ANI (2021), 'Delhi CM Launches 'Jahan Vote, Wahan Vaccination' Campaign To Vaccinate All Above 45 Years Within 4 Weeks', accessed June 14, 2021, https://swachhindia.ndtv.com/delhi-cm-launches-jahan-vote-wahan-vaccination-campaign-to-vaccinate-all-above-45-years-within-4-weeks-60038/

48 Dhwani Pandya and P. R. Sanjai, (2021), 'How Mumbai did a better job than Delhi in fighting the second wave of Covid', accessed May 30, 2021, https://theprint.in/health/how-mumbai-did-a-better-job-than-delhi-in-fighting-the-second-wave-of-covid/660850/

49 Rohini Swamy, (2021), 'Hit hard by 2nd wave, Bengaluru is using Mumbai's Covid management idea to prepare for 3rd wave', accessed May 30, 2021, https://theprint.in/india/governance/hit-hard-by-2nd-wave-bengaluru-is-using-mumbais-covid-management-idea-to-prepare-for-3rd-wave/655785/

50 News Desk, (2021), 'Bikaner First in India to Start Door-to-door Covid Vaccine Drive; Begins Monday', accessed June 14, 2021, https://www.news18.com/news/india/bikaner-first-in-india-to-begin-door-to-door-covid-vaccine-drive-begins-monday-3840098.html

51 PTI, (2021), 'COVID-19: Kolkata gets vaccine bus that will travel to markets to inoculate priority groups', accessed June 14, 2021, https://www.newindianexpress.com/cities/kolkata/2021/jun/03/covid-19-kolkata-getsvaccine-bus-that-will-travel-to-markets-to-inoculate-priority-groups-2311249.html

52 Sushmi Dey, (2021), 'Covid-19: Government plans 1 crore daily vaccines from middle of July', accessed May 30, 2021, https://timesofindia.indiatimes.com/india/covid-19-government-plans-1-crore-daily-vaccines-from-middle-of-july/articleshow/83127681.cms
References

ANNEXURES

Table 6.1. States, Confirmed Cases, Recovery Rate, Index of Reduced Inequality and Health Expenditure as a Percentage of GSDP

STATES	REDUCED INEQUALITY INDEX	CONFIRMED CASES PER THOUSAND POPULATION	RECOVERY PER HUNDRED CONFIRMED CASES	HEALTH EXP AS % OF GSDP
Andhra Pradesh	68	16.0	96.2	1.3
Assam	67	6.1	95.1	2.6
Bihar	74	2.0	95.9	2
Chhattisgarh	60	6.9	87.1	1.9
Delhi	69	16.2	89.9	1.2
Goa	19	20.1	93.2	1.8
Gujarat	59	2.6	90.3	0.6
Haryana	54	5.8	91.6	0.8
Himachal Pradesh	78	3.0	85.4	1.8
Jammu and Kashmir	47	7.4	91.7	3.6
Jharkhand	64	2.9	93.9	1.7
Karnataka	70	12.8	92.0	0.7
Kerala	75	11.9	78.6	1.1
Madhya Pradesh	68	2.1	93.1	1.8
Maharashtra	70	13.4	90.0	0.7
Odisha	69	6.6	95.0	1.6
Punjab	50	4.4	93.7	0.9
Rajasthan	70	2.6	91.4	1.4
Tamil Nadu	65	10.3	95.4	0.7
Telangana	94	6.0	91.9	0.6
Uttar Pradesh	46	43.3	93.6	1.4
Uttarakhand	59	0.3	91.3	1.2
West Bengal	73	3.9	88.3	1.1
Total	64	6.2	91.5	1.2

Source: SDG Index Baseline report 2018 (Reduced Inequality), www.covid19india.org (Confirmed and Recovered Cases), Author (Health expenditure-RBI as percentage of GSDP- MOSPI)

Table 6.2. Social Profile

CASTE (%)		RELIGION (%)		GENDER (%)	
SCs	29.7	Hindu	71.9	Male	54.9
STs	11.1	Muslim	18.5	Female	45.1
OBCs	35.8	Christian	6.5		
General	23.4	Others*	3.1		
Total	100	100			100

Source: Oxfam India Primary Survey, 2020
Note: Includes Buddhist, Sikh and Jain

Table 6.3. Income Categories

INCOME CATEGORIES (INR)	PERCENTAGE
Up to 15,000	50.1
15,001 to 30,000	27.2
30,001 to 45,000	12.8
45,001 to 60,000	3.6
60,001 to 75,000	0.9
75,001 and above	5.3

Source: Oxfam India Primary Survey, 2020

Table 6. 4. Issues Faced Across Different Income Groups During Hospitalization*

ISSUES FACED	UP TO 15,000	15,001 TO 30,000	30,001 TO 45,000	45,001 TO 60,000	60,001 TO 75,000	75,001 AND ABOVE
Slow response	14.8%	14.8%	8.2%	0.0%	0.0%	0.0%
Refusal to admit	12.7%	6.7%	6.1%	0.0%	0.0%	0.0%
Quality of food served	24.9%	17.2%	8.2%	14.3%	0.0%	4.9%
Unclean toilets	16.4%	12.0%	9.2%	10.7%	0.0%	2.4%
Attitude of medical staff	26.2%	19.6%	8.2%	10.7%	0.0%	0.0%
Attitude of neighbours/ community	38.2%	29.7%	24.5%	42.9%	0.0%	7.3%

Source: Oxfam India Primary Survey, 2020
Note: Multiple responses

Table 6.5. Difficulties in Accessing Non-Covid Medical Services Across Different Caste Groups

SOCIAL CATEGORY	DIFFICULTIES IN ACCESSING NON-COVID MEDICAL SERVICES
SCs	28.0%
STs	22.7%
OBCs	47.4%
General	18.2%
Total	31.6%

Source: Oxfam India Primary survey, 2020

Table 6.6. Caste-wise Access to Water for Household Consumption*

SOURCE OF WATER	SCs	STs	OBCs	GENERAL
Tube-well (within HH)	35.1%	41.2%	47.3%	42.2%
Tube-well (shared)	13.6%	29.4%	9.1%	10.6%
Open well	21.5%	14.1%	16.7%	7.8%
Protected well	17.5%	7.1%	8.4%	21.1%
Spring/stream	12.3%	10.6%	9.8%	3.9%
Piped water (within HH)	52.2%	45.9%	44.7%	46.1%
Piped water (shared)	11.0%	9.4%	5.8%	8.3%
Pond	7.9%	4.7%	6.5%	1.7%
Standpipe	0.9%	4.7%	1.5%	0.6%
Any other (tanker supplied waters, etc.)	0.9%	0.0%	0.7%	0.6%

Source: Oxfam India Primary Survey, 2020
Note: Multiple responses

Table 6.7. Mental Health Issues Faced Across Different Income Groups*

MENTAL HEALTH ISSUE	UP TO 15,000	15,001 TO 30,000	30,001 TO 45,000	45,001 TO 60,000	60,001 TO 75,000	75,001 AND ABOVE
Fear and anxiety during lockdown	41.8%	41.1%	24.5%	42.9%	14.3%	12.2%
Irritation and anger during lockdown	37.9%	34.9%	29.6%	50.0%	28.6%	82.9%
Sleep-deprivation during lockdown	32.2%	32.5%	28.6%	46.4%	42.9%	22.0%

Source: Oxfam India Primary Survey, 2020

THE WAY FORWARD

The preceding discussion establishes a case for an urgent need to address underlying causes of health inequality and invest in a strong primary healthcare system to truly make quality public healthcare accessible and affordable to all sections of the society. This report underscores the social gradient of health on account of which the socioeconomically marginalised individuals are burdened with the poorest of health and inaccessibility to quality healthcare. As such, the union and state governments should act upon these policy recommendations:

1. **Enact 'Right to Health' as a fundamental right.**
   The Constitution of India does not guarantee a fundamental right to health though it does refer to the role of the government in the provisioning of healthcare to all its citizens. Therefore, the right to health should be enacted as a fundamental right that makes it obligatory for the government to ensure equal access to timely, acceptable, and affordable healthcare of appropriate quality, and address the underlying determinants of health to close the gap in health outcomes between the rich and poor.

2. **The free vaccine policy should adopt an inclusive model** to ensure that everyone, irrespective of their gender, caste, religion or location i.e. people living in hard-to-reach areas, gets the vaccine without any delay.

3. **Increase the health spending to 2.5 percent of GDP** to ensure a more equitable health system in the country. This includes

   a. Ensuring that union budgetary allocation in health for SCs and STs is proportionate to their population. The government must monitor the spending under these heads via a special monitoring cell;

   b. Prioritising primary health by ensuring that two-third of the health budget is allocated for strengthening primary healthcare, specifically health and wellness centres, to ensure accessibility of services to all, including those living in the remotest parts of the country;

   c. Suggesting the state governments to allocate their expenditure on health to 2.5 percent of GSDP. States should be allowed a higher degree of autonomy on spending funds received from the Centre through centrally-sponsored schemes and the flexibility to reallocate funds to issues that might be of higher priority in a state;

   d. Centre should extend financial support to the states having low per capita health expenditure to reduce inter-state inequality in health.

4. **Ensure equity in access and quality of health services,** specifically for the poor and marginalised populations like the Dalits, Adivasis and Muslims. Regions with higher concentration of marginalised population should be identified and public health facilities should be established, equipped and made fully functional as per the IPHS that remains unfulfilled. Moreover, population-specific sub-plans such as the Tribal Sub-Plan should be adopted to address the specific health concerns of the poor and the marginalised populations.

5. **Widen the ambit of the insurance schemes to include out-patient care:** Major expenditures on health happens through out-patient costs as consultations, diagnostic tests, medicines, etc. It becomes particularly exorbitant for patients with chronic illnesses and those requiring long-term care. The current government-financed health insurance schemes only covers hospitalization cases. Moreover, the second wave of COVID forced large number of people to recover at homes due to shortage of beds incurring significant expenses that are not eligible for reimbursement under the existing insurance policies that require hospitalisation to be eligible. While the report does not endorse government-financed health insurance schemes as a way to achieve UHC and stresses that insurances can only be a component of it, it is imperative that government-financed health insurance schemes widens its ambit to include out-patient costs.

6. **Earmark funds for the provision of free essential drugs and diagnostics** at all public health facilities. The current National Health Mission Free Drugs & Diagnostics Service Initiative is only a set of guidelines; it is not statutory as a scheme and therefore not necessarily enforceable. Rajasthan and Tamil Nadu, however, already have a scheme for free medicines in place that increased the footfall of patients to public health institutions considerably. A national scheme, that includes not just drugs but diagnostics as well, should be introduced to reduce OOPE on health. Concurrently, budgetary allocations for the Jan Aushadhi scheme, which provides free medicines at select outlets, should be increased.

7. **Direct all states to notify the Patients' Rights Charter** forwarded to them by Ministry of Health and Family Welfare, and set up operational mechanisms to make these rights functional and enforceable by law; create awareness and educate citizens on what they should expect from their governments and healthcare providers and set up grievance redressal mechanisms to protect patients from exploitation and discrimination.

8. **Regulate the Private Health Sector:**

    a. All state governments must adopt and effectively implement Clinical Establishments Act or equivalent state legislations.
        - The Clinical Establishments (Registration and Regulation) Act (CEA), 2010 has been enacted by the Central Government to provide for registration and regulation of all clinical establishments in the country with a view to prescribe the minimum standards of facilities and services provided by them.
          The CEA Rules were notified in 2012 and specified some of the most important conditions for registration of clinical establishments such as prominent display of details of rates charged and facilities, charging the rates for procedures and services within the range of rates determined by the Central Government, compliance with prescribed Standard Treatment Guidelines, maintaining and providing Electronic Medical Records.
          Health is a state subject in India and therefore, every state has to adopt this act. As of now, 11 States and 6 Union Territories have adopted the Clinical Establishment Act, 2010 by 2020. Implementation of this act in all the states can ensure positive health outcomes and this can also reduce health inequality across the country.

b. Extend the price capping policy introduced during the COVID-19 pandemic to include diagnostics and non-COVID treatment in order to prevent exorbitant charging by private hospitals leading to catastrophic out-of-pocket health expenditure.
   - The price capping policy introduced during the COVID-19 pandemic has helped the poor through decreasing the burden of treatment cost. In order to prevent the marginalised groups from catastrophic OOPE for non-COVID treatment, there is a need to regulate the cost of the private sector health service providers. Capping of prices for each of the treatment and diagnostic-related services would help the poor to get the facility at genuine cost. This will ensure quality health services for all with affordable cost.

9. **Augment and strengthen human resources and infrastructure** in the healthcare system:

   a. The government should take steps to regularize services of women frontline health workers, especially ASHAs, and confer them the status of Group 'C' employees of the Government;

   b. Establish government medical colleges with district hospitals prioritizing their establishment in hilly, tribal, rural and other hard-to-reach areas where health infrastructure and human resources are either limited or non-existent.

   c. Enhance capacity of hospitals and other healthcare establishments to include more beds with oxygen and ventilators, so a second wave scenario does not occur again. The government needs to have a contingency plan in place of other establishments that can be converted to hospitals to cater to a surge in demand of hospitals.

10. **Need to look at health in totality:**

   - Quality health is directly related to well-being. There are number of direct and indirect factors responsible for delivery of health services. Health outcomes are the result of multi-sectoral interventions. 'Health for All' could not be achieved without inter-sectoral co-ordination. Thus, inter-sectoral coordination for public health is required to address issues of Water and Sanitation, literacy, etc. that contribute to health conditions. Specific roles and standard operating procedures of departments/ ministries, and convergence plan need to be detailed out for reducing health inequality in the country.

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