

THE INDIAN HEALTHCARE SYSTEM AND RIGHT TO HEALTH

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DISCUSSION PAPER

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ABSTRACT

The ongoing COVID-19 pandemic has exposed the underlying conditions surrounding India's healthcare system today. With a population of over 1.33 billion people, India spends 3.66% of its total GDP on healthcare, out of which the total government expenditure is only 1.28%. In light of this unprecedented health crisis, this paper seeks to highlight the issues gripping healthcare in the country. Focusing on inequitable access and lack of affordability to basic healthcare services, it further highlights the pressing need to recognise Right to Health as a fundamental right.

INTRODUCTION

On 11th March 2020, the World Health Organisation (WHO) declared the outbreak of the Novel Coronavirus (COVID-19) a global pandemic. As of 22nd April 2020, there were 26,38,477 cases worldwide, with over 1,84,248 reported deaths. In India, the first case of the pandemic was reported on 30th January 2020, with a total of 21,450 confirmed cases and 681 deaths till 22nd April 2020, with numbers expected to rise sharply in the following weeks¹. According to the WHO Executive Director Michael Ryan, India being the world's second-most populous country means that its capacity to deal with COVID-19 will shape the course taken to fight the pandemic globally (ANI 2020).

Data from China, USA, and other countries suggest that adults above 60 years of age, along with people suffering from cardiovascular disease, diabetes, and tuberculosis (TB) and other respiratory disorders are most susceptible to being affected by COVID-19 (McKay 2020; Unnamed Author, The Conversation 2020). In India, however, cases have been high across all age groups, indicating a general trend of poor health conditions (Rai 2020).

Poor public health is evident in India even without the threats presented by the recent pandemic. According to the World Bank, India has one of the world's highest populations of children suffering from malnutrition - a double of the total cases of malnutrition among children in Sub-Saharan Africa (Save the Children India 2016). Currently, India ranks 102 out of 117 qualifying nations on the Global Hunger Index, below North Korea and Sudan (Global Hunger Index Report 2019). Malnutrition is directly related to impaired immune systems, making malnutritioned children all the more vulnerable to diseases. Furthermore, the contribution of air pollution to disease burden remains high in India, with levels of exposure among the highest in the world. Air pollution causes disease burden through a mix of non-communicable and infectious diseases, mainly cardiovascular diseases, chronic respiratory diseases, and lower respiratory infections (ICMR et al. 2017). With 199 TB patients per 100,00 persons and housing 2.8 million of the total 10.2 million cases of TB worldwide, India also leads the count among TB burden countries (WHO n.d.). India constitutes 26% of the world's Disability Adjusted Life Years (DALYs)² due to air pollution (Global Burden of Disease Study 2017). Consequently, over 8% of the total disease burden and 11% of the total premature deaths of people below 70 years of age is due to complications from

¹ This data has been sourced from:

https://www.worldometers.info/coronavirus/

² According to the WHO, DALYs (Disability Adjusted Life Years) is defined as the sum of years of potential life lost due to premature mortality and the years of productive life lost due to disability.

polluted air (Balakrishnan et al. 2017). The issue of air pollution therefore has long-term negative consequences on health. For instance, studies have found that prolonged exposure to PM 2.5, a major contributor to air pollution, can increase the risk of death due to the coronavirus by almost twenty times (Matta 2020).

India spends a nominal 3.53% of its total GDP on healthcare, considerably lower than several other nations (Figure 1). Out of this, the total government expenditure is only 1.28% (Chandna 2019). Over the years, even though the central government's public health expenditure as a percentage of the Gross Domestic Product (GDP) has marginally increased from 1.13% in 2014-15, it remains considerably lower than the WHO recommendation, which stipulates that countries globally should spend 4%-5% of their GDP on healthcare.

FIGURE 1: CURRENT HEALTH EXPENDITURE OF TOP TEN COUNTRIES BY GDP (% OF TOTAL GDP)



HEALTHCARE MANDATES IN THE CURRENT CONSTITUTUION OF INDIA

In India, the right to health has been enforced through a series of public interest litigations, encompassed by Article 21 of the Indian Constitution. It incorporates Protection of Life and Personal Liberty. The Directive Principles of State Policy and clauses (e) and (f) of Article 39, 41 and 42 take into account protection of health, availability of proper facilities for healthy development of children and humane working conditions for all citizens. Further, Article 47 of the constitution mandates that it is imperative for the state to raise the level of nutrition as well as maintain the living standard of people, accompanied by the need to improve the public healthcare system of the country. However, till date, the right to health has not been recognised as a separate fundamental right, leaving the contours and legal jurisdiction of the right ambiguous.

In 2017, a new private member Bill was introduced in the Rajya Sabha seeking to expand the scope of Article 21. It proposed an amendment to incorporate 'Right to Health' as a fundamental constitutional right to facilitate the provision of adequate medical facilities as a duty and obligation of any government in a welfare state (Sharma 2017). Right to Health is an internationally recognised fundamental human right, enumerated in Article 25 of the United Nations 1948 Universal Declaration of Human Rights, with an aim to constitutionally facilitate the highest attainable level of health. Encompassed by the broader international human rights law, it focuses on ensuring the role of the State in promoting a minimum level of health protection (Hendriks 1998). In the context of the looming pandemic, this paper seeks to highlight the challenges surrounding the Indian healthcare system today and further focuses on the need to expand the scope of Article 21 of the Indian constitution to incorporate Right to Health as a constitutionally recognised fundamental right.

CHALLENGES GRIPPING THE INDIAN HEALTHCARE SYSTEM TODAY

1. LACK OF PREVENTIVE HEALTHCARE

The National Health Accounts defines preventive healthcare as the provision of conditions with the primary purpose of risk avoidance of acquiring or suffering injuries which can lead to direct involvement of a consumer with the healthcare system (NHA Report 2015-16)³. It involves systematic measures to prevent the occurrence of diseases and preventable deaths. Preventive healthcare is of critical importance in India, primarily due to lack of quality medical health professionals, steered by the highly skewed doctor-patient ratio (1:1565)⁴. In 2015-16, the Central Government spent merely 6.9% of its total health expenditure on preventive healthcare, with less than 1% spent on information and counselling of people (Ibid.).

⁴ Lok Sabha Starred Question No. 60.

³ Despite the critical importance of preventive healthcare, there is no separate account of India's expenditure on preventive health care. Currently, National Health Accounts (NHA) encompasses information on primary health care and preventive care.

http: an acute shortage in the availibility of //164.100.47.194/loksabha/Questions/QResult15.aspx?qref=69322&l-sno=16)

Neglecting preventive healthcare has severe consequences on public health outcomes. For instance, due to a lack of focus on preventive oncology, over 70% of cancer cases are diagnosed only after reaching stage III or stage IV (National Health Profile 2018). Consequently, the number of cancer-related deaths in India are among the highest in the world, with 784,821 people succumbing to cancer in 2017-18. Similarly, India has one of the highest numbers of diabetes cases in the world, with the figure expected to rise exponentially to 80 million by 2025, making India the 'Diabetes Capital' of the world (Diabetes Foundation (India) n.d.). The country also has some of the highest rates of HIV/AIDS, diarrhoeal diseases, rabies, and chronic obstructive pulmonary disease (COPD) in the world, all of which are preventable. A range of factors associated with preventive healthcare are neglected in India, some of which are discussed below.

MALNUTRITION

Malnutrition is defined as the occurrence of 'deficiencies, excesses or imbalances in a person's intake of energy and nutrients' (WHO 2018a). Malnutrition can lead to physiological dysfunction, affecting the functioning and recovery system of the human body. It also causes decline in muscle function, reduction in cardiac muscle mass, increase in risk of infection along with delayed wound healing, among others (Saunders 2010).

As per UNICEF's The State of The World's Children Report 2019, 69% of the total deaths of children below the age of five was due to malnutrition. India is responsible for one-third of the world's total cases of undernutrition, with 194.4 million people found to be undernourished in 2019 (Global Nutrition Report 2018; FAO 2019). 46.6 million stunted children out of a worldwide total of 150.8 million, with more than 3 out of every 10 stunted children, are in India. 44% of children under the age of 5 are underweight, while 72% of infants suffer from anaemia (Global Nutrition Report 2018). India is also home to more than a million overweight children, ranking as the third most obese nation in the world preceded by USA and China, thus facing a double burden of malnutrition⁵.

Underweight (%)	35.7%
Severely Underweight (%)	11.0%
Wasted (%)	21.0%
Severely Wasted (%)	7.4%
Stunted (%)	38.4%
Severely Stunted (%)	16.3%

TABLE 1: ALL INDIA STATUS OF MALNOURISHED UNDER-FIVE CHILDREN

SOURCE: NFHS-4 (2015-16)

⁵ The double burden of malnutrition is characterised by the coexistence of undernutrition along with overweight and obesity, or diet-related noncommunicable diseases, within individuals, households and populations, and across the lifecourse.

SANITATION

WHO links poor sanitation to transmission of diseases such as cholera, diarrhoea, dysentery, hepatitis A, typhoid and polio as well as exacerbated stunting. Poor sanitary practices have shown to reduce human well-being, social and economic development due to impacts such as anxiety, risk of sexual assault, and lost educational opportunities (WHO 2019). According to a joint report by WHO and UNICEF, 88% of the total diarrhoeal deaths worldwide are due to unsafe drinking water and inadequate sanitation facilities. Out of a total of 2.5 billion people globally practising open defecation, 665 million people belong to India (WHO and UNICEF 2012).

Good sanitation practices have far-reaching impacts because it can arrest the contraction and spread of several infections. For instance, since there is currently no vaccine to prevent COVID-19, regular and effective hand hygiene⁶ has been hailed as one of the most important ways to hinder the spread of the virus. However, in India, 64.2% and 25.9% households do not wash their hands with soap/detergent before eating and defecating, respectively (NSS 2018) (Figure 2).





⁶ Washing hands at regular intervals for 20 seconds with soap and water or using an alcohol-based hand rub.

• DOUBLE BURDEN OF DISEASES

Over the last two decades, India's rapid GDP growth has been accompanied by an accelerated rise in the prevalence of chronic Non-Communicable Diseases (NCDs), lifestyle-related diseases that were previously only considered a bane for the richer western nations. These coexist with the traditional communicable diseases that have continued to plague the developing world. India's healthcare system, thus, faces a dual challenge of healthcare which WHO defines as the 'Double Burden of Disease' (Global Nutrition Report 2018).

NCDs⁷, which are typically prevalent in populations aged 55 years or older in many developing countries, have an onset period of a decade earlier (≥45 years of age) in India (Arokiasamy 2018). Exacerbating this problem are the issues of multiple chronic conditions and a delay in their diagnoses due to lack of awareness and inequitable access to healthcare.

In 2016, NCDs accounted for 61.8% of the total deaths in India with WHO recording it at 63%, an increase from 37.9% in 1990, while communicable, maternal, neonatal and nutritional diseases accounted for 27.5% (ICMR et al. 2017) (Figure 4).



FIGURE 3: CONTRIBUTION OF MAJOR DISEASE GROUPS TO TOTAL DEATHS IN INDIA, 1990 AND 2016

⁷ These include heart ailments, cancer, diabetes, chronic respiratory diseases and mental disorders.



2. LOW INFRASTRUCTURE DEVELOPMENT

Health infrastructure is not limited to mere physical infrastructure such as public hospitals, clinics and dispensaries. It also acquires a broader significance with an equal focus on well-trained doctors, specialists and other medical staff. However, India suffers from an alarming shortfall of skilled health workers along with a substantial lack of public hospitals and medical provisions in already existing public health facilities.

PUBLIC HEALTH FACILITIES

In India, there are 37,725 public health facilities which include Primary Health Centers (PHCs), Community Health Centers (CHCs), Sub-District/Divisional Hospitals (SDHs) and District Hospitals (DH) (Table 2). On the other hand, in rural and urban areas, there are 19,810 and 3,772 hospitals respectively. The total allocation of public health facilities in India accounts for a negligible 0.29 facilities for every 10,000 people (MOSPI 2019).

Primary Health Centers (PHC)	Community Health Centers (CHC)	Sub-District/ Divisional Hospitals (SDH)	District Hospitals (DH)	Total
29,899	5,568	1,255	1,003	37,725

TABLE 2: NUMBER OF PUBLIC FACILITIES IN INDIA

SOURCE: MOSPI 2019

The total number and availability of beds in government hospitals in India are also disproportionately low. According to the World Bank, in India, there are 0.7 beds per 1000 population, the lowest among the top ten countries by GDP (Figure 5). For a population of 1.3 billion people, there are 7,10,761 beds in all public health facilities in India, of which 2,79,588 and 4,31,173 are in rural and urban India respectively.

FIGURE 5: HOSPITAL BEDS PER 1000 PEOPLE IN THE TOP TEN COUNTRIES BY GDP



• SHORTAGE OF HUMAN RESOURCE

According to the Rural Health Statistics (RHS) 2018, there is an acute shortage of human resource via-vis the various requirements in public health facilities in India. As per the Health Management Information System (HIMIS), there are 86,342 doctors in rural areas and 15,964 doctors in urban areas⁸. Taking into account the requirement of 5,624 physicians in CHCs in India, there is a shortfall of over 4,821 physicians. Similarly, there is a requirement of 5,624 obstetricians and gynaecologists in CHCs across the country against which there is a shortfall of over 4200 specialists. Overall, the total requirement for specialists (surgeons, obstetricians, gynaecologists, physicians and paediatricians) in CHCs is around 22,496 out of which only 4,074 are in position with a shortfall of over 18,422 specialists⁹.

3. ACCESSIBILITY AND AFFORDABILITY OF HEALTHCARE

Over the years, India has witnessed a growth in the private health sector, with 80% of curative care being availed through the private health facilities (Aggarwal 2008). However, along with a push to facilitate health tourism, there has been a substantial cut in public funding in the health sector. This has led to a staggering increase in healthcare expenses, especially for the poor. It is reported that about 6 crore people every year, or 7,000 people every hour slip into poverty due to mounting healthcare expenses (PTI 2018).

In 2014, with 58% of all hospitalisation cases occurring in private facilities¹⁰, according to the 71st Round Report, 'Health in India' by National Sample Survey Office (NSSO), the utilisation of private health services is on a rise as compared to public/government facilities.

⁸ Lok Sabha unstarred question no. 1265.

http://164.100.47.194/loksabha/questions/QResult15.aspx?qref=77591&lsno=16

⁹ Lok Sabha starred question no. 365. http://164.100.24.220/loksabhaquestions/annex/171/AU1265.pdf ¹⁰ Lok Sabha unstarred question no. 4449.

http://164.100.24.220/loksabhaquestions/annex/171/AU4449.pdf





FIGURE 7: AVERAGE MEDICAL EXPENDITURE DURING HOSPITAL STAY PER HOSPITALISATION CASE (INR)



SOURCE: MINISTRY OF STATISTICS AND PROGRAMME IMPLEMENTATION 2017

The average medical expenditure in private hospitals is seven times greater than that incurred in a government/public facility in 2017-18 (MOSPI 2017) (Figure 6). For cardiovascular ailments, which are the leading cause of death in India with 28% of total deaths in 2016, the average medical cost per hospitalised case was INR 54,970 in private hospitals, an eightfold increase from the average expenditure in a public hospital. For chronic respiratory diseases, which led to 10.9% of all deaths in 2016, the average medical expenditure in a private hospital was six times the cost incurred in a public hospital (ICMR et al. 2017) (Figure 7). Moreover, in the financial year 2017-18, around 48.2 crore persons were covered under health insurance (excluding personal accidents and travel insurance)¹¹, which accounts for merely 35% of the total population.

AYUSHMAN BHARAT YOJANA-PMJAY

On 23rd September 2018, the Government of India launched a national health protection scheme called the Ayushman Bharat Yojana (now renamed as Pradhan Mantri Jan Arogya Yojana or PMJAY). The scheme aims to make secondary and tertiary healthcare completely cashless, and the beneficiaries of the scheme get access to an e-card that can be used to avail services at an empanelled (public or private) hospital in the country.

The PM-JAY scheme seeks to provide healthcare to 10 crore families, or 50 crore individuals, belonging to poor and lower middle income households, through a health insurance scheme providing a cover of INR 5 lakh per family. The coverage includes 3 days of pre-hospitalisation and 15 days of post-hospitalisation expenses, with around 1,400 medical procedures covered under the scheme. On 4th April 2020, the National Health Authority announced that testing and treatment for COVID-19 will be free of cost for Ayushman Bharat beneficiaries at private laboratories and empanelled hospitals, a decision expected to attract more private players to test and treat patients suffering from the COVID-19 (Unnamed Author, Business Today 2020).

TABLE 3: PROGRESS MADE BY PM-JAY SINCE LAUNCH (TILL 30/03/2020)

E-Cards Issued	Hospital Admission	Hospitals Empanelled
12,44,59,629	94,41,539	20,104

SOURCE: NATIONAL HEALTH AUTHORITY N.D.

However, it is argued that the insurance-based model of Ayushman Bharat-PMJAY has severe structural and operational shortcomings. Firstly, PMJAY covers only hospitalisation costs and does not take into account in-patient and outpatient care. It also requires hospital admission as a criterion to avail the benefits of the scheme even though in India, only around 4.4% of the total population requires hospitalisation (Sehgal 2018). Thus, the scheme effectively leaves out a large section of the population in dire need of medical services, like patients suffering from diseases requiring long-term care or medication. Secondly, it is reported that the poorest sections of the society who were previously

¹¹ Lok Sabha unstarred question no. 4340. http://164.100.24.220/loksabhaquestions/annex/171/AU4340.pdf benefiting from Rashtriya Arogya Nidhi (RAN) were unable to avail any benefit from AB-PMJAY. For instance, those suffering from chronic liver disease and blood cancer, among others, have been reportedly denied treatment as these illnesses are not listed under the medical packages in the scheme (Khan 2019). Thirdly, the scheme has been plagued with corruption and misuse of funds. Within the first year of its completion, confirmed cases of fraud have been reported in 1,200 hospitals (Sharma 2019). Finally, the profit-motivated, supplier-induced demand by private healthcare providers, has led to a low number of empanelment of private hospitals, particularly in districts with the highest concentration of beneficiaries, uncovering a major flaw in the scheme (Choudhury and Datta 2019).

CONCLUSION- WHY DOES INDIA NEED RIGHT TO HEALTH?

According to the Bhore Committee Report 1946, access to primary healthcare is a fundamental right which lays the foundation of a national health care system. However, inequitable access to healthcare threatens the complementary nature of health and human rights as promotion and protection of the former is inevitably linked to the latter (Mann et. al. 1994). In India, over the years, Article 21 of the Constitution (Right to Life) encompasses protection of life and right to health. In a series of pronouncements such as Consumer Education and Research Centre v. Union of India and CESC Ltd. v. Subash Chandra Bose case, among others, the Supreme Court of India stated that health is a fundamental right and accessibility and affordability of medical facilities is an integral part of social security (Ramaswamy 1995, Jhawar n.d.).

Additionally, with the sporadic rise in COVID-19 cases in India, the right to health could be invoked to demand effective steps from the State to ensure equitable access to healthcare for every citizen, according to lawyer Gautam Bhatia (Bhatia 2020). However, the Supreme Court has not laid out the "full contours of the right" (Bajaj 2020) If introduced as a fundamental right, the right to health will mandate a set of legal consequences for the failure to provide primary health facilities to any Indian citizen. Furthermore, this could be a first step towards re-evaluating and re-structuring India's current assurance-based approach towards a more equitable healthcare strategy (Sharma 2017).

While the government has established a number of primary health centres across India over the years, these public health facilities are not adequately equipped to deal with a pandemic like COVID-19. With a lack of government facilities and public hospitals all over the country, ICMR had to grant permission to select private clinics to conduct tests to check the spread of the virus. However, these private clinics put a cap of INR 4,500 per test for the same (PTI 2020). On 8th April 2020, in response to a PIL, the Supreme Court of India passed an interim order directing the state to ensure that all private labs conduct COVID-19 tests free of cost (Talekar 2020). However, on 13th April, the Supreme Court modified its order and stated that free testing facilities would be limited only to the 'poorest' which includes persons covered under the PMJAY, persons who fall under a notified category of economically weaker sections and any other category deemed suitable for free testing by the central government (Sanyal 2020). Meanwhile the court also granted permission to private clinics to charge upto INR 4,500 per test. With more than 65% of the Indian population not being covered under health insurance and reimbursement facilities, access and affordability to primary healthcare services has transformed into a privilege for a few. It is imperative to point out that this high cost of testing comes at a time when India's low testing rate of 18 tests per million population is already raising major concerns

towards India's COVID-19 strategy to combat the ongoing pandemic (Saikia 2020).

The government's poor outlay for public health not only poses a serious concern for the health system but also is a major threat to the fundamental human rights of the poor and the marginalised population of the country. 22% of India's total population lives below the poverty line (BPL), yet in India, the average medical expenditure per hospitalisation case in a government/public hospital is around INR 4,452 as opposed to INR 31,845 in a private hospital. With less than 14% of the rural population having health expenditure coverage, lack of or limited access to government/public healthcare facilities forces the poor and the marginalised to either turn to the private health sector or go through a complete absence of required and timely treatment. This results in a considerable amount of out-of-pocket payments (OOPs)¹² transforming healthcare into a luxury (PTI 2016; Rao and Choudhary 2012). In times of a global pandemic such as COVID-19, the need to reopen the conversation surrounding accessibility and affordability of essential healthcare facilities by each and every citizen as a fundamental and a human right gains paramount significance.

¹² According to the WHO, out-of-pocket payments are direct payments made to healthcare providers by consumers in times of service. As per the Health and Morbidity Survey 2014, the out-of-pocket payment or expenditure per hospitalised case (excluding childbirth) in public health facilities is INR 5,369 in rural areas as opposed to INR 7,189 in urban areas.

BIBLIOGRAPHY

Aggarwal, Arun. K, (2008). "Strengthening Health Care system in India: Is privatization the only answer?". *Indian journal of community medicine:official publication of Indian Association of Preventive & Social Medicine* 33(2), 69–70.

https://www.ncbi.nlm.nih.gov/pmc/articles/PMC2784627/

ANI, (2020), ""India Led World In Eradicating 2 Pandemics, Should Show The Way": WHO" *NDTV* March 24, 2020.

https://www.ndtv.com/india-news/coronavirus-outbreak-world-health-organisation-executive-director-mi-chael-j-ryan-india-has-tremendou-2199553

Arokiasamy, Perianayagam, (2018) "India's escalating burden of non-communicable diseases". *The Lancet Global Health* December 1, 2018.

https://www.thelancet.com/journals/langlo/article/PIIS2214-109X(18)30448-0/fulltext

Bajaj, Rahul, (2020) "Can the Judiciary Invoke Right to Health to Demand a More Vigorous Response to COVID-19?" *The Wire* March 31, 2020.

https://thewire.in/law/can-the-judiciary-invoke-right-to-health-to-demand-a-more-vigorous-response-to-covid-19

Bhatia, Gautam, (2020), "Coronavirus and the Constitution" *Wordpress* March 17, 2020. https://indconlawphil.wordpress.com/2020/03/17/coronavirus-and-the-constitution/

National Health Portal of India, (n.d.) "Bhore Committee, 1946". Accessed April 2, 2020. https://www.nhp.gov.in/bhore-committee-1946_pg

Chanda, Himani, (2019) "At 1.28% of GDP, India's expenditure on health is still low although higher than before" *The Print* October 31, 2019.

https://theprint.in/health/at-1-28-gdp-india-expenditure-on-health-still-low-although-higher-than-be-fore/313702/

Diabetes Foundation (India), "About Us". Accessed April 6 2020. http://www.diabetesfoundationindia.org/about.htm

FAO, IFAD, UNICEF, WFP and WHO, 2019. *The State of Food Security and Nutrition in the World 2019. Safeguarding against economic slowdowns and downturns.* Rome: FAO. http://www.fao.org/3/ca5162en/ca5162en.pdf

Global Hunger Index Report 2019. Accessed April 6, 2020. https://www.globalhungerindex.org/results.html

Global Nutrition Report 2018. Accessed April 4, 2020. https://globalnutritionreport.org/reports/global-nutrition-report-2018/ Hendriks, Aart, (1998). "The right to health in national and international jurisprudence". *European Journal of Health Law* 5(4): 389-408.

Indian Council of Medical Research, Public Health Foundation of India and Institute for Health Metrics and Evaluation, (2017). *India: Health of the Nation's States - The India State-level Disease Burden Initiative*. New Delhi, India: ICMR, PHFI and IMHE.

https://www.healthdata.org/sites/default/files/files/policy_report/2017/India_Health_of_the_Nation%27s_ States_Report_2017.pdf

Jhawar, Anisha, (n.d.) "Health as a part of Fundamental Right under Article 21: A pursuit by India" Legal Service India.

http://www.legalserviceindia.com/legal/article-450-health-as-a-part-of-fundamental-right-under-article-21-a-pursuit-by-india.html

Khan, Shah A, (2019) "Ayushman Bharat- Hurdles to Implementation One Year On". *Economic and Political Weekly* 54(47): 13-15. https://www.epw.in/journal/2019/47/commentary/ayushman-bharat.html

Kumar, Avneesh and Saurav Gupta, (2012) "Health Infrastructure in India: Critical Analysis of Policy Gaps in the Indian Healthcare Delivery" *Vivekananda International Foundation.* https://www.vifindia.org/sites/default/files/health-infrastructure-in-india-critical-analysis-of-policy-gaps-in-the-indian-healthcare-delivery.pdf

Mann, Jonathan M., MPH Lawrence Gostin, Sofia Gruskin, Troyen Brennan, Zita Lazzarini and Harvey V Fineberg, (1994) "Health and Human Rights" *Health and Human Rights* 1(1): 6-23. https://cdn1.sph.harvard.edu/wp-content/uploads/sites/2469/2014/03/4-Mann.pdf

Matta, Anubhuti, (2020). "New Study Ties Poor Air Quality to Covid19 Mortality Rates" *The Swaddle* April 9 2020.

https://theswaddle.com/in-a-first-study-states-poor-air-quality-and-covid19-deaths-are-related/

Ministry of Health and Family Welfare, (2005). "Report of the National Commission on Macroeconomics and Health" *National Commission on Macroeconomics and Health.* https://www.who.int/macrohealth/action/Report%20of%20the%20National%20Commission.pdf

Ministry of Health and Family Welfare, (2018) "National Health Accounts Estimates for India 2015-16". Ministry of Health and Family Welfare, Government of India. https://main.mohfw.gov.in/sites/default/files/NHA_Estimates_Report_2015-16_0.pdf

Ministry of Statistics and Programme Implementation, (2019). *Key Indicators of Social Consumption in India: Health (July 2017-June 2018).* National Statistical Office, Government of India. http://www.mospi.gov.in/sites/default/files/NSS75250H/KI_Health_75th_Final.pdf Mishra, Ishita, (2019), "How hospitals use bizzare ways to siphon off public funds" *Times of India* August 28, 2019.

https://timesofindia.indiatimes.com/india/under-ayushman-bharat-how-hospitals-use-bizarre-ways-to-si-phon-off-public-funds/articleshow/70654696.cms

National family Health Survey 4. http://rchiips.org/NFHS/factsheet_NFHS-4.shtml

National Health Authority, (n.d.). "Ayushman Bharat: Pradhan Mantri Jan Arogya Yojana". Accessed April 2 2020.

https://pmjay.gov.in/

NHATS, (2018). *National Health Accounts: Estimates for India 2015-16*. National Health Accounts Technical Secretariat, National Health Systems Resource Centre and Ministry of Health & Family Welfare, Government of India.

http://nhsrcindia.org/sites/default/files/NHA%20Estimates%20Report%20-%20November%202018.pdf

Parker, Edward and Beate Kampmann, (2020) "Coronavirus: who is at risk and how do we know?" *The Conversation* March 13 2020.

https://theconversation.com/coronavirus-who-is-at-risk-and-how-do-we-know-133547 https://www.wsj.com/articles/whos-most-at-risk-from-the-coronavirus-11584048476

PTI, (2016), "Economic Survey 2016: Treatment cost at private hospitals 4 times than government ones" *Economic Times* February 26 2016.

https://economictimes.indiatimes.com/industry/healthcare/biotech/healthcare/economic-survey-2016-treatment-cost-at-private-hospitals-4-times-than-government-ones/articleshow/51156935.cms?from=mdr

PTI, (2018). "7,000 people per hour slip into poverty due to healthcare expenses in India: AB-PMJAY CEO Bhushan" *DNA* November 18 2018.

https://www.dnaindia.com/health/report-7000-people-per-hour-slip-into-poverty-due-to-healthcare-ex-penses-in-india-ab-pmjay-ceo-bhushan-2686845

PTI, (2020). "ICMR may cap price of each coronavirus test at Rs 4,500-Rs 5,000 for private labs: Official" *Economic Times* March 21 2020.

https://economictimes.indiatimes.com/industry/healthcare/biotech/healthcare/icmr-may-cap-price-of-each-coronavirus-test-at-rs-4500-rs-5000-for-private-labs-official/articleshow/74735591.cms?from=mdr

Rai, Dipu, (2020) "Young Indians comprise more than half of confirmed Covid-19 cases" *India Today* April 3 2020.

https://www.indiatoday.in/diu/story/coronavirus-india-young-patients-age-groups-covid19-1662698-2020-04-03

Rao, K Sujatha, (2018), "Why India's Private Hospitals Can Get Away With Overcharging Patients" *Quartz India* March 26 2018.

https://qz.com/india/1237169/why-indias-private-hospitals-can-get-away-with-overcharging-patients

Rao, M. Govinda and Mita Choudhury (2012). "Health care financing reform in india's decentralized health care system". National Institute of Public Finance and Policy.

Ramaswamy, K, (1995). *Consumer Education & Research Centre And Others Vs. Union Of India & Others.* https://indiankanoon.org/doc/1657323/

Saikia, Arunabh, (2020) "Testing is key to fighting coronavirus – so why does India have such a low testing rate?" *Scroll* March 27 2020.

https://scroll.in/pulse/957380/testing-is-key-to-fighting-coronavirus-so-why-does-india-have-such-a-low-testing-rate

Sanyal, Anindita, (2020) "Coronavirus- Free Coronavirus Testing Only For The Poor, Says Supreme Court" *NDTV* April 13 2020.

https://www.ndtv.com/india-news/free-covid-19-testing-only-for-poor-says-supreme-court-gives-option-to-centre-to-add-more-categories-2211061

Saunders, John and Trevor Smith, (2010). Malnutrition: causes and consequences. *Clinical medicine (London, England),* 10(6), 624–627. https://www.ncbi.nlm.nih.gov/pmc/articles/PMC4951875/

Save the Children India, (2016). *Malnutrition in India Statistics State Wise*. Save the Children. https://www.savethechildren.in/articles/malnutrition-in-india-statistics-state-wise

Sehegal, Rashme, (2018). "PMJAY scheme has impressive list of benefits, but 'flawed model', lack of funds have medical experts sceptical" *Firstpost* September 26 2018. https://www.firstpost.com/india/pmjay-scheme-has-impressive-list-of-benefits-but-flawed-model-lack-of-funds-have-medical-experts-sceptical-5260481.html

Sharma, Arushi, (2017) "Why India Needs Right to Health as a Fundamental Right" *Qrius* December 26 2017.

https://qrius.com/india-needs-right-to-health/

Sharma, Neetu Chandra, (2019) "Names of hospitals involved in fraud under Ayushman Bharat to be made public" *Livemint* September 17 2019.

https://www.livemint.com/politics/policy/govt-to-launch-40-000-health-and-wellness-centres-by-march-2020-1568714333973.html

Talekar, Pradnya (2020) "How the Supreme Court's Order on Free COVID-19 Testing Can Be Implemented?" *The Wire* April 11 2020. https://thewire.in/law/supreme-court-free-covid-19-tests-implementation

The World Bank, (2017). "Current health expenditure (% of GDP)". Accessed March 30 2020. https://data.worldbank.org/indicator/SH.XPD.CHEX.GD.ZS

World Bank, (n.d.). "Hospital beds (per 1,000 people)". Accessed April 4 2020. https://data.worldbank.org/indicator/SH.MED.BEDS.ZS

Unnamed Author, (2020), "Free coronavirus treatment under Ayushman Bharat-PMJAY" *Business Today* March 24, 2020.

https://www.businesstoday.in/current/economy-politics/breaking-govt-to-offer-free-treatment-of-corona-virus-under-ayushman-bharat-pmjay-scheme/story/399050.html

WHO, (2018a). "Malnutrition". Accessed April 6 2020. https://www.who.int/news-room/fact-sheets/detail/malnutrition

WHO, (2018b). "Noncommunicable Diseases (NCD) Country Profiles, 2018". Accessed April 4 2020. https://www.who.int/nmh/countries/ind_en.pdf

WHO, (2019). "Sanitation". Accessed April 6 2020. https://www.who.int/news-room/fact-sheets/detail/sanitation

WHO, (n.d.). "India: Tuberculosis Profile". Accessed April 7 2020. https://extranet.who.int/sree/Reports?op=Replet&name=%2FWHO_HQ_Reports%2FG2%2F-PROD%2FEXT%2FTBCountryProfile&ISO2=IN&LAN=EN&outtype=html

WHO and UNICEF, (n.d.). "Water Sanitation Hygiene: Fast facts" Accessed April 3 2020. https://www.who.int/water_sanitation_health/monitoring/jmp2012/fast_facts/en/

