Isabel Long

HLTH 4700-001

Julia Sherry

December 9, 2021

Investments into a Better India

In recent decades, India has experienced economic growth which has improved the health and poverty of the nation. Due to this rapid growth, India faces both unique challenges and unprecedented opportunities in the health sector. According to the United Nations, the current life expectancy in India is 69.66 years, which has drastically increased from previous years (U.N. World Population Prospects, 2019). Infant mortality has been reduced from 66 to 38 per 1,000 live births from 2000 to 2015, while the maternal mortality ratio falled from 374 to 173 per 10,000 live births over the same period (Harvard School of Public Health, 2018). In addition, India has a growing and dynamic pharmaceutical and biotechnology industries with world renowned scientists. The Indian medical tourism industry is booming, with impressive hospitals that attract foreign patients from all over the world.

Despite these improvements in the health of the nation, the country still faces persistent and daunting public health challenges. The Indian healthcare system is divided into public and private health sectors, in which there is great discrepancy and quality between the two. In the public health sector, health coverage is universal but the system is underfunded and facilities are understaffed and experience shortages of supplies. Due to the lack of services and resources, many Indian citizens turn to the private sector for care. Most of the health system is funded by out-of-pocket payments, making it more difficult for the poor to access care (Tikkan, 2020). With that being said, 90% of the poor have absolutely no health insurance (Jain, 2021). Sushma

Swaraj, a senior politician, said “Health is a thing for the rich. We in India have to focus on getting bread to the poor”(Danner, 2021).

As the Indian government strives to provide comprehensive healthcare for all, public health challenges are still very prevalent, especially for the poor. Child undernutrition is a chronic problem and longstanding challenge for India, with more than half of children under four being underweight (National Family Health Survey, 2016). In the past decade, noncommunicable diseases such as obesity, diabetes, cancer and high rates of road traffic accidents have been increasing (The World Bank, 2020). The public and private healthcare system need to rise to meet these challenges. The people of India have an opportunity to have a major influence on their future health and medical efforts globally. There are many factors influencing these health disparities, most of which are forces outside of the healthcare sector. The biggest influences on the state of India’s health status is the water crisis, gender inequality and the inadequate rural health system. Investment into these three matters will dramatically improve the overall health of India.

Demand for water will reach twice the availability supply by 2030, the United Nations reports (UN Water, 2016). India is currently facing one of the worst water crises in history. Severe water scarcity is a new reality for hundreds of millions of people, and the Composite Water Management Index (CWMI) reports that by 2030, the country’s water demand is projected to be twice the available supply (Matto, 2019). Decades of rapid urbanization and population growth has led to inadequate city planning and little water infrastructure. Urban lakes and reservoirs have been lost to environmental degradation, with a total of 21 major cities projected to run out of groundwater next year, according to a 2018 report by NITI Aayog. This water crisis is affecting low socioeconomic people disproportionately; according to the UN human rights

report, “Climate change will have devastating consequences for people in poverty”(UNHCR, 2016). When clean water drinking runs out, people must rely on unsafe drinking water, leading to waterborne illnesses that lead to higher death rates and infant mortality rates. The wealth divide deepens further as food and water prices skyrocket, and there are fewer resources disproportionally for the poor. 80% of India’s poor population live in rural areas and 72% of this population is engaged in the agriculture sector (Mirza, 2021). In order to avoid this devastating future, it is important to focus efforts towards the most vulnerable population affected by water scarcity: the Indian agricultural sector.

Inefficient agriculture uses up to 80% of all water resources in India, which is one of the primary reasons for India’s water stress (Shekar, 2019). The most commonly produced agricultural crops of India include rice, wheat, and sugarcane, which are simultaneously the most water consuming crops (Chakrabarty, 2019). In addition, the World Bank lists that India’s farm yield is 30-50% lower than that of other countries. With this low production efficiency and waste of valuable water, a change needs to be made to prevent an upcoming disaster that affects all sectors. In order to avoid this, funds should be provided for the Indian government to give financial assistance and incentives to farmers in water stressed areas to halt the production of water consuming crops and switch to cultivating less water intensive crops. These crops include oilseeds, pulses, and millets, which use less water to grow and can tolerate more stress. These government incentives can go directly towards the oilseeds, pulses, and millets as well as irrigation systems and other means of a more sustainable process.

Indian agriculture contributed 21% of GDP (Gross Domestic Product) in 2004-2005, but has dropped 13% in the past 17 years (National Statistics Organization, 2021). The change in production will turn around this agricultural financial decline, which will help the overall Indian

economy. With less of India's valuable water going towards agriculture, more people will have access to safe drinking water. Approximately 200,000 people die annually in India due to inadequate access to safe water (Aayog, 2019). Although this situation is projected to worsen by 2030, investing in the water crisis will help prevent these high premature death rates.

The poor are disproportionately at risk for the effects of the water crisis and many other situations, but the disparity also affects women. Women are traditionally tasked with fetching water, and with reservoirs drying up, young girls may drop out of school to walk longer distances to rare water access points (Madhavan, 2019). Discrimination against women and girls is a long-running phenomenon that affects Indian society at every level. In 2010, India was ranked 112 among 134 countries on the global gender gap index, according to the World Economic Forum. In the past decade, although India's GDP has grown around 6%, there has been a decline in the female workforce from 34% to 27% (World Bank, 2021). Estimates suggest that each year, at least 1.5 million girls under 18 get married in India. Child marriage is driven by poverty and leads to increased health risks including increased risk for sexually transmitted deseases, premature birth, and many cancers (Nour, 2006). The Indian Census reports that female literacy is 53.7%, which is significantly lower than the male population at 75.3%. All of these factors point to the significant gender gap in India and an apparent need for change.

To reduce this significant gender inequality, funding for the education and empowerment of women in India is necessary. The yield from investing in the education of women is substantial. According to UNICEF, with only a 1% increase in female education the average GDP rises by 0.2%. The implications are clear from studies from other areas: if all girls in Sub-Saharan Africa received secondary education, child marriage would fall by 64% (Bourne, 2014). Studies show that women with any form of formal education are more likely than uneducated

women to use contraceptives, have fewer children, and have a longer life expectancy (PRB, 2011). Education of women will help future generations as well; a child born to a mother who can read is 50% more likely to survive past the age of 5 than a child born to an illiterate woman (UNESCO, n.d.). Lack of funding for education is a fundamental problem in India, with only 4% of the GDP going towards education (Wiser, 2012). By investing in the education sector to incentivize schools to require a certain number of girls, putting money towards infrastructure and higher educator salaries, the overall health of the nation will improve. "When you educate a boy, you invest in an individual, but if you send a girl to school, then you invest in a family, and sometimes even a whole village," (Shashani, 2015).

Villages in rural areas of India lack access to adequate healthcare due to several societal factors. Not only are rural communities in India less wealthy, but “rural and tribal areas have less movement and connectivity than others and settlements are more spread out than in urban areas”(Ranscomb, 202). 86% of medical visits in India are made by people in rural areas traveling more than 100 km. In addition, these visits are 70-80% of the time paid out of pocket, which lands most people below the poverty line (Kumar, 2021). Rural residents flock to urban hospitals because rural India has 3.2 government hospital beds per 10,000 people (Mampatta, 2020). Despite the lack of infrastructure, rural India also faces a chronic shortage of medical professionals. Especially with the recent COVID-19 pandemic hitting rural India the hardest, action needs to be taken to improve the health of the people of rural India. The proportion of rural residents reporting poor physical health was two times higher compared to urban residents in India (Health Policy Institute, n.d.).

There is clear evidence that states that spend higher proportions of their budgets on healthcare have better health outcomes than those who spend smaller amounts (Mohan, 2019).

India only spends 1.3% of their GDP on healthcare which restricts the opportunity for improvements in rural healthcare especially (National Health Profile, 2019). The biggest issue that this lack of funding causes is the shortage of physicians to work in rural areas. Their aversion to work in rural areas comes from inadequate working conditions, low wages, and poor training opportunities. Due to this shortage of physicians, various organizations have engaged nonphysician providers to deliver healthcare in these rural regions. The World Health Organization India Country Office concluded that nonphysician providers can deliver good quality healthcare when well-trained, supervised, and supported (WHO, 2019). Investment in nonphysician providers in rural India is both realistic and beneficial. Registered nurses, community health workers, physicians assistants and other healthcare providers can improve access to care and quality of care for rural communities by providing primary care. Although an increased amount of physicians and investments into building hospitals would be ideal, to improve the health of rural communities the quickest investing in non physician providers is the right solution.

To improve the overall health of India, the top priority for investors should be shifting the water crisis, education of women, and the rural healthcare system. These components, although not obvious, are vital to improving the health of India by 2030. To address the United Nations Sustainable Development Goal 3, to “ensure healthy lives and promote well-being for all at all ages”, targeting these three sectors will address all genders and all age groups.

Shifting the agricultural angle to developing a more sustainable way to utilize water will increase the availability for safe drinking water for all people. Annually, 3.7 million Indians are affected by waterborne disease, and 1.5 million children die of diarrhea (Ganapati, 2018). The water crisis in India is the biggest threat to the wellbeing of Indians today and will only worsen

as climate change continues. In relation, men and women need to have equal footing to education, health, nutrition domains, and the workforce in order to stimulate the economy and overall improve the country. Societies that value men and women as equal are safer and healthier. Although the maternal mortality rate in India has been declining, in rural areas the mortality rate is between 800 and 900 deaths per 100,000 live births, which is significantly higher than other countries (Pillai, 2018). SDG target 3.1 aims to reduce the global maternal mortality ratio to less than 70 per 100,000 live births. According to the International Journal of Population Research, maternal mortality and female literacy rates have a negative ratio, which shows that education of women is one of the most crucial areas that need to be addressed. In efforts to work towards SDG target 3.8, “achieve universal health coverage and access to quality services”, the Indian rural healthcare system stands out and should be addressed over other issues. The rural population is more likely to be uninsured and are less likely than urban residents to receive any healthcare treatment (Health Policy Institute, n.d.). The research points to these three factors as being the most investments into creating a healthier India.

Sources

Chakrabarty, M., & Bharadwaj, S. (2019, July 9). India's water crisis: A permanent problem which needs permanent solutions. Retrieved December 9, 2020, from https://www.orfonline.org/expert-speak/india-water-crisis-permanent-problem-which-needspermanent-solutions-52896./

Columbia School of Public Health . (n.d.). *India: Summary*. India : Summary . Retrieved December 8, 2021, from https://www.publichealth.columbia.edu/research/comparative-health-policy-library/india-summary.

Danner , C. (2021, May 3). *India sees 400,000 new cases in a day: Covid-crisis updates*. Intelligencer. Retrieved December 8, 2021, from

Health Policy Institute . (2019, February 13). *Rural and Urban Health*. Health Policy Institute. Retrieved December 9, 2021, from https://hpi.georgetown.edu/rural/.

Mudur, G. (2003, June 14). *India's burden of waterborne diseases is underestimated*. BMJ (Clinical research ed.). Retrieved December 9, 2021, from https://www.ncbi.nlm.nih.gov/pmc/articles/PMC1151007/.

Nour, N. M. (2006, November). *Health consequences of child marriage in Africa*. Emerging infectious diseases. Retrieved December 9, 2021, from https://www.ncbi.nlm.nih.gov/pmc/articles/PMC3372345/.

OECD . (n.d.). *OECD Health Status Data* . Health status. Retrieved December 7, 2021, from https://stats.oecd.org/Index.aspx?DatasetCode=HEALTH_STAT.

Tikkanen, R., Osborn, R., Mossialos, E., Djordjevic, A., & Wharton, G. A. (2020, June 5). India. Commonwealth Fund. https://www.commonwealthfund.org/international-health-policy-center/countries/india

UN-Water. (n.d.). *Scarcity: UN-Water*. UN. Retrieved December 9, 2021, from https://www.unwater.org/water-facts/scarcity/.

Upadhyay, P. (2019, September 13). *India's water crisis: A permanent problem which needs permanent solutions.* SSRN. Retrieved December 9, 2021, from https://papers.ssrn.com/sol3/papers.cfm?abstract_id=3451715

World Bank. (n.d.). *Current health expenditure (% of GDP) - India*. Current Health Data - India . Retrieved December 7, 2021, from https://data.worldbank.org/indicator/SH.XPD.CHEX.GD.ZS?locations=IN.