COUNTRY PROFILE: INDIA

Overview of India's health system

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SOCIAL INNOVATION IN HEALTH INITIATIVE

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LIST OF ABBREVIATIONS

AIDS	Acquired immune deficiency syndrome
ASHA	Accredited female social health activist
AYUSH	Ayurveda, Yoga and Naturopathy, Unani, Siddha, and Homeopathy
HIV	Human immunodeficiency virus
HLEG	High Level Expert Group
MDG	Millennium Development Goal
NRHM	National Rural Health Mission
NUHM	National Urban Health Mission
OOP	Out-of-pocket
UHC	Universal health coverage
US$	United States dollar
WHO	World Health Organization

EXECUTIVE SUMMARY

Located at the heart of Southern Asia, the Republic of India has the second largest population in the world with nearly 1.3 billion inhabitants. This figure is expected to overtake China by 2022. Though nearly a quarter of Indians are of Dravidian descent, most are Indo-Aryan in origin. Two thirds of the population live in rural areas, and most Indians are Hindu, though a significant number practice Islam, Christianity and Sikhism. The government is a federal republic, with Narendra Modi currently prime minister. The economy has enjoyed growth across numerous sectors, and though poverty remains widespread and access to basic services is still a challenge, India is soon expected to have the youngest and largest workforce in the world. The health system faces a double burden of disease in the form of both communicable and non-communicable diseases, and has made varied progress in attaining Millennium Development Goals 4, 5 and 6. Furthermore, households suffer from numerous out-of-pocket payments. The National Rural and Urban Health Missions were established to increase provision of primary health care and improve access for rural and urban populations. India has a strong tradition of innovation in several sectors and numerous social innovations have been implemented in the health sector.

1. COUNTRY AT A GLANCE

Component	Details/indicator/year	Data
Population	Total population (2014)	1 295 291 543[a]
	Percentage of urban vs. rural (2014)	Urban: 32, rural: 68[a]
Geography	India, together with neighbours Bangladesh and Pakistan, forms a sub-continent separated from the rest of Asia by the Himalayan mountains. The rest of India's terrain is widely diverse, ranging from the Indo-Gangetic Plain to the Great Indian Desert to coastal lowlands and islands. India has a monsoon climate with three main seasons: hot wet weather from June till September, cool dry weather from October until February, and hot dry weather with high humidity from March to June.[b]	
Ethnic composition	Aryan, Dravidian, and various other ethnicities.[b]	
Government	The Indian system of government has been heavily influenced by the British model of parliamentary democracy as well as the Constitution of the United States of America. India is a democratic republic, with the central government overseeing 29 states. While the president serves as head of state, his role is largely ceremonial, as executive powers generally reside with the prime minister, who is chosen by the majority party or coalition in the Lok Sabha, one of the two houses of parliament. The other house is the Rajya Sabha. Members of the legislature serve five-year terms. The Supreme Court is the highest court; each state also has a high court and a number of lower courts.[b]	
Economic and infrastructure data	GDP per capita (purchasing power parity) (2014)	US$ 5 700.7 (current international dollars)[a]
	Economic growth as percentage of GDP (2014)	7.3[a]
	Gini-index (2013)	33.9[c]
	HDI (2014)	0.609 (ranked 130)[d]
	Percentage of people below national poverty line (2011)	21.9[a]
	Percentage of unemployment (2014)	3.6[a]
	Percentage of adult literacy (2011)	69[a]
	Education gender parity index (2012)	0.99[a]
	Percentage of population with access to sanitation (2015)	Access to improved drinking water: 94 (urban: 97, rural: 93)[a] Access to improved sanitation facilities: 40 (urban: 63, rural: 29)[a]
	Percentage of population with access to electricity (2012)	78.7[a]

Health system	Health expenditure as a percentage of GDP (2014)	4.7[a]
	Annual public expenditure on health as percentage of total health expenditure (2014)	30.0[a]
	Health expenditure per person (2014)	US$ 75 (current US$)[a]
	Number of physicians per 1 000 population (2012)	0.7[a]
	Number of nurses and midwives per 1 000 population (2011)	1.7[a]
	Percentage of births with skilled attendants (2007–2008)	52[e]
	Average life expectancy in years (2014)	68[a]
Disease burden	HIV prevalence among adults (2013)	0.3%[f]
	Deaths due to AIDS (2013)	130 000[f]
	Deaths due to non-communicable diseases (2012)	5 868 800[g]
	Deaths due to homicide (2012)	52 998[g]
	Maternal mortality rate per 100 000 births (2015)	174[a]
	Infant mortality rate per 1000 births (2015)	38[a]
	Under-five mortality rate per 1000 births (2015)	48[a]
Top five causes of mortality as percentage of deaths (2012)[h]	1. Ischaemic heart disease 2. Chronic obstructive pulmonary disease 3. Stroke 4. Diarrhoeal diseases 5. Lower respiratory infections	12.4 10.8 9 6 4.9
Top five causes of DALYs (2012)[h]	1. Maternal/neonatal/nutritional 2. Cardiovascular diseases and diabetes 3. Other non-communicable diseases 4. Other infectious diseases 5. Unintentional injuries	ND ND ND ND ND

GDP: gross domestic product; gini-index: measures the extent to which the distribution of income (or consumption expenditure) among individuals or households within an economy deviates from a perfectly equal distribution; HDI: human development index; DALYs: disability-adjusted life years.
Sources: [a] World Bank (2015b); [b] Calkins (2015); [c] UNDP (2013); [d] UNDP (2015b); [e] UNICEF (2014); [f] Joint United Nations Programme on HIV and AIDS (2014); [g] WHO (2015b); [h] WHO (2015c).

2. COUNTRY CONTEXT

2.1 COUNTRY HISTORY AND POLITICAL SYSTEM

Once considered the "jewel in the crown of the British Empire", India gained independence on 15 August 1947 after a sustained resistance movement propelled by Indian nationalism and headed by Mahatma Gandhi and Jawaharlal Nehru. With increasing tension between Muslims and the predominantly Hindu population, India was partitioned into the Dominion of Pakistan and Union of India. This partition instigated the mass migration of millions of Hindus, Sikhs, and Muslims and the subsequent deaths of hundreds of thousands of people in ethnic and religious conflict. In 1948 and 1965, India went to war with Pakistan over the Kashmir region and later in 1971 over the secession of Bangladesh (BBC, 2015).

Nehru's daughter, India Gandhi, came to power as prime minister in 1966. She was found guilty of electoral malpractice in 1975, leading to her declaration of a state of emergency and the imprisonment of some 1 000 political opponents. Gandhi's Congress Party lost elections in 1977, but returned to power in 1980 in the form of a party splinter group. Sikh militants began calling for self-rule, resulting in the government troops' seizure of the Golden Temple, the Sikhs' holiest shrine. Shortly afterwards, Gandhi was assassinated by her Sikh bodyguards and succeeded by her son Rajiv. From 1987 to 1990, India deployed peacekeeping troops during Sri Lanka's ethnic conflict, and Rajiv was subsequently assassinated in 1991 by a suicide bomber sympathetic to the Sri Lankan Tamil Tigers (BBC, 2015).

As Hindu-Muslim tensions continued, the Hindu nationalist Bharatiya Janata Party emerged for the first time as the single largest party in 1996, forming a coalition government under Prime Minister Atal Behari Vajpayee in 1998. Although Vaypayee signed the bilateral Lahore peace declaration in 1999 with Premier Nawaz Sharif of Pakistan, a brief war still occurred between the two rivals over conflicts in Kashmir, with threats of another looming war in 2002. Numerous homicidal attacks, motivated by regional tensions, persisted throughout the 2000s. The Congress Party returned to power, enjoying electoral victories in 2004, 2007, 2009, and 2012. However, the Bharatiya Janata Party won parliamentary elections in 2014, with Narendra Modi as the new prime minister (BBC, 2015).

2.2 POPULATION

At nearly 1.3 billion, India has the world's second largest population after China and is expected to become the most populous country by 2022 (Farooqui, 2015). While most of the population is either Aryan or Dravidian in origin, the country is home to many different ethnicities and tribal groups (Calkins, 2015). The population is becoming increasingly urbanised, with about a third residing in urban areas and an estimated 10 million moving into urban areas each year (World Bank, 2015b). Hindi and English are the official languages of the Indian central government, but 22 other "scheduled" languages are recognised in the constitution and may be used by states in official correspondence. Most of the population are Hindu, while Islam is the largest single minority faith. Other major religions within the country include Christianity, Sikh, Jain, and Buddhism (Calkins, 2015). Religious tension has marked India's history from before its nationalist movement and independence and continues to the present day (BBC, 2015). The population is fairly young, with a median age of approximately 26 years (Calkins, 2015). Life expectancy is 68 years (World Bank, 2015b).

2.3 ECONOMY

Table 1. Economic measures of India

Indicator/year	Data
GDP per capita (purchasing power parity) (2014)	US$ 5 700.7 (current international dollars)[a]
Economic growth as percentage of GDP (2014)	7.3[a]
Debt as percentage of GDP (2014)	66.4[b]
Gini-index (2013)	33.9[c]
HDI (2014)	0.609 (ranked 130)[d]
Percentage of people below national poverty line (2011)	21.9[a]
Percentage of unemployment (2014)	3.6[a]

GDP: gross domestic product; gini-index: measures the extent to which the distribution of income (or consumption expenditure) among individuals or households within an economy deviates from a perfectly equal distribution; HDI: human development index.
Sources: [a] World Bank (2015b); [b] IMF (2015); [c] UNDP (2013); [d] UNDP (2015b).

India's economy is the fourth largest in the world and has grown tremendously since independence. High increases in agricultural productivity have made India a net exporter of food. Literacy rates and health indicators have improved with the emergence of a middle class. It is expected that India will soon have the largest and youngest labour force in the world.

However, several challenges persist. More than 400 million people still live in poverty, with wide disparities between different states and across castes and gender. Although primary education has been universalised, less than 10% of the working population has completed a secondary education, resulting in insufficient skills to support the growing economy. Many health indicators have improved, but maternal and child health lags behind; for instance, some 217 million children are estimated to be malnourished. The country's transport infrastructure and manufacturing sector are currently insufficient and there is a need for increased coverage of basic services and more inclusive economic growth (World Bank, 2015a).

2.4 ENVIRONMENT

At the heart of Southern Asia, with neighbours Bangladesh and Pakistan, India forms its own sub-continent with a diverse terrain. India also borders Nepal, China, Bhutan, and Myanmar; and is close to Sri Lanka, which is situatd about 65 km to the south. The Himalayan mountains in the north are the highest mountain range in the world and are still tectonically active, sometimes resulting in earthquakes and accompanying landslides. The Indo-Gangetic Plain lies in the Himalayan foredeep and contains the Ganges River basin, the Indus River basin, and the Great Indian (Thar) Desert. The Deccan Plateau occupies the remainder of the country in the south and is geologically stable. India has a monsoon climate with three general climatic periods: hot wet weather from June till September, cool dry weather from October until February, and hot dry weather with high humidity from March to June. Variations in climate occur across regions due to differences in elevation, proximity to water, and other factors (Calkins, 2015). Climate change is anticipated to increase: the ambient temperature, the frequency of floods, and the intensity of cyclones. This may affect the incidence of vector-borne diseases and the risk of diarrhoeal disease, in addition to possible adverse health effects from drought (Dhara, Schramm & Luber, 2013).

3. HEALTH SYSTEM

3.1 OVERVIEW

India's health system has attaineds varied progress in achieving Millennium Development Goals (MDGs) 4, 5, and 6. India has a double burden of both communicable and non-communicable diseases. In addition, inadequate health-insurance coverage and low public spending place most of the burden of health expenditure on households through out-of-pocket (OOP) payments. Socioeconomic and geographical disparities persist causing rural and impoverished populations to have limited access to health care, which subsequently leds to poorer health outcomes (Government of India, 2012b). The government has attempted to extend health insurance coverage through the National Rural Health Mission (NRHM), focusing on the poorest populations in India—with special attention to those in rural areas (Wennerholm, Scheutz & Zaveri-Roy, 2013). The National Urban Health Mission (NUHM) has been established to increase provisions for the urban poor (Government of India, 2014).

3.2 ORGANIZATION

The federal government is responsible for policy-making, providing assistance and coordination to provincial health authorities, and funding national programmes; and is run by the Union Ministry of Health and Family Welfare. Individual states are overseen by the State Department of Health and Family Welfare and are responsible for their own respective health systems. Within each state are regional or zonal set-ups that cover three to five districts. The district level serves as the link between state or regional authorities and peripheral structures, such as primary health care and sub-centres. The health system includes allopathy, Ayurveda, Yoga, Unani, Siddha, and Homeopathy (AYUSH).

The private sector, which dominates health-care services, consists of for-profit multispecialty hospitals, specialty hospitals, nursing homes and private clinics as well as non-profit charitable trust dispensaries and hospitals. Non-governmental organizations also run clinics and health outreach. The public sector comprises of three tiers (Wennerholm, Scheutz & Zaveri-Roy, 2013):

1. **Primary level**: includes village teams, sub-centres, and primary centres.
2. **Secondary level**: includes community health centres and sub-district hospitals.
3. **Tertiary level**: includes district hospitals and medical colleges.

Health infrastructure in the public sector has an urban-rural divide: rural areas oversee a three-tier system of sub-centres, primary health-care centres, and community health centres; while urban areas consist primarily of hospitals (Government of India, 2014).

3.3 CAPACITY

Table 2. Number of facilities and health workers per population, India

Indicator/year	Data
Public sector (2013)[a]	
Sub-centres	147 000
Primary health-care centres	23 500
Community health centres	4 500
Hospitals	12 700
Number of beds per 1 000 population (2011)	0.7[b]

Physicians per 1 000 population (2012)	0.7[b]
Nurses and midwives per 1 000 population (2011)	1.7[b]
Community health workers per 1 000 population (2005)	0.05[b]

Sources: [a] Wennerholm, Scheutz & Zaveri-Roy (2013); [b] World Bank (2015b).

In public facilities in rural areas, each sub-centre covers 5 000 people and is staffed with a male and a female worker. Each primary health-care centre covers 30 000 and is staffed with a physician and paramedical staff. Each community health centre covers 100 000 people and is equipped with 30 beds and basic specialists. In urban areas, health posts have been established with each covering a few thousand people, while each health centre attached to a general hospital covers 100 000. Public infrastructure is unevenly distributed across states, with many facilities under-resourced and understaffed (Government of India, 2012b).

The private sector provides the majority of care, including 78% of outpatient services, 60% of inpatient services, and 78% of ambulatory services. Private sector services range from medical tourism offering world-class services, to private providers with few, if any, formal qualifications (Kumar et al., 2011). The private sector employs 80% of the country's physicians and 26% of nurses, and owns 49% of available beds (Government of India, 2012a). The dominance of the private sector may be due to the perceived lack of quality care and capacity in the public sector (Jilani et al., 2008).

The NRHM was established in 2005 to improve the health system, particularly in rural areas, and aims to provide universal access to a development health package that is integrated into national programmes such as immunisation, tuberculosis control, and the elimination of leprosy. The NRHM also seeks to incorporate AYUSH into the public health system. To achieve these aims, the government introduced a workforce of 900 000 female social health activists, otherwise known as accredited female social health activists (ASHAs), to facilitate household access to health care at the village level and implement the District Health Mission, which includes provisions for drinking water, sanitation, hygiene, and nutrition. The NRHM also introduced over 18 000 ambulances to provide free emergency services and increased the general health workforce (apart from the ASHAs) by 178 000 (Wennerholm, Scheutz & Zaveri-Roy, 2013; Government of India, 2014).

In 2013, the NUHM was also mandated to strengthen primary health care in urban areas. It seeks to do this through auxiliary nurse-midwifes, urban ASHAs, women's health committees, and a network of primary health centres. It still needs substantial additional funding in order to effectively implement its mission (Government of India, 2014).

The capacity for human resource development in nursing has increased substantially in recent years, with the establishment of 1 050 auxiliary nurse-midwife courses, 1 541 general nurse-midwife courses, 1 160 graduate nursing schools and 388 post-graduate nursing schools. There have also been increases in pharmacist education, the number of medical colleges and the availability of places for both undergraduate and post-graduate education. However, there is little orientation towards rural or public service and the quality of teaching standards varies (Government of India, 2014). Geographical distribution of training facilities is also uneven, as only 193 of 640 districts have a medical college for training health-care workers (Government of India, 2012a).

3.4 POLICY ENVIRONMENT

The World Health Organization (WHO) (2013) states the following:

> For the past 30 years the geographically wide, densely populated and enormously varied Republic of India has made remarkable efforts in the field of health. The list of initiatives include the adoption of a National Health Policy in 1983; the 73rd and 74th Constitutional Amendments devolving power to local institutions in 1992; the National Nutrition Policy in 1993; the National Health Policy, the National Policy on Indian System of Medicine and Homeopathy and Drug Policy in 2002; the introduction of simple health insurance schemes for the poor in 2003; and the inclusion of health in the Common Minimum Programme of Government in 2004. More recent achievements include the commitments to implement the National Rural Health Mission (NRHM) and proposals to achieve universal health coverage (UHC). The High Level Expert Group (HLEG) on UHC constituted by the Planning Commission of India met in October 2010, with the mandate of developing the UHC framework for the 12th Five-Year Plan of the Government of India. The Group submitted its detailed report in October 2011, the salient recommendations of which have been accepted by the Steering Committee of the Commission and communicated to the parliament.

WHO (2013) lists the following three strategic priorities for India:

1. Supporting an improved role of the Government of India in global health.
2. Promoting access to and utilization of affordable, efficiently networked and sustainable quality services by the entire population.
3. Helping India to confront its new epidemiological reality.

3.5 HEALTH FINANCING

Table 3. Health financing data for India, 2014

Indicator	Data
Total health expenditure (current US$)	US$ 97 139 877 000
Public expenditure on health as percentage of total expenditure	30.0
Public expenditure on health as percentage of general government expenditure	5.0
OOP expenditure on health as percentage of total private expenditure	89.2
Private insurance expenditure on health as percentage of total private expenditure	2.5
Expenditure of non-profit institutions serving households as percentage of total private expenditure	1.0
External funding (current US$)	US$ 922 973 000
Health expenditure as percentage of GDP	4.7

OOP: out-of-pocket; GDP: gross domestic product.
Source: WHO (2015a).

Health spending as a percentage of India's growth domestic product (GDP) was 4.7% in 2014 (World Bank, 2015a), substantially less than the average of countries in the Organisation for Economic Co-

operation and Development (OECD, 2014). Just under a third of health expenditure was funded by the public sector, while over 60% was funded by OOP payments (World Bank, 2015a). Over 63 million people are estimated to be impoverished because of the significant burden of health-care costs (Government of India, 2012b). While health insurance is still in its infancy in India, an estimated 243 million people are covered by government-sponsored insurance schemes while 55 million are covered by private insurers (Government of India, 2012a).

Previously, the NRHM provided free care in public hospitals for maternity, neonatal, and infant care, whilst still charging user fees for diagnostics and outpatient prescriptions. Thus, several essential services, especially those for chronic illness, were not obtainable or, at best, only available at overcrowded district and medical college hospitals. This had detrimental consequences to people's health, financial stability and quality of care. Many people experience financial barriers to health care, including insufficient health insurance coverage, low public expenditure and high reliance on OOP payments. These barriers hinder advances towards equity in health care, especially for vulnerable populations and pose the risk of potential catastrophic health-care expenditures (Government of India, 2012b).

3.6 COUNTRY DISEASE PROFILE

Table 4. Disease profile for India

Indicator/year	Data
Age-standardized DALYs per 100 000 for communicable diseases (2012)	15 840[a]
Age-standardized DALYs per 100 000 for non-communicable diseases (2012)	26 503[a]
Age-standardized DALYs per 100 000 for injuries (2012)	5 607[a]
Under-five mortality rate per 1 000 live births (2015)	48[b]
Infant mortality rate per 1 000 live births (2015)	38[b]
Maternal mortality rate per 100 000 live births (2015)	174[b]
Estimated cases of malaria (2013)	17 000 000[a]
Estimated deaths due to malaria (2013)	26 000[a]
Prevalence of TB per 100 000 (2014)	195[a]
Incidence of TB per 100 000 (2014)	167[a]
Deaths due to TB among HIV-negative people per 100 000 (2014)	17[a]
Prevalence of HIV as percentage among adults aged 15–49 (2013)	0.3[c]
Deaths due to AIDS (2013)	130 000[c]
Deaths due to non-communicable diseases (2012)	5 868 800[a]
Deaths due to homicide (2012)	52 998[a]
Percentage of top five causes of mortality (2012)[d]	
1. Ischaemic heart disease	12.4
2. Chronic obstructive pulmonary disease	10.8
3. Stroke	9.0
4. Diarrhoeal diseases	6.0
5. Lower respiratory infections	4.9

Top five causes of DALYs (2012)		
1.	Maternal/neonatal/nutritional	ND
2.	Cardiovascular diseases and diabetes	ND
3.	Other non-communicable diseases	ND
4.	Other infectious diseases	ND
5.	Unintentional injuries	ND

DALYs: disability-affected life years; TB: tuberculosis; NA: not determined.
Sources: [a] WHO (2015a); [b] World Bank (2015b); [c] Joint United Nations Programme on HIV and AIDS (2014); [d] WHO (2015b).

India's disease burden is distributed inequitably in impoverished communities and states (Government of India, 2012b). While infant and maternal mortality has declined by more than a half and two thirds, respectively, since 1990 (Government of India, 2012a; World Bank, 2015b), India has made slow to moderate progress in meeting targets in MDGs 4 and 5. With respect to MDG 6, the spread of HIV has been reversed, but there has been slow to moderate progress in stemming malaria and other major diseases (UNDP, 2015). Poor living conditions, such as lack of sanitation infrastructure, are major challenges in improving health indicators, particularly in rural areas (Government of India, 2012b). Furthermore, the persistence of communicable diseases, coupled with the recent rise in non-communicable diseases, is a double challenge for the health sector. Non-communicable diseases currently account for a greater share of mortality (Government of India, 2012b) and disability-affected life years (WHO, 2015a).

4. INNOVATION ECO-SYSTEM

Health innovations in India have provided good examples of the potential impact that low-cost innovations can have on the health system. Many innovations have demonstrated how systems innovation is an emerging and crucial aspect of public health innovation. Three key lessons are described below (Ehrbeck, Henke & Kibasi, 2010).

1. **Importance of standardised operating procedures**: The use of standardised clinical protocols increases quality of care, minimises waste, improves the utilisation of resources and facilitates the transfer of knowledge. The Aravind Eye Care System, for instance, provides cataract operations to the blind and near-blind, standardising the pathway from initial diagnosis to discharge. Narayana Hrudayalaya hospitals offer high-quality cardiac care at lower prices by using a highly standardised model. This illustrates production specialisation that borrows techniques from the manufacturing sector, like process flow, management and improvement.

2. **Repurposing resources**: Innovations also employ existing resources to reduce capital and operating costs, resulting in more affordable care. The Health Management Research Institute in India, for instance, uses established supply chains for mobile health facilities and health workers to deliver care from public hospitals. The Institute and other organisations use a medical hotline, thus taking advantage of existing mobile-phone systems and the widespread adoption of mobile phones.

3. **Task shifting**: Another innovative approach is to challenge existing practices and assumptions about task distribution, allowing skills and training requirements to be better matched to actual tasks, thus lowering labour costs. LifeSpring in India, for example, uses midwives to provide maternal care, decreasing the burden on doctors and thus lowering the cost of a delivery to US$ 40 as opposed to the more typical charge of US$ 200.

REFERENCES

British Broadcasting Corporation. 2015. “India Profile - Timeline.” http://www.bbc.com/news/world-south-asia-12641776.

Calkins, Philip B. 2015. “India.” *Encyclopaedia Britannica*. Britannica. http://www.britannica.com/place/India.

Dhara, V Ramana, Paul J Schramm, and George Luber. 2013. “Climate Change & Infectious Diseases in India: Implications for Health Care Providers.” *Indian Journal of Medical Research* 138 (6): 847–52.

Ehrbeck, Tilman, Nicolaus Henke, and Thomas Kibasi. 2010. “The Emerging Market in Health Care Innovation.” *McKinsey & Company*. http://www.mckinsey.com/insights/health_systems_and_services/the_emerging_market_in_health_care_innovation.

Farooqui, Sania. 2015. “India Will Become the World’s Most Populous Country by 2022, the U.N. Says.” *Time*, July. http://time.com/3978175/india-population-worlds-most-populous-country/.

Government of India. 2012a. “India: Country Cooperation Strategy 2012-2017.” New Delhi.

———. 2012b. “Report of the Steering Committee on Health for the 12th Five-Year Plan.” New Delhi. http://planningcommission.nic.in/aboutus/committee/strgrp12/str_health0203.pdf.

———. 2014. “National Health Policy 2015 Draft (Placed in Public Domain for Comments, Suggestions, Feedback).” New Delhi. http://www.mohfw.nic.in/showfile.php?lid=3014.

International Monetary Fund. 2015. “World Economic Outlook Database.” Washington, DC.

Jilani, A, G Azhar, N Jilani, and A Siddiqui. 2008. “Private Providers of Health care in India: A Policy Analysis.” *The Internet Journal of Third World Medicine* 8 (1).

Joint United Nations Programme on HIV and AIDS. 2014. “HIV and AIDS Estimate.” Geneva: Joint United Nations Programme on HIV and AIDS. http://www.unaids.org/en/regionscountries/countries.

Kumar, A K Shiva, Lincoln C Chen, Mita Choudhury, Shiban Ganju, Vijay Mahajan, Amarjeet Sinha, and Abhijit Sen. 2011. “Financing Health Care for All: Challenges and Opportunities.” *The Lancet* 377 (9766): 668–79. doi:10.1016/S0140-6736(10)61884-3.

Organisation for Economic Co-operation and Development. 2014. “How Does India Compare?” *OECD Health Statistics 2014*. http://www.oecd.org/els/health-systems/Briefing-Note-INDIA-2014.pdf.

United Nations Children’s Fund. 2014. “UNICEF Data: Monitoring the Situation of Children and Women.” New York: United Nations Children’s Fund. http://data.unicef.org.

United Nations Development Programme. 2013. “Income Gini Coefficient.” http://hdr.undp.org/en/content/income-gini-coefficient.

———. 2015a. “Eight Goals for 2015: India.” http://www.in.undp.org/content/india/en/home/mdgoverview.html.

———. 2015b. “Human Development Report 2015.” New York.

Wennerholm, Peter, Andreas Muranyi Scheutz, and Yasmin Zaveri-Roy. 2013. “India’s Health care System – Overview and Quality Improvements.” Östersund, Sweden. http://www.tillvaxtanalys.se/en/home/publications/direct-response/direct-response/2013-05-20-indias-health care-system---overview-and-quality-improvements.html.

World Bank. 2015a. “India: Overview.” http://www.worldbank.org/en/country/india/overview.

———. 2015b. “World Development Indicators.” Washington, DC: World Bank. http://data.worldbank.org.

World Health Organization. 2015a. “Global Health Expenditure Database.” http://apps.who.int/nha/database.

———. 2015b. “Global Health Observatory Data Repository.” Geneva: World Health Organization. http://apps.who.int/gho/data/node.main.

———. 2015c. “India: WHO Statistical Profile.” Geneva: World Health Organization. http://www.who.int/gho/countries/ind.pdf?ua=1.