

# **Chapter 4**

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## **4.1: Health – a Fundamental Right as per the Indian Constitution:**

The State has an important role to play in combating the poor health status of people in India. One cannot afford to ignore the fact that the poor health status of people in our country is mainly due to poverty and inadequate health budget of the government. The inflexible government policy in this area deprives people from right to good health. Absence of good health means deprivation from well-being. The Indian Government's policies have miserably failed in improving human resource of the country, a resource that becomes burden in the absence of appropriate policy framework. Article 25 of the Universal Declaration of Human Rights states that:<sup>1</sup>

- (1) Everyone has the right to a standard of living adequate for the health and well-being of himself and of his family, including food, clothing, housing and medical care and necessary social services, and the right to security in the event of unemployment, sickness, disability, widowhood, old age or other lack of livelihood in circumstances beyond his control.
- (2) Motherhood and childhood are entitled to special care and assistance. All children, whether born in or out of wedlock, shall enjoy the same social protection.

India pledged along with other WHO member Nations, '*Health for All by the Year 2000*' at Alma-Ata in 1978; and in the same year signed the International Covenant for Economic, Social and Cultural Rights – Article 12, in which the State is obliged to achieve the highest attainable standard of health for its population. However the health scenario in India is abysmal. Somehow healthcare in India continued to be out of the main focus and it has been persistently neglected despite the recent changes in economic policy.

Healthy mind and body itself may have intrinsic value in terms of fulfilling aspirations for enlightenment, self improvement and social interaction. Development of basic human capabilities such as ability to live long and to escape preventable illnesses not only influences the quality of life that the people can enjoy, but also affects the real opportunities of economic expansion. The consequences of neglecting preventive healthcare were apparent at the time of epidemic of plague in Surat that had adverse effect on diamond, tourism and textile industry in the State.

## **4.2 Understanding the Indian Healthcare Sector:**

India is one of the largest democratic countries in the world, and is one of the fastest growing economies, which is projected to be more than double, in the next five years. Among all the sectors of the Indian economy, health care sector is the second fastest growing sector next to Information Technology.

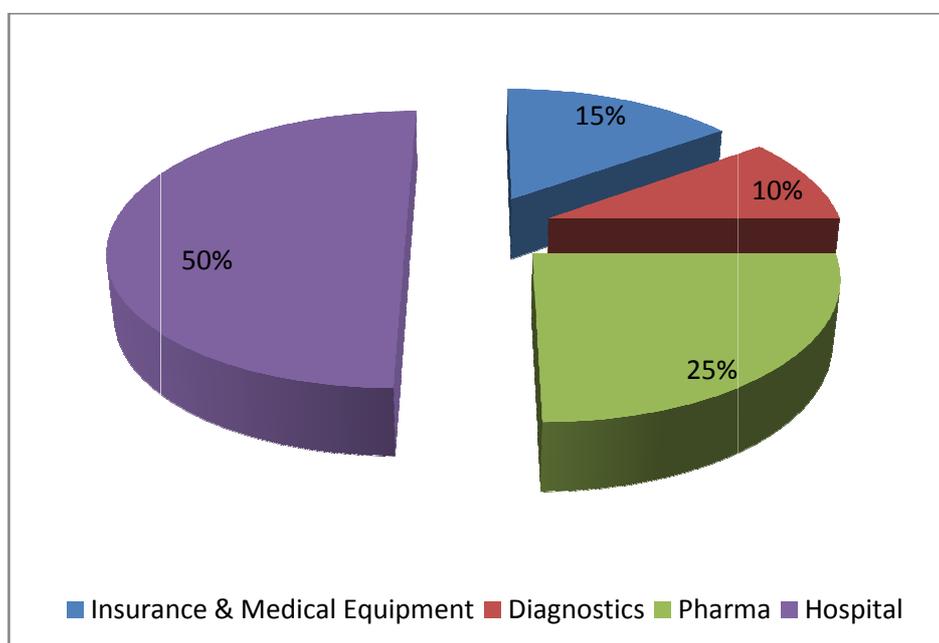
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<sup>1</sup> United Nations (1946), Universal Declaration of Human Rights, New York.

India has become a hot medical destination for patients in the Middle East, Africa and even the West. In a nation like India, where there is no formal social security system in place, notwithstanding the high tax rates, healthcare and health insurance become that much more crucial. Word is fast-spreading that Indian hospitals can provide world-class care at competitive rates. A vibrant and dynamic healthcare sector is imperative for the new human resource intensive world. Quality healthcare is vital for the growth of any nation. The key objectives of an effective healthcare system would be to enhance average life expectancy and to improve quality of life and productivity.

The sector today has a radical outlook with major emphasis on high skill sets that can leverage technology and medical science, and needs to cater to a critical and inevitable customer need at an affordable cost. It works on the principle of network economics touching innumerable lives.

The Indian healthcare sector is predicted to reach US\$ 280 billion by 2020. Some of the driving factors for the growth of the sector include growing population, increasing lifestyle related health issues, cheaper treatment costs, thrust in medical tourism, improving health insurance penetration, increasing disposable income, government initiatives and focus on Public Private Partnership (PPP) models. The Indian Healthcare sector currently represents a USD 40 Billion industry.<sup>2</sup> A break-up of the sector as of 2009 is shown in the figure 4.1:



*Source: IDFC Securities Hospital Sector November 2010*

**Fig. 4.1 Health Industry Break-up in India**

<sup>2</sup> Report Published by India Brand Equity Foundation (2009), New Delhi.

## A. Phases in the Development of Indian Healthcare Sector:

The development and progress of the India's health system can be categorised into three distinct phases<sup>3</sup>:

- (1) In the initial phase of 1947-1983, health policy was assumed to be based on two broad principles:
  - That none should be denied healthcare for want of ability to pay, and
  - That it was the responsibility of the state to provide healthcare to the people. This phase saw moderate achievements.
- (2) In the second phase of 1983-2000, a National Health Policy was announced for the first time in 1983, which articulated the need to encourage private initiative in healthcare service delivery and encouraged private sector investment in healthcare infrastructure through subsidies. The policy also enhanced the access to publicly funded primary healthcare, facilitating expansion of health facilities in rural areas through National Health Programmes (NHPs).
- (3) The National Health policy was revised in the year 2002. The third phase, post-2000, is witnessing a further shift and broadening of focus; the current phase addresses key issues such as public-private partnership, liberalization of insurance sector, and the government as a financier.

## B. Healthcare System in India:

The Central and State Governments in India have promulgated several legislations to safeguard the health of its population. The Union Ministry of Health and Family Welfare (MoHFW) is responsible for implementation of national programmes, sponsored schemes and technical assistance relating to the Indian healthcare industry. The following departments come under the Ministry:

- (1) **Department of Health:** The Department of health looks after:
  - Health related activities, including various immunization campaigns;
  - Control over various health bodies including National Aids Control Organization (NACO), National Health Programme, Medical Education and Training, and International Cooperation in relation to health;
  - Administers the Hospital Services Consultancy Corporation.
- (2) **Department of Family and Welfare:** This department offers the following services:
  - Maternal and Child Health Services; Information, Education and Communication;
  - Rural Health Services, Non-Governmental Organisations and Technical Operations.

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<sup>3</sup> Government of India (2005), *Report of the National Commission on Macroeconomics and Health*, Ministry of Health and Family Welfare, August.

- Policy Formulation, Statistics, Planning, Autonomous Bodies and Subordinate Offices;
  - Supply of Contraceptives; International Assistance for Family Welfare and Urban Health Services;
  - Administration and Finance for the Departments of Health, Family Welfare.
- (3) **Department of AYUSH:** This department undertakes the following activities:
- Upgrade the educational standards in the Indian Systems of Medicines and Homoeopathy colleges in the country;
  - Strengthen existing research institutions and ensure a time-bound research programme on identified diseases for which these systems have an effective treatment;
  - Draw up schemes for promotion, cultivation and regeneration of medicinal plants used in these systems;
  - Develop Pharmacopoeia standards for Indian Systems of Medicine and Homoeopathy drugs. A pharmacopoeia is a fairly full list of medications officially declared by the government with information on use, counter indications, side effects and so on.
- (4) **Autonomous Institutions conducting Research and Development:** The following autonomous institutions under the Ministry of Health and Family Welfare conduct research in various specific areas:
- Indian Council of Medical Research (ICMR).
  - Indian Medical Association (IMA).
  - Central Drug Research Institute (CDRI).

### **C. Healthcare Delivery in India:**

With the Indian economy enjoying a steady growth, the healthcare industry in India is heading towards growth phase. The health sector in India is characterised by a government sector that provides publicly financed and managed curative, preventive and promotive health services from primary to tertiary level throughout the country free of cost to the people and a fee-levying private sector that plays a dominant role in the provisioning of curative care.

- (1) **Public Health Sector:** The provision of healthcare by the public sector is a responsibility shared by the state government, Central Government and local governments. General health services are the primary responsibility of the states with the Central Government focusing on medical education, drugs, population stabilisation and disease control. The National Health Programmes of the Central Government related to reproductive and child health and to the control of major communicable diseases like malaria and tuberculosis have contributed significantly to the state health programmes. Recently, under the

NRHM, the Central Government has emerged as an important financier of state health systems development. The government health care services are organized at different levels. Primary health care is provided through a network of over 146,036 health sub-centres, 23,458 PHCs and 4,276 CHCs. At the district level on an average there is a 150-bedded civil/district hospital in the main district town and a few smaller hospitals and dispensaries spread over other towns and larger villages.

- (2) **Private Health Sector:** At the time of independence only about 8% of all qualified modern medical care was provided by the private sector. But over the years the share of the private sector in the provision of health care has at about 80% of all outpatient care and about 60% of all in-patient care.<sup>4</sup>

The private sector in India has a dominant presence in all the submarkets – medical education and training, medical technology and diagnostics, pharmaceutical manufacture and sale, hospital construction and ancillary services and, finally, the provisioning of medical care. Over 75% of the human resources and advanced medical technology, 68 per cent of an estimated 15,097 hospitals and 37% of 623,819 total beds in the country are in the private sector. Of these most are located in urban areas.<sup>5</sup> The private sector's predominance in the health sector has led to inequities in access to healthcare. Hospitalisation rates among the well-off are six times higher than those among the poor.

In the present era of population growth and demographic restructuring, the burden of providing health care has increased. Many countries have pursued health services distribution to their citizenry through merely expanding services with non-governmental organization (NGO) assistance. This solution is not permanent, especially in developing democratic countries like India, where the prime duty of the government is to provide better and equally accessible services to every strata of the population. Nonetheless, concerns about the ability of governments to finance health services adequately, the poor performance of public health service delivery systems and the desire to expand the choices available to patients have led a number of Asian countries to encourage the expansion of private-sector healthcare (William & Patricia, 1997).<sup>6</sup> India is not an exception; private health care services are increasingly prevalent throughout the nation. Today, the private sector provides almost 75% of health services in India (NRHM, 2005-12).<sup>7</sup>

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<sup>4</sup> The Hindu (2010), "Universal Healthcare – Media Push Needed", December 26.

<sup>5</sup> Government of India (2005), Report of the National Commission on Macroeconomics and Health, Ministry of Health and Family Welfare, August.

<sup>6</sup> William N. and Patricia M. (1997), 'The Future of Health Sector Reforms in Asia', in 'Private Health Sector Growth in Asia', ed. by William C. Newbrander. Chichester: John Wiley & Sons.

<sup>7</sup> Government of India (2005), National Rural Health Mission: Mission Document, Ministry of Health and Family Welfare, New Delhi.

### 4.3: Demographic Profile of India, Maharashtra & Mumbai:

As on 1<sup>st</sup> March, 2011 India's population stood at 1.21 billion comprising of 623.72 million (51.54%) males and 586.47 million (48.46%) females. India, which accounts for world's 17.5 percent population, is the second most populous country in the world next only to China (19.4%). In absolute terms, the population of India has increased by about 181.46 million during the decade 2001-2011.<sup>8</sup> Table 4.1 details the population of India, Maharashtra and Mumbai as per 2001 and 2011 Census.

**Table 4.1**  
**Population of India, Maharashtra and Mumbai – Census 2001 and 2011**

	Population					
	2001			2011 (Provisional)		
	Persons	Males	Females	Persons	Males	Females
<b>India</b>	1,028,737,436	532,223,090	496,514,346	1,210,193,422	623,724,248	586,469,174
<b>Maharashtra</b>	96,878,627	50,400,596	46,478,031	112,372,972	58,361,397	54,011,575
<b>Mumbai</b>	11,978,450	6,619,966	5,358,484	12,478,447	6,736,815	5,741,632

Source: Census of India, 2011.

#### Highlights of the Census 2011:

- (1) The average annual exponential growth of population declined to 1.64% per annum during 2001-2011 from 1.97% per annum during 1991-2001.
- (2) Decadal growth of population during 2001-2011 declined to 17.64% from 21.54% during 1991-2001.
- (3) The decade is the first, with the exception of 1911-21, which has actually added fewer people compared to the previous decade.
- (4) The rural population (83.31 crore) and urban Population (37.71 crore) constitutes 68.84% and 31.16% respectively of the total population.
- (5) Literacy rate increased from 64.83% in 2001 to 74.04% in 2011; 82.14% male literacy, 65.46% female literacy.
- (6) Sex ratio has improved from 933 in the year 2001 to 940 in the year 2011, mainly improved due to improvement in the overall sex ratio in urban areas.
- (7) With the increases in the population of India, the population of Maharashtra and Mumbai has increased significantly.

### 4.4: Healthcare Status in India, Maharashtra and Mumbai:

India is drawing the world's attention, not only because of its population explosion but also because of its prevailing as well as emerging health profile and profound political, economic and social transformations.

Even after 65 years of independence and implementation of a number of urban and growth-orientated developmental programs, nearly 716 million rural people (72% of the total population), half of which are below the poverty line (BPL) continue to

<sup>8</sup> Government of India (2011), Census of India, New Delhi.

fight a hopeless and constantly losing battle for survival and health.<sup>9</sup> The policies implemented so far, which concentrate only on growth and not on equity and equality, have widened the gap between ‘urban and rural’ and ‘haves and have-nots’. Nearly 70% of all deaths, and 92% of deaths from communicable diseases, occurred among the poorest 20% of the population.<sup>10</sup>

**Table 4.2**  
**Healthcare Statistics in India at Glance**

	<b>Healthcare Expenditure (% GDP)</b>	<b>Doctors (per 1000)</b>	<b>Hospital Beds (per 1000)</b>	<b>Infant Mortality (per 1000)</b>
<b>India</b>	0.8	0.7	0.8	71
<b>World</b>	2.6	1.5	3.3	54
<b>Developed Nations</b>	6.1	2.8	7.2	6

*Source: Accessible Healthcare – A Reality Check, Philips Healthcare India, 2009.*

### **Features of Healthcare Sector in India:<sup>11</sup>**

- (1) India accounts for more than 20% of global maternal and child deaths, and the highest maternal death toll in the world estimated at 138,000.
- (2) United Nations calculations show that India’s spending on public health provision, as a share of GDP is the 18th lowest in the world.
- (3) Nearly 67% of the population in India do not have access to essential medicines.
- (4) There are approximately 600 district hospitals in India. On an average 1500 patients visit these hospitals daily. Thus, there is excessive pressure of patients on these hospitals.
- (5) The development of healthcare services in India is clearly biased in favour of urban areas. There are 2.20 beds per 1000 persons in urban areas as against only 0.19% beds per 1000 persons in rural areas.
- (6) 75% of the medical consultants are concentrated in the urban areas while remaining 25% are in semi-urban and rural areas.
- (7) Infant Mortality Rate (IMR) in India was 67.6 in 1998-99 and has come down to 57 in 2005-06. Kerala has the lowest IMR of 15/1000 births while it is worst in the state of Uttar Pradesh at 73/1000 births.
- (8) Maternal Mortality Rate (MMR) is currently 4 deaths per 1000 births. India accounts for the largest number of maternal deaths in the world.
- (9) 79% of the children between the age of 6-35 months, and more than 50% of women, are anaemic, and 40% of the maternal deaths during pregnancy and child-birth relate to anaemia and under-nutrition.

<sup>9</sup> Dutt D. K. (2011), ‘Strategies to Reduce Maternal Mortality and Morbidity in Rural India’, the Federation of Obstetric and Gynecological Societies of India, January.

<sup>10</sup> Patil A.V., Somasundaram K.V. and Goyal R.C. (2002), ‘Current Health Scenario in Rural India’, Australian Journal of Rural Health, 10, pp. 129-135.

<sup>11</sup> DISE (2007), ‘Wada Na Todo Abhiyan’, ‘Ensuring Universal Access to Health and Education in India’, New Delhi, November.

- (10) There are 585 rural hospitals compared to 985 urban hospitals in the country. Out of the 6,39,729 doctors registered in India, only 67,576 are in the public sector.

The demographic and health status indicators in India have shown significant improvements during last decade. The table below shows data on some of the significant health indicators in India, Maharashtra and Mumbai at the end of the year 2001 and the current level as per the availability of data:

**Table 4.3**  
**Health Indicators in India, Maharashtra and Mumbai 2001 and Current Level**

Parameters	2001	Current Level
<b>Crude Birth Rate (per 1000 population)*</b>		
India	25.4	22.5 (2009)
Maharashtra	20.7	17.6 (2009)
Mumbai	15.73	11.87 (2007)
<b>Crude Death Rate (per 1000 population)<sup>@</sup></b>		
India	8.4	7.3 (2009)
Maharashtra	7.5	6.7 (2009)
Mumbai	7.1	6.89 (2007)
<b>Total Fertility Rate<sup>#</sup></b>		
India	3.1	2.6 (2009)
Maharashtra	2.6	1.9 (2009)
Mumbai	N.A.	N.A.
<b>Maternal Mortality Ratio (per 1,00,000 live births)<sup>§</sup></b>	(2001-2003)	(2007-2009)
India	301	212
Maharashtra	149	104
Mumbai	0.06 (2001)	1.7 (2007)
<b>Infant Mortality Rate (per 1000 live births)<sup>Ω</sup></b>		
India	66	50 (2009)
Maharashtra	45	31 (2009)
Mumbai	38.51	36.66 (2007)
<b>Child Mortality Rate (0-4 years per 1000 children)<sup>€</sup></b>		
India	19.3	14.1 (2009)
Maharashtra	11.0	6.8 (2009)
Mumbai	N.A.	N.A.
<b>Couple Protection Rate (%)</b>	45.6	40.4 (2011)
<b>Expectation of Life at Birth (in years)</b>	(1999-2003)	(2002-2006)
<b>India</b>		
Male	61.8	62.6
Female	63.5	64.2
<b>Maharashtra</b>		
Male	64.4	66.0
Female	67.3	68.4
<b>Mumbai</b>		
Male	N.A.	52.6 (2007)
Female	N.A.	58.1 (2007)

\* *Number of Births per 1000 population in a given year.*

@ *Number of Deaths per 1000 population in a given year.*

# *Average number of children that would be born to a woman if she experiences the current fertility pattern throughout her reproductive span (15-49 years).*

\$ *Number of women who die as a result of pregnancy and childbirth complications per 100,000 live births in a given year.*

Ω *Number of infants dying under one year of age in a year per 1000 live births of the same year.*

€ *Death of number of children (0-4 years) taking place per 1000 children (0-4 year's age).*

**Source:** *Office of Registrar General of India (except Couple Protection Rate which is based on estimation of Statistics Division of Ministry of Health and Family Welfare), 2011.*

Since 1990s, the public health system in India has been collapsing and the private health sector has flourished at the cost of the public health sector. Health policy in India has shifted its focus from being a comprehensive universal healthcare system as defined by the Bhore Committee (1946) to a selective and targeted programme based healthcare policy with the public domain being confined to family planning, immunization, selected disease surveillance and medical education and research. The larger outpatient care is almost a private health sector monopoly and the hospital sector is increasingly being surrendered to the market. The decline of public investments and expenditures in the health sector since 1992 has further weakened the public health sector thus adversely affecting the poor and other vulnerable sections of society. Introduction of user fees for public health services in many states has further reduced their access to health services.

The time has come to reclaim public health and make a paradigm shift from a policy-based entitlement for healthcare to a rights based entitlement.

*“The importance of public health in India’s development cannot be overemphasised. Ours is a demographically young country. The largest growing demographic segment in India over the next two decades lies between 15-59 years. This provides a wide window of opportunity to enhance national growth provided one can productively deploy this large base of human resources.”<sup>12</sup>*

– Dr. Manmohan Singh, Prime Minister of India

Economists often point out the demographic dividend that India could yield due to growing youth force in the country. However, this potential can only be realised only if these young population is healthy. The objective of all development policies is the achievement of public welfare through economic growth. Thus, economic growth is a means to achieve human welfare. Human welfare, in addition to income and employment must include health, education, physical and social environment and also economic, social and cultural freedom. In other words, one should be able to and also afford to enjoy all sorts of freedom which is in the interest of the society.

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<sup>12</sup> Quoted from the speech of Dr. Manmohan Singh at the launch of Public Health Foundation of India (PHFI).

India is confronted both by an unfinished agenda of infectious diseases, nutritional deficiencies and unsafe pregnancies as well as the challenge of escalating epidemics of non-communicable diseases. This composite threat to the nation's health and development needs an intensive public health response that can ensure efficient delivery of cost-effective interventions for health promotion, disease prevention and affordable diagnostic and therapeutic health care.

#### 4.5: Slum Population in India, Maharashtra and Mumbai:

A slum is a compact settlement with a collection of poorly built tenements, mostly of temporary nature, crowded together usually with inadequate sanitary and drinking water facilities in unhygienic conditions in that compact area. Slum are commonly known as 'jhopad patti' in Mumbai. Slums are divided into two categories:

- (1) Notified slums are those slums which are notified as slums by the respective municipalities, corporations, local bodies or development authorities.
- (2) Non-notified slums are those slum areas which are not notified by the municipalities, corporations, local bodies or development authorities.

According to the Census (2001), the slum population of India has exceeded the population of Britain. It has doubled in last two decades. According to last census in 2001, the slum-dwelling population of India had risen from 27.9 million in 1981 to 61.8 million in 2001.<sup>13</sup> Indian economy has achieved a significant growth of 8 percent annually during last few years, but there is still large number of people nearly 1.1 billion still survives on less than 1 \$ (around 46 INR) in a day.<sup>14</sup>

**Table 4.4**  
**Slum Population of India<sup>15</sup> (Census 2001)**

	No. of cities/ towns reporting slums	Total Urban Population	Population of cities/towns reporting slums	Total Slum Population	% of Slum Population to Total	
					Urban Population	Population of cities/towns reporting slums
India	640	283,741,818	183,352,421	42,578,150	15.00	23.10
Maharashtra	61	41,100,980	33,635,219	11,202,762	27.30	33.30

*Source: Government of India (2010), Ministry of Statistics and Programme Implementation, National Sample Survey, May 2010.*

Mumbai, the third largest city in the world, houses almost 50% of its population in slums. The Brahanmumbai Municipal Corporation (BMC) has identified that a total of 1959 slum settlements house about 6.5 million. The island city area houses about 17 % of the slum population whereas western suburbs had 58% and the rest were housed in eastern suburbs.<sup>16</sup>

<sup>13</sup> Government of India (2001), Census of India.

<sup>14</sup> Dhanabhakya M. and Sakthipriya M.R.G. (2012), 'India's Economic Performance – Globalization as its Key Driver', International Journal of Global Business, 5 (1), pp.1-16, June.

<sup>15</sup> Based on data collected from notified slums.

<sup>16</sup> James Tulloch (2011), 'Indian Migration – Leaving the Land', retrieved from [www.knowledgeallianz.com](http://www.knowledgeallianz.com) on 12<sup>th</sup> November 2011.

**Table 4.5**  
**Slum Population of Mumbai<sup>17</sup> (Census 2001)**

	Total Population (in 000)	Slum Population (in 000)	% of Slum Population to Total Population	Sex Ratio in Non-slum Areas	Sex Ratio in Slum Areas
Mumbai	11,978	6,475	54.06	859	770

*Source: Government of India (2010), Ministry of Statistics and Programme Implementation, National Sample Survey, May.*

Some of the characteristics of urban slums in India as reported in the NSS 65<sup>th</sup> Round<sup>18</sup> survey report are:

- (1) About 49 thousand slums were estimated to be existence in urban India in 2008-09.
- (2) Of these, 24% of slums were located along nallahs and drains and 12% along railway lines.
- (3) About 57% of slums were built on public land, owned mostly by local bodies, state government, etc.
- (4) In 64% of notified slums, a majority of the dwellings were pucca, the corresponding percentage for the non-notified ones being 50%.
- (5) Only 1% notified and 7% non-notified slums did not have electricity connection.
- (6) About 78% of notified slums and 57% of the non-notified slums had a pucca road inside the slum.
- (7) About 73% notified and 58% non-notified slums had a motorable approach road.
- (8) About 48% of the slums were usually affected by waterlogging during monsoon.
- (9) Latrines with septic tanks (or similar facility) were available in 68% notified and 47% non-notified slums (up from 66% and 35% respectively in 2002).
- (10) At the other extreme, 10% notified and 20% non-notified slums (down from 17% and 51% in 2002) did not have any latrine facility at all.
- (11) About 10% notified and 23% non-notified slums did not have any drainage facility. (15% for notified and 44% for non-notified slums in 2002).
- (12) Underground drainage systems existed in about 39% notified slums (25% in 2002) and 24% non-notified slums (13% in 2002).
- (13) Underground sewerage existed in about 33% notified slums (30% in 2002) and 19% non-notified slums (15% in 2002).
- (14) Government agencies were collecting garbage from 75% notified and 55% non-notified slums.
- (15) About 10% notified and 23% non-notified slums did not have any regular mechanism for garbage disposal.

<sup>17</sup> Based on data collected from notified slums.

<sup>18</sup> Government of India (2010), Ministry of Statistics and Programme Implementation, National Sample Survey, May.

- (16) Over the last five years, facilities had improved in about 50% of notified slums in terms of roads (both within-slum road and approach road) and water supply.

### **A. Problems of Slums in Mumbai:**

Mumbai is merged by seven islands in the city area and four in the suburbs, covers an area of about 437.71 sq. Kms. Mumbai accounts for about 1 per cent of the total population in India. Mumbai's per capita income is a little more than three times than that of India.<sup>19</sup> The infant mortality rate is (@1000 birth) – 34.57 (2006) and the maternal mortality rate is (@1000 birth) – 0.63 (2006). According to Census 2011, the city has a population of 1.25 crores, where 49% population lives in slums, facing the problem of water shortage, living space shortage and shortage of sanitation facilities too. Due to an increase in unplanned urbanisation and industrialisation, the environment has deteriorated significantly. Pollution from a wide variety of emissions such as from automobiles and industrial activities, has reached critical level in Mumbai, causing respiratory and several other health problems.

The financial capital of India – Mumbai, is a home to estimated 6.5 million slum people (nearly 55% of the total population of Mumbai). Some of the common problems of slums in Mumbai are:

- (1) It is projected that more than half of the Indian population will live in urban areas by 2020 and nearly one third of this urban population will be slum dwellers. The ongoing process of rapid urbanization has deleterious repercussions on health and nutrition, especially for children.
- (2) People residing in slums face many problems like improper sanitation, unhygienic environmental conditions, social, economic, health, educational and cultural problems and many more. The basic problems inherent in slums are health hazards.
- (3) Although, public hospitals provide health care services to persons below poverty line free of cost or at a very negligible fee, many of the slum dwellers do not access them as they are situated away from places of residences and waiting time there is too long.
- (4) Malnutrition among children is another problem of urban slums. The major causes of childhood malnutrition in slums are inappropriate child feeding practices, infections, improper food security and suboptimal childcare besides poor availability and inadequate utilization of health care services.
- (5) Lack of basic amenities like safe drinking water, proper housing, drainage and excreta disposal services; make slum population vulnerable to infections and communicable diseases. These further compromise the nutrition requirements of those living in slums.

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<sup>19</sup> Jadhav, N. (2011), 'Role of Mumbai in Indian Economy', retrieved from [www.drnarendra.jadhav.info](http://www.drnarendra.jadhav.info) on 21<sup>st</sup> July.

- (6) Poor sanitary conditions and poor quality of water lead to illnesses like diarrhoea and other water borne diseases, affecting the life expectancy of slum dwellers. Among water borne diseases, diarrhoea disproportionately affects children under the age of five.
- (7) In dense overcrowded urban conditions, it is often difficult for people to find space to build latrines. As a result, many have to defecate in the open or share whatever limited facilities are available which tend to offer no privacy, safety or hygiene.
- (8) In urban slums, human waste and refuse collected in stagnant pools spread disease and contaminates water sources. The problem is made worse during the rainy season when rubbish and excrement are washed into cramped living areas in the vicinity.

In these conditions it is virtually impossible to remain healthy and clean. Diseases spread rapidly among the crowded conditions and the little money that slum dwellers earn often has to be spent on medicines to help the sick recover. Often these settlements are unofficial and so, the people living there are not entitled to get connections to basic facilities like water and sanitation. They are also vulnerable to demolition as the government may reclaim the illegally occupied land for other usages.

## **B. Social Issues in Mumbai Slums:**

The slum environment is the perfect breeding ground for a wide range of social problems. High unemployment often causes men to stay at home, growing increasingly frustrated with their pathetic situation and the worsening poverty.

Cramped conditions means that there is nowhere to go when tensions rise, a factor that regularly leads to domestic violence. Sometimes the situation goes to the other extreme, where people abandon their homes, lured by the prospect of oblivion through alcohol or drug abuse. Once people develop such problems, the prospects of finding work diminish. They fall deeper into poverty and the cycle continues. Many of them fall into deep depression without any hope of recovery and indulge in anti-social activities.

- (1) Many children in the slums start work at a very early age with no prospect of getting any education. They make money by rag picking (trawling through rubbish dumps to retrieve anything that can be sold), selling newspapers in traffic jams, peddling drugs or begging. They are at risk of exploitation as well as all the health problems that accompany their lifestyles.
- (2) Some people manage to achieve a high status within slums and establish themselves as slumlords. They are often allies of certain politicians and gain control of sizeable chunks of the community land. By renting out the land, they make huge financial gains while everyone living in the slum struggles to survive on their meagre earnings.

- (3) The slumlords form elaborate links with local politicians, government officials and the police, and slum dwellers become dependent on them for their safety and protection, especially from threat of eviction. They have little empathy with the slum residents and exploit them by charging highly inflated prices for illegal electricity and water supplies or for constructing huts.
- (4) The sheer volume of people living in slums causes them to be obvious targets for politicians wanting to increase their percentage of vote. During election, they are bribed in all possible ways to extract votes. Slum inhabitants are often promised all kinds of support and improvements in return for political allegiance, but their trust is regularly belied.
- (5) Female babies in the slums often face discrimination and poor treatment right from their birth, if they are given a chance of life at all. Although gender specific abortion is illegal in India, it is still practiced in some slums. As per the Census 2001, the sex ratio in non-slum areas in the city of Mumbai was 859 while the same was only 770 in slum areas.

### **C. Health Issues in Mumbai Slums:**

Many of the health problems in urban slums stem from the lack of or inadequacy of necessary civic amenities in the area such as safe drinking water, clean sanitary environment and adequate housing and garbage disposal. All these factors pose series of threats to the health of slum dwellers, women and children in particular, as they spend most of their time in and around the unhygienic environment. Inadequate nutritional intake due to non-availability of subsidised ration or availability of poor quality ration makes the slum dwellers prone to large number of infections and water borne diseases.

Given its nature, the slums are small cramped houses with dirty toilets, clogged drains and access to clean water is inadequate. The cramped huts and narrow lanes make it difficult to keep living areas clean. The dustbins in the slums are placed at locations which are inaccessible to municipal vehicles for collection. Urban malaria, tuberculosis and pneumonia, leprosy, meningitis, preventable infections in children such as measles, whooping cough and polio, diarrhoea and intestinal worm infections are some of the most common health problems apart from higher morbidity and mortality due to accidents.

Community toilet facilities mean as many as 2000 people may share one block of ten toilets. Although the government builds toilets, they do not maintain them. Gutters running outside houses are clogged with rubbish. During the monsoon, the gutters overflow into houses. Stagnant gutters are breeding grounds for disease-carrying mosquitoes. For clean water, the inhabitants have to rely on community taps scattered around the slums. These slums dwellers suffer from diarrhoea, measles hepatitis etc., arising from malnutrition. A survey of slums carried out as part of the

Mumbai Sewerage Development Project-I by Brahanmumbai Municipal Corporation, reveals that about 50 per cent of the slum population does not have adequate access to safe sanitation facilities. About 73 % depend on community toilets, 28% use open space toilet and 0.7 % has to pay to use toilets. Based on a norm of one toilet seat per 50 populations, the total shortage in toilet seats is about 65,000.<sup>20</sup> Inadequate number of toilets leads to overuse and poor maintenance makes them unhygienic. It is found that nearly 35–45% of the families in slums have at least one member always suffering from some kind of illness, with water and sanitation related diseases like diarrhoea, malaria, typhoid, intestinal worms etc.<sup>21</sup> That apart many suffer from chronic diseases like tuberculosis (TB), asthma, heart diseases, cancer, leprosy etc. The Greater Mumbai Municipal Corporation has various programmes meant to improve public health facilities in order to create awareness and prevent the spread of diseases during epidemics and natural disasters. However, the benefits of these programmes do not have the desired impact.

The high rate of population growth has an adverse effect on the health and the quality of people's lives. The extent and severity of malnutrition continues to be very high. Being the industrial city, people suffer from pollution related diseases such as T.B. and infectious diseases such as Hepatitis Enteric fever Gastro Enteritis etc. Largest numbers of cases of Tuberculosis are found in Mumbai. Mumbai also has highly recorded cases of AIDS due to migrant labour population. There is a high incidence of diarrhoeal diseases and other preventive and infectious diseases, especially amongst infants and children due mainly to lack of safe drinking water and poor environmental sanitation. Poverty and ignorance are among the major contributory causes of the high incidence of disease and mortality. Gastro Enteritis, another dangerous disease, is very common in Industrial cities. The instance of this disease is high due to multiplicity of organisms involved such as bacteria, protozoa, intestinal parasites, fungi and viruses caused mainly due to poverty, unsanitary conditions and ignorance of rules of elementary hygiene in the general population.

Many are exposed to new types of risks associated with industrial pollution, road accidents, air pollution, poisonings, threat to child adolescent health, etc. Drainage system is poor in Mumbai which causes high incidence of infectious disease and epidemics. High densities of dwellings and lack of internal roads cause poor accessibility for emergency and life saving services. New squatter settlements come up on the periphery often on inhabitable lands because of their low values and cause environmental hazards. Malaria, tuberculosis, pneumonia, leprosy, meningitis, preventable infections in children such as measles, whooping cough and polio,

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<sup>20</sup> Brahanmumbai Municipal Corporation, Sewerage Development Project-I.

<sup>21</sup> Karn S. K., Harada H. (2002), '*Field Survey on Water Supply, Sanitation and Associated Health Impacts in Urban Poor Communities – A Case from Mumbai City, India*', Water Science and Technology, Vol. 46, No. 11-12, pp.269-275.

diarrheal diseases and intestinal worm infections are some of the most common health problems apart from higher morbidity and mortality due to accidents.

Some of the major health issues in slums in Mumbai are:<sup>22</sup>

- (1) Information on maternal and child health indicators among slum-dwellers shows that their health conditions are 2 to 3 times worse than the average health levels in other urban areas in the state of Maharashtra.
- (2) According to estimates, health agencies are only reaching roughly 30 percent of the urban poor – that too in comparatively less poor slums. *For example*, a study conducted by Nair Hospital in an urban slum located in E Ward (Byculla) found that 44 percent of new born babies had low birth weight compared to 21 percent, the state average for the rest of urban Maharashtra. In another slum called Cheeta Camp in M-East ward (Chembur), three quarters of the women in the reproductive age group were anaemic, compared to the state average of 49 percent in Maharashtra.
- (3) Public health data suggest that about 80 percent of neonatal deaths in Mumbai occur in the first week of life, mainly because of premature deliveries and complications resulting from birth asphyxia.
- (4) Although more than 95% women are registered in the antenatal period, almost 50% amongst them visit a hospital for the first time in the last three months of their pregnancy. Plus almost one-third of the 91% who deliver in the hospitals arrive only half an hour before delivery which means there isn't enough time to diagnose and respond to any complications that may arise.
- (5) The infant mortality rate in Mumbai has been static at 40 per 1000 births in the last six years while the maternal mortality rate has been on a rise.
- (6) The actual situation in slum pockets is still however unclear. Unplanned deliveries, delays in reaching health facilities and deliveries by untrained personnel all contribute to injuries and loss of life during birth. These problems persist despite the concentration and proximity of public and private health facilities.

Although 90% of child deliveries occur in hospitals, the Infant Mortality Rate (IMR) in Mumbai has been static at 40 per 1000 births in the last six years, while the Maternal Mortality Rate (MMR) is on the rise. The current maternal mortality rate is stated to be 0.14. However this is perhaps a gross underestimation because there is no clear definition for maternal death in the records maintained by the Municipal Corporation of Greater Mumbai (MCGM). The set of inter-related problems in both maternal and neonatal health care delivery and uptake that has led to the high IMR and MMR figures are:

- (1) The existing public healthcare infrastructure is over stretched by the burgeoning population.

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<sup>22</sup> City Initiative for Newborn Health – Overview and Protocol document of SNEHA (2006).

- (2) There are no systems in place to collect data about maternal and child health care issues.
- (3) Lack of continuing medical education for doctors, nurses or the paramedical staff.
- (4) Poor communication, transportation and blood banking services.
- (5) Deficiencies in health care uptake: Community centered Information Education and Communication (IEC) services and counselling in maternal and child health care issues is rare.

#### **D. Dysfunctional PDS and the Impact on Nutritional Intake:**

It is common sense that for a healthy body that is strong enough to fight off infections/disease nutrition intake must be appropriate and adequate. Residents of slums rely on government subsidies for their ration. These residents come under the Targeted Public Distribution Scheme (TPDS) and can avail of government subsidies for wheat, rice, and kerosene oil for cooking. However, the Mumbai's public distribution system is in shambles. Basic food grain items like rice and wheat never reaches the target beneficiaries. People in slums rely on Public Distribution System to avail their ration. Women in slum clusters complain of receiving poor quality ration. Most of the times, there is no supplies in ration shops. Unable to get their ration they are compelled to buy from the market at market rates and end up spending much more. A field survey conducted in St. Mary Chawl (Malad) revealed 70% of the families never relied on ration shop items due to either non-availability of food or very poor quality food. Most of them purchased only sugar from the ration shops. Ration card is a mere residential and identity proof for these poor people. Furthermore, adulteration in cooking oil, milk and wheat flour add to the woes of people. The implications of consuming adulterated food create further complications such as chronic cough, diarrhoea and several intestinal diseases – many of which go untreated due to lack of information, money and proper medical assistance for the poor. School going poor children are forced to consume poor quality and adulterated meals under free meal scheme. Quite a few children are deprived of the benefit of this scheme due to corrupt officials and contractors.

#### **4.6 Health Infrastructure in India, Maharashtra & Mumbai:**

Healthcare is one of the key parameters in which a country's development and stature are measured. It is an important indicator to understand the healthcare delivery provisions and mechanisms in a country. It also signifies the investments and priority accorded to creating the infrastructure in public and private sectors. There has been a slowing down of investment in public health in most states and this is reflected in the declining proportion resources that are allocated to health budget. This is creating a situation where state governments are losing control over the public health system and directly affecting the poor individuals and making them more vulnerable as they have no choice other than depending on public health sectors.

## A. Health Infrastructure in India:<sup>23</sup>

Health Infrastructure indicators are subdivided into two categories viz. educational infrastructure and service infrastructure.

(1) **Educational Infrastructure:** Educational infrastructure provides details of medical colleges, students admitted to M.B.B.S. course, post graduate degree/diploma in medical and dental colleges, admissions to BDS and MDS courses, AYUSH institutes, nursing courses and para-medical courses. Medical education infrastructures in the country have shown rapid growth during the last 20 years.

- The country has 314 medical colleges, 289 Colleges for BDS courses and 140 colleges conduct MDS courses with total admission of 29,263 (in 256 Medical Colleges), 21547 and 2,783 respectively during 2010-11.
- There are 2028 institution for General Nurse Midwives with admission capacity of 80332 and 608 colleges for Pharmacy (diploma) with an intake capacity of 36115 as on 31st March, 2010.

(2) **Service Infrastructure:** Service infrastructure in health include details of allopathic hospitals, hospital beds, Indian System of Medicine and Homeopathy hospitals, sub centers, primary health centres (PHCs), community health centres (CHC), blood banks, mental hospitals and cancer hospitals.

- There are 12,760 hospitals having 576793 beds in the country, of these 6795 hospitals are in rural area with 149690 beds and 3748 hospital are in urban area with 399195 beds.
- Medical care facilities under AYUSH by management status i.e. dispensaries and hospitals are 24,465 & 3,408 respectively as on 1.4.2010.
- There are 1,45,894 Sub Centers, 23,391 Primary Health Centers and 4,510 Community Health Centers in India as on March 2009 (Latest).
- There were 2445 licensed blood banks in the country as on January 2011.
- CGHS has health facilities in 24 cities having 246 allopathic dispensaries and total 438 dispensaries in the country with 847081 registered cards/ families.

**Table No. 4.6**  
**Number of Government Hospitals and Beds in Rural and Urban Areas (Including CHCs) in Maharashtra and India (2011)**

	Rural Hospitals (Govt.)		Urban Hospitals (Govt.)		Total Hospitals (Govt.)		Projected Population (In '000')	Average Population Served Per Govt Hospital	Average Population Served Per Bed
	No.	Beds	No.	Beds	No.	Beds			
India	6795	149690	3748	399195	12760	576793	1160804	90972	2012
Maharashtra	735	13376	1037	36627	1772	50003	111118	62708	2222

*Notes: Government hospitals include central government, state government and local govt. bodies.*

*Source: Directorate General of State Health Services*

<sup>23</sup> Government of India (2010), 'National Health Profile', Central Bureau of Health Intelligence, New Delhi, India.

(3) **Ayurveda, Yoga and Naturopathy, Unani, Siddha and Homoeopathy (AYUSH):** A separate Department of Indian Systems of Medicine and Homoeopathy (ISM&H) was set up in 1995 to ensure the optimal development and propagation of AYUSH systems of health care. The Department of ISM&H was renamed as the Department of AYUSH (an acronym for – Ayurveda, Yoga and Naturopathy, Unani, Siddha, Homoeopathy) in November 2003.

The Department of AYUSH under the Ministry of Health and Family Welfare, promotes and propagates Indian systems of Medicine and Homoeopathy, and is committed to infuse the wisdom of traditional medicine with the methodologies of modern science, scientifically validating the systems and presenting them in the scientific idiom, relating their efficacy to modern life styles. The Department has, over the years, developed a broad institutional framework to carry out its activities.

**Table No. 4.7**  
**Medical Care Facilities under AYUSH by Management Status as on 1.4.2010**

		State Govt.	Local Bodies	Others	Total
Ayurveda	Hospitals	2233	20	181	2434
	Dispensaries	13899	886	346	15131
Unani	Hospitals	232	0	26	258
	Dispensaries	1074	45	8	1127
Siddha	Hospitals	268	0	4	272
	Dispensaries	530	0	0	530
Yoga	Hospitals	4	0	0	4
	Dispensaries	7	0	48	55
Naturopathy	Hospitals	8	0	16	24
	Dispensaries	66	0	30	96
Homoeopathy	Hospitals	96	0	144	240
	Dispensaries	5447	1084	201	6732
Amchi*	Hospitals	0	0	2	2
	Dispensaries	5	0	129	134
Total	Hospitals	2841	20	373	3234
	Dispensaries	21028	2015	762	23805

\*Tibetan medicine, based on the herbs and natural products of Tibet and the Himalaya, has existed for thousands of years.

**Source:** State Governments and concerned agencies.

## **B. Health Infrastructure in Maharashtra:**

The Public Health Department is the main authority in Maharashtra which plans and implements public health programmes and schemes on the line with the National Health Policy of the Government of India. Some of the objectives of the Public Health Department of the Government of Maharashtra are:<sup>24</sup>

<sup>24</sup> Government of Maharashtra (2011), Public Health Department, Directorate of Health Services, retrieved from the official web-site [www.maha.arogya.gov.in](http://www.maha.arogya.gov.in) as on 23<sup>rd</sup> October.

- (1) To provide adequate and qualitative preventive and curative health care to the people of the State.
- (2) To ensure greater access to primary health care by bringing medical institutions as close to the people as possible or through mobile health units.
- (3) To improve maternal and child health with a view to reducing maternal and infant mortality.
- (4) To improve hospital services at the secondary levels both in terms of infrastructure and personnel.
- (5) To give training to doctors, nurses and other paramedical staff to meet the needs of health care in the State by upgrading their skills and knowledge.
- (6) To implement various national health programmes and evaluation of their achievements and success.
- (7) To give health education for improving knowledge, attitude and behaviour of the community.

**Table 4.8**  
**Number of Health Sub-Centres in Maharashtra**

Number of Sub-centres		
Tribal	Non-tribal	Total
2075	8504	10579

*Source: Official web-site of Government of Maharashtra, retrieved on 10<sup>th</sup> February 2012.*

It can be seen in the table 4.8 that there are altogether 10579 sub-centres in Maharashtra of which 2075 sub-centres are located in tribal areas while the remaining 8504 sub-centres are in the non-tribal areas.

### **C. Health Infrastructure in Mumbai:**

Mumbai has a huge network of government, private and trust run hospitals. While many of the hospitals in Mumbai belong to the private sector, a good number of hospitals and health care centers are government ventures. Mumbai has a network of 16 Municipal general hospital, 5 maternity homes, 26 speciality hospitals, 162 municipal dispensaries and 168 Health Posts. In addition, the State government has one Medical College hospital, three General hospitals and two Health units. Although, these hospitals provide services to poor patients without any charges or at negligible user fee, many deserving people refrain from using their services or make use of their services as a measure of last resort. There are several reasons for this.

The total number of clinics, diagnostic centers and urban health care centers in Mumbai are estimated to be around a thousand in number. All these hospitals taken together can accommodate around 22,000 patients with proper bedding and other facilities. Table 4.9 shows health infrastructure – private and public – in the city of Mumbai.

**Table 4.9**  
**Healthcare Infrastructure in Mumbai**

<b>I. Public Sector</b>					
<b>Primary</b>	<b>Number</b>	<b>Secondary</b>	<b>Number</b>	<b>Tertiary</b>	<b>Number</b>
Health Posts	168	Peripheral Hosp.	16	Teaching Hosp.	4
Dispensaries	162	Maternity Homes	5		
PPCs*	22	Speciality Hosp.	26		
<b>Total</b>	<b>352</b>		<b>47</b>		<b>4</b>
<b>II. Private Sector</b>					
<b>Primary</b>	<b>Number</b>	<b>Secondary &amp; Tertiary</b>		<b>Number</b>	
General Practitioners (GPs)	4663	Nursing Homes		1258	
		Hospitals		175	
		Super Speciality Hospitals		5	
<b>Total</b>	<b>4663</b>			<b>1438</b>	

\*Post Partum Centres.

*Source: Mumbai Human Development Report (2009), MCGM.*

The table 4.10 gives the details of number of beds and daily out-patient visits to four teaching hospitals and 16 peripheral hospitals in the city of Mumbai.

**Table 4.10**  
**Intake Capacity of Municipal Hospitals and Number of Daily Out-Patients**

<b>Hospital</b>	<b>Number of Beds</b>	<b>Daily Out-Patients</b>
K.E.M. Hospital	1800	4930
Sion Hospital	1404	1500
J. J. Hospital	1352	1500
Nair Hospital	1200	3000
Peripheral Hospitals	3633	10000

*Source: Official web-site of TIFR.*

It was observed in the field survey that most of the municipal hospitals in Mumbai provide services to the inpatients and outpatients without supplying medicines to them. The patients, who travel from a long way to these hospitals, only to be attended by the doctors, end up spending towards medicine prescribed and travelling. This when compared to the visit to a private doctors in the slums who charge just Rs. 30 as fees and provide medicine, is far less than the money spent to avail public health services in government hospitals. They not only save on the money but these private doctors' timings too are convenient which enables the workers to utilise the whole day for their works. Thus, the practicing private doctor's clinics in slum areas are crowded with patients. Many private doctors in such area are not qualified to provide modern health care. Many claim to be practicing other systems of medicine such as traditional Indian systems like Ayurveda, Unani and Siddha, and Homoeopathy. These quacks, mainly patronised by the poor, only add to the risk. In case of hospitalisation, the municipal hospitals provide only bed free of cost. The patients have to spend on their own for medicines and tests. As these are costly, they

are forced to borrow from local moneylenders, thus being indebted for life. Though the government hospitals are better equipped, the distance is a major factor, which weighs heavily against its patronage.

#### 4.7 Common Disease and their Proximate Cause in Slums:

During field survey, the researcher also collected data on some of the common diseases among slum dwellers in Mumbai and tried to locate their proximate causes. The following table provides an overview of the natures of disease/illness, the treatment sought and its proximate causes in Mumbai slums.

**Table No. 4.11**  
**Common Diseases, their Proximate Cause and Treatment Sought in Mumbai Slums**

Common Disease	Treatment Sought	Proximate Cause
<b>MALES</b>		
Chest Pain	Medication from private/public hospitals	Smoking bidis
Headaches	Self-medication	Exertion and stress
Abdomen Pain	Government hospital/private clinics	Alcohol/contaminated water
Tuberculosis	Government hospital	Unhygienic living conditions
Ear bleeding	Private doctors	Not known
<b>FEMALES</b>		
Weak Eyesight	None	Occupational
White discharge	None	Infection
Infections (Urinary/Reproductive Tract)	Medication from quacks/public Hospitals	Lack of bathing units and toilets for daily use
Acute tiredness	Standard pain killers	Inadequate food intake/long working hours/stressful life
Rheumatism	Medication from public hospital	Inadequate nutrition – vitamin and mineral deficiency
Mental Stress	None	Overall living conditions
Severe back aches	Standard pain killers	Work related (household/job)
Headaches	Standard pain killers	Inadequate food intake/stress
Joint pains	Medication from government hospitals	Inadequate food intake
<b>CHILDREN</b>		
Stunted Growth	None	Poor intake of food
Ear bleeding (water)	Government/private Dispensaries	Not known
Fever	Private doctors (quacks)	Infection/ weak immunity
Cough	Private doctors (quacks)	Seasonal/Unhygienic conditions
Boils	Home remedies	Seasonal
Indigestion	Private doctors (quacks)	Faulty food habits
Malaria (dengue)	Government hospitals/clinics	Open garbage dumps, open drains and stagnant water holes
Conjunctivitis	Home remedy	Seasonal - infections

*Source: field survey.*

Broad classifications of proximate causes of ill health in Mumbai slums:

- (1) Lack of adequate civic amenities likes clean toilets, bathing units, garbage disposal and drinking water.

- (2) Lack of information about state owned and managed medical hospitals and various plans and schemes of the government for health care sector.
- (3) Mistreatment, corruption and indifferent attitude of government officials in government hospitals compel the poor to avail private alternatives.
- (4) Inadequate food intake and low levels of nutrition weaken the immune system thereby making the poor prone to infections.
- (5) Lack of financial resources to ensure sustained medical attention for skin disorder or joint pains.

It can be seen that women suffer from a number of diseases in comparison to man. The reasons being they at home most of the time in unhygienic and unhealthy conditions and do all types of household work. Some of them also work in nearby household as maid and are generally given secondary status in home, both with regard to essential requirements like food and health services.

Public health data suggest that about 80 percent of neonatal deaths in Mumbai occur in the first week of life, mainly because of premature deliveries and complications resulting from birth asphyxia. Although more than 95% women are registered in the antenatal period, almost 50% amongst them visit a hospital for the first time in the last three months. Plus almost one-third of the 91% who deliver in the hospitals arrive only half an hour before delivery which means there isn't enough time to diagnose and respond to any complications that may arise. The actual situation in slum pockets is still however unclear. Unplanned deliveries, delays in reaching health facilities and deliveries by untrained personnel all contribute to injuries and loss of life during birth.

#### **4.8 Budgetary Allocations of the Maharashtra Government and MCGM to Healthcare Sector:**

In India, states contribute the bulk of government health financing, which is in consonance with India's constitutional decentralization whereby health is a – state subject (Constitution of India). Table 4.12 shows the budgetary allocations of the Maharashtra Government for health sector during XI<sup>th</sup> Five Year Plan (2007-2012).

**Table 4.12**  
**Budgetary Allocation of the Government of Maharashtra for Health Sector during XI<sup>th</sup> Plan 2007-12 (Rs. in Lakhs)**

	XI <sup>th</sup> Plan Outlay	2006-07	2007-08	2008-09	2009-10	2010-11
Maharashtra	496884	33123	52298	110150	88992	N.A.
Total of All States	6103802	757127	824386	1029238	1196722	1201639

*N.A. - Not Available*

**Source:** Health, Family Welfare & Nutrition Division, Planning Commission, of India.

The per capita health expenditure of all states in India is only Rs. 279 p.a. and that of Maharashtra stood at Rs. Rs. 286 p.a., a little more than the national average. The per capita health expenditure of Mizoram is highest at Rs. 1555 followed by Arunachal Pradesh at Rs. Rs. 1425 and Goa at Rs. 1388.

### **Highlights of the MCGM Budget 2011-2012 for Healthcare Sector:**

Some of the major provisions of the MCGM for healthcare sector in the Budget 2011-2012 are:<sup>25</sup>

- (1) Rs. 2167.51 crore allocation to Health Sector. An increase of 29.57% over Revised Estimates 2010-2011.
- (2) Rs. 25 crore for Primary Health Sector under Dispensary Upgradation Programme comprising enhancement of clinical skills of doctors, upgradation of diagnostic facilities and repairs and branding of Dispensaries.
- (3) Rs.49.56 crore provided for upgradation of health services, repairs and facelift of 16 Peripheral Hospitals.
- (4) Rs.123.02 crore provided for upgradation of existing infrastructure, introduction of new units and provision for state of art equipments of 4 teaching hospitals.
- (5) Introduction of linkage system between Major and Peripheral Hospitals to enable citizens to get speciality medical treatment at the Peripheral hospital in their neighbour.
- (6) Rs. 167 crore provided for redevelopment of Cooper Hospital (100 crore), Bhagwati hospital (Rs.12 crore) and Centenary hospital, Kandivali (Rs.55 crore).
- (7) Provision of Rs.40 crore for establishment of Trauma Hospital at Jogeshwari.
- (8) New initiatives under Mumbai Aarogya Abhiyan, including Liver Transplant Programme, Comprehensive Programme for Breast Cancer Care, Special Dispensaries for Life Style Diseases such as Diabetes and Hyper tension, slum screening programme for the same, programme on mental health and well being.
- (9) 6 new Dialysis Centres sought to be established under Public-private partnership programme.
- (10) Introduction of Antinatal and Postnatal services and checkups in all 182 Health Posts to strengthen maternal and child care.

### **4.9 Expenditure Pattern of Slum Dwellers on Curative Health Services:**

The average monthly expenditure on health related services is approximately 50 per cent of household income for slum dwellers. One visit to a doctor costs about rupees 20-500. During summer each person in a house has to visit doctor on an average 3-5 times. Thus, the total monthly cost of visiting a doctor for a family comes to:

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<sup>25</sup> MCGM Budget Highlights 2011-2012 (2012), retrieved from the official website of Municipal Corporation of Greater Mumbai. [www.mcgm.gov.in](http://www.mcgm.gov.in) on 1<sup>st</sup> April.

### Minimum Monthly Cost of Accessing Healthcare Services per Family

$$\begin{aligned} &= \text{Fees per Visit} \quad \times \quad \text{No. of Visits} \quad \times \quad \text{No. of Persons} \\ &= \text{Rs. 20} \quad \times \quad 4 \quad \times \quad 4 \\ &= \text{Rs. 320.} \end{aligned}$$

This is the minimum cost which each family incurs on availing health care services in slum areas. Maximum expenses per family per month may go up to Rs. 5000 or even more than that. The average income of families interviewed during field survey was found to be Rs. 5000 to Rs. 10000 per month. The services availed from private doctors by spending such a huge sum are available free of cost to the deserving population in government hospitals. However, it was revealed in the field survey that these people avoid visiting government hospitals for several reasons. One of the most important factors revealed in the field survey was the distance that they need to travel in order to access health care services of public hospitals. The nearest government hospital from slums visited during field survey was at a distance of 5 kms. The cost of travelling this distance for accessing free government health care services in government hospitals is much higher than the cost of accessing the services of 'private' doctors - albeit untrained. A woman claimed that the government hospitals are a waste of their time and energy. She remarked – '*sarkari aspatal mein to garib ki koi sunwai nahin*' (there is no hearing for the poor in government hospitals). The doctors seldom give them medicine and when they do they give them medicines without a check-up. A visit to a state government hospital, a woman said, requires them to devote a whole day. The long queues and impolite manner in which they are spoken to discourage the poor from turning to the government services for medical relief.

**Table 4.13**  
**Average Spending on Health Care**

<b>Rich</b>	<b>Poor</b>
20 % enjoy three times the share of public subsidy for health.	20 % of Indians have more than double the mortality rates, fertility rates and under nutrition levels of the richest 20 %.
On an average, the rich spend 2 percent of their incomes on healthcare.	On an average the poor spend 12 % of their incomes on health care.

Source: Chandhoke Neera (2005), "*Democracy and Well Being in India*" UNRISD.

There are several factors that compel a poor person to spend on private healthcare services. Some of the difficulties are ground realities of public health care system in the city of Mumbai were revealed by respondents during field survey. A government health post in Malad area was located at walking distance from slum clusters but the availability of doctors, medicines and chances of treatment there were erratic. Seldom were the doctors or medicines available there. A cold and flu may get the service providers attention occasionally but for every visit made to the health post, the patient is told '*yahan pe goli nahin hain – bade aspatal mein jao*' (there is no

medicine available here go to the big hospital). Mobile clinics have not been near the slum clusters for several months. As a result with no proper institution to redress their medical problems, the poor take refuge in quacks or rely on their own knowledge to cure themselves.

#### **4.10 Government Initiatives for Healthcare Sector in India:**

Some of the steps taken by the government to give boost to healthcare facilities in general in India are:

- (1) 100% FDI is permitted for hospitals and all health-related services under the automatic route.
- (2) The government encourages foreign/private investment in the healthcare sector.
- (3) The Government has defined and enforced minimum quality standards for healthcare facilities.
- (4) It has announced a number of policy initiatives to stimulate the growth of private, social and community insurance.
- (5) The policy encourages the supply of services to patients of foreign origin on payment.
- (6) The rendering of medical services on payment in foreign exchange is treated as 'deemed exports' and is eligible for all incentives extended to exporters.
- (7) A new category of visa "Medical Visa" ('M'-Visa) has been introduced which can be given for a specific purpose to foreign tourists coming into India.
- (8) In order to promote capital upgradation in medical sector, the government has taken a number of initiatives:
  - Reduction in import duty on medical equipment from 25 per cent to 5 per cent.
  - Depreciation limit on such equipment rose to 40 per cent from 25 per cent, to encourage medical equipment imports.
  - Customs duty reduced to 8 per cent from 16 per cent for medical, surgical, dental and veterinary furniture.
  - Customs duty on as many as 24 medical equipments, which include X-ray, goniometry and teletherapy stimulator machines, has been reduced to 5%.
  - To make India a competitive player in medical equipment manufacturing, the government encourages setting up of Special Economic Zones (SEZs).
  - For a sector specific zone a hospital with minimum bed strength of 25 is stipulated and this goes up to 100 beds for a multi-product SEZ.

#### **A. Foreign Collaboration in the Indian Healthcare Sector:**

Since liberalisation in 1991, a growing number of Indian companies have formed alliances with foreign firms. The following are some of such alliances:

- (1) Wockhardt collaborated with Harvard Medical International Inc. USA.
- (2) Fortis Healthcare collaborated with Partners Healthcare System, USA.

- (3) Birla Heart and Research Centre collaborated with Cleveland Clinic Foundation, USA.
- (4) Max Healthcare and Singapore General Hospital (SGH) have entered into collaboration for medical practice, research, training and education in healthcare services.
- (5) Apollo-Gleneagles Hospitals Ltd. is a 50:50 joint venture between Apollo Hospitals Ltd and Parkway Group of Singapore.
- (6) Apollo Hospitals has also entered into a partnership with Yemen's Hayel Saeed Anam Group to provide advisory services to the latter's hospital project.

### **B. Foreign Players in India:**

- (1) The US-based Atlas Medical Software, which specializes in developing software solutions for healthcare industry, has set up its operations in India.
- (2) Bayer Diagnostics, one of the largest diagnostic businesses in the world.
- (3) GE-BEL, a joint venture between General Electricals and Bharat Electronics Limited is the only manufacturer of X-ray and CT tubes in South Asia.
- (4) UK-based Isoft Group plc (iSOFT), one of the world's leading suppliers of application systems for hospitals and healthcare organizations.
- (5) Phillip sells about US\$ 43-49 million worth of medical systems in India.
- (6) The US-based healthcare products major, Proton Health Care is making an entry into India with its range of digital health monitoring devices.
- (7) Siemens is a leading manufacturer of medical equipment with a market share of more than 30 per cent in India.
- (8) Wipro GE Medical Systems, a joint venture between GE Medical Systems and Wipro Corporation, is India's largest medical systems sales and service provider.

### **C. Private Equity Players in Healthcare:**

The following firms have evinced interest in healthcare (hospitals, diagnostic sector and medical equipment):

- (1) Carlyle.
- (2) Fidelity International.
- (3) UK-based CDC Group.
- (4) Blackstone.
- (5) IDFC.
- (6) HSBC.
- (7) JP Morgan Private Equity Fund.
- (8) American International Group Inc (AIG).
- (9) Evolvence India Life Sciences Fund
- (10) George Soros's fund Quantum.
- (11) Blue Ridge.
- (12) ICICI Venture.
- (13) Global Healthcare Investments and Solutions.

- (14) Bluewater International Investment.
- (15) Lightspeed Advisory.
- (16) Ajay Piramal Group.
- (17) Groupe Limagrain.
- (18) Singularity Ventures.
- (19) ePlanet Ventures.
- (20) Daninvest.
- (21) Barings Private Equity Partners India..
- (22) Reliance Life Sciences.

#### **D. Opportunities in Healthcare Sector in India:**

- (1) India needs USD 50 billion annually for the next 20 years.<sup>26</sup>
- (2) India needs to add 2 million beds to the existing 1.1 million by 2027, and requires immediate investments of USD 82 billion.
- (3) 100 per cent foreign direct investment (FDI) is permitted for health and medical services under the automatic route.
- (4) Allocation for National Rural Health Mission (NHRM) has proposed to be increased from Rs 18,115 crore (US\$ 3.59 billion) in 2011-12 to Rs 20,822 crore (US\$ 4.13 billion) in 2012-13.
- (5) National Urban Health Mission is being launched.
- (6) Pradhan Mantri Swasthya Suraksha Yojana being expanded to cover upgradation of 7 more Government medical colleges.

#### **E. Health and Nutrition:**

- (1) Proposal to extend concessional basic customs duty of five per cent with full exemption from excise duty/countervailing duty to six specified life saving drugs/vaccines.
- (2) Basic customs duty and excise duty reduced on Soya products to address protein deficiency among women and children.

India's booming economy is driving urbanisation and creating an expanding middle class, with more disposable income to spend on healthcare. The sector holds enormous potential which is waiting to be unleashed to the maximum potential. On the back of continuously rising demand, the hospital services industry is expected to be worth US\$ 81.2 billion by 2015, according to the latest RNCOS research report titled, "Indian Hospital Services Market Outlook," published in March 2012. Huge private sector investments will significantly contribute to the development of hospital industry, comprising around 80 per cent of the total market.<sup>34</sup>

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<sup>26</sup> Government of India (2002), *India Vision 2020 Report*, Planning Commission, New Delhi, December.

<sup>34</sup> Based on the information retrieved from [www.indiape.com](http://www.indiape.com). On 15<sup>th</sup> March 2012.