CHAPTER 1

INTRODUCTION

“It is health that is the true wealth, not pieces of gold and silver.” ¹
~ Mahatma Gandhi

1.1 Introduction

Health is invaluable to mankind; so precious and priceless like happiness, that it cannot be bought. Therefore, attaining a long life is a highly valued goal for humankind. Healthy citizens are a prerequisite to build an economically viable society and form the basis of a nation’s social infrastructure. Unhealthy people can hardly be expected to make any valid contribution to the economic and social development of a nation. Thus, over the ages health has been considered to be a highly valuable asset. It is truly said that ‘Health is wealth’.

Health is a fundamental human right and also a social goal globally. It is necessary for achieving basic human needs and also for improving the quality of human life. In 1977, under the aegis of the World Health Organization (WHO), the 30th World Health Assembly, decided that the focal social target of governments and World Health Organization (WHO) in the coming decades should be “the attainment by all the citizens of the world by the year 2000 of a level of health that will permit them to lead a socially and economically productive life”.² (WHO 1979)

The above declaration by the WHO, has served as guidelines to the governments of many countries around the world, and as result more priority has been given to their health care sectors to develop improved health care programmes. In fact, this has given the necessary impetus to the governments and other health care agencies to offer quality health care to its citizens by higher allocation and better utilization of resources. Many of the less developed countries have used the WHO declaration as

guidelines to starting new health care programmes and at the same time improving the existing health care systems by prioritizing their health care through increased resource allocation and better utilization of the same.

**Concept of Health**

Etymologically, the English word "health" comes from the Old-English word *hale*, meaning "wholeness, being whole, sound or well". The word ‘*hale’* is derived from the Proto-Indo-European root *kailo*, meaning "whole, uninjured, of good omen".3

A person’s greatest asset is health, which enables a person to lead a socially and economically productive life. In other words, the growth and development of a nation depends really upon the health of its people. In fact, as children, one is taught that good health is equal to wealth. Elders have constantly stressed on the necessity of good health by eating nutritious food and having good exercise. Health is a resource for everyday life, and is a positive concept emphasizing social and personal resources as well as physical capabilities.

The importance of health in person’s life can never be lessened, as health does not merely mean being disease-free or without physical pain. It also includes mental well-being. A healthy mind and body helps a person to live a better and productive life. The adage ‘health is wealth’ holds true as a healthy mind and body enables a person to live a more productive life. Good health is an important condition for optimum socio-economic development of humankind.

When people talk about health, they usually refer to the condition of the body. The mind is as crucial an element in the overall assessment of a person’s well-being. Most people take their health for granted and often disregard the need for a good health regime i.e. eating right, exercising and trying to live a stress-free life. In fact, health assumes greater significance for people, only when they generally suffer from ill-health; physical or mental or both.

**1.2 Definition of Health**

---

When applied generally, the definition of health appears to accept anything and everything that affects the status of health. The most celebrated modern definition of health was formed during the Preamble to the Constitution of the World Health Organization as adopted by the International Health Conference, New York, 19-22 June, 1946. The World Health Organization (WHO) defined health in its broader sense as, “a state of complete physical, mental, and social well-being and not merely the absence of disease or infirmity.”\(^4\) This definition of health has not been amended since 1948. During the Ottawa Charter for Health Promotion in 1986, the WHO said that health is: “a resource for everyday life, not the objective of living. Health is a positive concept emphasizing social and personal resources, as well as physical capacities.”

The meaning of ‘Health’ cannot be merely confined to the absence of disease or infirmity. In fact, good health bestows upon society, the freedom from illness and helps its citizens realize their true potential. Health is also a major determinant of human resources and is so vital for enhancing productivity, accelerating economic development and improving the quality of life and the level of social welfare. This takes us back to the words of the wise that ‘health is wealth’, it underlies the importance of the role of health in creating wealth. Health is considered to be an important facet of human resource development, as good health care facilities and services are essential for creating healthy citizens who can effectively contribute to social and economic development of the society.

A healthy population means a better and more productive workforce, which in turn leads to better economic growth. This brings out the connection between health and success. Generally, it is believed that children who have enjoyed better health and received higher levels of nutrition in the pre-school years, and are healthier in the school years, usually achieve higher success rates in education and work. Strong healthy children grow up to be strong healthy adults and in turn contribute in building a prosperous nation. Children, who are born unhealthy or underweight, are more prone to childhood diseases, remain weak and sick throughout their childhood and later grow up to be adults who are less efficient than their healthier counterparts.

Thus, for individuals, health has a double function in their lives. On the one hand, achieving perfect health represents a value of its own, a target that needs to be reached as closely as possible. On the other hand, there are other aims in life as well e.g. good health gives good income in the labor market.\(^5\)

The two major determinants of a person’s progress in life are good health and education, both of which are interlinked. Clubbed with incomes or purchasing power parity they broadly indicate the level of attained human development.\(^6\) In fact, education enables an individual to think and make proper choices which ultimately influence the individual’s health. Therefore, health in itself is a major asset which helps one to improve their economic and social status.

The economic development of a nation depends on the health and productivity of its people. The reflection of a society’s development is found and measured in their health and nutritional status. Indicators such as infant mortality rate, maternal mortality rate, provision of and access to health care services, and nutritional status of women and children, thus assume greater significance. Health and nutrition is also instrumental in attaining higher productivity and economic welfare of the citizens.\(^7\)

As human development assumes top priority world-over, health which is the primary source for human development, assumes even more importance. Health care improvements by way of increasing the number of physicians and other health care professionals, medical facilities like infrastructure and equipment, free medicines to the poor can help to reduce Infant Mortality Rate (IMR), Maternal Mortality Rate (MMR) and Children Under-five Mortality Rate (Cu5MR), which are basic indicators for calculating Human Development Index (HDI).

It is often observed that a less developed country is poor and remains poor because its human and natural resources remain under-utilized. There is a vicious cycle that one sees in the relation between poverty and ill-health. On the one hand, the poor are

---


\(^7\) *Ibid.*
often unable to access the opportunities in life, due to lack of education and other social factors, which in turn reduce their ability to get better work opportunities and this in turn affects their standard of living and thereby their ability to access better health. On the other hand, poor health lessens the accessibility to various social factors like opportunities in life, increases levels of stress, isolation, lack of education etc., which in turn can increase health-related problems. It is well-known that efficiency in any activity is increased due to good health. Insufficient health care provisions to expectant and new mothers can result in increased health problems, like high levels of anemia among both mother and child, which in turn can lead to complications at birth and stunted growth.

Apart from the fundamental value of health as a measure of welfare, poor health can directly influence the performance of an individual at different arenas of life like at occupation, education, or even their personal lives. Individuals’ health-seeking behavior is influenced by their knowledge as well as awareness of health care facilities and services along with their concern about their own health and the health of their household members. Besides health care interventions and a person's surroundings, there are other factors which can affect the health status of individuals; these include their background, lifestyle, and economic and social conditions. These are often referred to as “Determinants of Health.”

Governments world-over are trying to improve their health care systems, as it is being realized that a healthy population enables human development. Since health is the primary sector on which results the human development of the society, it has to be given top priority in comparison to other sectors. The enjoyment of the highest standard of living, of which health is a crucial component, is the fundamental right of every human being. In developing countries, the governments are striving for better health care systems and outcomes.

If any of the above basic human needs is to be achieved, good health should be considered mandatory for ensuring a better standard of life. In 1977, the World Health Assembly pronounced that the main social target of the governments should be the attainment by all the people of the world, a level of health that would enable them to lead a socially and economically productive life by the year 2000. The Alma-Ata
declaration prompted many governments of Western countries to give more preference to their health systems by higher allocation of resources and making more concerted efforts to improve their existing health systems.

In India, though health is a concurrent subject, Article 47 of the Indian Constitution, emphasizes the provision of health care - both preventive and curative services - mainly to be the responsibility of the State governments. In India, health as a State subject is the responsibility of the States and the implementation of laws and policies depends on the State Governments’ ability to allocate higher budgetary support to the health sector. The Indian Constitution has directed the States to raise the level of nutrition, the standard of living of the people, the improvement of public health, elimination of poverty and ignorance and unhealthy practices as a part of its primary duties which is central to development. Therefore, the analysis of public health expenditures by the States assumes greater significance.

1.3 Significance of the Study
A sound and efficient health care system helps in improving a nation’s wealth by ensuring a speedier economic growth and development. It is increasingly recognized and understood, that good health is an important contributor to productivity and economic growth, but it is, first and foremost, an end in itself. In a developing nation like India, where majority of the population have to rely on their physical labour, health assumes an even greater significance for their economic status.

Good health, and its natural corollary, defense against illness, are fundamental to every man, woman and child, not just for their well-being, but also for their very survival. How a society values and understands the importance of making health care easily accessible and available, will ultimately determine to a greater degree the nature of health experienced by its citizens.

Recent studies by PricewaterhouseCoopers International Limited (PwCIL) indicate that the Indian economy is poised to be become the second largest economy in the world and is among the fastest growing economies in the world.\(^8\) India as the second

---

most populous nation in the world has access to one of the largest natural resources – its population. In fact, this very factor makes a huge difference in the country’s growth potential – a healthy population means highly productive workforce and more economic advancements.

Yet, India has much catching up to do; the Human Development Report 2015, released by the United Nations Development Programme (UNDP) ranked the country at a very low 130 out of the 188 countries on its Human Development Index (HDI) – this index shows the level of human development of a country on the basis of a composite of human development indicators like life expectancy, access to education and income levels.

India has a vast health care sector in terms of population coverage, health care institutions, professional and para-professional health staff and health care spending. Yet, in spite of these, even after six decades of India’s independence there continues to be widespread poverty and health care issues. As a result, malnourishment and communicable diseases are still serious problems faced by the country.

One of the persistent challenges faced by India at present is improving access to basic health care facilities, as it is vital from the human development perspective as well as to ensure a solid foundation for future economic growth. Health care indicators vary widely across Indian states, partly reflecting the differing levels of resources available to state governments. But one totally consistent trend seen is that health indicators are much worse in rural regions than in urban areas.

The problems faced by India’s health care system is of access and availability, as it rests on a primary health care system that is pitifully inadequate for meeting the basic needs of the population. Yet, another problem is the low utilization of the existing health facilities due to lack of awareness and persistent widespread poverty, resulting

---


in undernourishment and spread of communicable diseases. The abysmal health care indicators in India can be attributed to factors like lack of sufficient infrastructure, manpower, low public spending on health care etc. Higher investment in education and health infrastructure can lead to higher levels of citizens’ well-being as well as a better educated and healthier workforce, resulting in higher levels of work efficiency and productivity.\(^\text{11}\) So an investment in health is really an investment in Human Resource Development of a nation.

Yet, the above realization has brought about little changes in the policies and practices as revealed by the World Health Statistics, 2011. The health statistics in India have shown alarming trends, where the Maternal Mortality Rate (per 100 000 live births) is 230, Infant Mortality Rate a (probability of dying by age 1 per 1000 live births) is 50, Under-five Mortality Rate (probability of dying by age 5 per 1000 live births) is 66 in 2010, Adult Mortality Rate (probability of dying between 15 and 60 years per 1000 population) is 212 and Malaria Mortality Rate (per 100 000 population) is 1.9 every year.\(^\text{12}\)

To add to these figures, the latest UN statistics show that India accounts for one-third of deaths of pregnant women, mainly due to complications such as severe bleeding after childbirth, infections, high blood pressure during pregnancy and unsafe abortion. These alarming statistics show the impact of poverty, inadequate financial investment and lack of skilled health personnel and thus, highlight the critical significance of access to public health systems and the need to increase free medical help.\(^\text{13}\)

The far from encouraging picture is contrasted by the ironic reality that India is fast becoming one of the preferred destinations for medical tourism, with a reputation for providing super-specialty health care at globally comparative rates. Ironically India still has a very long way to go in providing basic health care to the citizens. Despite its growing economic prowess, India is ranked among one of the lowest spenders in


terms of public expenditure on health care as a proportion of the Gross Domestic Product (GDP). The low levels of health care expenditure have led to a state of deficiencies in the health outcomes of a majority of the country’s population.

In India, starting with the Bhore Committee (1946), which was followed by various other health committees, the Five-year plans, the National Policies on health etc. all have pointed out the significance of providing easily accessible, available health care and with special focus on the medically underserved and the underprivileged segments of population. Health policies in India had initially been planned to focus on providing an inclusive universal health care system as defined by the Bhore Committee. These health policies soon underwent a change and then were conformed to achieve a selective, targeted programme based on health care policy aimed at providing immunization, selected disease surveillance and medical education plus research along family planning programmes.

India has a vast and divergent health care needs and concerted efforts are to be undertaken in bridging the shortfall in the availability of health infrastructure and its delivery for better health outcomes. Such improvements require better social investments in the fields of education and health. Improving the standards of education and health sectors is not only a goal in itself for achieving a better quality of life but also has immense positive impact on the economic development of a country. So investments in education and health, act as a key element in any national policy that aims at broad-based economic growth. In India, where a large segment of the population rely on physical labour, the twin benefits of better education and health can boost up their productivity and earnings.

Since health and education form key elements for the development of a country’s social infrastructure and leads to higher efficiency as well as productivity, any expenditure in these sectors must assume a greater significance. Public health expenditure consists of recurrent and capital spending from government (both central and local) budgets, external borrowings and grants (including donations from

international agencies and non-governmental organizations) as well as social (or mandatory) health insurance funds. Public Health Expenditure refers to expenditure by the government authorities on planning and intervening for better health outcomes for the general populace as these are vital to the overall health and well-being of the people. Public health expenditure not only just provides major social and economic benefits but also maximizes future preventable demand on health services.

Public health programmes are concerned mainly with preventive, promotive and rehabilitative aspects giving importance to primary health care. Public health services are vital to the overall health status and well-being of the nation and improving them can bring about major economic and social benefits as well as minimize future preventable demand on health services over period of time. Hence, in the recent years, governments have realized the growing importance of public spending on health.

Health care expenditure is a major consideration for the government, as it is inextricably linked with the overall economic well-being of a country and its population, which is ultimately its workforce. The health care infrastructure depends upon health expenditure incurred by the nation. Across the globe there are great variations on the amount countries reserve and spend on health. Health expenditure, both in terms of percentage of GDP spent on health and per capita health expenditure, is much higher in the developed countries. Similarly, there was wide variation of per capita health expenditure across countries, which was extremely low in developing countries when compared with most of the developed countries.

Developed countries spend the most on health per person. The per capita government expenditure on health in high income countries was around US Dollar $3026 (8 per cent of GDP), while in low income countries it was only US Dollar $10 (2 per cent of GDP) in 2010, reflecting high variation in health expenditure across countries. The Organization for Economic Co-operation and Development (OECD) countries

account for less than 20 per cent of the world's population in the year 2000, but were responsible for almost 90 per cent of the world's health spending. Therefore, 80 per cent of world’s population spent only 10 per cent of the total expenditure on health, which highlights the high levels of inequality in health expenditure across the globe and this includes people from Asia-Pacific, as well as African and Latin American countries.

In India, public health expenditure is incurred by the Central and State governments and also by other Local Bodies. The Central Government spends directly on health and also provides grants-in-aid to State Governments for incurring health expenditure. The State Governments, along with the grants-in-aid received from the Centre, also carries out health expenditure directly out of the resources available with them. Health expenditure at the state level includes transfers of aid to rural and urban local bodies to spend on health. The local bodies incur health expenditure from the resources available with them. Thus, a total of health expenditure incurred by each of these government bodies provides an estimate of public spending on health in India.

In India, though health is a concurrent subject, Article 47 of the Indian Constitution emphasizes the provision of health care – both preventive and curative services, mainly to be a responsibility of the state governments. In other words, the implementation of health related programmes becomes the responsibility of the State Government. The Central Government’s area chiefly remains providing for disease control programmes, family welfare services and medical education etc. The other components in the health sector are jointly financed by the central and state governments, with a larger share apportioned from the states.

Health care outcomes in India have been less than satisfactory. There are many factors responsible for these dismal outcomes and these range from inadequate health care infrastructure (India has just 90 beds per 100,000 population against a world average of 270 beds), lack of adequate skilled health professionals (India also has just 60

doctors per 100,000 population and 130 nurses per 100,000 population against world averages of 140 and 280 respectively) and to insufficient public health care spending (less than 1 per cent of GDP) since Independence and heavy dependence on private health care facilities.

According to the data in the Economic Survey, India spends around 4.1 per cent of GDP on health, while China and Russia spends at least a percentage point more. Only Indonesia has a poorer allocation of 2.6 per cent among the 11 countries identified in the government report, while Brazil and South Africa are near the 9 per cent range. This makes India the worst performer among the BRICS group.20

Recent studies also reflect the regional imbalance in health care services in rural and urban parts of the country and also in the provision of services made by the public and private health care sectors. It is against such a background that public health care assumes greater significance, requiring it to be more accessible, available and affordable to the citizens, and thereby ensuring that the objectives of universal health coverage are realized. There is a dichotomy seen in the Indian health care sector, where at one end virtually every type of modern health care, including cosmetic surgery, psychiatry, alternative treatment, convalescent care, is available at a price and at the other end, there is the severe paucity of basic medical services like medicines, beds, personnel and other infrastructure.

1.4 Scope of the Study

Maharashtra is the second most populous state after Uttar Pradesh and third largest state by area in India. As India's richest state, Maharashtra has contributed 25 per cent of the country's industrial output and 23.2 per cent of its GDP in 2010-11.21 Maharashtra holds the status of being the wealthiest state in India, with a Gross State Domestic Product (GSDP) of ₹ 16,866,950 in 2014, at current prices.

The state's capital, Mumbai, is the commercial capital of India and has evolved into a global financial hub. Mumbai is the most populous city in India, second most

20 Economic Survey 2013: India has lowest spend on health in BRICS group. (2013, February 28). The Times of India.
21 About Maharashtra. Available at: http://janpratinidhi.com/state/maharashtra-15 Date accessed on 11 January 2015
populous metropolitan area in India, and the fifth most populous city in the world, with an estimated metropolitan area population of 20.7 million as of 2011. The population in Mumbai according to the 2011 census was 12,442,373 and the population density is estimated to be about 20,634 persons per square kilometer. Such a high population density brings in its wake the resultant problems of overcrowding and limited resources to cater to the needs of the ever-burgeoning population. Adding to her woes, Mumbai suffers from all the same major urbanization problems witnessed in many fast growing cities of developing countries that is, widespread poverty and unemployment, large slums, lack of proper garbage disposal, poor public health due to lack of basic civic amenities and lack of proper education for a large section of the population. In fact, Mumbai city, like many fast developing cities of the world sees rampant poverty along with huge economic prosperity and affluence.

Greater Mumbai, India’s financial nerve centre is the most populous city in India and serves as the core city for the Mumbai Metropolitan Region (MMR), which is among the top ten urban agglomerations of the world. Geographically, the Mumbai mega-urban region has three distinct entities which are as follows:
1. Greater Mumbai (MCGM)
2. Mumbai UA (Urban Agglomeration)
3. Mumbai Metropolitan Region (MMR)

Mumbai Metropolitan Region (MMR) consists of the Mumbai City (MCGM) and six other rapidly growing municipal corporations, 13 small towns with municipal councils and 995 villages spread over an area of 4,355 sq km. The boundary of MMR was first demarcated by the state government in 1967 and Mumbai Metropolitan Development Authority (MMRDA) was established in 1974. The Mumbai UA (Urban Agglomeration) consists of Mumbai City (MCGM) and other adjoining cities and towns namely Navi Mumbai, Thane, Kalyan, Balldiapur, Ambernath, Ulhasnagar and Mira-Bhayander. The area of Mumbai UA covers 1,135 sq. km., at a density of about 16,000 persons per sq km. Greater Mumbai, the area under the administration of

---

The Municipal Corporation of Greater Mumbai (MCGM) provides major facilities in the public sector along with the State Government. The Public Health Department of the MCGM provides the basic health care facilities and also manages other aspects related to preventive and social or community medicine. This Department is divided into zonal set-ups consisting of five such zones, and covers 24 Wards (nine city Wards, nine western suburban Wards and six eastern suburban Wards), for administrative purposes. The Deputy Municipal Commissioner handles each zone. Each Ward has a separate Ward Office and the Ward Medical Health Officer (MHO) heads the Public Health Department in that Ward.

The infrastructural facilities provided by the MCGM include Health (including medical colleges, hospitals), Primary Education Facilities (running and maintaining its schools and supporting private schools through its program) and Fire Protection. Municipal Health Infrastructure of the MCGM consists of 4 Teaching Hospitals, 5 Specialty Hospitals, 18 Peripheral Hospitals, 30 Maternity Homes, 175 Dispensaries, and 183 Health Posts providing health services to the population of Greater Mumbai. The existing health infrastructure was planned between 1950 and 1980 to cater for a population in the range of 5.2 to 7.0 million. Presently, these health services are being used by nearly 12.4 million people. The scope of the present study is restricted to the public health care expenditure as well as the public health care
services provided by the MCGM. This study covers data for a period from 2005-06 to 2015-16.

1.5 Statement of the Problem
The main focus of public health care is to improve health and quality of life through preventive and curative measures as well as to develop conditions for better mental and physical health. The public health system in India is made of State-owned health care facilities, which is funded and controlled by the Indian Government. Nonetheless, today there is a growing concern among health care professionals on many aspects of the public health infrastructure. Prior studies reveal declining share of the public health care services and increasing privatization of health care services especially in the urban areas.

Low levels of investments have affected the quality of services provided by the public health care system. As stated earlier, the public health infrastructure in Mumbai was planned to cater to the needs of much lesser number of citizens and yet, today has to cater to needs of more than 12 million people. Hence, this study aims at studying how changes in the public health care expenditure, since 2005 have impacted the availability of health care facilities to the needier sections of the society as well as to understand the MCGM’s spending plan on public health infrastructure and thereby its inclusion of the under-served population.

This study aims to understand the perceptions of the users towards the public health care facilities provided by the MCGM, as well as attempts to recognize the deficiencies in the growth and development of these facilities. It endeavors to understand the ways to guide investment of scarce resources that will help to improve the economic well-being of the population through improvements in health care services and also to help the economically weaker sections of the society. For this purpose, the study examines the budgetary allocations to the public health by the MCGM, the availability and access of the public health care facilities and studies the views of the users, which help to understand deficiencies in the system.

1.6 Research Questions of the Study
The purpose of this study is to examine the changes in public health care expenditure of the MCGM, which is the main public health service provider in Mumbai and also
to understand whether the public health care expenditure is keeping pace with the
growing needs of an ever increasing population of Mumbai. It also aims to understand
the perception of the public health care users’ towards these facilities. With this
intention, the present study the following two research questions have been
specifically drafted:

**Research Question1:** Is the Public Health Care Expenditure keeping pace with the
growing health care needs of the population of Mumbai?

**Research Question2:** What is the perception of the ‘Public Health Care Services
Users’ towards the public health care facilities in Mumbai?

1.7 Objectives of the Study

Health is central to human happiness and well-being and hence is a goal aspired by
every society globally. Good health and long life therefore is traditionally on the most
wished-for assets in a human life. Good health enables a person to work better and
thereby increase his productivity in comparison to a person suffering ill-health. In
addition, good health enables individuals to have better standard of living, which in
turn helps them to use their resources, to earn more and also maintain their health.
The good health of the citizens can help a nation grow and achieve economic
development. In this context, the promotion of health care services and infrastructure
through increased public health care expenditure assumes greater significance for
developing nations like India.

This study tries to analyze the public health care expenditure of the MCGM and also
tries to understand the perception of public health care services users towards the
availability, accessibility and affordability aspect of the existing health services
available to the population of Mumbai. At the same time, the study also endeavors to
get an insight into the factors that act as constraints while public health care users tries
to access the various public health facilities.

The existing health care facilities were formulated decades earlier to cater to the
requirements of a population which was about half the size of what it is presently.
These inadequacies in infrastructure, availability of skilled manpower, medicines,
technical equipment has put the existing system under severe stress and as a result has magnified the problem of public health care in Mumbai. Adding to the woes of the public health care system is the ever increasing population and the high rate of immigrants coming in from other states of India. The end result points to poor quality of services, inconvenient hospital locations and timings which force the poor to turn to more expensive private health care alternatives.

The city of Mumbai accepts the largest number of immigrants from other states and this puts immense pressure on the available public health infrastructure, which ultimately leads to an ever widening gap between the availability of health care services in urban areas and the requirements of the rising population and the ever escalating rate of immigration. The study also attempts to examine the public health system and health related policies and policy implications which would results in improvement of the status of health in Mumbai. Besides stagnant expenditure levels, the health care sector has been plagued with instances of inefficiencies at several levels, resulting in waste, duplication and sub-optimal use of scarce resources. All these factors combine to have an adverse impact on the health sector’s ability to provide health care services to the needy.

The topic of the thesis is ‘A Study of Government Expenditure in Public Health Care Services in Mumbai’ and the study tries to understand and analyze the distribution of public health expenditure as well as the usage of public health facilities under the MCGM in Mumbai. The study attempts to understand the budgetary allocation of resources and its distribution along with the growth of public health expenditure in Mumbai. It also aims at looking into the perception of the public health care services users’ towards the public health care facilities made available to them in Mumbai. The study aims at an in-depth analysis of availability and accessibility of Public Health Care Services available to the underprivileged sections of the population that represents a large part of the population of the city. This study analyzes the obstacles faced by the beneficiaries of the public health services and simultaneously wishes to highlight the gross disparity in availability of services and the needs of the population.
This study focuses on the need to have a better public health care system by allocating more resources to this sector and also to bring about a better distribution of the existing resources and infrastructure. The study aims to interpret the spending plans of the MGCM on public health services and also to understand the deficiencies in the existing system by studying and analyzing the allocation pattern under the MCGM health expenditure.

In the light of the above broad Research Questions, the objectives of the study are as follows:

1. To examine the government policy on public health care in the post-independence period of India.
2. To examine the pattern and trends of public health expenditure in Mumbai, since 2005.
3. To study the growth in the public health care infrastructure since 2005, in Mumbai.
4. To study the users’ perception regarding accessibility and quality of public health care services provided by the public hospitals in Mumbai.
5. To suggest policy measures for improving the public health care benefits.

1.8 Research Methodology

Various components of research methodology have been used for the present research study.

A. Universe

All public health care facilities provided by the MCGM and located in the city of Greater Mumbai along with the entire population of Mumbai constitutes the ‘universe’ for the present study.

Justification of Using Mumbai as a Research Area

Mumbai, the commercial capital of India, is home to millions of people both from within Maharashtra and also from the different states of the India and has an immense display of linguistic as well as religious diversity. Being one of the most densely populated cities of the world, Mumbai experiences all the same major urbanization problems like increasing population, pollution, growing slums, poor health awareness, lack of health facilities along with lackadaisical attitude of the government towards
development of health facilities. The table given below shows the ward-wise distribution of the population as well as the slum population as per the Census 2011.

**TABLE 1.1**

MUNICIPAL WARDS OF GREATER MUMBAI: DISTRIBUTION OF PUBLIC HEALTH CARE FACILITIES AND SLUM POPULATION IN MUMBAI CITY, 2011

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>185</td>
<td>63400</td>
<td>0</td>
<td>0</td>
<td>6</td>
<td>2</td>
</tr>
<tr>
<td>B</td>
<td>127</td>
<td>14400</td>
<td>0</td>
<td>0</td>
<td>5</td>
<td>2</td>
</tr>
<tr>
<td>C</td>
<td>166</td>
<td>......</td>
<td>0</td>
<td>1</td>
<td>5</td>
<td>3</td>
</tr>
<tr>
<td>D</td>
<td>347</td>
<td>33000</td>
<td>2</td>
<td>0</td>
<td>5</td>
<td>5</td>
</tr>
<tr>
<td>E</td>
<td>393</td>
<td>77800</td>
<td>1</td>
<td>1</td>
<td>12</td>
<td>6</td>
</tr>
<tr>
<td>F North</td>
<td>528</td>
<td>308400</td>
<td>2</td>
<td>1</td>
<td>9</td>
<td>7</td>
</tr>
<tr>
<td>F South</td>
<td>361</td>
<td>95200</td>
<td>2</td>
<td>1</td>
<td>6</td>
<td>7</td>
</tr>
<tr>
<td>G North</td>
<td>599</td>
<td>189600</td>
<td>0</td>
<td>1</td>
<td>13</td>
<td>8</td>
</tr>
<tr>
<td>G South</td>
<td>378</td>
<td>78300</td>
<td>0</td>
<td>1</td>
<td>9</td>
<td>7</td>
</tr>
<tr>
<td>H East</td>
<td>557</td>
<td>234800</td>
<td>1</td>
<td>1</td>
<td>7</td>
<td>8</td>
</tr>
<tr>
<td>H West</td>
<td>308</td>
<td>118500</td>
<td>1</td>
<td>0</td>
<td>5</td>
<td>6</td>
</tr>
<tr>
<td>K East</td>
<td>824</td>
<td>403800</td>
<td>1</td>
<td>3</td>
<td>10</td>
<td>12</td>
</tr>
<tr>
<td>K West</td>
<td>749</td>
<td>108800</td>
<td>1</td>
<td>1</td>
<td>7</td>
<td>10</td>
</tr>
<tr>
<td>P North</td>
<td>941</td>
<td>504500</td>
<td>2</td>
<td>3</td>
<td>10</td>
<td>12</td>
</tr>
<tr>
<td>P South</td>
<td>464</td>
<td>264000</td>
<td>1</td>
<td>1</td>
<td>3</td>
<td>5</td>
</tr>
<tr>
<td>R North</td>
<td>432</td>
<td>104300</td>
<td>1</td>
<td>2</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>R Central</td>
<td>562</td>
<td>221500</td>
<td>0</td>
<td>1</td>
<td>6</td>
<td>9</td>
</tr>
<tr>
<td>R South</td>
<td>691</td>
<td>399200</td>
<td>2</td>
<td>2</td>
<td>6</td>
<td>8</td>
</tr>
<tr>
<td>L</td>
<td>902</td>
<td>490400</td>
<td>1</td>
<td>2</td>
<td>14</td>
<td>13</td>
</tr>
<tr>
<td>M East</td>
<td>808</td>
<td>245300</td>
<td>1</td>
<td>2</td>
<td>9</td>
<td>11</td>
</tr>
<tr>
<td>M West</td>
<td>412</td>
<td>217200</td>
<td>1</td>
<td>1</td>
<td>5</td>
<td>7</td>
</tr>
<tr>
<td>N</td>
<td>326</td>
<td>385600</td>
<td>2</td>
<td>1</td>
<td>8</td>
<td>10</td>
</tr>
<tr>
<td>S</td>
<td>744</td>
<td>537900</td>
<td>1</td>
<td>3</td>
<td>8</td>
<td>13</td>
</tr>
<tr>
<td>T</td>
<td>314</td>
<td>111800</td>
<td>2</td>
<td>1</td>
<td>3</td>
<td>7</td>
</tr>
<tr>
<td>Total</td>
<td>12,443</td>
<td>52,07,700</td>
<td>25</td>
<td>30</td>
<td>175</td>
<td>183</td>
</tr>
</tbody>
</table>


Although Mumbai, as one of the top cities in the world should have reflected top health facilities, it shows a severe paucity of public health services. With a city’s population expanding at a rate faster than the infrastructure to address it, health is likely to be impacted severely, and the underprivileged communities are the hardest
hit. This has paved way for the development of health care services in the private sector. The city of Mumbai houses one of the largest numbers of slum dwellers in the world who have numerous health issues, both due to pollution, fast-moving lifestyle and abysmal living conditions. As per the 2011 census, about half of Mumbai's population lives in slums (5.93 million out of total population of 12.4 million). Health care in Mumbai comes under the jurisdiction of the MCGM. It functions to provide health care to the citizens in an affordable and accessible manner. All these factors individually and collectively make Mumbai an ideal place for conducting research on the present subject.

B. Sample

The data of the ward-wise slum and non-slum population as per the Census 2011, present the following ten areas with the MCGM Hospitals for the purpose of data collection and analysis:

1. (Ward F/S) Parel,
2. (Ward F/N) Sion,
3. (Ward H/W) Kurla (W),
4. (Ward R/S) Kandivali (W),
5. (Ward L) Bandra (W),
6. (Ward N) Ghatkopar (E),
7. (Ward S) Vikhroli (E),
8. (Ward K/W) Vile Parle (W),
9. (Ward H/E) Santacruz (E), and
10. (Ward P/N) Malad (E)

A sample of 384 respondents (192 in-patients and 192 out-patients) were selected randomly from various municipal hospitals in the areas, and were interviewed to have in-depth investigation and analysis, on the public health care facilities provided by the MCGM hospitals in their vicinity. The following table gives the details of the sample selected from these hospitals:

---


### TABLE 1.2

DISTRIBUTION OF PATIENTS SELECTED FOR PERSONAL INTERVIEW FROM THE SELECTED MUNICIPAL HOSPITALS FROM THE VARIOUS MCGM WARDS UNDER SURVEY

<table>
<thead>
<tr>
<th>Sr. No.</th>
<th>Ward</th>
<th>List of Hospitals</th>
<th>Number of Respondents</th>
<th>Per cent</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Ward F/S</td>
<td>King Edward Memorial (KEM) Hospital, Parel</td>
<td>60</td>
<td>15.6</td>
</tr>
<tr>
<td>2</td>
<td>Ward F/N</td>
<td>Lokmanya Tilak Municipal General Hospital, Sion</td>
<td>50</td>
<td>13.0</td>
</tr>
<tr>
<td>3</td>
<td>Ward H/W</td>
<td>K.B. Bhabha Hospital, Kurla</td>
<td>40</td>
<td>10.4</td>
</tr>
<tr>
<td>4</td>
<td>Ward R/S</td>
<td>Bharatratna Dr. Babasaheb Ambedkar Municipal General Hospital, Kandivali</td>
<td>38</td>
<td>9.9</td>
</tr>
<tr>
<td>5</td>
<td>Ward L</td>
<td>K.B. Bhabha Hospital, Bandra</td>
<td>36</td>
<td>9.4</td>
</tr>
<tr>
<td>6</td>
<td>Ward N</td>
<td>Seth Wadilal Chaturbhai Gandhi J.P. &amp; Seth Monji Aminadas Vora Mun. Gen. Hospital Rajawadi, Ghatkopar</td>
<td>36</td>
<td>9.4</td>
</tr>
<tr>
<td>7</td>
<td>Ward S</td>
<td>K.M.J. Phule Hospital, Vikhroli</td>
<td>34</td>
<td>8.9</td>
</tr>
<tr>
<td>8</td>
<td>Ward K/W</td>
<td>Dr. R.N. Cooper Hospital, Vile Parle</td>
<td>28</td>
<td>7.3</td>
</tr>
<tr>
<td>9</td>
<td>Ward H/E</td>
<td>V.N. Desai Hospital, Santacruz</td>
<td>32</td>
<td>8.3</td>
</tr>
<tr>
<td>10</td>
<td>Ward P/N</td>
<td>M.W. Desai Municipal General, Malad</td>
<td>30</td>
<td>7.8</td>
</tr>
<tr>
<td></td>
<td>Total</td>
<td></td>
<td>384</td>
<td>100</td>
</tr>
</tbody>
</table>

*Source: Researcher’s Field survey*

### Pre – Testing the Questionnaire before Final Study

A pilot study was conducted among the twenty public health care users. The earliest stages of pilot work were exploratory and unstructured interview and became crucial in framing and modifying the questionnaire for the Survey Method.

### C. Sources of Data

The present research study is based on data collected from both primary as well as secondary sources. The necessary information on public health expenditure for the analysis was collected from various Union Budgets, Economic Surveys of India and Maharashtra. Economic survey of Government of Maharashtra, Basic Statistics relating to health from the MCGM and Reports of Annual Plans in Maharashtra economy for the year 2005-06 to 2015-2016 along with Publications of Ministry of
Health and Family Welfare Reports, and various issues of Study of State Finances, published by the Reserve Bank India, Mumbai.

A great deal of secondary data was collected from published reports of the Government of India, Statistical data from Census Reports, Planning Commission Reports along with similar Government publications and international data was taken from reports published by international bodies such as the World Bank Publications; World Development Report (WDR), World Health Organization (WHO) etc. Information from the latest reports and papers are from certain websites and internet. Review of literature from carried out from various health related books, research articles and studies published in national and international journals and publications.

The collection of primary data was initiated through personal interviews of in-patients and out-patients, selected randomly from various the MCGM hospitals in the areas mentioned earlier to get an in-depth investigation and analysis of the problem under consideration. Three hundred and eighty four men and women were interviewed and became a part of this research.

Simple ratios and percentage methods were employed to examine the trend and pattern of municipal expenditure, and especially health expenditure of Mumbai. Besides, linear growth of various components of expenditure was computed to examine the trend of the various components of municipal expenditure. For examining the trends in Public Health Expenditure, time series data has been taken from 2005-06 to 2015-2016.

**D. Tools of Data Collection**

In order to analyze the objectives of the study related to the growth in the public health care infrastructure along with the pattern and trends of public health expenditure from 2005, in Mumbai, the secondary data was acquired from the Government of India, State Government of Maharashtra and also the MCGM publications. The researcher in order to analyze the objectives related to the users’ perception regarding accessibility and quality of public health care services provided by the public hospitals in Mumbai, collected primary data from 384 respondents, all of
whom are the patients of the hospitals under consideration. The Survey Method with closed-end questionnaire has been used to seek specific responses from the respondents. Users’ perceptions regarding the quality of care, their experiences in the public hospital with the doctors and other staff have been examined to understand why despite various problems patients belonging to different income groups seek treatment from the public hospitals.

E. Presentation of Data and Analysis of Data
Data collected from primary and secondary sources was presented through tables and for comparison and analytical study. Interpretation of the data was done with the help of various statistical techniques including percentages, graphs, charts etc. to achieve objectives and establish the research questions under consideration.

1.9 Chapterization
The following chapter scheme has been adopted for the present study:

Chapter One: Introduction
Chapter one is an introduction to the nature, scope, objectives, methodology of the research and its significance in the present scenario and research design of the study. It presents and provides the synoptic view of the study.

Chapter Two: A Review of Literature
Chapter two reviews the relevant studies and literature relating to public health care in India and also tries to get detailed understanding of the theoretical background and present status of the research problem.

Chapter Three: Health Care Economics – Concept, Development, Growth and Constraints with Reference to the Indian Economy
The third chapter deals with the conceptual background of health, significance of good health, health as a Fundamental Right, Health Economics, Health Expenditure and its significance, Indian Health care Sector and the evolution of National Health Planning in India, Health care Objectives and Initiatives under India Five Year Plans, National Health Policies & Programmes in India and highlights the impact of Disease Burden and Challenges faced by the Health Care Sector in India.
Chapter Four: Overview of Public Health Care Sector in India with Reference to Mumbai, Maharashtra

The fourth chapter exclusively pays attention to the framework of health care sector in India, as well as health care policies and systems in India, with specific reference to Mumbai and state of Maharashtra.

Chapter Five: Data Analysis and Interpretation-I: Public Health Care Expenditure in India and Mumbai

Chapter five forms the nucleus of the research study and deals with data analysis and methodology, and also examines the public health expenditure and measures its trends overtime in India, Maharashtra and Mumbai. In this context, this research does the analysis and interpretation of this data on public health care expenditure and health care facilities in the city of Mumbai.

Chapter Six: Data Analysis and Interpretation-II: Health Care Facilities Users’ Perception about Public Health Care Facilities in Mumbai

Accompanying with the fifth chapter, Chapter six forms the core of the research study that deals with perceptions of public health care users’ regarding quality of care experienced in the public hospitals under the MCGM in Mumbai. It also focuses on their utilization pattern the public health facilities and their experience while availing these facilities and bring out their suggestions and requirements for the public health facilities.

Chapter Seven: Summary, Suggestions and Conclusion

Chapter seven gives a concise summary of the findings of the research study and also highlights briefly the various limitations of the study. It also makes suggestions for the way forward for public interventions in health care scenario and to make health care services available universally, as well the future scope for further research.

1.10 Conclusion

Provision of adequate health facilities is obligatory for human development which is essential for poverty alleviation as well as for realizing the goal of economic
development. Special policy packages must be provided to states which are lagging in health infrastructure. The conclusions of the present study clearly show that Mumbai, in spite of having some of the best public health care facilities in the country, most of the people are not able to access them due to unplanned locations, inadequate infrastructure and their poor maintenance of public hospitals. In short, the results present a forceful plea for greater attention to the allocation and quality of public health care services for the poor and needy, which is accessible at an affordable cost.