Synopsis of the Ph. D. Thesis

Measuring The Economic Burden of Treatment For Urban Slum Dwellers: A Case Study of Mumbai

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SYNOPSIS OF THE THESIS
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1. INTRODUCTION

Health care carries a major concern at the micro as well as macro levels. At macro level changing disease pattern, rising levels of morbidity and increasing health care costs are serious concerns. At the micro level the enormous increase in the cost of health care services causes concern for different income groups. Aggregate health care spending has been rising at a faster rate than spending on anything else in almost all the countries of the world. Even though per capita expenditure on health is rising it does not necessarily guarantee better health outcomes or higher health standards for people of a country. However, as an investment in health care services to improve health status has important implications for human development through its linkages to human capabilities, the state needs to be actively involved in the betterment of health outcomes in a country.

T.W. Schultz (1993) viewed health as an investment in human capital and included it as one of the factor for improving human capabilities. World Health Organisation (henceforth WHO) states that "the enjoyment of the highest attainable standard of health is one of the fundamental rights of every human being…” (Government of India, National Health Policy, 2002) In general, whether viewed as an investment or a right, the emphasis on health in the last decades has increased mainly on account of rising human standard due to scientific advancement and overall high growth rate in terms of income capacity. There is an increasing public interest in both developing and developed countries in health and diseases, in deficiencies and defects in health services and rising cost of health care. The issue of health care has gone beyond the medical profession and individual family units. In the face of limited resources, the problem of health care has become one of “wants” and “needs” and available resources.
Therefore, politically and economically health care has now become a major concern for all government. The economic gains of better health are relatively greater for the poor people on account of its direct impact on the productive capacity of the bread earner of the family. Health improvement programs have thus become an important part of the overall poverty alleviation program of the developing countries.

Recognizing, the importance of the health care system, India as a signatory to the Alma Ata Declaration of “Health for All by 2000 AD” incorporated policy of public health to promote the health status of the vast majority of underserved rural and urban poor. As a result over the years a vast network of health infrastructure was built with significant improvements of macro health indicators. But in the light of the structural adjustment program and low shares of health expenditure in Gross Domestic Product (henceforth GDP) (0.9%) as compared to (4-6%) in developed countries, the issue of the cost burden of seeking health care has emerged an important policy concern.

It is argued that an important factor contributing India’s poor health status is its low level of public spending on health, which is one of the lowest in the world. (WHO, 2013). India ranked 136 (out of 186) in the same study, spending just about $62. At the same time, public spending on health as a percentage of GDP has been low, during the post liberalization phase, ranging in between 0.9% to 1.3 % between 1990-91 and 2013-14.

Public spending on health care is low; the out of pocket (henceforth OOP) expenditure by household has been large. In 2013, total expenditure on health in India (public and private) was about 4.1% of GDP private spending constituted nearly 74 % of the total spending on health. Nearly 90% of this private expenditure in India were in the form of OOP expenditure on health by household (WHO 2010), a share that is one of the highest in Asia (Van Doorslaer et al, 2007). The high OOP expenditure puts an increasing burden on poor household resulting into non treatment of illness. Data from the National Sample Survey Organisation (henceforth NSSO) in India indicate that between 1986-87 and 2004, the share of ailments not treated due to financial reasons has increased from around 15% to 28% in the rural areas. In 2011-12, the share of out of pocket expenditure on health care as a proportion of total household monthly per capita expenditure was 6.9% in rural areas and 5.5% in urban areas. This led to an increasing number of households facing catastrophic
expenditures due to health costs (18% of all households in 2011-12 as compared to 15% in 2004-05)\(^1\)

The role of healthcare in improving a nation’s wealth and accelerating economic growth is well established. But India, which is poised to become the second largest economy in the world, is poorly reflected in the Human Development Index (2013). Several facts indicating adverse health scenario in India are given below,

(1) India’s healthcare infrastructure is inadequate to meet the rising burden of disease. India has just 90 beds per 100,000 populations against a world average of 270 beds. (‘Budget 2011-12: The Healthcare Sector Wish list’, PWC India, February)

(2) India also has just 60 doctors per 100,000 population and 130 nurses per 100,000 populations against world averages of 140 and 280 respectively (‘Budget 2011-12: The Healthcare Sector Wish list’, PWC India, February).

(3) Public spending on healthcare has been less than 1% of GDP since independence. As per Economic Survey 2014-15, the expenditure by the Government (Central and State Government combined) on health as percentage of Gross Domestic Product (GDP) for 2014-15 (BE) is 1.2 per cent

(4) India’s healthcare financing mechanisms are very dismal with 66% of health care expenditure being out of pocket.

(5) Per capita spending on health care in India is $109 as on 2013. (National Health Account, Planning commission, 2013).

(6) Over 63 million persons are faced with poverty every year due to healthcare costs alone. Healthcare costs are more impoverishing than ever before and almost all hospitalization even in public hospitals leads to catastrophic health expenditures. (National Health Policy, draft, 2015)

India is currently experiencing demographic and epidemiological transition simultaneously and differently. It has the co-existence of both chronic and degenerative and poverty related health problems. Amidst this, a successful planning and management of health services require knowledge about the accessibility of health care as well as frequency and pattern of morbidity in a population. The knowledge of the utilization of preventive and curative services in addition to peoples’ preference and attitude towards different forms of health care is highly required. All this added together makes the study of health seeking behaviour of poor

\(^1\) National Health Policy, 2015, (Draft)
a complex issue with several economic, social, administrative and political dimensions to it.

Taking into account the impact of health costs on poverty levels, it is estimated that about 3.5% of the population would fall below the poverty line and 5% households suffer catastrophic health expenditure due to unaffordable health cost (Shahrawat and Rao, 2011). It is the people belonging to the lower income classes or poor who suffer the most. In India, particularly after the liberalization, the health care cost has become almost unavoidable and has given rise to serious equity issues (Gumber and Arora, 2006). India was ranked as having the 42nd highest average out of pocket expenditure, with 74.4 percent of private expenditure being paid as out of pocket. (WHO 2011) In the year of 2012, India ranked third in the World Health Organization's latest list of "countries with the highest out of pocket expenditure on health" in the Southeast Asia region. (WHO, 2012). The WHO's World Health Statistics 2012, says almost 60% of total health expenditure in India was paid by the common man from his own pocket in 2009. In comparison, Nepal's OOP health expenditure stands at 49%, Sri Lanka (44%), Indonesia (41%), Maldives (28%), Thailand (15%) and Bhutan (13%). Myanmar has the worst OOP expenditure at 82%, followed by Bangladesh (65%) in the same region.

Health expenditure pattern and health care seeking behaviour of the population need to be studied in depth. At the micro level the best method to obtain this information is by using primary survey. The data thus obtained can fill up the gaps in the health information available through the secondary sources2.

2. OBJECTIVES OF THE STUDY

Against the backdrop of increasing urbanization and marginalization of slums and increasing pressure on the demand for health care facilities in the urban slums, this study has made an attempt to examine the economic cost and consequences of illness for the urban poor. The specific objectives of the study are as given below.

- To undertake a comprehensive review of public health care services in India in general and Maharashtra in particular.

2.Census of India, Census of Maharashtra State, Ministry of Health and Family Welfare, National Family and Health Survey, National Health Account, National Health Policy 2000 etc.
To examine the utilization pattern of public health care services in Mumbai.

To examine the direct and indirect costs of illness that fall on the poor households.

To assess poor households' ability to cope with the monetary cost of the burden of ill-health through analysis of expenditures on illness and related loss of income.

To assess the impact of illness caused and coping strategies on the household assets and consumption behaviour, so as to examine the impact of such burden on the livelihood patterns of the households.

To suggest policy guidelines on the basis of this study.

**Conceptual Framework**—When an individual falls sick and incurs ‘out-of-pocket’ expenses for health care, the impacts on household finances can be severe. If social safety nets are inadequate, a family can become impoverished not only directly from the out-of-pocket payments for medical care, but also indirectly from missing work, disability, or premature death, thereby leading to lower income. In India, out-of-pocket payments for healthcare accounted for nearly 68% of total health expenditures in 2005 (World Health Organization (WHO) 2011), which likely resulted in the considerable impoverishment of households. This is suggested by survey-based analyses (van Doorslaer et al. 2007; Garg and Karan 2008) and by qualitative studies undertaken in the Indian states of Rajasthan and Andhra Pradesh (Krishna 2004; 2006). The conceptual base for the present study has been adapted from Russel\(^3\). Individuals and households

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In response to perceived illness (Box 1), decisions are made about whether to seek treatment and from which source (Box 2). The health system is shown as a resource outside the household on which members can draw (Box 6). Illness costs are broken down into direct (Box 3a) and indirect costs (Box 3b.) Direct and indirect costs will be influenced by type and severity of illness (Box 1) and health service characteristics (Box 6) that influence access and choice of provider. Illness costs going beyond the household’s daily or monthly budget may trigger coping strategies such as borrowing or asset sales (Box 4). If coping mechanism fails or is not adequate, it may have a long term impact on livelihood security. (Box 5)

Against this background the present study has used primary based survey to examine the various issues related to health care services. The issues on which this research is focussed are summarized as follows:

- Urban poor incurs substantial burden of health costs, both direct and indirect.
- Health costs, expenditure are financed through out of pocket and as a result the urban households face catastrophic health expenditure.
• Poor is spending more on private health services in the absence of adequate public health facilities.

• In Mumbai, indirect cost to access public health service is much higher than the user charges.

3. METHODOLOGY

The study mainly focuses on analysing the health cost burden borne by the urban poor in a metropolitan city like Mumbai. To fulfil this objective a survey of urban households in the slum areas of Mumbai was conducted. This survey provides baseline information regarding the socioeconomic status, health status and health care service utilization pattern of urban poor in slums. We have tried to analyses the patterns of health seeking behaviour among these poor households by including questions regarding the morbidities at the household level for the reference period of six month / one month. Generally, health spending is considered to be an important problem and burden for the slum population in the cities due to the irregular incomes and marginalised economic status. The study has tried to look into the three main aspects of this problem which are as follows…

• The socioeconomic conditions of the urban poor in Mumbai.

• The urban poor incurs substantial cost burden in the event of falling sick and in the absence any medical insurance, the expenses are converted into being catastrophic and compel them to face “medical poverty trap” as majority of urban poor depends on the informal sector for their livelihood.

• The study tries to identify the factors that influence the health behavior of the urban poor and their perceptions and attitudes towards the health status and utilization of health care services.

The present study is restricted to three municipal wards which are highly slum populated wards of Mumbai, namely, Kurla (L), Chembur (M) and Bhandup (S).
### Table 1- Top Five Wards of Mumbai Slum and non-slum Population

<table>
<thead>
<tr>
<th>Area</th>
<th>% of Slum population</th>
<th>% of Non-slum population</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bhandup (S)</td>
<td>86.83</td>
<td>14.17</td>
</tr>
<tr>
<td>Kurla (L)</td>
<td>84.68</td>
<td>15.32</td>
</tr>
<tr>
<td>Khar/Santacruz (HE)</td>
<td>78.79</td>
<td>21.21</td>
</tr>
<tr>
<td>Chembur (M)</td>
<td>77.55</td>
<td>22.45</td>
</tr>
<tr>
<td>Ghatkopar (W)</td>
<td>70.21</td>
<td>29.79</td>
</tr>
<tr>
<td>Greater Mumbai</td>
<td>54.7</td>
<td>45.95</td>
</tr>
</tbody>
</table>

Source- Census 2011.

The above wards are among the top five wards of Mumbai’s slum population. The data from the 2011 census shows that nearly 41.3% of the city’s population live in slums. The scope of the present study is restricted to three slum areas which are selected by using the method of purposive sampling method namely, Kurla (L), Bhandup (S), and Chembur (M) covering both structured and non-regularized slums.

#### 3.1 Sample of the study

A sample of 300 respondents has been selected randomly from slum areas in the following three wards to analyse the cost burden of health care services utilization. Verbal consent was obtained from the respondents before interviewing. A pretested structured interview schedule was used to collect required information on some variables like among independent variables, age, religion, caste, type of family, education, socio economic status (SES), known morbidities etc. The sample design for the households is indicated in the table below.
Table 2- Distribution of Sample

<table>
<thead>
<tr>
<th>Items</th>
<th>Kurla</th>
<th>Chembur</th>
<th>Bhandup</th>
<th>All</th>
</tr>
</thead>
<tbody>
<tr>
<td>No. of household surveyed</td>
<td>140</td>
<td>90</td>
<td>70</td>
<td>300</td>
</tr>
<tr>
<td>No. of ailment causes (Last one month)</td>
<td>101</td>
<td>61</td>
<td>50</td>
<td>212</td>
</tr>
<tr>
<td>No. of hospitalization cases (last six months)</td>
<td>39</td>
<td>29</td>
<td>20</td>
<td>88</td>
</tr>
<tr>
<td>Total</td>
<td>140</td>
<td>90</td>
<td>70</td>
<td>300</td>
</tr>
</tbody>
</table>

Table 3- Distribution of sample as per disease Type

<table>
<thead>
<tr>
<th>Disease Type</th>
<th>Number of Households</th>
</tr>
</thead>
<tbody>
<tr>
<td>Chronic</td>
<td>133</td>
</tr>
<tr>
<td>Common</td>
<td>107</td>
</tr>
<tr>
<td>Pregnancy - C section</td>
<td>22</td>
</tr>
<tr>
<td>Pregnancy - Normal</td>
<td>38</td>
</tr>
<tr>
<td>Total</td>
<td>300</td>
</tr>
</tbody>
</table>

The survey collected primary data on health care expenditure for various categories of treatment like hospitalized care, outpatient care, birth delivery and chronic illness. Chronic illness is defined as the condition that is long-lasting (e.g., more than 3 weeks and in many cases lifelong), which needs to be managed on a long-term basis. All the information was collected on the last episode of illnesses (reported morbidity).

3.2 Sources of Data

The present study is based on data collected from both primary as well as secondary data. Secondary data were used in case of reviewing health system of the country and also to support the findings derived from the primary data.
3.3 Tools of Data Collection

Survey method was used to collect primary data from 300 respondents, all of whom reported morbidity. The technique applied was a purposive sampling. A detailed questionnaire was developed based on pilot survey to search data from sample respondents. The households residing in the slum areas were the unit of survey. Views were also sought from medical staff on the responses of the sample respondents. The recall period was retained as one month in case of common illness and six months in case of chronic sickness requiring hospitalization.

3.4 Presentation of Data

For interpretation of data, graph and simple diagrams have been used and for comparative and analytical study tabular presentation has been practiced.

3.5 Analysis of data

Data collected from primary sources have been analyzed through appropriate statistical tools. All the data were entered into MS-Excel and formulas and graph were prepared by utilizing MS-Excel office.

3.6 Limitation of study

The nature of the household survey presented its own set of problems with regard to this kind of study. Women (who formed the important section of the respondents) were not accustomed to the survey format and generally were more comfortable while narrating. It was difficult to get them to answer for each of the treatment and health facilities utilized and expenditure for each of the episodes.

There were problems in the selection of household also. As mentioned earlier the methodology used to be of a purposive sample, therefore we had to physically approach the household and asked them whether there had been the case of health problem or not. In certain cases snowball sampling has been useful in selecting the sample households.
5. LITERATURE REVIEW

Disease and ill health not only cause suffering and death but also have an important cost. In most societies disease not only creates out-of-pocket expenditures for patients and their families but also undermines income generation, and as a consequence jeopardizes future economic welfare. This was one of the driving factors for European nations to set up social welfare systems or national health services. The relationship between poverty and ill-health is bidirectional. Ill-health can be a catalyst for poverty spirals and in turn poverty can create and perpetuate poor health status. Sudden or prolonged ill-health can precipitate families into an irretrieviable downward spiral of welfare losses and even lead to the breakdown of the household as an economic unit. The poor suffer ill health due to a variety of causes, poor nutrition for instance, which reduces the ability to work and weaken their resistance to disease. Illness reduces the income earning ability of the poor and further increases dependency.

The role of health in influencing the economic outcome of the nation has been widely accepted at the micro and macro level. Better health also has a positive effect on the learning attitude and abilities of children and leads to better educational outcomes (school completion rates, higher means years of school achievement) and increases the efficiency of human capital formation by individuals and household (Strauss and Thomas, 1998; Schultz, 1999). Empirical findings have also focused on the role of health improvement among health worker in influencing another policy objective – poverty reduction. Improvement in health results in improvement in National Income.


Cost of Health Care Services

Sudden or prolonged ill-health can precipitate families into an irretrievable downward spiral of welfare losses and even lead to the breakdown of the household as an economic unit (Pryeret al, 2003). Health services can also impose regressive cost
burden, with poor households spending a higher proportion of their income on health care than better-off family, (Fabricant S J and Mill A 1999). Many households’ surveys, using self-reported illness as the health status measure, have found that low income groups report illness less frequently than the higher income groups. (Baker and vanderGaag 1993, Falkingham 2004). e.g , a study in South Africa found that household in the richest income quintile were 2.3 times more likely to report illness than those in the lowest – income quintile, using a two week illness recall period(Mclntyre and Gilson 1998). These findings are important given the high level of medically confirmed ill health among the lowest socio-economic groups.

The costs of illness can cause vulnerable household into poverty and can deepen the poverty gap for households that could have categorized as poor even before the onset of illness related costs. (Russell 2001, Wagstaff and van Doorslaer 2003). Some refer to this link between costs of ill health and persistent poverty as the “medical poverty trap” (Whitehead et al 2001). From a poverty perspective, it is the impoverishing effect of healthcare payment that is more useful to study. (Peter Burman 2007)

The studies done earlier at international (Baker and vanderGaag 1993, Mclntyre and Gilson 1998, Wagstaff 2000,Whitehead et al. 2001,Russel, 2002,Xu et al. 2003,Falkingham 2004,van Doorslaer2006) and national level (Bidani and Ravallion, 1997;Uplekar et al. 2001,Peters et al. 2002, Gupta et al., 2003, Garg & Karan 2006) empirically establish that the health expenditure pose a significant burden on the poor population. Here two broad categories of costs are of main concern. Direct costs refer to all financial payments made in the process of seeking and obtaining care. Indirect costs refers to the costs of time lost because of inability to undertake normal productive activities due to illness and health care seeking activities , including the wage loss of the other household members.

India and health cost studies

Although the health-poverty relations and other related issues has been the focus of many of the writers in India such as ( Dreze and Sen,1995;Fuchs,1 986 ; Behrman and Deolalikar,1988; Osmani,1990); but at the policy level it was largely recognized only after the Cairo International Conference on Population and Development, September 1994. This recognition was further reemphasized in two subsequent policy documents of the Government of India- the National Population Policy (2000) and the National
Health Policy (2002). In India, the NSSO data on household expenditure do provide some details of health care expenditure at household level. However, the data is available only for specific rounds of surveys and hence no time series estimates of private health care expenditure could be developed. Similarly, the National Accounts Statistics also have not been found to be very much useful for understanding the details of household level expenditure on health care.

5. CHAPTER SHCEME

Following the logical flow of thoughts and the objectives, the study is presented in seven chapters.

Chapter 1- Introduction

The first chapter introduces the subject of research undertaken, providing an overview of the whole study. It contains the background of the study and definitions of the terminology used. The statement and objectives of the study clearly explain the purpose of the research project undertaken. It provides a brief analysis of the area of research, hypotheses to be tested, the research methodology used and the chapter plan.

Chapter 2- Literature Review

The Chapter reviews existing literature on health cost related issues with respect to poor and urban poor specifically. The whole chapter is divided into several sub-sections. The first section includes the wide range of issue that comes under broader picture of health poverty link, cost of health services, burden of treatment, catastrophic out of pocket expenditure, conceptual framework to study health cost and other related aspects. The second section covers literature and findings related to India. The third section analyses urban poor, definition, social services in urban slum settings and studies related to Mumbai.

Chapter 3- Health and Health care in India: a Review

The Chapter provides the review of healthcare system of India with special reference of Maharashtra and Mumbai. The chapter is divided into three sections. The first section covers health and health care indicators in general, health services under globalization, growth of private health sector, role of government in health sector, scope of public – private partnership in healthcare sector and health sector reforms.
The **second** section includes information on health status of Maharashtra and health schemes meant for urban poor. The **third** section analyses the position and status of health indicators and health services available in Mumbai./profile of urban poor, condition of urban poor, morbidity levels in slums, health issues related to poor infrastructure, policies/schemes.

Healthcare in India consists of a universal health care system run by the respective State Governments. The Constitution of India charges every State Government with ‘raising of the level of nutrition and the standard of living’ of its people and ‘the improvement of public health as among primary duties. The National Health Policy was endorsed by the Parliament of India in 1983 and updated in 2002. Although, both these policies aimed to achieve “Health for All” within a specified time frame, the reality is different after decades of their implementation. In the absence of a proper policy framework, there is a heavy burden on government sector hospitals which are generally understaffed and underfinanced. Poor services at state-run hospitals force many people to visit private medical practitioners and private clinics and hospitals.

**Table 4: Health Expenditure in India**

<table>
<thead>
<tr>
<th>Year</th>
<th>Private Health Expenditure (% of GDP)</th>
<th>Public Health Expenditure (% of GDP)</th>
<th>Total Health Expenditure (% of GDP)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1995</td>
<td>2.97</td>
<td>1.04</td>
<td>4.01</td>
</tr>
<tr>
<td>1997</td>
<td>3.18</td>
<td>1.07</td>
<td>4.24</td>
</tr>
<tr>
<td>2000</td>
<td>3.16</td>
<td>1.11</td>
<td>4.27</td>
</tr>
<tr>
<td>2002</td>
<td>3.38</td>
<td>1.02</td>
<td>4.40</td>
</tr>
<tr>
<td>2004</td>
<td>3.56</td>
<td>0.94</td>
<td>4.50</td>
</tr>
<tr>
<td>2006</td>
<td>3.08</td>
<td>0.94</td>
<td>4.03</td>
</tr>
<tr>
<td>2009</td>
<td>2.86</td>
<td>1.09</td>
<td>3.95</td>
</tr>
<tr>
<td>2011</td>
<td>2.67</td>
<td>1.20</td>
<td>3.87</td>
</tr>
<tr>
<td>2012</td>
<td>2.70</td>
<td>1.30</td>
<td>4.00</td>
</tr>
</tbody>
</table>

Source- WHO, 2013

It is evident from the table that over the years the share of total health expenditure in GDP has remained more or less constant. India is only country in the world, where
private spending is more than the public spending on health. As per 2013-14(BE), public health expenditure as percentage of GDP stood at 1.4% against total health expenditure of 4.8%.

Table 5 - Health Indicators of Urban Groups

<table>
<thead>
<tr>
<th>Indicators</th>
<th>Urban poor</th>
<th>Urban non poor</th>
<th>Urban(Total)</th>
</tr>
</thead>
<tbody>
<tr>
<td>% mother with 3 antenatal care visits</td>
<td>54.3</td>
<td>83.1</td>
<td>74.7</td>
</tr>
<tr>
<td>% children completely immunized</td>
<td>39.9</td>
<td>65.4</td>
<td>57.8</td>
</tr>
<tr>
<td>% children underweight</td>
<td>47.1</td>
<td>26.2</td>
<td>32.7</td>
</tr>
<tr>
<td>Under five mortality</td>
<td>72.7</td>
<td>41.8</td>
<td>51.9</td>
</tr>
<tr>
<td>% birth in health facilities</td>
<td>44</td>
<td>78.5</td>
<td>67.4</td>
</tr>
<tr>
<td>% woman age 15-49 with anemia</td>
<td>58.8</td>
<td>48.5</td>
<td>50.9</td>
</tr>
<tr>
<td>% children who are stunted</td>
<td>54.2</td>
<td>33.2</td>
<td>39.6</td>
</tr>
<tr>
<td>% children with anemia</td>
<td>54.6</td>
<td>35.5</td>
<td>41.7</td>
</tr>
</tbody>
</table>

Source- NFHS III (2005-06)

It is often assumed that the heavy concentration of health infrastructure in urban area will automatically address the health needs of urban population. However the rapid growth of cities together with the growth of urban population and inequities created within the cities has proved this as untenable. Though, the average health indicators of urban areas are always found to be better than the rural areas. But data have shown (DHS, NSSO, and NFHS) that urban poor though living in proximity of good health facilities are often unable to access them. The urban poor suffer from the adverse outcome that is not reflected in commonly available statistics. Most of the sources of health information which provide for urban and rural inequality hide the inequalities that exist within the various economic groups. A comparative analysis of urban poor
and urban non-poor shows that the statistics of the urban poor are worse than the urban averages. As indicated in the table number 5.

To understand the true situation of the urban poor, it is important to study the disaggregated urban poor data, which reflects major differences in health access and quality of life indicators within the urban poor and even across different slum pockets in Mumbai.

Chapter 4 - Research Methodology

The Chapter highlights the methodological issues in relation to measurement of cost burden. It consists of rational for selecting area under study, socio-economic and demographic profile of the population under study. It explains the process and manner in which study is undertaken such as details about the pilot study, revisions made on the basis of the pilot study, questionnaire used for collecting detailed information and other methods used for collecting and interpreting primary data, the parameters and sampling technique used, choice of appropriate statistical tools and computer software used to arrive at findings.

Chapter 5-- Data Analysis and Research Findings

The Chapter includes the survey results and highlights the contribution to existing knowledge on the subject. It is divided into four sections. The first section deals with the analysis of demographic and socio-economic profile of the selected areas under study. This is further divided into sub-section dealing with the comparative analysis of the three regions under study with respect to their income, expenditure and economic status and accessibility of urban amenities. The second section includes the measurement of direct cost with respect to different socio-economic groups, disease categories and disease types and measures the catastrophic burden of health cost treatment faced by the respondents of the study area. The third section tries to measure the indirect cost of seeking treatment and different components under indirect cost and their role in influencing health expenditure seeking. Finally the Fourth section studies the utilization pattern of healthcare services, Factors affecting the health seeking behavior, coping strategies and resource mobilization pattern of the household under sample areas.
HIGHLIGHTS OF THE FINDINGS:

5.1- Socio-economic profile of the respondents of the study area.

- The main aim of the survey was to find the health expenditure burden of the family, therefore questionnaire was asked from any of the family member or the closed neighbour, in the absence of the head of the family.
- The majority of the respondents (46%) have education below 5th standard, followed by senior secondary. (34%)
- Among the respondents, 59% were male and 41% were female respondents.
- The mean age of respondents were 38.8 with 45% as married, 36% unmarried and 8% were widow. (mainly elderly women residing with their children).

5.2- Socio-economic profile of the households of the sample area

(1) The sample data reveals that 58% belong to general category, 33% to OBC and 9% are SC. In many cases to know about caste during the survey ration card was examined. The survey was conducted among the orange and yellow card holders.

(2) Majority of the respondents were Hindu (78%), 17% were Muslims and rest 5% belong to other castes mainly Christian. Majority of the people are not only the residents of Maharashtra but has been residing in Mumbai since a very long time.

(3) The mean size of the family is 4.3 with 41% family reporting to have more than four members in the family. 69% of the family has male as the main head and in 31% family women were the main decision makers mainly comprising the widow.

(4) It is understood from the primary survey that around 82% people are living in one room and 60% slum dwellers own the house and remaining is dwelling in a rented kholi, which takes away a major part of their income.

(5) A survey of slums reveals that about 63% of the slum population does not have adequate access to safe sanitation facilities. About 55% depend on public toilets, 11% have their own flush toilet and 34% have shared toilet.

(6) As the data show the mean level of the income for the surveyed house is Rs.8755 per month with the standard deviation of 3885.04. The high level of the standard
deviation is mainly due to random selection of the family, which does not belong to
the same income group.

(7) Maximum households (60%) have on an average spending in the range of
Rs5000- 8000 per month. The mean size of the expenditure is Rs 6216 and the
standard deviation 2283.6.

(8) The survey result of the occupational status of the three areas also confirm the
popular belief that slum people mostly engaged in the unorganized sector, with no
safety cover nets.

(9) The sample data shows the problem of basic amenities like safe drinking water
and toilet facilities. But as far as use of consumer durables are concerned, the Mumbai
slum represents double face. It was also observed that 88% households have mobiles
and 76% households have Television sets, 94% have fan and 36% has fridge.

(10) Kurla reported to have lowest mean level of income among the three surveyed
areas. It has a mean income of Rs. 8057.8 which was below than the overall average
of Rs. 8755.12. Similarly monthly expenditure on consumption and other items
excluding health cost was Rs. 6004.2 as against the total average of Rs.6216.
Bhandup recorded to have highest level of mean income (Rs.10357) and expenditure
level (Rs.7190). This variation can be correlated with the difference in occupational
status of the household

5.3 – Average direct and indirect cost of seeking treatment

(1) The average number of days of illness for the surveyed population is 9.5 with a
standard deviation of being 6.8. This is across all socio-economic groups, who have
been covered under the study. This finding shows that the slum populations do face
the problem of health hazards. The illness pattern ranges from being common as cold,
cough and fever to chronic one as diabetes, acute asthma and blood pressure.

(2) Malaria emerges as the single largest health affecting diseases for Mumbai slum
area. It accounts for 12.3%, followed by asthma (10.3%). Though the largest number
of respondents suffered from viral fever, cold and cough, which may not be affecting
them financially much, but do affect the productivity and efficiency.
(3) The cost (both direct and indirect) was comparatively higher for the income group falling in 5-10,000Rs category. The indirect cost is more as this group mainly consists of daily wage earners or low salary earning individuals, which is more often temporary in nature.

(4) A disaggregated analysis against the caste category shows that direct cost is more for general as well as scheduled caste, but the comparative analysis with the source of treatment shows the different reason for the cost being high. It was found that general class people had better awareness regarding the institutional source of healthcare, while the latter group first sought the informal source and mainly relied on quakes operating in nearby slum areas.

(5) The survey shows that in case of common sickness the mean expenditure of the family is approx. 2769 Rs. per month, but in case of chronic sickness which require regular treatment the total average cost increased by approx 1.50 times to 4148 Rs. Similarly a median level analysis shows that on an average household spends 1000 per month in case of common sickness and 1150Rs. in case of chronic sickness.

(6) It was found that about 56 % household face catastrophic impact of health expenditure to the extent of 10%, while the least number i.e. 36 out of 212 household accounting to 17% of the sample has experienced an impact of cost burden to the extent of 40%.

(7) The findings are important to understand that the cost burden will be different for different ailments and at the same time it will be different for inpatient and outpatient treatment. Therefore, one size fits all approach may not be useful and a disease specific target policy to minimize cost burden on urban poor is required.

5.4 – Health seeking behaviours of the household under study

(1) The survey shows that slum dwellers are well aware of the need for health services. As 94% family reported to seek some form of institutional health services against 6%, who resorted to traditional medicine.

(2) Nearly half of the surveyed family (49.3%) had availed private source of treatment and 24% had sought treatment from BMC run hospitals
(3) Approx. 39% family agreed that the reason for selecting a particular source of treatment was affordable services provided, followed by the facilities being near to the locality. (29%)

(4) An important finding was that 95% health expenditure was out-of-pocket expenditure.

(5) The most predominant source of mobilization of funds was routine wage income (in case of 43% of family) followed by borrowing from relatives/friends (27%)

(6) The most preferred means of coping with health service expenditure was delayed in getting payment for using up items like water/electricity bill and ration (49%) followed by thawing.

Chapter 6---- Health Financing – Alternative Approaches

The demand for this chapter was felt due to the fact that most health spending is out-of-pocket financed and there is room for expanding the health insurance coverage. Thus the chapter highlights the different alternative models of health, finance systems, which might be useful for urban health policy maker while planning for reforms in existing health schemes or in bringing out new programs to minimize health cost burden of urban poor. The chapter is divided into three sections. The first section provides an overview of four existing models of health financing the world over. The second section does pros and cons analysis of a popular existing model of health financing with respect to Thailand, Brazil, USA, UK, Germany and Singapore. The third section deals with Indian health insurance and community health models.

Chapter 7---- Policy Implication and Conclusion

The chapter highlights the important suggestions and recommendations for urban poor in general and slum dwellers of Mumbai in particular. The health seeking behaviour and the variables affecting it will be useful in enhancing health care facilities in the city. What may appear as impressive levels of access to housing and services in urban areas may in fact – hide several facts, e.g. most of the slum dwellers appear to have good access to urban amenities (e.g. 99% have electricity, 71% LPG, 97% access to tap water, bathroom, toilet facilities, TV and mobile, fridge), but most of the basic facilities are shared and highly inadequate, especially water, sanitation. Therefore,
there is a need to look urban slum poverty with a different approach. The current poverty line may not capture the depth of poverty experienced in urban areas.

There is a need to strengthen public sector health care facilities. Resource shortages, centralized bureaucratic structures and related poor management practices are the main reasons quoted in the literature for these service weaknesses (Mills et al. 2001; World Bank 1993). Drug shortages are a very pressing problem for poor and vulnerable groups, particularly as households must cope with a high burden of poverty-related diseases, as well as an increasing burden of chronic illness related to the lifestyle factor and non-communicable diseases. There is therefore an urgent need for additional resources, alongside improved organizational and management performance, to enable households to access better healthcare services. In case of metros, the high growth of the rate of the urban poor and the consequent increase in the number of slum dwellers (both due to natural increase and migration) has made the situation worse. It has led to over-straining of the infrastructure and deterioration in public health in terms of doctor-patient ratio and overburdening of the health workers and less time available for outpatient care.

The catastrophic health spending is an important problem for the population in cities, suggesting that more work is needed on developing methods of financial protection. More attention is needed on the poverty-inducing effects of repeated payments for minor ailments, rather than focusing on hospitalization and acute conditions. Protection of interest of this vulnerable people should be address in policy formulations to ensure better access and high degree of financial protection against the impact of illness.

6. CONCLUSION

The present study was undertaken with the main objective of analysis the cost of treatment (direct and indirect) both in case of hospitalization and non-hospitalization faced by urban slum dwellers. Urban poor assumed to enjoy better locational access of health services compared to their rural counterpart, but in reality the economic access does pose limitation to health service utilization. Apart from the monetary cost, the health seeking behaviour and decisions of urban poor households is also affected by the opportunity cost in terms of losing daily wages due to seeking treatment,
transport cost and cost on family in delaying payments for basic consumption expenditure. There is a need for health policy makers understand the peculiar problems faced by the slum dwellers in accessing the public health facilities in the urban set up. As private healthcare services are unaffordable for this section of the population states’ role either as a provider or as a facilitator of health services needs to be re-emphasized.