Chapter I
INTRODUCTION

1.1 Introduction:

One of the Millennium Development Goals (MDGs) of the United Nations was reduction of maternal mortality by 75 percent between 1990 and 2015 (De Brouwere & Lerverghe, 2001). However, most of the developing countries have failed to achieve the MDGs. Lack of medical facilities and skilled assistance was identified as major reasons for high Maternal Mortality Rate (MMR). At the same time, other than these reasons many more factors have been associated with high rate of maternal mortality and disparities in maternal mortality rate. The specific reasons are age, education, health, and social background. Accordingly, there are huge differences among the nations of the world in MMR (Hogan M.C & Naghavi, 2010).

Maternal mortality rate refers to the number of resident maternal deaths within 42 days of pregnancy or termination due to complications of pregnancy, childbirth, and the puerperium in a specified geographic area (country, state etc.) divided by total resident live births for the same geographic area for a specified time period, usually a calendar year, multiplied by 100,000. Approximately, 5,29,000 women die from pregnancy related causes annually and almost all (99 percent) of these maternal deaths occur in developing nations (Davis & Stampnitzky, 1998).

During 2013, about 2,89,000 deaths were recorded due to maternal related issues. Out of these, 2,86,000 (98.96 percent) deaths alone were recorded in less developed countries. There were 1,79,000 (61.94 percent) maternal deaths recorded in the Sub-Saharan Africa region alone, followed by Southern Asia with 69,000 (23.88 percent) maternal deaths, within South Asia and 50,000 (17.30 percent) maternal deaths recorded in India; which means one out of six maternal deaths were in India (UNICEF & UNFPA, 2014).

In the same way, maternal mortality rate is also high in less developed and less literate countries. Sierra Leone is estimated to have the highest MMR with 1100 deaths per Lakh live births during 2013. In all Sub-Saharan countries MMR was more
than 980, in Central African Republics MMR was 880, in Somalia it was 850, in Cameroon it was 590, in Nigeria 560, in Mali it was 550, in Afghanistan it was 400 and in India MMR was 190. Though the MMR in India is relatively less compared to the above mentioned nations, it is quite high compared to Southern Asian countries like Iran (23), Sri Lanka (29), Maldives (31) Bhutan (120), Bangladesh (170), and Pakistan (170), except Nepal where the MMR is the same as India (190). Accordingly, the problem of maternal related death is quite acute and severe in India (UNICEF & Bank, 2014).

Soon after getting Independence in 1947, India stressed the importance of the task that lay ahead of ending poverty, ignorance, disease and inequality of opportunity. The First Five Year Plan (FFYP) did not spell out any specific planning strategy linking sectoral investment proposals to the objective of the plan. But in the second FYP, the principles of ‘socialistic pattern of society’ underlay the planning strategy and emphasized social gain. In the successive plan periods, the policy makers of India have concentrated more on eradicating poverty, employment generation programmes, investing on infrastructure facilities such as health, education and so on for the overall development of the country. The Planning Commission released, the first National Human Development Report (NHRD) in 2001. It compares the human development situation of the different states of India with the help of about 70 development indicators for each state. At present, the National Institution of Transformation of India (NITI) AAYOG, by taking into the consideration involvement of the states in the policy formulation, is trying to achieve development for healthy human beings (Callister & Edwards, 2016).

The Human Development (HD) story of India is unique in its kind. Through the preparation of not only national, but also sub-national Human Development Reports (HDR), India has decentralized and integrated the human development concept into its development agenda at the national, the state, as well as the district and the municipality level in India. This coincided with a period of rapid growth and rising inequalities, where a need was felt to reinforce the idea that people matter, and India welcomed the concept of human development. Today, India is acknowledged globally as having the largest body of work on human development reporting at the sub- national levels in the form of State Human Development Reports (SHDRs) and
District Human Development Reports (DHDRs) (Shyama Nagarajan & Namrata Yadav, 2015).

In India, the proportion of institutional deliveries is low (less than 41 percent) as per the National Family Health Survey III [NFHS-III]). Every seven minutes a maternal death occurs, leading to more than 77,000 Indian women dying each year. Most maternal deaths can be prevented if deliveries are attended to by Skilled Birth Attendants (SBA) and if proper Antenatal Care (ANC) and Post-Natal Care (PNC) are received. Furthermore, institutional deliveries are encouraged for women with potential complications since home deliveries lack the time of Emergency Obstetric Care (EOC) that trained health professionals in an institution can provide. As part of an effort to reduce the nation’s MMR, the Government of India (GOI) has developed programmes promoting safe and healthy deliveries for pregnant women (Sukumar Vellakkal & Adyya Gupta, 2017).

India is one of the countries, which has accepted the MDG 5 of the United Nations. As far as the goal is considered the MMR in India could have been reduced to 140 by 2015. But India failed to achieve this target, even though there was a reduction in MMR. It was 560 in 1990 and reduced to 190 during 2013, yet within India there are enormous variations in MMR. As per the census 2001, the MMR of India stands at 301 per 1,00,000 births. It is highest in Uttar Pradesh at 517 and lowest in Kerala at 110. Despite an increase in institutional deliveries, 60 percent of pregnant women still deliver their babies at home. In India more than two third of all maternal deaths occur in a handful of states like Uttar Pradesh, Uttarakhand, Bihar, Jharkhand, Odisha, Madhya Pradesh, Chhattisgarh, Rajasthan and Assam. As a matter of fact, the relative status of India in terms of MMR has not changed much during the 2011 census (Lalneihzov, 2007).

As per 2011 census, the maternal mortality rate of India stands at 178 per one Lakh live births. In Uttar Pradesh the MMR was 292, Bihar was 219, Assam 328, Chhattisgarh 230, Odisha 235, Andrah Pradesh 110, Karnataka 144, Kerala 66, Tamil Nadu 90, Gujarat 122, and Haryana 146, Maharashtra 87, Punjab 155, West Bengal 117 and others 136. The need to understand the reasons for variations in MMR is important in order to solve the problem effectively and in a timely manner. These facts and figures explain the extent of disparity in maternal deaths and also explain the
linkage of maternal death with the level of development. Hence, certainly there is an element of economic reason for maternal related death (Collaborators, 2016).

1.2 Issues in Maternal Mortality:

It has been argued by the many theoretical works that the Human Development (HD), Gender Development (GD) and economic development process, public and private expenditure on health and education, level of literacy, life expectancy at birth, level of satisfaction about health and education, access to safe drinking water and sanitation and many other socio-economic factors have negative relationship with MMR.

As these factors have moved in the positive direction the level of MMR will be reduced. At the same time, Gender Inequality (GI), Infant Mortality (IM) birth rate and death rate and many gender and health factors have positive relationship with MMR. Accordingly, as these factors could have been shown the negative trend, the MMR will also be decreased.

Therefore, in order to reduce the MMR, the positive factors have to be improved and negative factors have to be minimized. Hence, the process of improving the positive factors and minimization of negative factors has tremendous implications on the status of MMR.

1.3 Research Gap:

Most of the previous studies have proved the negative relationship between MMR and HDI (Shen & B.williamson, 1999) (Kvernflaten & Birgit, 2013); and between MMR and GDI (Farzadi F & Shariati B, 2010) (Adjiwanou & LeGrand, 2014). There is a positive relationship between MMR and GI (Sarri & Rosemary, 1997). Some studies have found that, there is inverse relationship between health, Life Expectancy and MMR (Barclay & Myrskyla, 2016) (Hickson & Jane, 2009). There is negative relationship between MMR and GDP (Sarah Mc Tavish & Sam Harper, 2010). Nadia has established the negative relationship between GDP per capita and MMR (Akseer & Salehi, 2016) (Chuang & Sung, 2013). Sonia Silvestrin and Clecio Homrich da Silva have established the negative relationship between education satisfaction and MMR (Silvestrin & Silva, 2013) (Randive & Sebastian, 2014).
However, these studies have not computed the relationship by segregating the countries based on the level of development. At the same time there are no studies on establishing relationship of MMR with human and economic development at world, nation, and sub-nation and at regional level with integrated approach. Hence, the present study is a new attempt to estimate the relationship of maternal mortality with human and economic development.

1.4 Statement of the Problem:

It has been identified by the research gap that the previous studies have failed to establish the relationship of MMR with human and economic development. To fill this gap, the present study will analyze the relationship of MMR with human and economic factors at world level; with respect to very high human development countries, high human development countries, medium human development countries, and at low human development countries. The study also extends to examine the relationship of MMR with human and economic development in India, Karnataka and in Mysore district. The study will identify the specific human and economic factor responsible for certain level of MMR at all levels. The specific reasons for the maternal mortality have been identified by conducting case studies. Accordingly, the present study “An Economic Analysis of Maternal Mortality: With Special Reference to Mysore District”.

1.5 Objectives:

The following objectives are framed for the present study. They are;

- To establish the relationship between stages of development and MMR at the world level.
- To analyze the impact of socio-economic factors on MMR in India and Karnataka and also in Mysore District.
- To analyze the impact of government programmes on MMR.
- To examine the characteristics and causes of maternal death in Mysore District.
1.6 Hypotheses:

For the present study the following hypotheses are designed:

- The human and economic development processes have failed to explain the variations in maternal mortality in very high, high human development countries.
- The income has effectively explained the variations in maternal mortality in medium and low human development countries.
- The human and economic development processes have explained the variations in maternal mortality in India and Karnataka.
- The socio-economic factors have made significant impact on MMR in Mysore district.

1.7 Methodology:

The present study has used analytical methods for the analysis of issues chosen for the present study. The detailed methodology has given in each chapter and brief summary of the methodology is given in this section.

1.7.1 Data source:

1.7.2 Scope of the Study:

The study has conducted at four levels;

- At the world level, countries have segregated into four groups; like very high, high, medium and low human development countries. Based on their categories the relationship of MMR has established with human and economic factors. Sixty countries have taken for the analysis. (the details of countries given in the chapter III)

- At the national level, the status and disparities in MMR in India has analyzed and established its relationship with human and economic development. Eighteen states of India have taken for the analysis. (the details of states given in the IV chapter)

- At the sub-national level, the status and disparities in MMR in Karnataka has analyzed and established its relationship with human and economic development. All districts of Karnataka have taken for the analysis. (the details of districts given in the IV chapter)

- At the regional level, the status and disparities in MMR in Mysuru has analyzed and established its relationship with human and economic development. At the district level, the reasons for maternal deaths have identified by conducting case studies. All Taluks of Mysuru district have taken for the analysis. (the details of taluks given in the V chapter)

1.7.3 Period of the Study:

The secondary cross section data have collected for the recent years for which comparable data are available. The primary data have collected during 2016-17 by conducting case studies. The selection of cases for the study was intentional and purposive. The maternal death is the criteria for selection of a house for case study and largely the discussion method was adopted for the case studies.
Case Studies Selection

Mysuru District

(30)[170]

1.7.4 Method of Analysis:

The present study has used similar method for the analysis of secondary data in all the working chapters. The correlation matrix has computed to estimate nature and the relationship of MMR with each human and economic development factors. Once the relationship estimated the factor analysis has been conducted to identify the group of factors having relationship with MMR. After identified the factors and components, the regression analysis has made to estimate the impact of components on MMR. In each regression analysis, the specific factor responsible for MMR has identified based on the regression co-efficient and their significance. The descriptive methods have used for case study analysis. Data have presented in the form of graphs. The detailed methodology has given in the respective chapters.
1.8 Chapter Scheme:

Chapter I

Introduction

The chapter I includes an introduction to the subject, Issues in maternal mortality, research gap, statement of the problem, objectives, hypotheses, methodology and chapter scheme.

Chapter II

Review of Literature

Review of literature and conceptual frame work of the present research work.

Chapter III

The Impact of Human and Economic Development Processes on Maternal Mortality Rate are focused on in the III chapter.


Chapter IV

The IV chapter looks at in detail the Impact of Human and Economic Development Processes on Maternal Mortality Rate in India with special reference to Karnataka.

Introduction, Methodology for India Level Analysis, Analysis and Discussion, Factor Analysis for Indian States, Methodology for Karnataka Level Analysis, Analysis and Discussion, Factor Analysis for Karnataka Districts, Conclusion.

Chapter V

An Analysis of Maternal Mortality Rate in Mysuru District is taken up in the V chapter.

Chapter VI

Findings, Suggestions and Conclusion wind up the last chapter of the thesis.
References:


