6.1 Introduction:

The present study has analysed the determinants and reasons for maternal deaths. The study has analysed the issues at world, national, state and at district level by using both secondary and primary data. The study has largely proved that socio-economic factors, human and economic development process have efficiently explained the variations in maternal mortality. The study has run into three working chapters and major findings of the study have been summarized and presented below. Based on the findings and tested proofs few suggestions have also given at the end.

6.2 Major Findings of the Study:

The following section presents the major finding of the study:

- Maternal mortality rate is the main concern among the policy makers at the global level. A higher level of MMR represents the lack of health facilities, education, low level income and lack of awareness about health. The study has examined the inter-relationship between maternal mortality rate and human development at the global level. Eight parameters related to human and economic development namely, HDI, LEB, GDI, GII, GDP, and GDP per capita, education and health were chosen to examine the inter-relationship of MMR with human and economic development in sixty countries of the world. Further, these sixty countries have been classified into four categories i.e., very high human development countries, high human development countries, medium human development countries and low human development countries and MMR relations were analysed.

- At the world level, GII has a significant positive relationship with MMR. At the same time, HDI, LEB, GDI, GDP per capita, educational satisfaction, health satisfaction have a significant negative relationship with MMR. Most of the parameters, individually, have failed to establish the relationship with human development and therefore, factor analysis has been largely used in the present study.
• In the very high human development countries, GII and GDP have significant positive relationship with MMR.
• In the medium human development countries, GII has a significant positive relationship with MMR. At the same time, HDI has a significant negative relationship with MMR.
• In the low human development countries, GII has a significant positive relationship with MMR. At the same time, LEB has a significant negative relationship with MMR.
• It was found from the analysis that, maternal mortality rate individually does not have significant relationship with any human and economic development indicators in very high human development and high human development countries. Therefore, individually parameters representing human and economic development have failed to establish relationship with MMR.
• The factor and regression analysis identified that the group of parameters have also failed to explain the variations in MMR. As a matter of fact, most of the very high human development and high human development countries have reached the lowest level of maternal mortality rate and capacities of determining MMR by human and economic development parameters have exhausted.
• Both in very high human development and high human development countries, MMR has been determined by other than human and economic development parameters. Therefore, there is a need of country specific studies to understand the issues related to MMR and factors which determine MMR.
• In medium human development countries, only HDI and LEB have significant association with MMR. Other parameters individually have failed to establish the relationship with MMR.
• The factor and regression analysis have identified that HDI, LEB and GII have jointly explained the variation in MMR. Therefore, there is inverse relationship of MMR with HDI, GDI and GII. Accordingly, as human development takes place, life expectancy increases, and inequality between male and female decreases, and the level of MMR will decrease.
• In low human development countries, only LEB has significant relationship with MMR, and none of the other parameters have significant association with MMR.
• It has found from the factor and regression analysis that, GDP per capita and
gender inequality have significantly determined the level of MMR. Accordingly,
in low human development countries income plays a major role in determination
of MMR and gender issues also play a considerable role in determination of
MMR. Therefore, income is a necessary condition for reduction of MMR.

• The study has proved that the issues related to MMR and determinants of MMR
are different at different levels of human and economic development processes.
Therefore, study of MMR at country level or at regional level has more validity
and relevance.

• The study was conducted at the national level i.e., in India. The study has
analyzed the status of maternal mortality in India by using cross section state
level data.

• In the Indian states, IMR, UFMR and birth rate have significant positive
relationship with MMR. At the same time HDI, health, income, education, per
capita, LEB, literacy rate and per-capita private expenditure on health have a
significant negative relationship with MMR.

• It was identified by the correlation matrix and analyses that the human
development process, the economic development and efficient public
expenditure on health have reduced maternal mortality. The factor and multiple
regression analyses also reconfirm the arguments of correlation matrix.
Meaning; in India, the increased economic development in the form of increased
national and per-capita income have resulted in enhancing the human
development process, increasing expenditure on health, increasing literacy level
and there by these processes have effectively reduced maternal mortality.

• In Karnataka, IMR and birth rate have a significant positive relationship with
MMR. At the same time, HDI, GDI, health, education, living standard, per
capita income, and LEB and literacy have significant negative relationship with
MMR. in Karnataka, the increased economic development in the form of
increased education, health, correspondingly to the satisfaction level of people
and MMR decreased.

• The Government of Karnataka has introduced many programmes to reduce
maternal deaths. Yet, it has found from the analysis that in absolute term the
average number of deaths per year were more in Mysuru and have increased.
• The status of maternal mortality in Mysuru has analysed by using cross section taluk level data. The time series data have also used for trend analysis and primary case studies have also used for identifying the reasons for maternal death.

• It has been also found from the factor analysis that the human and economic development processes were insufficient to effectively reduce the maternal deaths in Mysore district. Therefore, Mysuru district has failed to develop an integrated programme or individual programme to efficiently reduce maternal mortality.

• It has been found from the time series analysis that the average numbers of deaths per year were more in Mysuru and have increased. Maternal deaths have increased in the city and reduced in rural and semi-urban areas. And most of the deaths have occurred in government hospitals. Transfer of maternal cases to district centers and over dependency on district hospital are the immediate answers to these arguments. But at the same time, inefficiency of district government hospitals is also equally responsible for increased maternal deaths. Deaths after delivery have increased due to lack of post delivery care.

• Age is also an important factor in determination of maternal deaths. Deaths could have also been reduced by lunching ambulance services exclusively for maternal cases. Therefore, the study has proved the need of maternal welfare programmes along with improved and increased health infrastructure facilities. It calls for sufficient allocation by the government from both capital account and revenue account.

• The present study has also analysed thirty case studies on maternal deaths in Mysuru district. It has found from the overall analysis of 30 case studies that early pregnancy, low level of education, incapability to earn sufficient income, inadequate facilities in the hospital, irregularity in taking treatment and medicine, most importantly negligence of doctors and nurses have been identified as major problems for maternal deaths. Hence, low level of income, low level of knowledge and awareness about health; meaning the overall human and economic development processes have been held responsible for maternal deaths in Mysore district.
6.2 Suggestions:

The following suggestions have proposed based on the present study;

- The very high human development and high human development countries, have reached the lowest level of MMR and capacities of determining MMR by human and economic development parameters which have been exhausted. Both in VHHD and HHD countries, MMR have been determined by other than human and economic development parameters. Therefore, there is a need of country specific studies to understand the issues related to MMR and factors which determine MMR.

- The very high human development and high human development countries have attained high level of income, health, education, gender equality which has resulted in attaining low level of MMR. To further reduce the MMR these countries need to identify specific issues which are not yet explored.

- The study identified that in medium human development countries, HDI, LEB and GII have jointly explained the variation in MMR. Therefore, there is an inverse relationship of MMR with HDI, GDI and GII. Accordingly, as human development takes place, life expectancy increases, and the inequality between male and female decreases, the level of MMR will be decreased. Therefore, in MHD countries, increasing GDP and per capita income will not directly reduce the level of MMR. Indeed, the increased income needs to be effectively invested for human development and gender empowerment in order to reduce MMR.

- In the low human development countries, income still has a major role in determinator of MMR and gender issues also play a considerable role in determination of MMR. As it has been identified income is a necessary condition for reduced MMR. Therefore, in LHD countries there is a need to increase income at a faster rate in order to fight against the high level of MMR.

- In India, the increased economic development in the form of increased national and per capita income have resulted in enhancing the human development process, increasing expenditure on health, increasing literacy level have effectively reduced maternal mortality in India. Accordingly, in India the policy should focus on increasing income and spending more on health,
education and human development process for effective reduction of maternal mortality.

- In Karnataka, the increased economic development in the form of increased income, education, health, correspondingly the satisfaction levels of people have reduced MMR. Accordingly, in Karnataka the policy should focus on increasing HDI, GDI, health, education, income; meaning spending more on human development process for effective reduction of maternal mortality.

- In Mysore, lack of human and physical infrastructures is the major hurdle for effective reduction of maternal mortality. Therefore, it is the responsibility of government to improve the efficiency of hospital by increasing health infrastructure facilities and human resources along with better maternal welfare programmes.
6.3 Conclusion:

The present study has analyzed the maternal mortality in world, India, Karnataka and Mysore district. The study has used both primary and secondary data. It has found from the study that high human development countries have achieved lowest level of MMR. Accordingly, the human and economic development process have failed to explain the variations in MMR and these process have been exhausted; matter of fact these process have completed their role in determination of MMR. In medium and low human development countries, the human and economic development processes have effectively explained the variations in MMR. However, the medium human development countries need allocate more funds for human development process and low human development countries need to increase the income and allocate more funds for human development process to achieve lower MMR. Karnataka being one of the major states of India has shown similar trends in MMR. The primary data analysis has clearly proved that along with medical reasons, socio-economic factors are equally responsible for maternal deaths in Mysore district. Therefore, human and economic development process need to be integrated with maternal welfare programmes to fight against maternal deaths. At the same it is also necessary to increase and improve the quality and quantity of human and physical infrastructure to strengthen the medical service system for effective reduction of maternal mortality.