

**EXAMINING THE SOCIAL-ECONOMIC INDICATORS OF MATERNAL  
MORTALITY IN BURUNDI (2005-2015)**

**By**

**RUMURI BERNY CHRISTIAN**

**MSTAT/54422/151/DF**



**A DISSERTATION SUBMITTED TO THE COLLEGE OF ECONOMICS AND  
MANAGEMENT IN PARTIAL FULFILMENT OF THE REQUIREMENTS  
FOR THE AWARD OF THE DEGREE OF MASTER OF SCIENCE IN  
STATISTICS OF KAMPALA INTERNATIONAL UNIVERSITY**

**APRIL ,2017**

## ABSTRACT

The study aims at examining the social-economic indicators (percapita income, deliveries in health facilities, government budget on health sector and malaria incidences) that explain of maternal mortality rate in Burundi. The objectives were to examine the relationship between maternal Mortality and the social-economic indicators; to determine the proportion of variation in maternal mortality explained by social-economic indicators. Secondary data from the ministry of health in Burundi and World Bank database running from 2005-2015 were collected for each of the variables in the study. This study employed both descriptive and quantitative analysis. Charts such as graphs and tables were presented to aid in the descriptive analysis. Unit root tests was carried out on all variables using Augmented Dickey-Fuller (ADF) and Phillip-Perron test to ascertain their order of integration to avoid the problem of spurious regression. Regression analysis was then conducted to investigate the relationships between the social-economic variables and maternal mortality. The results show that there is a very significant negative relationship between per capita income and maternal mortality. There is a negative but not significant relationship between the incidences of malaria and maternal mortality in Burundi. Furthermore, there exists a non-significant negative relationship between government expenditure on the health sector and the overall mortality rate in Burundi. Additionally, there is a positive but not significant relationship between deliveries in health care facilities and maternal mortality. Lastly, per capita income, incidences of malaria government budget, number of deliveries in health facility are significant and explain 77.22% of the variation in the overall maternal mortality. The findings imply that as the income of a people increase, the number of maternal deaths in Burundi decreases. A decrease in the incidences of malaria is attributed to an increase in maternal mortality. As the amount of money that the government allocates to the health sector increases, the number of maternal deaths is expected to reduce though at a lower rate. Lastly, as more and more women deliver from the health facilities; the number of deaths is also expected to increase in the country. The study thus recommends subsidizing the hospital dues by the government would make them affordable for all the people to access health facilities further reducing maternal mortality. Increasing the accessibility of these health facilities especially the government facilities to the rural areas would also help increase the number of pregnant women that use them substantially reducing the incidences of maternal mortality in the country. Furthermore, sensitizing the women on the importance of sleeping under a mosquito net during or after pregnancy will help curb down on the incidences of malaria. Additionally, encouraging people to go for antenatal care would be a proper alternative in curbing down maternal mortality due to malaria in Burundi. On the contrary, increasing the government expenditure on the health sector through affordable health care infrastructure, purchase of the right drugs, increasing health workers will further reduce the likelihood of maternal mortality in the long run. The study recommends that the government should work in liaison with several NGOs or private sector like radios to sensitize the community on the reproductive health encompassing the benefits of family planning, antenatal care, delivering in health facilities and associated post-natal care. In the studies of public and maternal health, the research has demonstrated that although government expenditure on the health sector has a significant contribution to reduction in maternal health, people's lifestyles, for instance choice of children to have and when to have them also contributed greatly to reduction in maternal death. This is because mothers' exposure rates are heavily reliant on the time they start having children, how many children they have and whether they sleep under treated mosquito nets which zeros down to their level of per capita income.