

**Social and Economic Factors Influencing
Under-Five Mortality in Zimbabwe During
1996-2005**

by

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DECLARATION

I, Joshua Kembo, declare that the dissertation/ thesis, which I have submitted for the degree of Philosophiae Doctor (PhD) Epidemiology at the University of Pretoria, is my own work and has not previously been submitted by me for a degree at this or any other tertiary institution.

Joshua Kembo

Date

Commissioner of Oaths

Date



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DEDICATION

Dedicated To My Late Father, Mr. John Murima Kembo and My Mother
Mrs. Elizabeth Murima Kembo

ABSTRACT

This study addressed important issues on infant and child mortality in Zimbabwe. The broad objective of the study is to establish levels and trends of under-5 mortality and to determine the impact of maternal, socioeconomic and environmental contamination variables on infant and child mortality. Data from four DHS surveys conducted in Zimbabwe were used. It was found that mortality at all ages below 5 years old remained more or less constant from the period 1990-1994 to the period 1995-1999 and declined from the period 1995-1999 to 2001-2005. Mortality below 5 years old declined from 102 deaths per 1,000 live births during 1995-1999 to 82 deaths in 2001-2005. This decline was unexpected and it is argued that this decline is probably not genuine. Various types of evidence are provided to support the view that this decline in mortality probably did not take place. Analysis of ZDHS 2005-06 showed that births of order 6+ and short preceding interval (intervals of less than or equal to 18 months) had the highest infant mortality risk. Infants with these characteristics were significantly more likely (2.75 times) to die in infancy relative to births of order 2-5 and long preceding birth interval ($p < 0.001$). The infant mortality risk associated with multiple births was 2.08 times more relative to singleton births ($p < 0.001$). The results indicated that socioeconomic variables did not have a distinct impact on infant mortality. Determinants of child mortality were different in relative importance from those of infant mortality. The effect of maternal education, though not significant, implied a decline in child mortality with increasing maternal schooling. The provision of piped drinking water and flush toilets to the households had a stronger impact on child mortality than infant mortality. Including HIV prevalence in the models elevated the odds of dying in infancy and childhood stages by 10 percent and 63 percent, respectively. This suggests that HIV/AIDS directly and/or indirectly influences the current levels of under-5 mortality

in Zimbabwe. This study supports health policy initiatives stimulating use of family planning methods to increase birth intervals. Family planning programmes should be aimed at educating women and men with low educational levels and those in rural areas about the potential benefits of long-term birth spacing. These and other results are expected to assist policy makers and programme managers in the child health sector to formulate appropriate strategies to improve the situation of under-5 children in Zimbabwe.

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