

**MORTALITY AMONG LOW BIRTH WEIGHT NEONATES ADMITTED TO
THE NEWBORN UNIT AT MOI TEACHING AND REFERRAL HOSPITAL**

THE MARGARET THATCHER
MOI UNIVERSITY

BY

FESTUS M. NJUGUNA

20059321

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MOI UNIVERSITY**

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MOI UNIVERSITY



20059321

ABSTRACT

Introduction: Low birth weight is a leading cause of neonatal morbidity and mortality and accounts for 28% of the neonatal deaths globally. Neonates with low birth weight are 20 times more likely to die than those with normal birth weight. The neonatal mortality in Kenya currently stands at 33/1000 and accounts for 43% of infant mortality.

Objective: To determine the overall mortality and the factors associated with mortality among the low birth weight neonates admitted to the NBU of MTRH

Study design: Cross-sectional descriptive study

Study setting: The NBU of Moi teaching and referral hospital

Study subjects: Neonates who met the study criteria admitted to the newborn unit of MTRH

Data collection and analysis: The neonates who met the study criteria and whose parents gave consent were recruited. A complete history and physical examination including gestational assessment was done. Diagnoses were assigned and the neonates were followed up to the time of death, discharge or end of neonatal period.

Results: A total of 159 neonates were recruited. The mortality rate of the low birth weight neonates was 51.6%. All ELBW neonates did not survive. The leading morbidities were sepsis, respiratory distress syndrome, jaundice and birth asphyxia which affected 42%, 37%, 22% and 17% of all the neonates respectively. The positive predictors of mortality were vaginal delivery ($p < 0.0001$), low apgar score ($p < 0.0001$), gestational age less than 28 weeks, ($p < 0.0001$) and birth weight less than 1000 grams ($p < 0.0001$).

These diagnoses were also positive predictors of death: Birth asphyxia, ($p = 0.0028$) respiratory distress syndrome, ($p < 0.0001$) and clinically diagnosed sepsis ($p = 0.0049$)

Conclusion: The mortality of low birth weight neonates at the newborn unit of MTRH is very high. Clinically diagnosed sepsis, respiratory distress syndrome, jaundice and birth asphyxia are the leading causes of morbidity.