UTILITY OF CLINICAL RISK INDEX FOR BABIES (CRIB) II SCORE AS A PREDICTOR FOR NEONATAL MORTALITY AT MTRH, ELDORET

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ABSTRACT

BACKGROUND: Neonatal Mortality rate has been a major public health concern in many pediatric critical care units globally. The WHO estimates the neonatal mortality rate (NMR) to be at 36/1000 (5.1 million annual neonatal deaths). This has prompted the innovation of systems aimed at predicting the causes of these mortalities leading to improved quality of care thus preventing these deaths. Clinical Risk Index for Babies (CRIB) Score II is one of the systems that was established in order to assist in the prediction of these neonatal mortality cases. It is still in the process of being assessed for its applicability in general use. In Kenya, only one study has been done to validate CRIB II score and this is insufficient in adoption of the score in general practice. The need for further validation is what has prompted the need for this study to assess the use of CRIB II score as a predictor for neonatal mortality in low birth weight babies at Moi Teaching and Referral Hospital (MTRH).

OBJECTIVE: The main purpose of this study is to evaluate the use of CRIB II score as a predictor tool for neonatal mortality in low birth weight babies at MTRH, Eldoret Kenya. This is through; (i) Validation of CRIB II score calibrations in predicting the severity of illness in low birth weight babies born less than 2500g birth weight and (ii) comparison of the CRIB II score in survivors and non-survivors.

METHODOLOGY: A prospective cohort study shall be carried out in MTRH targeting babies from birth to 1 month of age admitted in NBU within the Riley Mother and Baby Hospital. A focused physical examination shall be done and blood samples drawn within 1 hour of admission to assess the CRIB II score variables. The data collected shall be tabulated and the risk of mortality calculated using a logistic regression equation by use of Statistical package for social sciences Software (SPSS v21).

RESULTS: Data collection on-going.

CONCLUSION: The study findings are expected provide key stakeholders in the health sector with information on the validation of CRIB II score system for use in Kenyan hospital and its impact in detecting neonatal mortality rates.

Key Words: CRIB II Score, Neonatal, Pediatrics, Mortality