Risk Factors for Under-Five Mortality in Secondary Level Hospitals in Ibadan, South-Western Nigeria.

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INTRODUCTION: A hospital-based comparative analytical study was carried out to investigate potential risk factors for under-five children mortality in a south-western city in Nigeria where child survival rates are among the lowest in the world. It is essential to identify determinants of under-five mortality (U5M) in order to map out strategies that will help us meet the United Nations MDG4. The objective of this study was to determine the factors influencing mortality among under-five children in three selected secondary health facilities in Ibadan, Nigeria.

METHODS: Cases were under-five children who were admitted and died during admissions over a five year period. For each case, one surviving control among those who were also admitted was matched for age, sex and health facility. Information on socio-demographic characteristics and possible risk factors were obtained from the case files and hospital records. Matched analyses of the 2146 dead children and their surviving counterparts were performed using Chi-square and logistic regression at p < 0.05.

RESULTS: A total of 19,203 (9152 in Hospital A, 5870 in Hospital B and 4181 in Hospital C) under-five children were admitted in the three health facilities. There were 2146 (11.2%) deaths during this period. Males were 56% while females were 44.0% giving a male to female ratio of 1.3:1. Identified risk factors include underweight (OR = 1.92, CI = 1.03, 1.26), referral from other health facilities (OR = 2.11, CI = 0.34, 0.67) and living in congested part of the city (OR = 2.05, CI = 1.54, 2.71). Children from families with 3–4 children were less likely to die when compared with families with 1-2 children (OR = 0.55, CI = 1.17, 10.80).

CONCLUSIONS: The high mortality rate in under-five children in Ibadan may be reduced by targeted interventions, such as nutrition education, early treatment seeking behaviour, urban planning and poverty reduction.