

ABSTRACT

Background: This study examines the socioeconomic factors associated with infant and postneonatal mortality in Kenya and tries to quantify these associations in order to put those factors in ranked order so as to prioritize them in health policy plans aiming to decrease infant and postneonatal mortality. The study has used wealth index, mother's highest educational level, mother's occupation and place of residence as exposures of interest. **Methods:** The study uses analytical cross-sectional design through secondary data analysis of the 2003 Kenyan Demographic and Health Survey (KDHS) dataset for children. Series of logistic regression models were fitted to select the significant factors both in urban and rural areas and for infant and postneonatal mortality, separately, through the use of backward stepwise technique. Then the magnitude of the significance for each variable was tested using the Wald's test, and hence the factors were ranked ordered according to their overall P-value. **Results:** After excluding non-singleton births and children born less than one year before the survey, a sample size of 4 495 live births was analyzed with 458 infants died before the first year of life giving IMR of 79.6 deaths per 1000 live births. After adjusting for all biodemographic and other health outcome determining factors, the analyses show no significant association between socioeconomic factors and infant mortality in both urban and rural Kenya. The exclusion of deaths that occurred in the first month of ages shows that risk of postneonatal (OR 3.09; CI: 1.29 – 7.42) mortality, in urban Kenya, were significantly higher for women working in agricultural sector than nonworking women. While in rural Kenya, the risk of postneonatal (OR 0.42; CI: 0.20 – 0.90) mortality were significantly lower for mothers

with secondary school level of education than mothers with no education. **Conclusions:** There is lack of socioeconomic differentials in infant mortality in both urban and rural Kenya. However, breastfeeding, ethnicity and gender of the child in urban areas on one hand and breastfeeding, ethnicity and fertility factors on the other hand are the main predictors of mortality in this age group. Furthermore, results for postneonatal mortality show that level of maternal education is the single most important socioeconomic determinant of postneonatal mortality in urban Kenya while mother's occupation is the single most important socioeconomic determinant of postneonatal mortality in rural areas. Other determinants of postneonatal mortality are ethnicity and gender of the child in urban areas, while in rural areas; the other main predictors are ethnicity, breast feeding and fertility factors.