Predictors of mortality in HIV-1 exposed uninfected post-neonatal infants at the Kenyatta National Hospital, Nairobi.


OBJECTIVES:

To identify potential predictors of mortality, to determine mortality rate and to identify prevalent causes of death in a cohort of HIV-1 exposed uninfected infants.

DESIGN:

Prospective cohort study.

SETTING:

Kenyatta National Hospital, Nairobi, Kenya.

SUBJECTS:

Three hundred and fifty one HIV-1 exposed uninfected post-neonatal infants who survived to one year of age.

RESULTS:

Sixteen infants died (post-neonatal mortality rate of 47/1000 live births), 14 (88%) before six months of age. The most frequently identified medical conditions at death included bronchopneumonia, diarrhoea and failure to thrive. In multivariate analysis, prematurity (RR=10.5, 95%CI 3.8-29.1, p<0.001), teenage motherhood (RR=3.6, CI 1.0-13.2, p=0.05) and symptomatic maternal HIV-1 disease (RR=2.7, CI 0.9-7.7, p=0.06) were associated with infant mortality.

CONCLUSION:

Prematurity, teenage motherhood and symptomatic HIV-1 maternal disease were important predictors for post-neonatal mortality in this cohort of HIV-1 exposed uninfected infants. These factors should be considered in monitoring and follow up in prevention of mother-to-child HIV-1 transmission (PMTCT) programs.