Cord care practices and omphalitis among neonates aged 3-28 days at Pumwani Maternity Hospital, Kenya

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Background: Omphalitis (umbilical cord infection) among new-borns is common and a major cause of neonatal deaths in developing countries. Annually about 4 million neonatal deaths occur around the world; of these, more than 30% are caused by infections. Majority of these infections start as umbilical cord infection.

Objective: The aim of the present study was to establish cord care practices associated with omphalitis among neonates aged 3-28 days at Pumwani Maternity Hospital, Kenya.

Methods: Cross-sectional descriptive study was employed among 178 mothers with neonates of 3-28 days. Participants were selected systematically and data was collected on new-born cord care practices. Omphalitis was defined as pus discharge, redness with or without pus and swelling of umbilical cord. Pearson's chi-square test (P<0.05) was performed to compare the significant discrepancies. Crude and adjusted odds ratios with corresponding 95% confidence interval were also used to determine the strength of association between omphalitis and cord care practices.

Results: Among 178 neonates, 67 (37.6%) were diagnosed with omphalitis. In logistic regression analysis, the main predictors of omphalitis were initiation of breastfeeding after one hour of delivery [AOR=2.47; 95%CI=1.15 - 5.30; P<0.05] compared to within one hour and application of saliva to the cord [AOR=6.59; 95%CI=2.02 - 21.46; P<0.01] compared to dry cord.

Conclusions: The prevalence of omphalitis among neonates was high. Health workers need to participate in educating the mothers to initiate breastfeeding within one hour and to avoid application of harmful cord care practices.

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