

Neonatal mortality and Associated Factors in Orotta National Referral Specialized Neonatal Care Unite, Asmara Eritrea

Amanuel Kidane Andegiorgish, Zemichael Ogbe, Mihreteab Andemariam, Sabella Temesghen, Liya Ogbai and LingXia Zeng

Xi'an Jiaotong University, China

Background: Factors associated with neonatal mortality in Orotta Specialized Neonatal Care Unite, Asmara, Eritrea is not known.

Methodology: A retrospective cross-sectional study was conducted in 2016. Information was analyzed using SPSS V.20. Quantitative indices were presented using mean±SD. χ^2 -tests and two binary logistic regression analyses were used to assess for neonatal and maternal related causes of deaths. P-value <0.05 was considered as significant association.

Result: A total of 1414 neonates were admitted in 2016, and 1204 neonates with complete information were included in this study. Seventy-nine (6.6%) neonates died in 2016. Males neonates were 59.9%. Eight-tenth of the neonates born at term, appropriate for gestational age, and were delivered in the tertiary maternity hospital, Orotta. Seventy-nine percent (79.1%) of the delivery were spontaneous vaginal delivery. Forty percent of the overall neonates were admitted to the neonatal care unit within one hour of birth. The most common causes of admission were sepsis, respiratory distress syndrome and perinatal asphyxia. Of the neonates who died, 38% came within one hour, 17.7% within less than

one day and 44.3% more than one day after birth, either referred from other health facilities or home delivered. The leading cause of death in this study was respiratory distress syndrome. Extremely low birth weight neonates held the highest percent (40.9%) of mortality followed by very low birth weight 30.5%, while normal birth weight neonates accounted 3.1% only. Univariate logistic regression analysis showed that gestational age (<37 weeks)($p<0.001$), low birth weight($p<0.001$), low apgars score($p<0.005$), length of stay ($p<0.040$), congenital abnormalities ($p<0.001$), place of delivery outside the tertiary hospital ($p<0.014$), and small for gestational age($p<0.016$) were significantly associated with neonatal mortality. However, only birth weight, place of delivery and congenital abnormality neonates were significantly associated with mortality in multivariate analysis.

Conclusion: Neonatal mortality due to amendable factors to early intervention in the delivery sites and the community was high. Health education on prevention during preconception and ANC should be strengthened. National data of facility and community sources should be explored and addressed early in the years of SDG strategy.

e: akidane2016@gmail.com

 Notes: