Survival status and predictor of mortality among premature neonate that was admitted to neonatal intensive care unit from 2013-2017 at Tikur Anbessa Hospital, Addis Ababa Ethiopia: a retrospective cohort study with survival analysis, 2018

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Backgrounds: Premature neonatal death is a global burden both in developed and developing countries. Despite, different strategies and interventions were implemented to reduced premature neonatal complications including death, the rate of neonatal mortality in Ethiopia are too far the targets. Even though published research in developing countries are increasing, scarcity of data regarding to the survival status and predictor of it is still seen. Therefore, estimating time to death and its predictors will provide an input for planners and decision makers for neonatal care.


Methods: An institution based retrospective follow up study was conducted among 604 premature neonates that were admitted from [2013 -2017] at TASH, Addis Ababa, Ethiopia. Data were collected from patient charts using systematic sampling with pretested data extraction tool and entered using Epi-data 3.1 and analysed using STATA 14. A Kaplan Meier curve and long rank test were used to estimate the survival time and compare survival curves between variables. Cox proportional hazard model were fitted to identify predictors. Results: In this study, out of 571 participants, 299 (52.36%) were females. A total of 170(29.7%) neonates were died during the follow up period with incidence rate of 39.1(95%CI: 33.59, 45.38) per1000-person day with overall median survival time of 21 days. Rural (AHR:0.699 (95%CI:0.49,0.98), maternal diabetic mellitus (AHR:2.29 (95%CI:1.43,3.65), neonatal sepsis (AHR:1.62 (95%CI:1.11,2.37), respiratory distress (AHR:1.54(95%CI=1.03,2.31), extremely prematurity (AHR:2.87 (95%CI:1.61,5.11), low first and fifth minute APGAR score with (AHR:3.11(95%CI:1.79,5.05) and (AHR:0.51 (95%CI: 0.32, 0.78) respectively and breast feed initiating (AHR: 2.87 (95%CI: 0.29, 0.58)

Conclusion: The incidence of death was found to be high and being male, living in rural, maternal diabetic mellitus, sepsis, respiratory distress, being extremely premature, low APGAR score and breastfeed initiating were found to be a predictor for time to death of neonates. Hence, it should be better to give special attention for patients with identified predictors.

Keywords: censored, incidence, predictors, Preterm neonate, Time to death, occurrence of death, survival status

Biography
Yared Asmare has completed his BSc at the age of 22 years from Deber Birhan University and maser of degree in paediatric and child health nursing studies from Addis Ababa University. He is the lecturer of Debre Birhan University, college of health science. He attempted to publish more than 3 papers in reputed journals.

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