Incidence and predictors of mortality among Human Immunodeficiency Virus (HIV) infected children on antiretroviral therapy in Amhara Regional State referral hospitals, Northwest Ethiopia, 2017: A retrospective follow up study

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Background & Aim: In Ethiopia, despite the availability of highly active antiretroviral therapy for more than 13 years there is still a scarcity of data in related to mortality rate among human immunodeficiency virus infected children on antiretroviral therapy. Therefore, the study assessed the incidence and predictors of mortality among human immunodeficiency virus infected children on antiretroviral therapy in Amhara regional state referral hospitals, Northwest Ethiopia.

Methods: An institution based retrospective follow up study was conducted among 553 among human immunodeficiency virus infected children on antiretroviral therapy from January 1, 2012 to February 28, 2017. A simple random sampling technique was employed to select the study participants. Data were entered into Epi-data version 3.1 and analysis was done using STATA 13. Kaplan-Meier survival curve was used to estimate the survival time. Log rank tests were used to compare the survival curves between different predictor variables. Bivariant and multivariable Cox-proportional hazard regression models were fitted to identify predictors of mortality.

Results: Among 538 children, records included in the final analysis, 7.1% of them died. In The overall mortality rate of this study was 3.2 (95% CI: 2.3, 4.3) per 100 child-years. Baseline opportunistic infection (AHR: 2.5, 95% CI (confidence interval): 1.0, 5.6.0)( AHR: aryl hydrocarbon receptor), low hemoglobin level (AHR: 3.1, 95% CI: 1.4, 6.7), CD4 cell count or percent below the threshold (AHR: 4.4, 95% CI: 1.7, 11.7), severe stunting (AHR: 3.3, 95% CI: 1.4, 8.0), severe wasting (AHR: 3.1, 95% CI: 1.3, 7.3) and advanced disease stage (III and IV) (AHR: 95% CI: 3.0 (1.3, 7.1) were found to be predictors of mortality.

Conclusion: There was a high rate of mortality. Baseline opportunistic infection, low hemoglobin level, CD4 count or percent below the threshold, severe wasting, severe stunting and advanced disease stage were found to be the predictors of mortality.

Biography
Animut Alebel has graduated with a BSc degree in Nursing from Debre Markos University in 2013 and served as an Assistant Lecturer at Debre Markos University for two years. Presently he is a Master’s student in Advanced Clinical Pediatrics and Child Health Nursing at the University of Gondar.

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