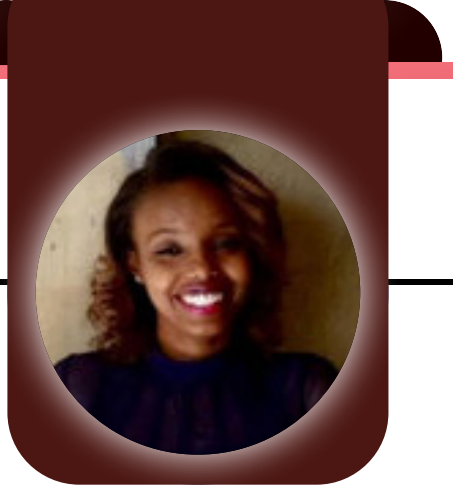# Ruth Tilahun

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Prevance of overt congenital anomalies and associated factors among newborns delivered at Jimma university medical center, south west Ethiopia, 2018; A cross sectional study

Abstract:

Background: Congenital anomalies, also known as birth defects, are structural, functional and metabolic disorders that occur during intrauterine life and can be identified prenatally, at birth or later in life. According to the World Health Organization, an estimated 270,000 deaths globally were attributable to congenital anomalies, but the scientific data on the magnitude and, contributing factors of birth defects in Ethiopia in general and in Jimma particularly is currently inadequate.

Objectives: To assess the prevalence of overt congenital anomalies and associated factors among neonates delivered at Jimma university medical center.

Methods: An institutional based cross-sectional study was conducted from May 1 to June 30, 2018. Data was collected from 754 delivered neonates with their respective mothers using structured and interviewer- administered questionnaire. All data were cleaned, coded and entered into EPI data 3.1 and exported to SPSS software version 20:0 for analysis. Analysis included descriptive statistics and logistic regression. Multivariate logistic regression model was fitted to assess the association between the independent and dependent variables. Adjusted Odds ratios were calculated with 95% CIs and considered significant with a p-value <0.05.

Results: A total of 754 neonates were delivered from 754 mothers. The study finding showed that the prevalence of overt congenital anomalies among live and still births neonates was 4.1%. Majority of anomalies were isolated and major in 93.5% and 96.7% of cases respectively. Central nervous system anomalies had the highest prevalence (45.1%) and followed by orofacial clefts (25.8%) and musculoskeletal system defects (13%).Unknown medication uses during early pregnancy (AOR = 15.18; 95% CI: 5.51–40.27, p-value=<0.00), history of maternal khat chewing in early pregnancy (AOR = 3.41; 95% CI: 1.46–7.95, p-value= 0.004), and maternal chronic illness before conception (AOR = 4.3; 95% CI = 1.65–11.37, p-value=0.031), were independent predictors of overt congenital anomalies. Folic acid use (AOR = 0.18; 95% CI: 0.02–0.92, p-value=0.003) during periconception had a protective effect from overt congenital anomaly.

Conclusion: The Prevalence of overt congenital anomalies among the study participants was high. Unknown medication use, folic acid use, maternal chronic illness and history of maternal khat chewing were independent predictors of overt congenital anomalies

Biography

Ruth Tilahun is a prominent academic and researcher at Dilla University in Ethiopia. With a strong commitment to education and research, she has made significant contributions to her field, particularly in the areas related to her expertise. At Dilla University, Ruth plays a key role in both teaching and mentoring students while actively participating in various research initiatives aimed at addressing local and global challenges. Her work reflects her dedication to academic excellence and community development in Ethiopia.