Abstract

Anaemia has prevailed as a mild to severe public health problem in Ethiopian women of reproductive age. Many studies carried out on anaemia have been limited to subnational assessments and subgroups of women. The effects of potential factors thought to affect anaemia and severity levels of anaemia have not been well considered.

Therefore, this study identifies individual, household and community level factors associated with anaemia among women of reproductive age in Ethiopia applying multilevel ordinal logistic regression models. Proportional odds assumption was tested by likelihood ratio test. About 35.6% of the variation on anaemia was due to between household and community level differences. Pregnancy (adjusted odds ratio[AOR] = 2.30, 95% confidence interval [CI]: 1.82, 2.91), HIV (AOR = 2.40, 95% CI:1.76, 3.25), giving birth once (AOR = 1.2, 95% CI: 1.05, 1.40), giving birth more than once (AOR = 1.4, 95% CI: 1.19, 1.71), living with five or more family members(AOR = 1.24, 95% CI: 1.05, 1.47), living in poorest households (AOR = 1.34, 95% CI:1.2, 1.61) and rural area (AOR = 1.57, 95% CI: 1.28, 1.92) were associated w ithgreater odds of more severe anaemia compared with their respective counter parts. Secondary and above education (AOR = 0.83, 95% CI: 0.70, 0.97) and use of pills, implants or injectable (AOR = 0.67, 95% CI: 0.59, 0.77) were associated with lower odds of more severe anaemia. Anaemia prevention and control programmes need to be strengthened for women living with HIV/AIDS and during pregnancy. Household poverty reduction and social protection services need to be strengthened and integrated in anaemia prevention and management activities in women.

KEYWORDS

anaemia, Ethiopia, multilevel ordinal logistic regression, women