The complete blood count and anemia classification: A study in southern Ethiopia

Misganaw Birhaneselassie and Gezahegn Bekele
Hawassa University, Ethiopia

Background: Anemia is a common health problem in Ethiopia. Therefore, this study intended to assess the prevalence and magnitude of different types of anemia, including severity and association with age and sex of study participants.

Methodology: Cross sectional study was conducted at Hawassa University Referral Hospital. Anemic patients who are men and non-pregnant women above 15 years of age were selected from patients visiting the laboratory for CBC investigation based on HGB result. During the study period (January to May 2016), 400 blood samples were collected by experienced laboratory personnel excluding children and pregnant women among the study subjects. Type and severity of anemia were assessed based on CBC result. Data was analyzed using SPSS software version 19 and Chi square was used at 95% CI.

Result: The overall prevalence of anemia in the study area was 13%. This study reported, majority of cases had mild anemia 234 (58.5%), while 76 (19.0%) and 90 (22.5%) of the patients had moderate and severe anemia respectively. Overall, the prevalence of mild anemia increases with age, while the prevalence of moderate and severe anemia decreases as age increases. In the present study, the most common anemia was normocytic, which mostly occur in the elderly (61-85) years of age.

Conclusion: The CBC parameters help to diagnose and classify anemia in to major components, which might help a better treatment practice in developing countries, where additional investigations are not available for a reliable diagnosis and classification of anemia.

misganawbs@gmail.com