Risk factors of anaemia among children under five years in the Hohoe municipality, Ghana: A case control study

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Background
Anaemia is one of the major causes of death among children under five years in Ghana. We examined the risk factors of anaemia among children under five years in the Hohoe Municipality, Ghana.

Methods
This facility-based matched case control study recruited 210 children (70 cases and 140 controls) aged 6 to 59 months. Stratified and simple random sampling techniques were used to select mothers and their children attending Child Welfare Clinic (CWC). Data were collected using a semi-structured questionnaire. Finger prick blood was collected to estimate the haemoglobin (Hb) level and to determine malaria parasitaemia. Axillary temperature and anthropometric measurements were measured. Conditional logistic regression was used to determine the strength of association between the dependent and the independent variables. Statistical significance was considered at p value of <0.05.

Results
The prevalence of anaemia was high (53.8%). While children whose mothers received iron supplementation during pregnancy were 7.64 times more likely to be anaemic compared with those who did not [AOR=7.64 (95% CI: 1.41-41.20); p=0.018]. Children with poor dietary diversity were 9.15 times more likely to have anaemia [AOR=9.15 (95% CI: 3.13-26.82); p< 0.001]; and children whose mothers were farmers and traders were 83% [AOR = 0.17 (95% CI: 0.05-0.60); p=0.006] and 79% [AOR=0.21 (95% CI: 0.06-0.74); p=0.014] respectively less likely to have anaemia.

Conclusion
The biologic, intermediate and underlying factors that were significantly associated with anaemia comprised maternal iron supplementation, poor dietary diversity, farmers and traders. Given that iron supplementation during pregnancy did not protect children against anaemia, we recommend the child’s nutritional dietary diversity is encouraged.