

Abstract Title

Antenatal care attendance associated with anemia among children (<2y) in rural Lao Cai, Ha Giang and Lai Chau province, Vietnam: A cross sectional survey

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Abstract

Introduction: In rural, Northern Vietnam, there are concurrent high levels of agricultural production, childhood anemia and malnutrition. The study, "Scaling up local production of fortified foods" attempts to promote food security among women farmers and decrease childhood malnutrition by producing local fortified complimentary foods. Funding was provided by the Canadian International Food Security Fund, the International Development Research Centre and Global Affairs Canada.

Objective: To observe the rate of anemia among children (<2y) and explore predictor variables among nine rural communes in Lao Cai, Lai Chau and Ha Giang, Vietnam.

Methods: A cross sectional survey (n=309) was carried out among children (<2y) in 9 communes. Capillary blood sampling and visible-spectrometry was performed to assess hemoglobin levels. A questionnaire probed associated factors such as; antenatal care visits, nutritional counselling, socio-economic factors, anthropometry, household dietary diversity and food security. Predictors of anemia were explored using logistics regression analysis.

Results: The prevalence of anemia among children (<2y) was 45.6% (141/309). Logistic regression models showed childhood anemia was lower among mothers who received antenatal care (4+visits) [OR 0.57, 95% CI 0.35- 0.93, P<0.05], among families doing financially better than the previous year [OR 1.33, 95% CI 1.00- 1.77, P<0.05], and a non-significant trend for lower anemia was found among girls [OR 0.64, 95% CI 0.40- 1.03, P=0.067].

Implications & Conclusion: These anemia rates are viewed as a severe public health issue of specific concern for children(. Lower rates of anemia were predicted by antenatal (4+ visits) care and among those whose economic situation had improved over the past year. Antenatal care may be an important intervention for anemia prevention in rural provinces in northern Vietnam.

Significance to the field of Dietetics: Nutritional counselling without access tangible interventions for decreasing anemia showed little association on anemia rates among children in Vietnam.