

Anemia in pregnancy in Malaysia: a cross-sectional survey

ABSTRACT

Anemia is the most prevalent nutritional deficiency during pregnancy. Except for a study conducted 10 years ago in Kelantan, Malaysia's available statistics are based on isolated small urban maternity hospital studies from the 1980s. There was therefore, a need for a large study at national level to estimate the magnitude of the problem in the country as well as to understand its epidemiology. This multi-center, cross-sectional study was conducted from February to March 2005, to assess the prevalence of anemia. Multistage stratified random sampling technique was used and 59 Ministry of Health (MOH) primary health care clinics were selected. Our final dataset consisted of 1,072 antenatal mothers from 56 clinics. The overall prevalence of anemia in this population was 35 % (SE 0.02) if the cut off level is 11 g/dL and 11 % (SE 0.03) if the cut-off level is 10 g/dL. The majority was of the mild type. The prevalence was higher in the teenage group, Indians followed by Malays and Chinese being the least, grandmultiparas, the third trimester and from urban residence. After multiple linear regression analysis, only gestational age remained significant. These findings are useful for our Maternal Health program planners and implementers to target and evaluate interventions. Work is in progress for outcomes and cost-effectiveness studies to best tackle this problem. In conclusion, the prevalence of anemia is 35% and mostly of the mild type and more prevalent in the Indian and Malays.

Keyword: Anemia; Grandmultiparity; Haemoglobin; Pregnancy; Prevalence