

Abstract

Background: It's often assumed that healthy full-term infants are endowed with adequate iron stores and haemoglobin that provides recyclable iron. It's speculated that many infants <6 months in less-developed countries are iron-deficient. Yet, WHO/UNICEF recommends exclusive breastfeeding for the first 6 months while use of fortified complementary foods/vitamins-mineral supplements is only recommended after 6 months in breastfed children (PAHO/WHO, 2004). Iron supplementation in iron-deficient Honduran infants (4-6 months) showed an increase in haemoglobin (Domellof et al (2001). There is need to re-think the current supplementation programs targeting infants >6 months.

Objective: To determine anaemia status among infants aged 4-6 months prior to a supplementation study.

Methods: Setting: Kenyan South Coast (INSTAPA Project). Haemoglobin (Hb) was measured in 219 infants (4.5-6 months old) using venipuncture blood samples (HemoCue Hb 301 System). Infants' anaemia status was defined as Hb concentration ≤ 110 g/L (race-adjusted). Anaemia status was further categorised as severe (Hb <70g/L), moderate (≥ 70 - <90g/L), and mild (90 - ≤ 110 g/L), respectively.

Results: Mean age was 5.64 months (SD 0.211). 79% of infants (n=173) were anaemic. Overall, 82% (n=143) and 16% (n=29) had mild and moderate anaemia, respectively.

Discussion: WHO/UNICEF recommendation on exclusive breastfeeding assumes that iron stores are adequate for the first 6 months. These findings concur with Domellof et al (2001) that showed Honduran infants <6 months were iron-deficient.

Conclusion: With 1:4 infants being anaemic, the data strongly suggests a re-look at the iron status of children <6 months, so as to adjust existing guidelines on exclusive breastfeeding for the first six months. The high level of anaemia begs the question whether caregivers are receiving correct contextual advice.