

SCN 2003 Report from Federal University of Goiás

Name: Maria Claret Costa Monteiro Hadler¹

Organization: Federal University of Goiás

Position: Assistant Professor

Email Address: claretheadler@uol.com.br

Research:

Anemia in infancy: etiology and prevalence.

Maria Claret Costa Monteiro Hadler¹, Yara Juliano², Dirce Maria Sigulem³

Objective: To verify the prevalence of anemia, iron deficiency anemia and iron deficiency in infants, at a Public Health Unit in the city of Goiânia - Brazil; to analyse and to correlate the hematologic and biochemical variables.

Methods: A cross-sectional study was carried out. One hundred and ten full-term infants of the 120 mothers interviewed were included. The infants aged between six and twelve months and there were no twins. Socioeconomic and hematologic data were obtained. Venous blood was taken from fasting infants in order to carry out a complete hemogram through electronic cell counting, serum iron, serum ferritin and C-reactive protein, which were used in the evaluation of the etiology of iron deficiency in the anemic infants. Children with hemoglobin < 11g/dL were considered anemic.

Results: The prevalences of anemia and iron deficiency were 60,9%. In the diagnosis of the iron deficiency etiology in infants without an inflammation process, when considering the alteration of hemoglobin plus two more indices among mean corpuscular volume (MCV) or serum ferritin or serum iron, the prevalence of the iron deficiency was 87%. Nevertheless, when red cell distribution width (RDW) was included in the indices, the prevalence was 97.8%. In the non-anemic infants, considering ferritin and RDW, the prevalence of iron deficiency observed was 28%. The best correlation among hematologic and biochemical variables were between hemoglobin and hematocrit ($r = 0.946$), and MCH with MCV ($r = 0.950$).

Conclusions: The main etiology in infants was iron deficiency anemia and its prevalence varied according to different parameters and criteria.

J Pediatr (Rio J) 2002; 78(4): 321-6: Iron deficiency anemia, nutritional status, iron, epidemiologic factors, infant, acute-phase proteins.

Free full text (portuguese and english) in <http://www.jpmed.com.br>.

¹ Master's Degree in Nutrition, Universidade Federal de São Paulo/ Escola Paulista de Medicina (UNIFESP/EPM). PhD student in Nutrition, UNIFESP/EPM and Assistant Professor, College of Nutrition - Universidade Federal de Goiás - Brazil. E-mail: clarehadler@uol.com.br.

Address: Av. T-4 n^o 802 apt^o 802 Setor Bueno. Goiânia-Goiás - Brasil CEP: 74230-030.

Phone number: 55 021 62 2552672 Fax number: 55 021 62 202 1748

² Professor of Collective Medicine, Universidade de Santo Amaro - Brazil.

³ Associate Professor, Department of Pediatrics, UNIFESP/EPM. Coordinator of the Postgraduation Course in Nutrition, UNIFESP/EPM.

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