Iron Deficiency Anemia among One-year-old Children in Nablus City/Palestine: A Cross Sectional Study

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Abstract:

Background:

Iron deficiency anemia is the most frequent cause of anemia worldwide. In the first 2 years of life, there're tremendous growth and development events which make children in the highest risks for developing iron deficiency anemia. Nutritional, socioeconomic, prenatal and perinatal risk factors may contribute and cause iron deficiency anemia among children in this age group and increase its prevalence.

Objectives:

The aim of this study is to assess the epidemiology of iron deficiency anemia among one-year-old children in Nabuls city in Palestine, and to find out the correlations of many variables associated with this health problem. As well as, to observe prophylactic measures which are done to protect children early against iron deficiency anemia.

Methods:

to explore the epidemiology of iron deficiency anemia, a cross-sectional study was conducted. Two-hundred and fifty five 1-year-old children who came to the healthcare centers were selected by convenience sampling. Questionnaires were used as a tool of data collection and blood samples were withdrawn and tested.

Results:

the prevalence of iron deficiency anemia among children was 18.8%, the mean of hemoglobin level was 11.2 g/dL and the mean MCV was 74fl. However, the mean hemoglobin level and MCV among children who had iron deficiency anemia were 9.8 and 66.5, respectively. Level of parents' education, family income, maternal iron supplement during pregnancy, timing of introduction of food, type of food, cow's milk ingestion and child's iron supplements showed to have significant association with iron deficiency anemia.

Conclusion:

in conclusion, iron deficiency anemia still has high prevalence among oneyear-old children despite the efforts of Ministry of Health to avoid it. Nearly fifth of children have iron deficiency

anemia in Nablus city. Parents' education, family income, maternal iron supplements during pregnancy, infant's iron supplements, introduction of solid food after 6 months, type of solid food and cow's milk ingestion during first year found to be associated with iron deficiency anemia