

**Frequency of Iron Deficiency Anemia in
6Months-12 Years Old Children in The
Outpatient Clinic of Al Fayoum
University Hospital**

Thesis

Submitted for Partial Fulfillment of Master

Degree(M.Sc) in Pediatrics

By

Rehab Galal Abd El Hamid

M.B.Bch

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2011

Abstract

The present study aimed to investigate the frequency of IDA in the outpatient clinic of Al Fayoum university Hospital in Al Fayoum Governorate ,Egypt . The study was carried out from September 2010 to April 2011, in the outpatient clinic of Al Fayoum University Hospital . A total of 300 children aged 6 months to 12 years were enrolled in the study.

During the study period, all children attending on two successive days weekly (2 different days each week to cover the 6 working days of the week) were enrolled in the study.

The questionnaire was covering the following elements; age, sex, family size, socioeconomic standards, mother education, date of attending, dietary habits. Measures for weight and height were done and analyzed according to growth curves. Blood samples were taken for CBC and iron profile.

Our results showed that, 73 (24.3%) children out of the total studied group (300 children) were found to have iron-deficiency anemia (the highest percent among 6m-2y age group(75%).

According to gender, the frequency of iron deficiency anemia among girls was 67% which is higher than that found among boys 32%. The frequency of IDA was high among children with low socioeconomic standards and less educated mothers.

Key words: IDA, children, Fayoum Governorate

Summary

Anemia is one of the most common and intractable nutritional problems in the world today. It has consequences on human health, social and economic development. WHO estimates that approximately two billion people are anemic. The most common cause of anemia is iron deficiency anemia (IDA). It occurs when storage sites of iron are depleted and blood level of iron cannot meet daily needs, The incidence of anemia in Egypt (as a developing country) is much higher than developed countries, so the present study aimed to investigate the frequency of IDA in the outpatient clinic of Al Fayoum University Hospital in Al Fayoum Governorate, Egypt .

The study was carried out from September 2010 to April 2011, in the outpatient clinic of Al Fayoum University Hospital . A total of 300 children aged 6 months to 12 years were enrolled in the study.

During the study period, all children attending on two successive days weekly (2 different days each week to cover the 6 working days of the week) were enrolled in the study.

Data collection was carried out using a field pre-tested interviewing questionnaire covering the following elements; age, sex, family size, socioeconomic standards, mother education, date of attending, dietary habits and consumption of iron rich food. Measures for weight and height were done and analyzed according to growth curves.

Blood samples were taken for CBC and iron profile. IDA is diagnosed as ferritin <10 ug/l and hemoglobin less than normal for age .Our results showed that, 73 (24.3%)children out of the total studied group (300 children) were found to have iron-deficiency anemia (the highest percent among 6m-2y age group p(75%).

According to gender, the frequency of iron deficiency anemia among girls was 67% which is higher than that found among boys 32%. In our study there was statistically significant difference between the iron deficient and non-iron deficient groups as regards the weight.

The frequency of IDA was high among children with low socioeconomic standards and less educated mothers.

In conclusion, frequency of iron deficiency anemia is high among children in the outpatient clinic of Al Fayoum University Hospital . To face this problem, there should be a program carried out by both Ministry of Education and Ministry of Health in Al Fayoum Governorate targeting children and their parents directly and through various public media approaches. Programs should focus on the nutritional and behavioral needs of these children , such as comprehensive iron supplementation programs.