

Abstract Title

Iron deficiency in a sample of pediatric nutrition outpatients

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Abstract

Introduction: Anecdotal evidence from Fraser Health (FH) dietitians suggests a large number of children, seen as outpatients, are iron deficient. In view of the detrimental effects that iron deficiency (ID) has on early development, data was sought to quantify the problem.

Objectives: To determine the prevalence of iron deficiency in pediatric patients seen by outpatient dietitians at a large teaching hospital within FH and to identify nutrition related ID risk factors.

Methods: A cross-sectional, retrospective chart review of pediatric patients (0-5 years) seen by a FH outpatient dietitian, regardless of the reason for initial referral. Prevalence of ID was based on: ferritin, a combination of hemoglobin and mean corpuscular volume, or % transferrin saturation (based on age). Anthropometric data and nutrition related ID risk factors as documented in the nutrition assessment report were also collected.

Results: Of 847 pediatric patients, 290 met the inclusion criteria. The mean age was 23 months (SD 16 months, range 4 days to 4 years and 11 months). The proportion of pediatric patients with ID was 45.2 % (n=131). By age group, 36.5% were aged 0 to 2 years (n=66) and 59.6% (n=65) were between 2 and 5 years. Of the documented ID risk factors, 32.6% had poor iron intake (n=94), 17.2% excessive non-breastmilk intake (n=50), and 16.6% followed vegetarian a diet (n=48).

Conclusion: Our findings confirm clinicians observations of a high prevalence of ID among pediatric outpatients seen by dietitians. Our sample was limited to patients referred to the dietitian and therefore cannot be extended to the greater FH pediatric population. Further research is needed to explore the prevalence of ID and common risk factors among children in the FH region.

Significance to dietetics: These findings may inform public health initiatives designed to mitigate the modifiable risks related to developing ID in early life.