

Editorial

**Iron Deficiency Anaemia in the Arab Gulf Countries:
The Need for Action**

Abdulrahman O Musaiger, DrPh(Nutr.)*

Despite the progress in the social, economic and health situation in the Arab Gulf countries during the past three decades, iron deficiency anaemia is still one of the main health problems in these countries. The prevalence of anaemia, especially iron deficiency anaemia is high in these countries, particularly among preschool children, adolescent girls and pregnant women. Studies showed that the prevalence of anaemia in preschool children ranged from 20-67% and among school children it ranged from 13-50%, using haemoglobin level as indicator. The percentage among pregnant women ranged from 23-54%¹. If not controlled, iron deficiency anaemia may lead to many health consequences such as impaired motor development, poor scholastic achievement of children, decreased physical and work capacity of adults, increased maternal morbidity and mortality in pregnant women².

The cause of iron deficiency anaemia is multi-factorial, depending on age, sex, dietary habits, health and socio-economic status of the community. Studies on factors associated with this kind of anaemia in the Arab Gulf countries are scarce. Some factors which may be responsible for the occurrence of iron deficiencies are, unsound weaning habits, low intake of food which can enhance iron absorption such as fruits rich in vitamin C, high intake of foods which can inhibit iron absorption, unhealthy eating habits, parasitic infection, parity, early age at marriage and ethnic differences.

Iron intake may be influenced by three main factors: availability of iron in foods consumed, compounds that inhibit iron absorption and compounds that enhance iron absorption. The intake of food rich in iron by preschoolers and adolescents in this region is generally low, particularly in adolescent girls. In Saudi Arabia, Sawaya et al³ showed that the iron intake of children aged 0-6 years did not exceed 38% of FAO/WHO, Recommended Daily Allowance (RDA). In Kuwait, it was reported that the percentage of RDA for iron decreased as the age of school girls increased. The proportions were 78%, 38% and 32% of RDA for iron for girls aged 10-12, 13-15 and 16-17 years respectively⁴.

Statistics also showed that the fertility rate of Gulf women is relatively high (4.6-7.1 per 1000 women). Multiple deliveries tend to lower the haemoglobin level in women because closely spaced pregnancies deplete the iron stores of the women, especially

* Director

Environmental & Biological Research Programme
Bahrain Centre for Studies and Research &
Editor
Bahrain Medical Bulletin
State of Bahrain

when there is no iron supplementation during pregnancy. In the UAE, Hossain et al⁵ found that the prevalence of anaemia was significantly higher in women who had seven or more pregnancies than in those who had 1-3 pregnancies (Odds Ratio = 4.17, 95% CI = 1.86-9.38). Anaemia increased significantly as months of pregnancy increased and became a serious medical problem in the last trimester of pregnancy. Many pregnant women in the Gulf do not intake iron and folic acid supplements because they believe that it causes harm to the fetus⁶.

Programmes to prevent and control anaemia are inadequate and non-effective in most countries. Attention should be given to health education in the mass media and in child and maternity clinics. Mothers should receive appropriate advice on the benefits and side-effects of iron supplementation. Control of infectious diseases, especially parasitic infection is highly recommended. Education on healthy food habits with emphasis on increased consumption of foods that enhance iron absorption should be included in any health and nutrition education programme. Information on causes and management of anaemia is important for school children and can be included in school curricula. Studies on factors determining anaemia in Gulf countries are highly recommended out.

REFERENCES

1. Musaiger AO. Anaemia among pregnant women and children in the Arab Gulf countries. Bahrain Centre for Studies and Research, Bahrain.
2. DeMayer EM. Preventing and controlling iron deficiency anaemia. World Health Organization, Geneva:1989.
3. Sawaya WN, Tannous RI, Othiammen AI. Dietary intake of Saudi infants and preschool children. *Ecol Food Nutr* 1988;20:171-84.
4. Eid N, Al-Hooti S, Bourisly N, et al. Anaemia in school children: A preliminary study. *J Kuwait Med Assoc* 1986;20:39-43.
5. Hossain MM, Bakir M, Marshall MA, et al. Iron deficiency anaemia in the United Arab Emirates. In: Musaiger AO, Miladi SS, eds. *Proceedings of Workshop on Prevention and Control of Micronutrient Deficiencies in the GCC countries*. FAO/RNE, Cairo: Egypt, 1997.
6. Musaiger AO. Factors associated with micronutrient deficiencies in the GCC countries. In: Musaiger AO, Miladi SS, eds. *Proceedings of Workshop on Prevention and Control of Micronutrient Deficiencies in the Arab Gulf Cooperation Council Countries*. FAO/RNE, Cairo: Egypt, 1997.