

Prevalence of vitamin A deficiency among preschool children, pregnant and lactating women in four Iraqi governorates

Sawsan Mohamed Ali Hadi, AlaaSha'lanHussien and Saad Alddin Hussien
Nutrition Researches Institute, Iraq

Vitamin A deficiency (VAD) is a major nutritional problem in poor societies, especially in lower income countries. The prevalence of vitamin A deficiency in a population is assessed by specific biochemical and clinical indicators of status.

The present study is an attempt to estimate the prevalence of vitamin A deficiency among preschool age children, pregnant and lactating women in four Iraqi provinces.

The relation between VAD with some demographical, nutritional, biological and environmental variables has also been considered.

The sample was comprised of 600 subjects (150) for each governorate and an average of 50 subjects per primary health care center), the data were collected through direct interview; blood samples were taken and analyzed for serum retinol.

The overall mean (\pm SD) serum retinol level in this study was (35.6 ± 13.2) $\mu\text{g/dL}$, in preschool children this mean (\pm SD) was (28.5 ± 8.9) $\mu\text{g/dL}$, whereas in pregnant and lactating women the mean serum retinol level (\pm SD) was (44.5 ± 14.6), (34.7 ± 10.3) $\mu\text{g/dL}$ respectively.

The study showed that the overall prevalence of vitamin A deficiency was (6.7%) with a percentage of (13.8%) among preschool age children, (2.7 %) among lactating women and (1.6 %) among pregnant women.

The extent of vitamin A deficiency in 3 groups (preschool age children, pregnant and lactating women), mainly in boys and in rural areas and Ninewah have the highest percentages of VAD. Further investigation is needed to identify risk factors and evaluate interventions to address nutrition programs towards preventing and controlling VAD nation-wide.

Keywords: Vitamin A, Pregnant, Lactating women, Primary health care centers.

Biography

Sawsan Hadi has Clinical Biochemistry Advanced degree from College of Medicine, Al-Nahrain Medical College and Bachelor's degree (Chemistry) from Baghdad University College of Science. She has Thirty years research experience in clinical biochemistry and in micronutrient deficiency and HPLC techniques and Prepared a diagnostic laboratory kit. She has published more than 8 papers in international journals and have five patent certificates issued by the Iraqi patent office, Central Organization for Standardization & Quality Control (COSQC) with industrial ownership and serving as Senior -Technical Expert, Supervised Nutrition Research Institute UNICEF/2012-2013.

sawsanmo@yahoo.com