

NUTRITIONAL RICKETS IN ARAR CITY, NORTHERN SAUDI ARABIA; PREVALENCE, PRESENTATION AND ASSOCIATED FACTORS: A CROSS SECTIONAL STUDY

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ABSTRACT

Nutritional Rickets is a common disease among our children and numbers of individuals suffering from it arising every year. Up to our knowledge no previous community based studies have been conducted in northern border of Kingdom of Saudi Arabia (KSA) addressing this issue could be traced. This study was carried out to estimate the prevalence, risk factors, presenting features and the previous treatment trials of nutritional rickets in northern Saudi Arabia, KSA. **Methods:** A cross-sectional study carried out on all children aged 6 months – 3 years attending the pediatrics outpatient clinic or the inpatient pediatrics department of the intended hospitals. Data were collected by means of personal interview with the children's mothers using pre designed questionnaire which include questions designed to fulfill the study objectives. **Results:** The overall prevalence of rickets among the studied children was 9%. There is no significant effect of child sex, age, arrangement between siblings, mother's age, mother's educational level, mother's work, father's age, father's educational level, father's work, parents consanguinity, skin color, exposure to sunlight, child feeding, Vitamin D supplementation, egg eating or diary milk consumption in the occurrence of rickets ($P>0.05$) but there is significant effect to presence of chronic diseases and family history of rickets ($P<0.05$). **Conclusion:** This study revealed that nutritional rickets is highly prevalent among children in Saudi Arabia. However, several factors seem to make important contributions. Appropriate preventive measures should include strategies such as health education, stressing the importance of exposure to sunlight, good quality weaning food and the right starting age for weaning. Mothers should be supplemented during pregnancy through food containing with vitamin D and infants may be supplemented after birth.

Keywords: Nutritional rickets; Children; Vitamin D deficiency; Arar; Kingdom of Saudi Arabia.