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Prevalence and Risk Factors of Vitamin D Deficiency among Men

Fadheela T Al-Mahroos, MD, MHPE* Huda S Al-Sahlawi, MD** Eshraq Al-Amer, MBBS***
Husain Taha Radhi, ABIM, SSC-MED**** Saeed Khalaf, MBBS, MRCP*****

Background: Vitamin D is vital for human health but its deficiency is worldwide. There is a gap in our knowledge about vitamin D status in Bahrain.

Objective: To identify vitamin D status and associated risk factors among men in Bahrain.

Design: A cross-sectional study.

Setting: Four public and four private maternity hospitals in Bahrain.

Method: The study was carried out in the second and third weeks of April 2012. Three hundred sixty-four men (husbands of mothers who presented in labor) participated in the study. A questionnaire was administered and vitamin D level was measured in the blood. Bivariate and multiple linear regression analysis were used to evaluate differences between variables. P-value <0.05 was considered significant.

Result: The mean age ± SD was 34.40 ± 7.27 years. Vitamin D mean level ± SD was 46.14 ± 12.80 nmol/L. Vitamin D level was <50 nmol/L in 233 (64%) men. The following variables showed significant association with vitamin D deficiency: high income (P-value 0.020), smoking (P-value 0.021), lack of sun exposure (P-value 0.001) and high body mass index (P-value 0.022).

Conclusion: Vitamin D deficiency is common among men in Bahrain. High income, lack of sun exposure and high BMI were significant and independent predictors of low vitamin D level. There is a need for population-based study in a randomly selected sample which includes all age groups and both genders.

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