

Vitamin D Status in Secondary Care Patients

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Background: Vitamin D deficiency is a growing problem worldwide and it is associated with a variety of diseases.

Objective: To evaluate the prevalence and risk factors for vitamin D deficiency in a sun-rich country.

Setting: Al Kindi Hospital, Bahrain.

Design: A Retrospective Study.

Method: Three hundred two patients were included in the study from 1 June 2009 to 28 February 2012.

The study included determination of the prevalence and severity of vitamin D and its correlation with age and gender. Data analysis was performed using SPSS software.

Result: Three hundred two patients were included in the study. Two hundred six (68.2%) females had 25(OH) D deficiency compared to 26 (8.6%) males. There was a statistically significant difference concerning gender (P-value= 0.014).

One hundred forty-two (48%) patients below 50 years had 25(OH) D deficiency compared to 90 (29.8%) patients above 50 years, P-value= 0.012. Pearson's correlation coefficient suggests a positive correlation as age increases (Pearson's $r^2 = 0.180$).

Conclusion: Low vitamin D is a growing health problem in Bahrain. Bahraini females had a significantly higher rate of vitamin D deficiency compared to males. We recommend earlier screening in women and young children. People who are at risk should be advised to increase their dietary calcium intake and vitamin D supplementation.