

2nd International Conference on **Alzheimer's Disease and Dementia** September 23-25, 2014 Valencia Convention Centre, Spain

Vitamin D deficiency among the elderly: Insights from Qatar

Navas Nadukkandiyil, Hanadi Khamis Alhamad, Ayman El-Menyar, Luay Abdel Wahab, Anoop Sankaranarayanan and Essa Mubarak Al Sulaiti
Hamad Medical Corporation, Qatar

Introduction: Vitamin D (VitD) deficiency is associated with comorbidities in the elderly. The present study investigates the prevalence of VitD deficiency among the elderly in Qatar.

Research design and methods: A retrospective study conducted between April 2010 and April 2012 that involved chart reviews. All elderly patients of age 65 years in geriatrics facilities including Rumailah hospital, skilled nursing facility and home healthcare services in Qatar were included in the study.

Measurements: Patient characteristics and outcomes were analyzed and compared according to the severity of VitD deficiency. Correlation of VitD with comorbidities was analyzed. Mean follow-up period was 6 months.

Results: A total of 889 patients were enrolled; the majority (66%) was females and the mean age was 75-8.7 years. Patient comorbidities included hypertension (76.5%), diabetes mellitus (63%), dyslipidemia, (47.5%), dementia (26%) coronary artery disease (24%) and cerebrovascular accident (24%). The mean baseline serum VitD level was 24.4-13.5 ng/ml; 72% of patients had VitD deficiency: mild (31%), moderate (30%) and severe (11%). Patients with severe VitD deficiency had significantly higher HbA1c levels compared with patients with optimal VitD ($P=0.03$). High density lipoprotein (HDL-C) levels were significantly lower in severe VitD deficiency patients compared with optimal VitD patients ($P=0.04$). There was a positive correlation between HDL-C and VitD level ($r=0.17$, $P=0.001$), whereas HbA1c levels showed negative correlation with VitD ($r=0.15$, $P=0.009$).

Conclusions: A high prevalence of VitD deficiency (72%) was observed among the elderly in Qatar. Lower VitD was associated with higher HbA1c and lower HDL-C levels. Further studies are warranted to evaluate whether VitD supplementation controls diabetes mellitus (DM) and low HDL-C levels among the elderly.

drnavasnk1111@yahoo.co.in