

Prevalence of Vitamin D Deficiency Among Orthopedic Attendances at Azadi Teaching Hospital in Kirkuk City

Hayman Mohammed Saeed Rashid, Ph.D* Karzan Jabbar Majeed, MSc** Tara Hameed Khorsheed, MSc***

ABSTRACT

Vitamin D deficiency is a major global health issue, affecting one billion people and impacting about fifty percent of the population across various regions. Risk factors include older age, female gender, limited sunlight exposure, winter months, malnutrition, dark skin, covered clothing, obesity, and being hospitalized or residing in nursing homes. This study aimed to assess the prevalence of vitamin D deficiency and its association with sociodemographic factors and chronic diseases in orthopedic patients. A cross-sectional, prospective study was conducted among outpatients of all ages at the orthopedic department of Azadi Governmental Hospital in Kirkuk City from December 1, 2023, to August 28, 2024. Data were collected through interviews and analyzed using SPSS version 24, with statistical significance set at $P \leq 0.05$. The mean age of participants was 34.6 ± 17.3 years. Most were Kurdish (80.4%), and 78.6% reported sufficient income. Nearly two-thirds suffered from arthritis (39.4%) or lethargy (31.7%), while 24% had chronic diseases. Vitamin D insufficiency was found in 62.1% of participants. Significant associations were noted between older age ($P < 0.001$), male gender ($P = 0.004$), obesity ($P = 0.003$), and chronic disease ($P < 0.001$) with arthritis. Vitamin D deficiency prevalence was high, particularly among women. The study found significant links between orthopedic diseases and older age, female gender, obesity, and chronic diseases. Educational strategies to raise awareness and treatment of vitamin D deficiency are crucial for all age groups.

Keywords: Vitamin D, Prevalence, Deficiency, Orthopedic, Chronic diseases.

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* Anesthesia Department, Lecturer, MSc, Ph.D
College of Health and Medical Techniques, Al-Qalam University, Kirkuk, Iraq.
E-mail: hemen.rashid@alqalam.edu.iq

** Blood bank of Azadi teaching hospital /kirkuk

*** Department of Embryology, Kirkuk Directorate of Health
Kirkuk, Iraq.