An-Najah National University Faculty of Medicine and Health Science



Prevalence of severe Vitamin D Deficiency among Pregnant Palestinian Women cross –sectional study

Submitted By:

Sara Saabneh Nireen Hasan Ali Rola Yassin

First Supervisor: Dr. Iyad Ali

Second supervisor: Dr. Zaher Nazzal

Abstract

Background: Vitamin D deficiency has been observed worldwide in pregnant women. However the epidemiological data of vitamin D deficiency among large group of Palestinian pregnant women is limited. This study is to evaluate the prevalence of severe vitamin D deficiency among pregnant women in Palestine and to analyze the association of vitamin D status with some pregnancy outcomes (in mother and newborn).

Methods: A descriptive, cross-sectional study was conducted in Palestine from December 2020 to May 2021 using face to face interview questionnaire, which was adapted from previous studies in this field. Data collected by convenient sampling. The pregnant answered a questionnaire covering socio-demographic and economic variables; risk factors; past medical , surgical and family history, OB-GYN history, delivery outcome on maternal and fetal basis, and the serum 25-hydroxyvitamin D [25(OH)D] concentrations were measured by electrochemiluminescence assay.

Results:

The mean level of 25 (OH)D was 9.1 ± 5.1 ng/ml. Only 1% of subjects had 25 (OH)D levels >30 ng/ml, whereas 31.6% had levels between 10 and 30 ng/ml; the remaining 67.4% were severely vitamin D deficient (<10 ng/ml).

Conclusions:

Severe vitamin D deficiency is highly prevalent among pregnant women in Palestine. Vitamin D supplementation campaigns which should cover pregnant women to prevent maternal and perinatal vitamin D deficiency should be implemented especially in risk areas.