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Assessment of the Prevalence of Calcium Deficiency among Pregnant Women in Assiut City

Thesis

Submitted in Partial Fulfillment of the
Master Degree in Obstetric and Gynecologic Nursing

٢٢٧٧٠٢

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Abstract

Background: Pregnancy is a period of high calcium requirement. The bulk of fetal skeletal growth takes place from mid-pregnancy onwards, with maximum calcium buildup occurring during the third trimester. Low calcium intakes are documented in pregnant women of different ages, especially those with inadequate food intakes. Insufficient calcium supply during pregnancy and lactation could result in maternal bone loss, reduced breast-milk calcium secretion, untoward infant bone development, and higher blood pressure levels.

Aim: This study aimed at assessing the prevalence of calcium deficiency among pregnant women in Assiut City. **Subjects and method:** The study was conducted in Assiut university hospital, Al-Eman, and Al-Shamla hospitals. The sample included 503 pregnant women aged from 18 to 48 years and they were free from medical diseases or gynecological problems. The tools used for data collection were; an interview questionnaire sheet, food survey tool, record form for investigation. **Results:** The main finding of this study were: About two thirds of the study subjects had deficient dietary calcium. As for blood calcium, 57.7% of the women had their blood levels less than 9 mg/dl, there was a statistically significant relationship between women dietary calcium and their education, residence, and family size, the higher gravidity and higher parity were associated with statistically significantly more prevalence of dietary calcium deficiency, Women with dietary calcium deficiency had statistically significantly higher numbers of live births and living children, and higher levels of blood calcium were statistically significantly associated with higher values of BMI. **Conclusion:** A large percentage of pregnant women in Assiut city fail to meet currently recommended guidelines for optimal calcium intake. This was reflected in low blood calcium in more than half of them. This is affected by age, residence, gravidity, and BMI. **Recommendations:** women be informed about the benefits of calcium, foods rich in calcium, the best way to consume calcium rich foods, and how to obtain the optimal calcium intake. This information can be transmitted to women through health class and special programs for exchange of ideas and enhancing health habits that can reduce calcium deficiency. The role of health professionals, including nurses, public and private sectors are emphasized.

Key words

Dietary calcium, blood calcium, calcium deficiency during pregnancy, body mass index, residency, education , and calcium deficiency.



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*To my parents
To my sisters
To my brothers
To my friends*

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