## **Evaluation of Palestinian Pharmacist's Knowledge about the proper use of Alendronate and its Interactions**

## **Students:**

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## **Abstract:**

**Background**:Bisphosphonates including alendronate are currently the leading drugs for the treatment of osteoporosis and other diseases characterized by increased bone resorption. Clinical studies reveal that poor bisphosphonates dosing compliance increases the fracture risk and ultimately treatment failure and increasing of the prevalence of side effects.

**Objectives**: This study aimed to assess pharmacist knowledge of the proper administration instructions of alendronate as this significantly correlate with medical effectiveness and development of adverse effects. Part of the aim is to determine the extent of pharmacist knowledge of alendronate interactions as this is considered the main obstacle for maximizing oral bioavailability of alendronate.

**Methods**: A Cross-sectional study, using self- administered questionnaire involving 230 pharmacists was conducted among pharmacists in the north of West Bank. The surveys were distributed in each city as following: 100 survey in Nablus, 70 in Jenin, 50 in Tulkarem, 25 in Qalqilia. Data were collected using a validated questionnaire consisting of 4 sections and analyzed by descriptive statistics a knowledge score was developed to me. Moreover, associations between pharmacist's socio-demography characteristics and knowledge of alendronate proper use, side effects, interactions are established in our research study.

**Results**:A total of 264 questionnaires were distributed and 230 were completed. The median knowledge score of the proper use of alendronate was 6(1-9), and the median knowledge score drug-food interactions of pharmacists was 10.5(2-14), whereas, the median side effects knowledge score was 4(0-8). found to affect knowledge alendronate dosing instructions, side effects, interactions were the factors; age, gender, work locality, work type, education level, residency, expert years and work place, employment status.

**Conclusion**: This study identified important knowledge gaps. Therefore, improving pharmacist's knowledge about the importance of proper use, drug-food interactions and side effects of alendronate. Pharmacists expert years, found to have a significant role in educating the pharmacists about alendronate therapy in Palestine.