

Nurses ' knowledge about high alert medications in Palestine, administration and regulation: a comparative cross-sectional study

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Abstract :

Background: Medication errors (MEs) are an unintended failure in drug treatment process that can occur during prescription, dispensing, storing, preparation and administration of medications. High alert medications (HAMs) are drugs that bear a heightened risk of causing significant patient harm when used incorrectly. Nurses are responsible for administration of HAMs, incorrect administration can have significant clinical outcome. Lack of knowledge about HAMs was one of the primary causes of MEs. Inadequate knowledge could be due to individual failure or systemic failure of nursing staff or hospitals to prepare qualified nurses to perform their work properly.

Aim of the study: the study aimed to assess the level of knowledge of HAMs among nurses in governmental hospitals in West Bank; Palestine.

Methods: A comparative cross-sectional study was conducted in 2015 in the West Bank Palestine using face to face interview questionnaire, which was taken from previous study. Data were collected by convenient sampling. The questionnaire consisted of 4 parts: nurses' demographic characteristics, drug administration knowledge (Contained 10 true-false questions), drug regulation knowledge (contained another 10 true-false questions), and finally the self-evaluation part.

Results: A total of 280 nurses participated in the study who were working in emergency room (ER), intensive care unit (ICU), pediatric or medical ward. The response rate was 93%. The study found that nurses had insufficient knowledge about HAMs as 67.1% of them had a score of less than 70% with total score mean value 59.92 ± 15.12 . Factors associated with nurses' sufficient knowledge were HAMs training and ICU training, both with p-value 0.002. Nurses with master degree, ICU, head nurses, and male nurses were the most knowledgeable group with p-value of 0.001. 81.8% of respondent hoped to obtain additional training. The leading obstacles reported were inconsistent opinions between doctors and nurses (37.9%) and no established standard operating procedures for HAMs (37.1%).

Conclusions: Evidence based results strongly suggest that nurses have insufficient knowledge about HAMs, and could benefit from additional teaching and training programs conducted by clinical pharmacist as a part of their role in hospitals to provide valuable information about HAMs. Our study recommend that each hospital should establish their own list of HAMs and to update it regularly, implanting risk reduction strategies during any step of medication use process from preparing and storage to administration and monitoring. Furthermore, additional academic courses about HAMs are needed to be implanted in teaching plans in nursing schools.