Assessing Nurses’ Knowledge in the Face of Nuclear Accidents

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Abstract

Introduction: Nuclear accidents in any shape or anywhere require presence of trained individuals and medical teams on the site of accident. Considering the important role of nurses in efficient management of these disasters, they should possess special qualifications in different areas. This study was done with the aim of assessing the knowledge of nurses working at a military hospital in the face of nuclear accidents.

Methods: This Cross-sectional descriptive study was carried out in 2015 in a military hospital. The study population consisted of nursing staff of the hospital, which were included using consecutive sampling. The tool used for this study was a questionnaire consisting of 2 parts. The first part was about the demographic data of the participants and the second part had 14 questions for evaluating the knowledge of the participants on facing nuclear accidents. Gathered data were analyzed using SPSS version 17 and descriptive statistics methods such as t-test and ANOVA.

Results: In this study, 136 of the nursing staff with the mean age of 32.99 ± 4.56 years participated (76.5% female). 83.8% had a Bachelor’s degree and their mean work experience was 8.03 ± 3.86 years, while 76.5% of them had no history of presence or service in any accident or disaster. Only 5.8% of the participants had sufficient knowledge of consequences of a nuclear accident and 80.3% of them had not participated in any training courses regarding nuclear victims. Knowledge of the nurses was evaluated as poor (m = 25) and results showed that there is no significant correlation between work experience (p = 0.330) and type of ward (p = 0.718) with the knowledge of nurses on encountering nuclear accidents.

Conclusion: Knowledge of nurses in facing nuclear accidents was poor and hospitals need to design disaster management programs and review its details with the staff in the form of trainings and maneuvers. In addition, decision-makers of educational programs for nursing students should include the topics related to nuclear disaster management and prepare the graduates for facing these accidents.

Keywords: Knowledge; nurses; radioactive hazard release; hospitals