ORIGINAL ARTICLE

Knowledge and Clinical Competence of Medical Emergencies Students in Facing Trauma

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Abstract

Introduction: Since pre-hospital care is the first line of trauma care, its right and accurate implementation can reduce problems such as long-term disabilities and mortality due to trauma. Therefore, the present study aimed to evaluate knowledge and clinical competence of bachelor of medical emergencies students in facing trauma. **Methods:** The present study is a cross-sectional one. All the students of medical emergencies in Alborz University of Medical Sciences were included using convenience sampling. To gather data a demographic questionnaire, "clinical competence checklist" including 9 skills, and an oral test were used. Face and content validity, and reliability of the tool were evaluated and approved by 10 experts. In addition, reliability coefficient was calculated to be 0.82 for all the skills. Data gathering was done by taking oral and OSCE tests and observation of skill performance and filling the checklists. Data analysis was done using SPSS version 20 and using univariate t-test and Pearson's correlation coefficient. **Results:** The findings of the study showed that 6.5% of the students had poor knowledge, 82.6% had fair, and 10.9% had good knowledge regarding trauma. In addition, 89.1% of the studied student had good clinical competences, and 10.9% had fair competence regarding trauma. In comparing the competence with an ideal state, there was a significant gap in all sub scales. There was a significant correlation between clinical competence level and work experience (p < 0.001, r = 0.595). However, no significant correlation existed between theoretical knowledge and clinical competence (p = 0.646, r = 0.07) or work experience (p = 0.478, r = -0.107). **Conclusion:** The results of this study showed that most bachelor of medical emergencies students in Alborz University of Medical Sciences had acceptable knowledge and competence regarding taking care of trauma patients in a pre-hospital setting. However, considering the significant gap between the acquired points and ideal state, continuous training in this regard seems necessary.

Key words: Emergency medical services; multiple trauma; clinical competence; management audit; educational status