

Research article

Impact of Implementation of Sequential Trauma Education Programs (STEPs) Course on Missed Injuries in Emergency Polytrauma Patients, Ismailia, Egypt

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Submitted Abstract

Introduction: Trauma deaths account for 8% of all deaths in Egypt. The incidence of missed injuries in the Emergency Department (ED) of Suez Canal University Hospital (SCUH) was found to be 9.0% after applying Advanced Trauma Life Support (ATLS) guidelines. However, this rate is still high compared with many trauma centers.

Aim: Improve the quality of management of polytrauma patients by decreasing the incidence of missed injuries by implementing the Sequential Trauma Education Programs (STEPs) course in the ED at SCUH.

Methods: This interventional training study was conducted in the SCUH ED. The study was conducted during the 1-month precourse and for 6 months after the implementation of the STEPs course for ER physicians. Overall, 458 polytrauma patients were randomly selected, of which 45 were found to have missed injuries after applying the inclusion and exclusion criteria.

Results: Overall, 45 patients were found to have missed injuries, of which 15 (12%) were pre-STEPs and 30 (9%) were post-STEPs course. The STEPs course significantly increased adherence to vital data recording, the reduction of missed injuries (3.0%) and decrease in missed injuries in the post-STEPs course group was an essential clinically significant finding.

Conclusion: STEPs course implementation decreased the incidence of missed injuries in polytrauma patients. Thus, the STEPs course can be considered at the same level of other advanced trauma courses as a training skills program or better in dealing with trauma patients. The validation of STEPs course certification should be completed at least every 2 years.

Keywords: STEPs course, Training programs, Trauma injuries