

Assessment of Medical Students' Knowledge for Polytrauma Cases in Romania: A Cross-sectional Study

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Abstract

Background: Polytrauma is a major cause of morbidity and mortality, yet formal training in its management is often absent from undergraduate medical curricula. This study aimed to assess the knowledge and perceptions of Romanian medical students regarding polytrauma management and evaluate the need for dedicated curricular courses.

Methods: A cross-sectional survey was conducted among medical students from seven major universities in Romania. The questionnaire included demographic data, knowledge about polytrauma, skills related to first aid, and perceptions on introducing polytrauma courses. The study took place at several prominent medical universities across Romania, including Bucharest, Craiova, Timișoara, Iași, Cluj-Napoca, Târgu Mureș, and Sibiu. Overall, 413 students participated in the survey and were recruited through online platforms and direct interaction. All participants completed the survey voluntarily.

Results: Of all the participants, 78.7% had heard about polytrauma primarily through clinical rotations in General Surgery, Emergency Medicine, and Orthopedics. However, only 31% of the participants who heard about polytrauma accurately defined it. No correlation was found between confidence in providing first aid and actual knowledge ($p=0.097$). Almost 80% believed that polytrauma management should be a mandatory subject in the curriculum.

Conclusion: The study highlights a significant gap in Romanian medical education regarding polytrauma

management skills among students. It supports the introduction of mandatory courses on trauma care to enhance practical skills and knowledge retention among future healthcare professionals.

Keywords: polytrauma, ATLS, emergency medicine, first aid