

Integrating Psychological Care Training in Trauma Care for Medical Students: the Need and the Strategies

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Abstract: Trauma, whether arising from accidents, violence, or medical emergencies, generally has a substantial impact on the lives of victims, their family members, the society, and the healthcare delivery system. The purpose of the article is to justify the need to train medical students in trauma-related psychological care, explore the significance of simulation-based training, and identify coping strategies to augment the resilience of medical students. As healthcare professionals are the ones who are executing trauma care-related interventions, it is essential that medical students are trained to offer psychological care to the victims and family members of trauma to enable healing of both the body and the mind. If medical students learn about psychological care pertaining to trauma, they will be well equipped to handle sudden traumatic events by being more adaptable and resilient. Medical students can be trained in multiple ways to improve their psychological preparedness while delivering trauma care. As a part of the psychological training related to the management of trauma victims, medical students must be trained in developing coping strategies and resilience. In conclusion, facilitating learning among medical students in the psychological aspects of trauma care is a crucial domain for developing competent healthcare professionals. It is a priority to integrate into medical education a comprehensive learning about psychological care that will empower medical students to respond effectively to the complexities of trauma with empathy, resilience, and effective communication.

Keywords: trauma, psychological care, medical students, medical education

Introduction

Trauma, whether arising from accidents, violence, or medical emergencies, generally has a substantial impact on the lives of victims, their family members, the society, and the healthcare delivery system.¹ The available global estimates suggest that each year close to 1.2 million people lose their lives due to road traffic injuries, while an average of 35 million people suffer non-fatal injuries, including disabilities.² For many decades, physical well-being has been prioritized in trauma care, rather than considering the crucial symbiotic relationship between physical and mental well-being.^{1,3} Giving importance to psychological care aids in relieving immediate distress and also becomes vital to long-term recovery.³ As healthcare professionals are the ones who are executing trauma care-related interventions, it is essential that medical students are trained to offer psychological care to the victims and family members of trauma to enable healing of both the body and the mind.³⁻⁵ The purpose of the article is to justify the need to train medical students in trauma-related psychological care, explore the significance of simulation-based training, and identify coping strategies to augment the resilience of medical students.

Trauma-Related Psychological Care: Necessity to Train

Medical students are expected to acquire multiple competencies as a part of their undergraduate training to become competent healthcare professionals.⁴ Considering the magnitude and geographical distribution of injuries, it is essential that medical students learn to deal with trauma.^{3,4} As these injuries can be extremely emotionally draining, from the

healthcare professional perspective, medical students should learn about the psychological aspect of trauma care to minimize this emotional toll and prevent burnout.⁵ Once medical students are trained in psychological care, they develop coping mechanisms and also have better resilience to not only manage the challenges of trauma care but even maintain their own professional well-being.^{5,6} Another good impact could be in terms of improvement in communication skills, which enables them to convey sensitive information and extend support to patients and their families. This kind of training enables medical students to deliver patient-centered care as they understand the psychological impact of trauma and accordingly be more empathetic and compassionate.^{1,3,4}

Once medical students are trained in psychological care, their competence to make sound decisions (evidence-based decisions) in high-stress trauma situations shows a significant improvement.^{7,8} This improvement in decision-making can also be attributed to there being better dynamics and communication in the healthcare team and more collaboration between professionals from different disciplines.^{3,4} Further, these trained medical students can not only advocate for the psychological well-being of trauma patients as an integral aspect of healthcare but even extend their contribution to break down the stigma that has been often reported in seeking mental health support.³⁻⁵ In addition, once students learn this, they realize the importance of maintaining ethical principles even while dealing with trauma patients by respecting their autonomy, informing them about the available treatment options and obtaining informed consent, etc.⁷⁻⁹ If medical students learn about psychological care pertaining to trauma, they will be well equipped to handle sudden traumatic events by being more adaptable and resilient.^{1,3} In short, medical students learning about psychological care can result in better long-term outcomes for trauma patients and also ensure that students offer culturally sensitive and effective care in different scenarios.^{3,4,10}

Simulation-Based Training

Medical students can be trained in multiple ways to improve their psychological preparedness while delivering trauma care. Simulation-based training is an effective approach as it involves immersive scenarios that can replicate real-world situations and gives quality exposure to medical students.¹¹ This way of learning can be facilitated by developing realistic trauma scenarios that have the component of psychological aspects (such as emotional distress, difficult communication, family interaction, etc.) of patient care.^{11,12} In order to enhance the authenticity of such interactions, there is a need to incorporate human factors like stress, fatigue, and pressure of time into the simulation activities.^{12,13} Even the simulated or standardized patients can be employed to create authentic interactions that empower medical students to deal with the psychological dynamics of trauma cases. Another strategy to enhance the effectiveness of such sessions could be via the involvement of professionals from different disciplines, to simulate the collaborative nature of trauma care.¹¹⁻¹³

Depending on the availability of technical and infrastructure support, medical educators might integrate virtual reality and augmented reality to enhance the psychological realism of the training experience.^{6,14,15} There is much scope to include ethical dilemmas within simulation scenarios to challenge medical students to make difficult decisions, as they have to take into account the psychological impact on trauma patients, their family members, and even themselves.^{14,16} There is much need to provide personalized feedback upon the completion of such sessions, and this feedback should be directed towards both medical skills and the psychological responses of medical students to enable self-awareness and continuous improvement.^{12,13} In addition, structured debriefing sessions should also be planned after simulations to enable medical students to reflect on the emotional aspects of the given scenarios, share experiences, and discuss coping strategies.^{14,16}

We must also remember that instead of exposing students to highly complex psychological stressors, the better strategy is to increase gradually the complexity of trauma scenarios, which will give time for medical students to develop adaptive coping mechanisms.^{4,5} Medical institutions should therefore try to initiate and implement longitudinal simulation-based training programs across different professional years, wherein complexity is gradually increased, enabling medical students to build on their psychological preparedness while dealing with trauma patients. Simulation-based training activities aimed towards improvement of the psychological preparedness not only enhance clinical skills but even empower medical students with the desired coping strategies and resilience, which are crucial to respond to the challenging field of trauma care.¹¹⁻¹³

Interdisciplinary Approaches to Psychological Training

Medical colleges must develop interdisciplinary approaches (viz. involvement of professionals from various healthcare streams, like counselors, psychologists, psychiatrists, social workers, etc.) to psychological training in trauma care.^{17,18} The findings of a study done in the Department of Surgery of Indiana University School of Medicine revealed that higher objectively assessed stress was associated with poor performance in non-technical skills.¹⁷ Such exposure creates a synergistic environment for medical students and they gradually acknowledge the interconnectedness of physical and psychological well-being while dealing with trauma patients.^{18,19} This can be executed by organizing joint workshops and training sessions, where all the involved professionals share their views on trauma care and psychological support strategies.^{19,20} The institution can allot fixed days for discussing specific trauma cases with psychological dimensions, and professionals who were related to the case can be called to share their experiences in the presence of medical students.^{20,21} A similar interdisciplinary approach can even be used for medical students to learn via simulation scenarios or 'grand rounds' in hospitals. This interdisciplinary approach to psychological training is an evidence-based way for medical students to learn about the shared decision-making process.^{18–20} The findings of an interventional study revealed that the adoption of an interdisciplinary approach can significantly improve the collaboration and eliminate the prevailing gaps between residents posted in emergency medicine and surgery.¹⁸

Developing Coping Strategies and Resilience

As a part of the psychological training related to the management of trauma victims, medical students must be trained in developing coping strategies and resilience that will empower them to deal with difficult situations in an efficient manner in their future careers.²² This can be done by students learning about mindfulness (to make them self-aware, reduce stress, and improve emotional regulation) and about stress management (including time management and prioritization) via workshops.²¹ Students can be sensitized to the need and ways to maintain a balance between their professional and personal life.^{22,23} Further, students can be enrolled in a peer support program, which will give them a platform to share their experiences and learn coping strategies from others. Considering the possibility that medical students might themselves be experiencing emotional stress and burnout while delivering psychological care to trauma victims, they must be aware of the mental health resources that are available and must seek mental healthcare without delay.^{23,24}

Medical students can also be given an opportunity to pursue an elective course on resilience training that will provide them with the practical tools to adapt to psychological issues and workplace-related challenges.²² Medical students should be encouraged to record their reflections for all emotionally-draining scenarios, as it will become an outlet for processing emotions and experiences.^{23,24} Further, students can also practice mind-body activities (like yoga), and participate in narrative medicine workshops or leadership and time-building workshops, all of which will help them to deal with these challenging situations better. The existing mentorship program in the institution can also be used to provide guidance and support to medical students while providing psychological care to trauma patients.^{23,24} The findings of a questionnaire-based study done among orthopaedic residents reported that during these extraordinary times, emphasis can be given to electronic portfolios, simulation-based training, and promotion of distance learning, as it will not only ensure health and safety of residents but will also be useful to provide moral support to them.²⁵ The inclusion of all these approaches is expected to create a supportive and resilient learning environment that can equip medical students with the desired set of skills necessary for dealing with trauma victims.^{22,23}

Conclusion

In conclusion, facilitating learning among medical students in the psychological aspects of trauma care is a crucial domain for developing competent healthcare professionals. The training of medical students in the psychological aspect of trauma care is expected to improve patient care, augment communication skills, aid in the development of empathy and compassion, reduce stigma and misunderstanding, empower patients, and will bring about enhancement in the professional satisfaction. It is a priority to integrate into medical education a comprehensive learning about psychological care that will empower medical students to respond effectively to the complexities of trauma with empathy, resilience, and effective communication.

Disclosure

The authors report no conflicts of interest in this work.

References

- Kelly E, Rogers SO. Graduate medical education in trauma/critical care and acute care surgery: defining goals for a new workforce. *Surg Clin North Am*. 2012;92(4):1055–1064. doi:10.1016/j.suc.2012.04.006
- World Health Organization. Key Facts – road traffic injuries; 2023. Available from: <https://www.who.int/news-room/fact-sheets/detail/road-traffic-injuries>. [Last accessed on 23, Jan 2024.]
- Bhagwagar H. Secondary trauma, burnout and resilience among mental health professionals from India: a review of research. *Asian J Psychiatr*. 2022;76:103227. doi:10.1016/j.ajp.2022.103227
- Sciolla AF, Eckstrand K, Potter J. Integrating trauma-related curricular content into medical education and training. *Acad Med*. 2016;91(7):896–898. doi:10.1097/ACM.0000000000001216
- Brown T, Berman S, McDaniel K, et al. Trauma-Informed Medical Education (TIME): advancing curricular content and educational context. *Acad Med*. 2021;96(5):661–667. doi:10.1097/ACM.0000000000003587
- McClinton A, Laurencin CT. Just in TIME: trauma-Informed Medical Education. *J Racial Ethn Health Disparities*. 2020;7(6):1046–1052. doi:10.1007/s40615-020-00881-w
- Nousiainen MT, McQueen SA, Hall J, et al. Resident education in orthopaedic trauma: the future role of competency-based medical education. *Bone Joint J*. 2016;98(10):1320–1325. doi:10.1302/0301-620X.98B10.37031
- Berman S, Brown T, Mizelle C, et al. Roadmap for trauma-informed medical education: introducing an essential competency set. *Acad Med*. 2023;98(8):882–888. doi:10.1097/ACM.0000000000005196
- Lum SK, Subramaniam T. The teaching of trauma management in undergraduate medical education. *Med J Malaysia*. 2016;71(6):338–340.
- Matta G, Woodward-Kron RE, Petty S, Salzberg MR. Eliciting and responding to patient histories of abuse and trauma: challenges for medical education. *Med J Aust*. 2016;205(6):248–249. doi:10.5694/mja16.00216
- Berkenstadt H, Erez D, Munz Y, Simon D, Ziv A. Training and assessment of trauma management: the role of simulation-based medical education. *Anesthesiol Clin*. 2007;25(1):65–74. doi:10.1016/j.atc.2006.11.004
- Berkenstadt H, Ben-Menachem E, Simon D, Ziv A. Training in trauma management: the role of simulation-based medical education. *Anesthesiol Clin*. 2013;31(1):167–177. doi:10.1016/j.anclin.2012.11.003
- Cherry RA, Ali J. Current concepts in simulation-based trauma education. *J Trauma*. 2008;65(5):1186–1193. doi:10.1097/TA.0b013e318170a75e
- Youngblood P, Harter PM, Srivastava S, Moffett S, Heinrichs WL, Dev P. Design, development, and evaluation of an online virtual emergency department for training trauma teams. *Simul Healthc*. 2008;3(3):146–153. doi:10.1097/SIH.0b013e31817bedf7
- Ren H, Du Y, Feng X, Pu J, Xiang X. Mitigating psychological trauma on adult burn patients based on virtual reality technology of smart medical treatment. *J Healthc Eng*. 2021;2021:5531176. doi:10.1155/2021/5531176
- Dell’Era V, Garzaro M, Carenzo L, Ingrassia PL, Aluffi Valletti P. An innovative and safe way to train novice ear nose and throat residents through simulation: the SimORL experience. *Acta Otorhinolaryngol Ital*. 2020;40(1):19–25. doi:10.14639/0392-100X-N0128
- Anton NE, Collings A, Athanasiadis DI, et al. Relationship between stress and resident non-technical skills during interdisciplinary trauma simulations. *Surgery*. 2023;174(3):529–534. doi:10.1016/j.surg.2023.05.024
- Haney RM, Graglia S, Schleifer J, et al. Interdisciplinary approach to enhance trauma residents education of extended-focused assessment for sonography in trauma in the emergency department. *ANZ J Surg*. 2020;90(9):1700–1704. doi:10.1111/ans.16000
- Anton NE, Huffman EM, Ahmed RA, et al. Stress and resident interdisciplinary team performance: results of a pilot trauma simulation program. *Surgery*. 2021;170(4):1074–1079. doi:10.1016/j.surg.2021.03.010
- Naess HL, Vikane E, Wehling EI, Skouen JS, Bell RF, Johnsen LG. Effect of early interdisciplinary rehabilitation for trauma patients: a systematic review. *Arch Rehabil Res Clin Transl*. 2020;2(4):100070. doi:10.1016/j.arct.2020.100070
- Francis AA, Wall JEM, Stone A, Dewane MP, Dyke A, Gregg SC. The impact of interdisciplinary care on cost reduction in a geriatric trauma population. *J Emerg Trauma Shock*. 2020;13(4):286–295. doi:10.4103/JETS.JETS_151_19
- Friedberg A, Malefakis D. Resilience, trauma, and coping. *Psychodyn Psychiatry*. 2022;50(2):382–409. doi:10.1521/pdps.2022.50.2.382
- Read JP, Griffin MJ, Wardell JD, P O. Coping, PTSD symptoms, and alcohol involvement in trauma-exposed college students in the first three years of college. *Psychol Addict Behav*. 2014;28(4):1052–1064. doi:10.1037/a0038348
- Smeets T, Giesbrecht T, Raymaekers L, Shaw J, Merckelbach H. Autobiographical integration of trauma memories and repressive coping predict post-traumatic stress symptoms in undergraduate students. *Clin Psychol Psychother*. 2010;17(3):211–218. doi:10.1002/cpp.644
- Moldovan F, Gligor A, Moldovan L, Bataga T. The impact of the COVID-19 pandemic on the orthopedic residents: a pan-Romanian survey. *Int J Environ Res Public Health*. 2022;19(15):9176. doi:10.3390/ijerph19159176

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