Prehospital Emergency Care: Literature Review

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Emergency care is often perceived to be in a hospital setting. In many situations, emergency care starts before hospital arrival. It usually is implemented in an unpredictable environment when emergency medical service (EMS) personnel arrive on the scene of an accident, providing emergency care for accident victims or arrive at a patient's home (Torabi et al., 2018). Other prehospital clinicians include doctors and nurses who work at primary medical care facilities and clinics. EMS personnel and prehospital clinicians often face difficult decisions. Emergency medical services and prehospital personnel are the first levels of health care provided to a patient. Adequate assessment of the urgency and severity of health care problems contributes to unnecessary emergency department visits (Breckner et al., 2021). EMS personnel face ethical dilemmas and must perform assigned tasks and consider the patient's values and dignity. Prehospital care providers also must weigh legal consequences before making decisions that affect patient care. Prehospital healthcare workers must guarantee the quality of prehospital emergency care. It is relevant for continuing education to improve the level of emergent care in the prehospital setting (Abelsson & Lundberg, 2018).

Trauma Simulation in Prehospital Emergency Care

An essential requirement for high-quality prehospital trauma care is a well-educated ambulance staff. The basis of this study was to examine participation in a trauma simulation and how nurses handled certain prehospital trauma situations. Providing an environment where individuals train in a real-life simulated situation can help provide realistic care and help individuals better prepare for different situations in an actual clinical setting. A cost-effective way to improve trauma patient outcomes is by improving the ambulance staff's knowledge and

skill set. The quantitative design of this study allowed collected data from participants performing simulated trauma care. In this study, 61 nurses participated. There were three statements that participants were asked to rate before the first simulation and again after the last simulation. By creating a realistic experience, the participants expressed that the simulation of severe trauma was beneficial (Abelsson & Lundberg, 2018).

Millions of people every year are injured temporarily or permanently due to traumatic injuries caused by both blunt and penetrating mechanisms. Approximately 6 million people globally are killed by injury. Providing adequate prehospital emergency care reduces the severity of an injury. Early response care measures can improve the possibility of survival—a 30% decrease in the mortality rate of patients with life-threatening injuries occur with well-educated prehospital ambulance staff (Abelsson & Lundberg, 2018). The difficulty of care for patients affected by trauma necessitates responders to have relevant education. Up to date, continuing education of nurses in trauma care has shown to improve the outcome for trauma patients. However, there is no standard indication of how often to offer continuing education. A skill set frequently used may require little updating. Skills less frequently used need to be practiced more. All emergency care measures prehospital staff provide must be guaranteed (Abelsson & Lundberg, 2018).

Key Points

Many people die of injuries that they could survive. By providing adequate prehospital emergency care, the severity of the injury can be reduced. Simulation is a suitable method for training prehospital personnel because it is not advisable to use actual patients for training purposes. This study examines how prehospital ambulance service personnel experienced

involvement in a trauma simulation. The simulation patient scenarios consisted of typical prehospital injuries such as closed pelvic fractures, penetrating abdominal wounds, and open extremity fractures. Learning through simulation allows the staff a learning environment that does not necessitate exposure to emergency care at accident sites. The simulated learning environment provides safety for the staff and the patient (Abelsson & Lundberg, 2018).

Sixty-one nurses participated in this quantitative designed study: on four different occasions, during a six-month time frame, data were collected by participants performing simulated trauma care. The participants were registered nurses with a bachelor's degree and specialist nurses with a master's degree in prehospital emergency care and work experience from a hospital-based emergency care facility. Simulation can provide learning theory and practical skills combined with existing skills. All simulations were performed on a Resusci Anne Basic mannequin, and all participants had previous experience in simulation training.

Before the first simulation and immediately after the last simulation, participants of the study rated three statements ranging from strongly agree, agree, neutral, disagree, and strongly disagree. The same questions were asked of the participants to strengthen the reliability of the study. The descriptive analysis describes the data where inferential analysis compared potential differences between the groups. There are statistically significant differences between the pre and post-test results regarding the statements. Simulation as a suitable method for educating on trauma care increased from the pre- to post-simulation statements by 38% when considering the outcome of the statistical analyses. (Abelsson & Lundberg, 2018). The simulation improved knowledge and practical skills and increased confidence in a critical care environment. A limitation possibly affecting the study results is that nurses who participated had varying experiences in the clinical setting with trauma patients.

Assumptions

A primary assumption of this study was that creating a simulated, controlled environment that gives a participant a realistic setting would better understand and handle prehospital trauma patients in a real-life situation. The simulated learning environment is also beneficial for the prehospital teaching staff to assist responders who lack certain skill sets. It provides an environment where responders can practice emergency care safely and effectively in a controlled situation. Being uncomfortable during a simulation has resulted in an obstruction of learning. Participants become motivated and more willing to prepare for future situations when they are more prepared.

Deficit/Conclusion

A simulation provides a learning environment to handle complex health care situations. A well-educated prehospital staff is required for high-quality prehospital trauma care. Simulation is a suitable method to train prehospital responders. Being involved in a controlled simulation, responders can focus on learning theories and practical knowledge and apply that information to the education and skills they already obtain. Provided simulations were able to help participants understand their level of anxiety. When participants feel uncomfortable, they focus on their anxiety instead of the learning process. By providing simulated trauma care, participants could better learn without being uncomfortable or experiencing anxiety. The outcome for trauma patients has improved due to higher education and continuing education of nurses in a trauma care environment. The experience of real-life situations in a simulation will better prepare participants for future events.

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Key Points

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Assumptions

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Deficit/Conclusion

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Deficit/Conclusion

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Conclusion

Write a conclusion here in your overall paper. Follow the MEAL paragraph formatting and use Grammarly.com. Provide a summary/conclusion of the analysis of all three articles. Discuss how the information can improve:

- Patient outcomes
- Nursing practice
- Evidence-based practice/Quality Improvement efforts
- Healthcare as a whole

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