

Breakout of the Box:

Innovative Education Using an Escape Room



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Background

- Emergency Department (ED) nurses must possess the complex knowledge and skills necessary to competently care for critically injured patients.
- Providing meaningful educational opportunities to assist with maintenance of trauma competencies is challenging (Stephenson, 2015).
- Passive education doesn't meet the needs of most adult learners (Brull et al, 2017).
- An escape room was designed and implemented as an educational tool with the objective of engaging staff in an interactive learning environment to increase knowledge and skills requisite when caring for trauma patients.

Methods

- A Learning Needs Assessment was conducted for ED nurses to categorize trauma-related education gaps.
- Four objectives were identified including overall comfort level when caring for trauma patients, massive transfusion protocol (MTP), locating supplies rapidly, and familiarity with resources available in the trauma room.
- The escape room was conducted during an attendance-optional trauma-focused educational event offered to all ED staff.
- A total of 35 nurses and EMTs attended the event, all of whom participated in the escape room.

Methods: Escape Room

- An in-situ trauma room was set up by the facilitator in the ED, nurses were assigned to teams of 4-6, and each participant was assigned a trauma team role (such as medication nurse or procedure nurse).
- The moderator read the rules of the escape room and the patient scenario aloud and then followed a step-by-step guide formatted to reflect the Trauma Nursing Process as teams proceeded to gather information and solve clues.
- The moderator observed team performance and utilization of equipment. Teams could ask for up to 2 "free clues" and could not progress to the next step in the scenario until the skill was completed accurately.
- All teams were able to complete the learning experience by successfully accomplishing all tasks/skills to breakout of the escape room.
- A 5-point Likert scale post-survey with 21 responses was used to quantify participants' perceptions of how the experience affected knowledge and comfort level with skills applicable in the care of trauma patients.

Escape room scenario from moderator guide:

Bio Phone Call:

We are coming to you emergent with a 10 y.o. male from the scene of an auto vs ped accident. The patient was crossing the street at a crosswalk and was hit by a small SUV type vehicle traveling at about 35-40 MPH. He is complaining of shoulder pain, head, and left leg pain, and is noted to have a deformity and laceration to the L thigh. Pulses are difficult to palpate in his L foot. Unknown LOC. Currently alert, but perseverating and amnesic to event.

VS are as follows: HR 108, RR24, BP 100/61





Results I feel confident in my ability to apply what I 24% earned in the Escape Room to my practice The format of the escape room is a learning 71% This learning opportunity increased my awareness 67% of the importance of teamwork and closed loop 19% communication in the setting of trauma Participating in the escape room increased my awareness of available resources in the trauma 19% 67% Participating in the Escape Room increased my 19% 67% ability to locate supplies in the Trauma room Participating in the Escape Room activity 33% 57% simulated a stress level similar to that of a I feel confident in my ability to perform Massive Transfusion Protocol following this learning 29% 57% 100 50 100 Percentage Response Strongly Disagree Disagree Somewhat Agree Agree Strongly Agree Figure 1: Likert scale post-survey results

Implications

- Development of a trauma focused escape room learning activity promotes learner participation and engagement, provides an opportunity for immediate feedback, and brings excitement to the classroom.
- Results suggest this approach positively impacts nurses' knowledge and comfort with skills necessary to care effectively for trauma patients.
- Nurse educators utilizing this education modality should consider implementation of program evaluation via pre, post, and periodic surveys at 3, 6, and 12 months post-event.

References

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