

Utilizing Standardized Patients and High Fidelity Simulation to Promote Interdisciplinary Communication

Introduction

Changes in technology have brought about a need for restructuring health care education:

- Miscommunication has been linked to medical errors and in trauma situations these errors have an increased risk of becoming fatal.
- It is imperative for patient safety that effective team communication occurs.
- Paramedic and nursing students alike require the ability to perform during stressful situations from both the medical and psychological aspect of care.
- Traditional teaching methods need to be augmented with today’s technology to accommodate the learning styles of students entering health care today
- Students need to be taught in a way that will prepare them to perform in the changing health care environment.

Purpose

The purpose of this project was to promote effective communication and the ability to perform medical and psychological aspects of care during stressful situations improve patient outcomes.

Objectives

At the completion of the simulation experience, the student will be able to examine communication within the healthcare team by means of reflective journaling.

Situation

- Professors from the areas of Nursing and Emergency Medical Services hosted an interdisciplinary mass causality training exercise. The college partnered with high school students who have identified interest in health professions, local fire departments and EMS agencies and a local towing company to create a mass casualty incident with over 30 patients exhibiting multiple traumatic injuries.
- The simulation began when a tornado hit a busy intersection sending cars crashing and injuring many.
- Over 75 college Paramedic and Nursing students and High School students participated in the exercise utilizing Communication skills to manage a disaster.



Results

Themes drawn from student reflective summaries:

- **Teamwork:** Acknowledged the need for all healthcare providers to work together and they showed new appreciation the role that other providers play in patient care
- **Communication:** Recognized the need for better communication between team members, between disciplines, with patients, and with bystanders.
- **Chaos:** The simulation pulled individuals from their comfort zone and forced them to interact and perform at higher levels
- **Real-life Preparation:** Simulation helped to identify personal weaknesses which can stimulate self growth

Limitations

- Run multiple scenarios or allow additional time to enable students designated as hospital staff to participate in the field and vice versa. Some students felt that they missed out on some of the experience
- Encourage more buy in to the simulation from all participants. Some students felt that others were not taking it seriously.
- Prepare patients for entire scenario and give them guidance as to how their condition should change over time.



Student Quotes

“One thing I took away from the scenario is a greater appreciation for the amount of teamwork and patience it takes to handle a situation like that. I feel like it forced us to work together and it showed how the different parts of a team can play lots of small roles to accomplish a big goal.”

“The drill showed me how important communication and teamwork are when working in an extremely stressful situation.”

“The need to continue this program yearly for the nursing and paramedic students because it brings a real aspect and sense of respect to all departments involved in what could be a multiple victim response.”

“This event brought together different members of the medical community and gave insight as to what roles the different branches have.”

“This was a valuable experience to get to work with the paramedics. It opened my eyes to a new set of challenges that others face in the healthcare field.”



Methods & Materials

- QSEN was used as a framework for the study which focused on teamwork/collaboration, patient centered care, and safety.
- A test retest format was performed utilizing the Agency for Healthcare Research and Quality (AHRQ, 2017) *TeamSTEPPS Teamwork Attitudes Questionnaire*
- A post simulation reflection paper was used to identify themes
- The following roles were assigned:
 - Patients (high school students)
 - Field teams comprised of nursing and paramedic students
 - Incident Command
 - Triage units
 - Field Care
 - Transportation
 - Facility teams comprised of nursing and paramedic students
- High fidelity manikins



Participants

- High school students in health related career course
- Paramedic students
- ADN nursing students

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