Larinda Dixon, RN, MSN, EdD | College of DuPage | Glen Ellyn, Illinois



An interprofessional simulation exercise was conducted to facilitate collaboration, promote patient safety, and improve communication among different health disciplines. This simulation created the opportunity for students to learn about the roles of other health care team members and to prepare them for their chosen careers in health care. The simulation created a realistic, safe environment where students could learn and provide care without causing harm to a patient.

Learning Objectives:

Promote effective interprofessional communication, confidentiality, and professional boundaries. Create an environment for students to demonstrate appropriate decision-making in managing multiple patients and prioritize patient care appropriately. Enhance and promote safe clinical practice and quality health care.

As a nursing student, we never get to receive the patient from the paramedics. This simulation created a learning experience I haven't received in the clinical setting.

Background:

The College of DuPage conducted an innovative collaborative simulation of a critical incident and emergency medical response call. The simulation began in the Homeland Security Education Center (HEC). The patients were taken to the Nursing Simulation Hospital via ambulance/cart, where they received nursing care. Some patients were transferred to other departments based on the medical diagnosis. Nuclear medicine, computed tomography, and the operating room are the departments some of the patients were transferred to.

The Nursing students at the College of DuPage had the opportunity to interact with multiple disciplines and provide nursing care in a stressful, yet controlled critical response environment.

The Nursing Simulation Hospital offered a safe and controlled environment where nursing students treated injured patients in need of emergency care. This exercise provided valuable opportunities for nursing students to review MD orders, cultivate the development of problem-solving skills, conduct nursing assessments, perform nursing interventions, utilize critical thinking, delegate effectively, work collaboratively, and provide safe nursing care.

Departments and Number of Participants:

STUDENTS

Nursing: 10
Emergency Medical Technician (EMT): 35
Surgical Technology and Sterile Processing: 25

Respiratory Care: 20
Nuclear Medicine: 2
Computed Tomography: 2
Fire Science: 2

NON-STUDENTS

COD Police Officers: 2
Theater Makeup Artist: 1
Actor in the role of shooter: 1
Actor in the role of the gunshot victim: 1
Actor in the role of parent of

the gunshot victim: 1 Faculty/Nursing Lab Simulation Lab staff/Administrators: 15

TOTAL STUDENTS: 96
TOTAL NON-STUDENTS: 21

Development:

The Development of this simulation began two months prior to the actual event. Faculty and staff from each participating discipline met weekly to discuss the learning needs and objectives for all of the students involved. Once the learning goals and objectives were decided, the scenarios were developed. Faculty and staff members had the opportunity to provide feedback on the scenarios. Adjustments were made to reflect the learning goals for each department.

In an effort to make the exercise as real as possible, limited details were provided to students. This added to the realism of the exercise because the students did not know exactly what they were responding to. Each participating department created a timeline for its own section.

Scenarios:

In the scenario, a married couple had a domestic dispute that turned violent, spilling out into the street outside their home. A man with a gun was seen trying to run away from the home. The police went after the suspect. A neighbor called the fire department to report a house fire. When the fire department, paramedics, and police department arrived, the house and attached garage were fully engulfed in flames. The fire department determined that there were multiple victims involved. A twenty-nine year-old woman was found lying on the ground outside of her home. Two children were also found. A seven year-old child was removed from a burning house. An eight year-old family friend jumped from a second floor window to escape the fire. The victims are listed below.

PATIENT 1:

29 year-old female (live patient)

Diagnosis: Gunshot wound to the abdomen, facial abrasions

Past Medical History: C-section

The nursing students collaborated with the following departments during this scenario:

EMT, Respiratory, CT, Blood bank, and Holding/OR.

PATIENT 2:

7 year-old male: son of gunshot victim (manikin)

Diagnosis: Smoke inhalation, 1st and

2nd degree burns to anterior chest,
arms, and fingers

Past Medical History: Asthma

The nursing students collaborated with the following departments during this scenario:

EMT and Respiratory.

PATIENT 3:

8 year-old male: friend visiting (manikin)

Diagnosis: Smoke Inhalation, bilateral lower leg compound fractures, head injury, seizures

Past Medical History: Left forearm fracture

The nursing students collaborated with the following departments during this scenario: EMT, Respiratory, Nuclear Medicine, and Holding/OR.

During the simulation, the EMT students called the Nursing Simulation Hospital to let the nurses know the condition of each patient and to provide them with an estimated time of arrival. The patients were transferred from the scene via ambulance/cart to the Simulation Hospital approximately ten minutes apart.

Debriefing:

Faculty members in each department met with their students to conduct a guided reflection of the simulation experience. This was done to help students to develop and refine knowledge, skills, and rationales impacting their clinical practice. After the guided reflection was conducted, an interprofessional collaborative debriefing was conducted. The collaborative debriefing helped the students reflect on what occurred during simulation and explore how other disciplines viewed the simulation.

Evaluation:

After the interprofessional simulation, the nursing students completed a survey to evaluate their experience. The results showed that simulation is a valuable clinical tool. It promotes the use of nursing theory, critical thinking, and interprofessional communication. The simulation provided a broader understanding of the roles and responsibilities of the other participating disciplines. As a result, the nursing students were more confident in their clinical skills.

"It's a shame every nursing student couldn't participate in this experience. It was a wonderful experience."

References

Booth, T. L., McMullen-Fix, K. (2012). Innovation Center: Collaborative Interprofessional Simulation in a Baccalaureate Nursing Education Program, *Nursing Education Perspectives*, 33(2), 127-129.

King, A., Conrad, M., Ahmed, R. A. (2013). Improving collaboration among medical, nursing and respiratory therapy students through interprofessional simulation, *Journal of Interprofessional Care*, 27(3), 269-271.

Reese, C. E.; Jefferies, P. R; & Engum, S. A. (2010). Learning Together: Using Simulations to Develop Nursing and Medical Student Collaboration, *Nursing Education Perspectives*, 31(1), 33-37.