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Introduction

A new approach to teaching is required to broaden a student's commitment to quality and patient safety. Pre-licensure students understandably limit their focus to their own practice when providing patient care. To assist students in seeing beyond their own work and as part of a health care team, simulation of accepting a patient from another RN was created. In this patient room, multiple errors are evident and the student must respond by identifying what must be acted upon. A patient safety exercise was conducted during National Patient Safety Week to encourage them to think beyond their own frame of reference. Student volunteers developed a set of prescriber's orders and created this Room of Horrors. The student response was positive however the identification of errors did not correlate with their level of progress within the program. The need to develop tools reflective of differing levels of nursing education was identified. These tools will assist faculty to develop an increased awareness of possible clinical practice errors while assisting students to proactively provide a safer patient environment.

Objectives

1. Identify skill level progression of undergraduate, baccalaureate students that can be applied to a patient safety scenario.
2. Classify patient safety issues according to student's level of program progression
3. Create tools to identify students knowledge level for identifying patient safety issues

Background

The Room of Horrors exercise had been held for 2 consecutive academic years. Student volunteers created a prescriber order sheet and set up the patient simulation. Errors ranged from the bed in the high position to the wrong IV solution infusing to a plate of food that was inappropriate given the dietary restrictions. Students created a report of lab values, a prescriber order sheet and a past medical history.

Undergraduate students were recruited to attend between classes and during the university's community time. Students who participated had their names entered into a drawing. One student from the sophomore, junior and senior class won a gift certificate to the university bookstore for participation in this event.

Each participant was provided with a clipboard on which they could record the errors identified. Upon completion, a sheet with the actual errors described was provided.

The outcome of this event was that students liked it however their ability to identify errors did not show a pattern. Students at the senior level did not show a greater ability to identify errors than did the sophomores.

What to do next?

What was needed was stratification of expected levels of knowledge and skills, and repeated exposure to these scenarios to create an attitude of patient protection from harm.

Formulate a comprehensive view of making this Room of Horrors stronger:

- Develop a comprehensive patient scenario that offers challenges at all levels of baccalaureate education
- Identify issues of patient safety that range from basic to complex
- Create tools to identify students at a specific educational level and determine their ability to recognize issues of patient safety

Aligning Student KSA's with a Patient Scenario

A senior nursing student was recruited to identify students KSA development during the curriculum. There is the expectation of what faculty expect students to know however students bring a perspective to which we might not be aware. Student met with faculty weekly for 7 weeks as work was done regarding faculty expectations vs. what students are able to assimilate. Student utilized textbooks required throughout curriculum, clinical evaluation tools and teaching materials from standardized testing company.

Academic Level	Knowledge & Skills
1 st year	<ul style="list-style-type: none"> • Bed raised in the highest position • Nasal cannula is not in the patient's nose • Bedrails down • Patient supine (sign above bed says have at 30 degrees)
Sophomore year	<ul style="list-style-type: none"> • O2 set at wrong level • Bed not in lowest position • Wrong name on I.D. bracelet • Medication left on bedside table • Foley catheter on bed instead of hanging on side
Junior year	<ul style="list-style-type: none"> • Wrong medication left at bedside • Incorrect medication labels on medication bottle • Assess H&P and identify why MI had occurred • Patient is NPO yet food tray is sitting at bedside
Senior year	<ul style="list-style-type: none"> • No SPO2 continuous monitoring device at bedside • Wrong blood hanging (patient is rH negative, rH positive is hanging) • Identify abnormal lab values (low RBC, High BUN) • Heparin should be D/C • Patient NPO and on Heart Healthy diet, cheeseburger and fries at bedside • Understand Signs and Symptoms of GI bleed • Read a rhythm strip and assess for myocardial ischemia

Aligning with a Patient Scenario

JH is a 59-year-old male who has come to the emergency department with chest pain and no relief from nitroglycerine. A 12-lead EKG shows a NSTEMI Myocardial Infraction. JH has been placed on a continuous cardiac monitor and vitals are being taken every 15 minutes. He is in bed and says he is experiencing a pain level of 8 on a 0-10 scale. He reports to smoking up to half a pack of cigarettes a day, but has intentions of stopping. He has a history of chronic hypertension, coronary artery disease and GERD.

Name: JH **DOB:** 1/10/1958 **Age:** 59 **Medical Record #:** 12345678

Height: 5'11" **Weight:** 97.7 Kg

Allergies: None

Code Status: Full Code

Diet: Cardiac Diet (Low Sodium and Fats)

Physician: John Smith (123)-456-7890

Unit: Emergency Room, Bed 10

STATUS: Admission Observation Medical Floor

Admitting Diagnosis:

Acute MI

Chronic Hypertension

Coronary Artery Disease

Upper GI bleed

GERD

No history of smoking or recreational drugs

Activity:

Up to commode/ Urinal

Ambulate with one assist

HOB 30 degrees at all times

Plan of Care:

Vital Signs; Q1

- Call for systolic BP <90

I&O

Daily weights

12 Lead EKG STAT

CXR

Continuous Cardiac Monitoring

O2 per Nasal Cannula

- 2-4L to keep O2 >94%

Cardiac cath at 0900 tomorrow

- Clear liquids only
- Mark peripheral pulses bilaterally
- Void on call to cath lab
- Give all AM meds as ordered
- Stat PTT @ 5:30AM
- Call MD at 6AM with 5:30 AM PTT for orders regarding heparin infusion

Medications:

Nitroglycerin 1 tab Q5 min 3 times prn

Heparin Drip

- Bolus 5000 units + start infusion of 25,000 units/500 ml D5W at 1800u/ hr now
- In 6 hours, repeat PTT
- 12 units/kg up to 1000units (keep PTT 50-70)

Metoprolol 25 mg PO Q12

Captopril 12.5 mg Q8 PO

D5_{1/2}NS 75 mL/hour

Protonix 40mg IV q12 hours

Calcium Carbonate 1 gram PO QID prn

Lorazepam 2mg po q8h prn

Administer 2 units of PRBC's over 2 hours each.

Repeat Hgb and Hct two hours after infusions are completed and call MD with results

Implementation

Utilize a Strategic Plan Grant which has been awarded by the university to implement this patient safety work in the 2017-2018 academic year

Recruit students to lead simulation scenario

- Develop prescriber order sheets/lab results
- Create simulated patient room with identified errors
- Encourage students to participate during National Patient Safety Week
- Assist and engage students during scenario

Create skills sheet for each year of academic study

Collect and analyze data for student ability to identify errors consistent with their level of course work

Develop additional scenarios to represent patients across the lifespan and those with special needs

Conclusions

Student involvement to create a Room of Horrors provides vital information as to the level of patient safety awareness at the undergraduate level.

Students at all levels will make observations as to what they perceive is an error.

Information derived from this simulation will inform faculty as well as students as to their understanding of patient risks in the acute care setting.

References

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