Case Overview

Preventing Medication Errors with Interprofessional Communication: Structured Interprofessional Bedside Rounds (SIBR)

Part of the JHUSON Interprofessional Education and Online Simulation Program

---

Brief Summary for Instructors

Learning Objectives

By the end of this simulation, the learner will be able to:

1. Determine breakdowns in communication leading to a medication error.
2. Identify the root causes of a medication error in a hospitalized patient.
3. Explain the ethical dilemma caused by the medication error and how it was addressed.
4. Contemplate how you would have addressed the error, if you were responsible.
5. Explain how each member engaged in addressing the medication error.
6. Describe the role of each team member in preparing the patient for discharge to a rehabilitation unit
7. Discuss the following core competencies for Interprofessional Collaborative Practice (2016)

Core Competencies for Interprofessional Collaborative Practice (2016)

A. Values/Ethics sub-competencies

VE1. Place interests of patients and populations at center of interprofessional health care delivery and population health programs and policies, with the goal of promoting health and health equity across the life span.

VE3. Embrace the cultural diversity and individual differences that characterize patients, populations, and the health team.

VE6. Develop a trusting relationship with patients, families and other team members.

VE9. Act with honesty and integrity in relationships with patients, families, communities, and other team members.

VE10. Maintain competence in one's own profession appropriate to scope of practice.

B. Roles and Responsibilities sub-competencies

RR1. Communicate one's roles and responsibilities clearly to patients, families, community members, and other professionals.

RR2. Recognize one's limitations in skills, knowledge, and abilities.

RR3. Engage diverse professionals who complement one's own professional expertise, as well as associated resources, to develop strategies to meet specific health and healthcare needs of patients and populations.

RR4. Explain the roles and responsibilities of other providers and how the team works together to provide care, promote health, and prevent disease.

RR5. Use the full scope of knowledge, skills, and abilities of professionals from health and other fields to provide care that is safe, timely, efficient, effective, and equitable.

RR6. Communicate with team members to clarify each member's responsibility in executing components of a treatment plan or public health intervention.

RR9. Use unique and complementary abilities of all members of the team to optimize health and patient care.

C. Interprofessional Communication sub-competencies

CC2. Communicate information with patients, families, community members, and health team members in a form that is understandable, avoiding discipline-specific terminology when possible.

CC3. Express one's knowledge and opinions to team members involved in patient care and population health improvement with confidence, clarity and respect, working to ensure common understanding of information, treatment, care decisions, and population health programs and policies

CC4. Listen actively and encourage ideas and options of other team members.

CC8. Communicate the importance of teamwork in patient-centered care and population health programs and policies.

D. Teams and Teamwork sub-competencies

TT3. Engage health and other professionals in shared patient-centered and population-focused problem-solving.

TT4. Integrate the knowledge and experience of health and other professions to inform health and care decisions, while respecting patient and community values and priorities/preferences for care.

TT7. Share accountability with other professions, patients, and communities for outcomes relevant to prevention and health care.

TT8. Reflect on individual and team performance for individual, as well as team, performance improvement.

TT10. Use available evidence to inform effective teamwork and team-based practices.

TT11. Perform effectively on teams and in different team roles in a variety of settings.

Key teaching/debriefing points

In addition to interprofessional communication, teamwork, roles and responsibilities, and values/ethics included on the debriefing tool important discussions points include:

1. Compare the team discussion outside the room with the discussion inside the patient's room
2. Discuss the medication error with the anticoagulant
    a. How was it handled among members of the team?
    b. Was it explained to the patient?
    c. How was it explained to the patient?
    d. How did it impact the plan of care?
3. Discuss how structured interprofessional rounds compare to what students have experienced in the hospital setting

Scenario overview

This simulation depicts structured interprofessional bedside rounds. Professionals participating include a nurse, physician, and pharmacist. They discuss patient Mrs Jones. Mrs. Jones:75-year-old female who was admitted to the ICU one month ago with a stroke and left sided weakness. Her ICU course was complicated by ventilation issues, pneumonia and sepsis. She has been on the medical floor for one week and she recently developed a VTE. She is currently being treated with a heparin drip. The team plans to switch to oral anticoagulation and plan for discharge to the rehabilitation service. The interprofessional team will meet with her to discuss her treatment plan, new medications, and transfer to rehabilitation.

Curricular information

Educational Rationale and Need

In its landmark report 'To err is human', the National Academy of Medicine brought attention to medical errors as an important cause of death resulting in 44,000 - 98,000 people annually in U.S. hospitals (Kohn, 2000). Despite efforts to address this problem, there has been little evidence of improvement (Landrigan, 2010) . Recently, preventable adverse events in U.S. hospitals were estimated at 210,000 deaths per year (James, 2013) thus becoming the third leading cause of death in the U.S. after heart disease and cancer (Makary, 2016). About 13.5% of Medicare beneficiaries experience an adverse event during their hospital stay, and about 44% of those are considered preventable events (Levinson, 2010). These events are often surgical- or drug-related (de Vries, 2008).

About 400,000 preventable adverse drug events are estimated to occur annually in U.S hospitals. An even greater number are estimated to occur in long term care facilities and ambulatory care settings, thus amounting to at least 1.5 million preventable adverse drug events occurring annually across various settings (Aspden, 2007). The full magnitude of this problem has not been well characterized (Hughes, 2008).

Medication errors have been identified at all stages of the medication delivery process though most have been reported at the prescribing and administration stages. About one third of medication errors that result in patient harm occur during medication administration (Bates, 1995).

Though errors cannot be fully prevented, given human limitations and vulnerability to distraction, fatigue, and other factors, much effort has been devoted to preventing patient harm from these errors. One approach to decreasing errors is to develop skill in communication by enhancing teamwork and encouraging cross-monitoring among team members to improve patient safety. Thus, if one person makes an error, another team member (or perhaps a patient or family member) can alert them to it, so it may be addressed in time without it causing any harm. Interprofessional rounds offer a platform for ongoing open communication among team members which can empower hospital staff. Structured Interprofessional Bedside Rounds (SIBR) prompts discussion of key elements of patient care and the therapeutic plan with the patient; thus, it has been shown to reduce the rate of adverse events on one academic medical unit (O'Leary et al, 2011). Conducting these rounds at the bedside also allows for patient and family member participation. Also, such rounds, referred to as SIBR, have been demonstrated to improve nurse retention and staff ratings for teamwork, communication, and efficiency (Gausvik,2015). These rounds allow for staff members to all gain a better understanding of the plan of care; provide feedback and express concerns which promote safety; and, for patients and family to engage in their care (Rosen 2009; Lubcke, 2015; Grzyb, 2014). Pre-licensure students need to be aware of common sources of miscommunication and adverse events, particularly medication errors, and become comfortable speaking up, regardless of conflict. during interprofessional rounding formats and anytime a safety risk is noted.

Reference Materials

Aspden P, Wolcott J, Bootman JL, Cronenwett LR, Editors. Preventing Medication Errors. Washington DC: National Academies Press; 2007

Bates DW, Boyle DL, Vander Vliet MB, Schneider J, Leape L Relationship between medication errors and adverse drug events. *J Gen Intern Med* 1995;10 (4) 199- 205

Bates, D. W., & Singh, H. (2018). Two decades since to err is human: an assessment of progress and emerging priorities in patient safety. *Health Affairs*, *37*(11), 1736-1743.

Beaird, G., Dent, J. M., Keim-Malpass, J., Muller, A. G. J., Nelson, N., & Brashers, V. (2017). Perceptions of teamwork in the interprofessional bedside rounding process. *The Journal for Healthcare Quality (JHQ)*, *39*(2), 95-106.

de Vries EN, Ramrattan MA, Smorenburg SM, et al. The incidence and nature of in-hospital adverse events: a systematic review. *Qual Saf Health Care*. 2008;17:216–223.

Gausvik, C., Lautar, A., Miller, L., Pallerla, H., & Schlaudecker, J. Structured nursing communication on interdisciplinary acute care teams improves perceptions of safety, efficiency, understanding of care plan and teamwork as well as job satisfaction. *Journal of Multidisciplinary Healthcare 2015; 8*, 33-37.

Grzyb, M. J., Coo, H., Rühland, L., & Dow, K. (2014). Views of parents and health-care providers regarding parental presence at bedside rounds in a neonatal intensive care unit. *Journal of Perinatology*, *34*(2), 143-148.

Hughes R, Blegen M Medication administration safety. In: Hughes RG, editor. *Patient Safety and Quality*

An Evidence-based Handbook for Nurses. Rockville, MD Agency for Healthcare Research and Quality 2008

James JT. A new, evidence-based estimate of patient harms associated with hospital care. J Patient Saf. 2013;9:122–128.

Kohn LT, Corrigan JM, Donaldson MS, editors. To err is human: building a safer health system. Washington DC: National Academies Press; 2000.

Landrigan CP, Parry GJ, Bones CB, et al. Temporal trends in rates of patient harm resulting from medical care. N Engl J Med. 2010;363:2124–2134.

Levinson DR. Adverse Events in Hospitals: National Incidence among Medicare Beneficiaries. November 2010. Available at: http://oig.hhs.gov/oei/reports/oei-06-09-00090.pdf. Accessed on Oct 17, 2019

Lubcke NL. Family-initiated dialogue about medications during family-centered rounds. *Pediatrics*. 2015;*135*(1), 94-101.

Makary MA , Daniel M. Medical error—the third leading cause of death in the US . BMJ 2016;353:i2139

O'Leary et al. Structured Interdisciplinary Rounds in a Medical Teaching Unit Improving Patient Safety. Arch Intern Med. 2011;171(7):678-684

Rosen P, Stenger E, Bochkoris M, Hannon MJ, Kwoh CK. Family-centered multidisciplinary rounds enhance the team approach in pediatrics. *Pediatrics* 2009; *123*(4), e603-e608.