# Importance of Patient Safety with Catheter Care

Jesika Barbee

NSG 6003

South University

May 29, 2017

**Description of Selected Topic**

The main reason behind teaching a topic related to patient safety is to ensure that both nurses and other healthcare employees who are involved in patient care utilize an approach that is patient-centered. There has been extensive research on ways to improve patient safety with the use of technology; however, with the fast-paced environment in the hospital, it is very easy for healthcare professionals to make mistakes. These areas of mistakes and accidents need to be examined and determined in which ways there can be change to improve patient outcomes. These mistakes can occur due for any reason. For example: surgery, medication administration, blood administration, falls, interpreting laboratory values, staff communication and infection prevention (The Joint Commission, 2017).

The topic of patient safety is very broad and encompasses a lot of material. Educating healthcare workers regarding patient safety would serve as a basis to reduce the risks associated with violation of the patients’ ethical rights, or patient harm that could potentially lead to death (Mitchell, 2008). For more than sixty years, the Joint Commission has served as a guideline to improve the quality and safety of the care that is provided to patients (The Joint Commission, 2017). The development of this teaching project will include all of the healthcare professionals that provide direct patient care on a daily basis. This will ensure that there is an integrated approach with patient safety. It helps to confirm that the sentential events that occur due to those uneducated about patient safety risks is decreased as well.

**Rationale of Selected Topic**

The ratioinale behind selecting the topic of catheterization was due to the fact that there has been many different studies completed that examined the increased risks and accidents in healthcare due to the lack of proper training with catheter insertion, removal, and the indications for a catheter (Grunebaum, Chervenak, Skupski, 2011). There are many articles that pertain to different aspects of patient safety; however, it seems that either healthcare workers are not understanding what they are being taught in regards to sterile technique when inserting foley catheters, or that they do not understand knowledge application and why it is so very important to utilize sterile technique.

The main topic regarding patient safety is on catheter care. The information will be provided to those who insert foley catheters, as well as the physicians who place the order as well. They need to understand the importance associated with early removal of the catheter to prevent catheter-associated urinary tract infections (CAUTI). The presence of a urinary catheter for an extended period of time or breaking sterile technique on insertion is a huge risk factor for bacteriuria. The most common cause of hospital-acquired infections (HAI) is a urinary tract infection, with eighty percent of the UTI’s caused by an indwelling urinary catheter (Aljohi, Hasan, and Gupta, 2016).

Along with the HAI as a result of CAUTI is the financial cost to the hospital as well. It is very expensive for the healthcare field to have to pay for the infections that are acquired while staying in the hospital. For the United States, it was estimated in a recent study that hospital-acquired infections accounted for nearly $45 billion per year. This money is directly charged to the hospital. With eighty percent being due to catheter-associated infections, the annual cost for CAUTI is around $35 billion (Kennedy, Greene, & Saint, 2013). This is just another reason as to why it is important to stress the proper education to all staff involved in direct patient care in the hospital setting.

**Target Audience**

 The clinical staff including: nurses, nurse aids, physicians, physician assistance, nurse practitioners, and those who are involved in coordinating the care of the patient will be the targeted audience for this teaching plan. This means that each person who is directly involved in the care of the patient will have to attend a class to ensure that the information is delivered in hopes to reduce the incidence of CAUTI. Also, for any new employees that are hired within the hospital, the teaching plan will be incorporated in their orientation.

The rationale for choosing the audience was the gap between skills and the knowledge associated with patient safety when it comes to catheter insertion or removal. It seems that many healthcare professionals not only do not have insufficient information with catheters, but are unable to interpret the knowledge that they have into the practice when delivering patient-care (Dolansky & Moore, 2013).

Furthermore, it is important to incorporate patients into the teaching plan. Utilizing proper education and the risks associated with prolonged catheter insertion would help the patient obtain a better understanding and be able to advocate for themselves as well. Nurses and nurse aids are the main targeted audience because they will be the ones who are who insert the foley catheter and need to understand the appropriate technique and monitor the patient for any signs of infection as a result.

**Resources used to develop the Teaching Tool**

Using the Institute of Medicine Competencies and the QSEN goals will help with the development of the core curriculum for the healthcare stakeholders (AHRQ, 2016). The core curriculum of the course will comprise of the following key aspects:

* Patient Outcomes and Patient Centered Care
* Principle of Patient Safety
* Teamwork and Collaboration
* Evidence-Based Practice

The proposition of a pilot teaching plan in a designated area will be used to determine the efficiency of the education. This will be done to ensure that the staff retains the information and that the use of additional education has a positive impact on patient safety and reduces the number of CAUTI in the hospital setting.

There will be designated people who will roll out the curriculum to all the hospitals that have a rise in CAUTI infections in multiple states that will be chosen. There will be a timetable completed that sets a goal as to when the current healthcare workers will need to be educated by. All of the new hires will have to sit through this teaching plan and demonstrate the skills necessary to pass the course. If the staff does not pass the course, they will not be allowed to insert catheters until successful completion of the course. Another group of important individuals during the implementation of the teaching project will be facilitators who have undertaken increased training with regard to skill development and the appropriate information to teach in regards to catheter care. These individuals should not only be highly competent in patient safety, but also be good mentors and aim to improve the quality of the curriculum (AHRQ,2016).

The teaching plan will be offered to all current healthcare professionals in the form of short two hour courses over the course of two to three days. These courses will be held at various times of the year. The new employees will complete this course through orientation that will cover them from having to sit through an additional two-hour course. Another resource that can be adopted during implementation of the teaching plan is the integration of comprehensive unit-based safety program (CUSP).

***Comprehensive Unit-based Safety Program***

 The integration of CUSP focuses on the collaboration of different healthcare professionals. This includes: nurses, nurse aids, physicians, nurse practitioners, and any other healthcare professional that is directly involved in patient care. Working together is one way that patient safety issues can be improved. Ensuring collaboration with those involved in the care of the patients allows everyone to be knowledgeable about what is going on with the patient and what may be best for the patient. It allows for each person to advocate for the patient as well. This is important when examining the need for an indwelling catheter as well. Along with a checklist, it is important that each member of the healthcare team is aware of the catheter in place and examine the need for one as well.

 This program promotes education of healthcare professionals on patient safety through training. It allows staff members to appreciate the importance of safety and learn the reasoning as to why it is so important to provide appropriate catheter care for every individual (Swope, 2014). Adoption of such a program in a health facility would promote the development of a teamwork culture and a place where team members are more aware of their actions and the consequences of becoming lax on those actions as well. Also, it would develop a culture of teamwork and collaboration with physicians regarding the need for a catheter. It is through teamwork that safety concerns with a patient can be easily identified and interventions made for better quality healthcare for each patient (Swope, 2014).

**Importance of the Tool with Assessing Learners**

 The use of the integrated safety curriculum as a tool towards the improvement of patient safety and decrease of infection rates is beneficial to evaluate the effectiveness in regards to the learners in many ways. First, it is possible to assess the learning outcomes of the teaching plan process when a small core team is involved during the beginning stages of the teaching project. At this point, the facilitators of the project can be identified and supported with additional information if necessary.

 The plan advocates for healthcare professionals to work as a team to contribute to patients’ safety due to proper technique as well as a knowledge basis as to why it is necessary to use proper technique as well. Health professionals should not only be trained as to the hands-on skill, but also need to understand the reason as to why. Explaining to the students why something is important gives them a reason to do it correctly. The teaching plan also incorporates the importance of collaboration with physicians and how to adequately communicate about a potential issue or need for the patient.

**Goal of the Teaching Plan**

The goals of the teaching plan will be to disseminate information on sterile technique, insertion, removal, and when to remove catheters to improve patient outcomes. The education is already existing, so it will be re-educating majority of the healthcare professionals on the proper technique and indications for removal. There will be a checklist given that provides steps as to when the catheter should be removed (Lo, et al, 2014). Staff will need to be able to demonstrate how and when to use the checklist. Healthcare workers on completion of this particular training course are expected to be more mindful about the necessity of a catheter and the use of appropriate technique by not only looking at the risk for complications or infection, but also looking at the bigger picture associated with CAUTI and hospital length of stays attributed to HAI.

Through the dissemination of education across all of the healthcare professionals, there will be a significant boost to improvement of the quality of healthcare provided to the patient in the hospital setting. Increased infections related to urinary catheters could be traced back to the failure of the health professionals following the best practices for their own patients.

The teaching plan also aims to enlighten each and every healthcare professional that is directly involved in patient care regarding proper safety procedures for improved quality health care (AHRQ, 2016). Patients are also targeted in the project to ensure that they are aware of the risks and complications associated with the prolonged usage of a foley catheter. For instance, many times, patients feel the need to want to leave in a catheter because it is easier to use that than have to get up to go to the bathroom. Education to each one of the patients will help go a long way for advocating as a means of improving patient safety (AHRQ, 2016).

Each of the goals for the teaching plan will be measured by the clinical staff passing the examination and skills portion, as well as a decrease in CAUTI rates in the hospital setting. The goals of the teaching plan enhance the way in which healthcare professionals deliver care to the patient in regards to patient safety (Dolansky & Moore, 2013). Upon completion of this course, healthcare workers need to be more mindful and maintain sterile technique when inserting catheters. Also, they should be mindful of how long a catheter has been in place too.

**Overall Learner Centered Goals**

 The overall goal of the learning activity is to generate a change in attitude within the hospital with regards to risk of infection and safety for each and every patient. All healthcare professionals should focus on the improvement of healthcare services to ensure that the patient’s safety is not put at risk (AHRQ, 2016). The purpose of the teaching plan is to show and demonstrate the importance of proper sterile technique with foley insertion. This applies to both indwelling and in/out catheters. With the use of the teaching plan, it is my hopes that students understand the necessity of sterile technique is when examining patient safety and the patient’s risk for infection.

 Another goal for the learning activity is to develop a change of attitude for the length of time that an indwelling catheter is left in place. This teaching plan includes physicians for this specific reason. The use of the checklist to determine the need for an indwelling catheter will be very useful in the prevention of CAUTI in the hospital inpatient setting. Having the patients educated will help them to advocate for removal as well when they see fit.

**Learning Objectives**

 There are four total learning objectives that are expected of the healthcare staff upon finishing the course. These learning objectives are student-centered and focus on the overall learning outcomes for the students. These learning objectives include:

1. The clinical staff will determine and verbalize when a patient needs a urinary catheter removed or inserted.
2. Staff will demonstrate and/or verbalize how to properly remove a urinary catheter.
3. The staff will evaluate and quantify the potential risks, complications, and contraindications that could undermine patient safety.
4. To be confident and competent in the proper steps when inserting a urinary catheter.

**Conclusion**

 In conclusion, patient safety is one of the most important principles in the healthcare field. It is important for all healthcare professionals to be aware of potential risks, implications, , as well as contraindications related to patient care. The teaching program focuses on patient safety by providing adequate education regarding catheter management and care. Although there is a baseline knowledge of catheter care taught through school, it is important to re-educate all staff at the expense of the patient. The teaching plan helps to bridge the knowledge gap for all healthcare professionals that are directly involved in the care of each patient and contributes to patient safety on a day to day basis.

References:

AHRQ. (2016). *Teamwork Training*. Retrieved from Agency for Healthcare Research and Quality (AHRQ): <https://psnet.ahrq.gov/primers/primer/8>

Aljohi, A., Hassan, H., & Gupta, R. (2016). The efficacy of noble metal alloy urinary catheters

in reducing catheter-associated urinary tract infection.*Urology Annals, 8*(4)

doi:http://dx.doi.org.southuniversity.libproxy.edmc.edu/10.4103/0974-7796.192099

Dolansky, M. A., & Moore, S. M. (2013). Quality and safety education for nurses (QSEN): The Key is Systems Thinking. *OJIN: The Online Journal of Issues in Nursing*, *18*(3).

Grunebaum, A., Chervenak, F., & Skupski, D. (2011). Effect of a comprehensive obstetric patient safety program on compensation payments and sentinel events. *American journal of obstetrics and gynecology*, *204*(2), 97-105.

Kennedy E.H., Greene M.T., Saint S. (2013). Estimating the cost of catheter-associated urinary

tract infection. *Journal of Hospital Medicine.* 8:519–522.

Mitchell PH. (2008). *Patient Safety and Quality: An Evidence-Based Handbook for Nurses.*

Rockville (MD): Agency for Healthcare Research and Quality (US); Chapter 1. Retrieved from: <https://www.ncbi.nlm.nih.gov/books/NBK2681/>

Swope, L. K. (2014). Hospital Wide Results of Catheter Associated Urinary Tract Infection with

Multiple Comprehensive Unit-based Safety Programs. *American Journal of Infection Control,42*(6). doi:10.1016/j.ajic.2014.03.284

The Joint Commission. (2017). Retrieved from

https://www.jointcommission.org/benefits\_of\_joint\_commission\_accreditation/

**Appendix A: Learner Assessment Questionnaire**

**Learning Preferences**

1. Do you prefer a group-oriented approach or a more one on one approach to learning?
2. What is the length of class time that is needed to teach this course?
3. Which day would work the best for the training activity?
4. What challenges did you face during the learning process?
5. Do you feel that the hands-on training sessions were helpful?
6. What would be the most convenient time for the course?
7. Do you have a preference on being trained by a male or female trainer?
8. What is your opinion on the use of video-clips versus hands-on learning?
9. What are your views on being in class with fellow co-workers who are either your senior or junior?
10. Would you suggest a certain location for the course to take place?

**Learning Needs**

1. What method of training do you prefer?
2. How long have you been currently working directly in patient care?
3. Do you possess any prior education in regards to the course?
4. Which department do you work in at your healthcare facility?
5. What kind of learning technology are you familiar with?
6. What areas would you like to cover during the course of the program?
7. Have you attended another course related to the patient safety with catheters?
8. Do you prefer auditory, visual, or hands-on learning strategies?
9. Do you have a personal computer at home that can be used related to learning purposes?
10. How much would you be willing to pay for the course?

**Learner Demographics**

1. How old are you?
2. What is your gender?
3. Are you currently employed?
4. Where are you working?
5. How much is your annual income?
6. What is the highest education level you have obtained?
7. Do you have any certifications?
8. Where were you born?
9. What is your marital status?
10. If comfortable, specify your ethnic background.