PICOT Question Or Clinical Question

Posted on September 30, 2019

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It is a collective practice to insert indwelling urinary catheters in patients to keep the urinary bladder of the patients empty during their stay in the hospitals in the course of pre- and post-operation stays and other treatment procedures. The patients are likely to get urinary tract-related catheter-associated infections despite the fact that this collective practice is carried out with the purpose of facilitating both the patients and the nursing staff. This assignment is an attempt to find the answer to the question of whether catheterization is essentially necessary for the patients or if any other alternative procedure or treatment plan can be adopted in this regard, such as the use of alcohol-based sanitizers. It uses an article based on quantitative research in this regard. Moreover, this assignment addresses the context of nurses in connection with their services towards the patients, what these nurses can do to improve the existing clinical facilities, and how they can help to keep their patients safe and healthy. In the end, this assignment points out where researchers and practitioners can go from this point in the discussion.

PICOT question or clinical question helps to integrate clinical practices with evidence. It has five components: P: population of the patients under observation; I: interventions of interest which indicate the purpose of the research; C: comparison intervention to compare the before and after results; O: outcome of the research and T: which is the timeframe of the intervention (Echevarria & Walker, 2014). The development of the PICOT question is done based on the roles and preferences of patients. Such questions integrate more evidence-based practices in this profession. They deal with everyday nursing practices to investigate various areas for further improvements.

The Problem

Improving the safety of hospitalized patients has been the focus for preventing healthcare-associated infections (Burke, 2003; Gerberding, 2002; Saint et al., 2010). In 2008, the Centers for Medicare and Medicaid Services decided not to reimburse hospitals for additional costs of care that occurred due to healthcare-associated infections in the patients during their stay in the hospitals in the course of pre- and post-operation stays and other treatment procedures (Pronovost et al., 2008; Saint et al., 2009). The catheter-associated urinary tract infection has been added to the list of non-reimbursing additional costs because it is believed to be ‘reasonably preventable’ (Medicare Program, 2007). The policy of the center is supported by the multi-model prevention strategies and evidence-based practices that hospitals and other medical facilities can take to reduce catheter-associated urinary tract infections (Saint et al., 2005). Seeing these changes in the system, the hospitals have been

working towards improving the hand hygiene of the nurses to prevent infections. In 2005, hospitals did not have a dominant strategy in this regard (Klevens et al., 2006). The data showed that the occurrence ratio of three of the five most common healthcare-associated infections had been reduced in hospitals and medical facilities since 2005 due to the use of various practices (Krein et al., 2012). The infections include ventilator-associated pneumonia, central line-associated bloodstream infections, and catheter-associated urinary tract infections.

The Clinical Question

A reduction in the risk of infections in patients with indwelling urinary catheters during prolonged hospital stays throughout the years of nursing by using alcohol-based sanitizers by nurses has been proven by evidence-based research studies in the past (Prado, 2016). A background question has been formulated based on the evidence shown by the past literature that alcohol-based sanitizers are a better option for decreasing the risk of CAUTI (catheter-associated urinary tract infection). However, for fully formatting a PICOT question, a more formal and specific research question has to be researched. Research on this area identifies how the use of alcohol-based hand sanitizers decreases the risk of infection in patients with indwelling urinary catheters, as well as how the location and placement of the alcohol-based hand sanitizers improve this situation.

In 2012, Macedo et al. provided an evidence-based research study to evaluate hand hygiene practices through the use of a nurse call system. Approved by the Albert Einstein Hospital's Ethics Committee, this article identified six nursing authors who had worked on the domain of the use and relevance of hand sanitizers in nursing practices. The problem stated that the risk of cross-transmission could be decreased by improving the compliance of hand hygiene by the healthcare staff. There is no study framework in this study because it is not a randomized control trial; it is a quasi-experimental study. An electronic hand wash counter was installed in the rooms of the patients to monitor the amount of hand sanitizer used by the nurses for hand hygiene. However, history might have intervened in the experiment because the hospital had other measures for preventing infections (Macedo et al., 2012).

The nurse call system was used for measuring nurse visits to each patient (Macedo et al., 2012). The data collection was performed with active surveillance. The external threat to validity might have occurred due to the Hawthorne effect, which means that the participants might have responded in a certain manner because they were aware of being observed (Macedo et al., 2012). A decreased trend in the rate of device-related infections was stated by the results of the study (Macedo et al., 2012). The study suggested that active surveillance might have caused the Hawthorne effect and, thus, might have acted as a limitation to the scope of the study (Macedo et al., 2012). Moreover, reducing the timeframe of the research from two years to one year could have helped eliminate maturity as an internal threat to validity (Macedo et al., 2012). Additionally, more research must be carried out in the future to address these gaps. Based on this article and the indicated shortcomings, the PICOT question from the research is: *In patients with indwelling urinary catheters, does the use of alcohol-based sanitizers decrease the risk of catheter-associated urinary tract infection, and how does the*

placement of alcohol-based sanitizers near the entrance impact this scenario?

The PICOT question is based on the following five components (Echevarria & Walker, 2014):

Population	Interventions of Interest	Comparison Intervention	Outcome	Time
Any patient involved with the nursing staff	Improving hand-hygiene compliance	Placement of alcohol-based hand sanitizers near entrances in comparison to other places	Reduction of the risk of catheter-associated urinary tract infection in patients with indwelling urinary catheters during prolonged hospital stays.	Varies from patient to patient and can take from two months to two years

Nursing staff should know about the importance and relevance of safety and quality in the health work field. Bedside care is an essential part of the nursing profession. It adds the responsibility of taking safety precautions to keep the patients free from infection. Therefore, nurses must ensure that they are following the correct policies that support evidence-based practice. Such evidence has been shown through the chosen research study of Macedo et al. (2012), which indicates that the use and placement of alcohol-based sanitizers increase compliance in the nursing staff. Thus, the location and accessibility of the anti-bacterial sanitizers can improve the quality of patient care.

References

Burke JP. Patient safety: infection control – a problem for patient safety. N Engl J Med. 2003;348:651–6

Echevarria, I. M., & Walker, S. (2014). To make your case, start with a PICOT question. *Nursing 2014, 44(2),* 18-19. Available at: https://europepmc.org/abstract/MED/24430384 (Accessed: 13th April 2018).

Gerberding JL. Hospital-onset infections: a patient safety issue. Ann Int Med. 2002;137:665–70

Klevens RM, Edwards JR, Andrus ML, Peterson KD, Dudeck MA, Horan TC. Dialysis Surveillance Report: National Healthcare Safety Network (NHSN)-data summary for 2006. Semin Dial. 2008;21:24–8

Krein SL, Kowalski CP, Hofer TP, Saint S. Preventing hospital-acquired infections: A national survey of practices reported by U.S. hospitals in 2005 and 2009. J Gen Intern Med. 2012;27(7):773–79

Macedo, R., Oliveira Jacob, E., da Silva, V., Santana, E., de Sauza, A., Gonclaves, P., & Edmond, M. B.,

(2012). Positive Deviance: Using a nurse call system to evaluate hand hygiene practices. American Journal of Infection Control, 40(10), 946-950. Doi: 10.1016/j.ajic.2011.11.015

Medicare program; changes to the hospital inpatient prospective payment systems and fiscal year 2008 rates. Fed Regist. 2007;72:47129–8175

Prado, A. B. (2016). Improving Compliance in the Use of Catheter Kit Supplied Hand Sanitizer Prior to the Insertion of an Indwelling Urinary Catheter. Available at: https://repository.usfca.edu/cgi/viewcontent.cgi?referer=https://www.google.com.pk/&httpsredir=1&article=1402&context=capstone (Accessed: 12th April 2018).

Pronovost PJ, Goeschel CA, Wachter RM. The wisdom and justice of not paying for “preventable complications. JAMA. 2008;299:2197–9

Saint S, Howell JD, Krein SL. Implementation science: how to jump-start infection prevention. Infect Control Hosp Epidemiol. 2010;31 (Suppl 1):S14–7

Saint S, Meddings JA, Calfee DP, Kowalski CP, Krein SL. Catheter-associated urinary tract infection and the Medicare rules change. Ann Int Med. 2009;150:877–85