
A Pico Research Study

Background of the study

Catheter-Associated Urinary Tract Infections (CAUTIs) are still among the top healthcare infections caused by prolonged hospital stays. A study conducted in the US noted that concern in the increasing CAUTI infections is a patient's prolonged use of a catheter for urinary function. To reduce such kinds of infections, the best alternative that can be used is reducing the use of indwelling catheters at all costs.

The Nursing Practice Issue

Two articles (Sursyakova & Safyanova, 2018 and Collins et al. 2019) are significant in answering the Pico question. The Patient (P) in this instance is the person infected with CAUTI. The Intervention (I) is any type of Intervention that the study will find compelling. A comparison of the two studies in terms of the interventions applied then forms the C. The O represents the outcome that is pursued in reducing these types of infections among the US population. The two studies will prove helpful in answering the Pico question and give a favorable outcome that will be instrumental in reducing the high rates of UTIs among the population being surveyed.

These two studies conducted a survey and undertook a research process that sampled 100 UTI patients, including those who have gone through catheterization. The results analysis shows that the period under which these patients underwent catheterization was crucial as it had a noticeable impact on the development and advancement of the UTI. During the evaluation exercise, the studies exhibited that the microbes leading to the development of the UTI originated from contamination of the catheters before their administration by the

healthcare professionals in charge. It further became apparent that this particular microbe had developed a soap resistance. It contained the antibacterial effect, 'Tabernacle.' As such, the two studies suggested that the best Intervention would be the hospital staff regularly replacing the liquid soap they were using before the process of catheterization (Sursyakova & Safyanova, 2018 and Collins et al. 2019).

Study Method

Both studies utilized evidence-based approaches. This approach assists in the delivery and provision of quality and cost-effective care. Its drawbacks include the omission of common sense and the struggle attributed to attaining binding evidence. The two articles used the secondary data analysis process, and through this research technique, they analyzed the data collected by other parties. The drawback attributed to this form of data analysis is that secondary data may fail to provide solutions to researchers, particularly on the intended problem of the study (Sursyakova & Safyanova, 2018 and Collins et al. 2019).

Study Results

Upon implementing the evidence-based approaches, the two articles concluded that the microbes that caused CAUTI resulted from catheter contaminations before the catheterization process. It was, therefore, necessary that healthcare professionals replace the liquid soap used in washing their hands often to prevent the microbes from developing resistance to it.

Expected Outcome

P: UTI Infected patient

I: Intervention (A reduction in the time catheters, particularly indwelling ones, were being kept on a patient)

C: Comparing the effects of regularly changing the liquid soap used in handwashing for those administering catheters within the hospitals.

O: The outcome which translates to the noted reduction in catheter linked UTI's

References

- Collins, J., Ammana, H., Balabayova, K., Freg, G., Kenne, F. M., Moaddab, A., Mossayebi, E., Moussa, J., Nformi, M., Ngomba, V., & Saverimuttu, J. (2019). A multidisciplinary approach to reduce catheter-associated urinary tract infection rate at Richmond University Medical Center between 2016 and 2018. *Journal of Scientific Innovation in Medicine*, 2(2). <https://doi.org/10.29024/jsim.41>
- Sursyakova, K. I., & Safyanova, T. V. (2018). Catheter-associated urinary tract infections in patients of TSBHI “Altai territory hospital for war veterans” urological unit. *Perm Medical Journal*, 35(5), 63-69. <https://doi.org/10.17816/pmj35563-69>