CLABSI Prevention with Antimicrobial Dressings and Nurse Training Research Study

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Background

It is important to analyze the clinical and research-related problems to identify the authenticity and accuracy of the research. The study analyzed the chance of infection as higher in the patients. The microorganism causes this higher rate of infection. This infection is known as the central line-associated infection (CLAI) (Buetti et al., 2022) and depending on their effect; they can be said to be bloodstream infections. In addition to this, several problems need to be analyzed earlier to remove the gap.

Hence, the gap found in the research is that no appropriate and effective use of technology is discussed in the study to achieve optimal patient outcomes. Issues related to complication management and prevention. Moreover, no discussion has been held on the organizational barriers, and no effective training program has been run by the organization to guide nurses in treating patients profoundly. Furthermore, some research-based problems are identified, including the research's complexity and size, as no proper abstract is found and there is a lack of synthesis information.

Significance of the Study

The study is based on clinical issues; those issues have been identified as the major cause of the high rate of infection in the patients. Therefore, it is discussed in the study to evaluate the proper site for inserting central line catheters and to be aware of others regarding the effective intervention approach to prevent the infection related to preventing the central line site. The influence of antimicrobial dressing in reducing infections has also been cited in the study in order to raise awareness. This research significantly explains the healthcare role of the effect of antimicrobial dressing and prevention of antimicrobial dressing.

Purpose of the Study

The purpose of the study is to evaluate the hospital-related infection how much such infections are harmful to the patients and how badly they have been impacting the patients. It is incorporated into

the study of how to cure the infection and raise awareness regarding the precautions of the infections. Hence, the study's main purpose is to analyze certain nursing issues to find the best prevention and intervention approaches.

Research Objectives

To identify the most used site for inserting central line catheters

To determine the most effective intervention approach for preventing central line site infections

To analyze the impact of antimicrobial dressing in reducing infections

To investigate the effect of using antimicrobial dressing

To identify the role played by healthcare providers in the incidence and prevention of antimicrobial dressing

Research Question

Q1) What is the most used site for inserting central line catheters?

Q2) What is the most effective intervention approach for preventing central line site infections?

Q3) What is the impact of antimicrobial dressing in reducing infections?

Q4) What is the effect of using antimicrobial dressing?

Q5) What role do healthcare providers play in the incidence and prevention of antimicrobial dressing?

Thus, it is identified that the purpose and research questions are related to the research problems.

Method of the Study

Yes, the qualitative methods are appropriate for answering the research questions because the researcher emphasises the nature of the value-laden inquiry. The study was developed to raise awareness of the need to deal with clinical issues and save patients from severe infections. Moreover, an author is incorporated with the citation of quantitative and qualitative studies relevant to the study. In addition to this, an author should include some oral literature in the study. In this study, the in-text citations and references are focused on the years 2014 to 2016, and all of the research studies are empirically relevant to the study. Moreover, in the reference section, the proper evaluation and indication of the weaknesses of the research studies have been done to work on the identified gap and elaborate on the significance of the study. Furthermore, the literature reviews include adequate

information to build a logical argument and identify the researcher's thoughts from the empirical studies. In this way, it would be easier to determine the study's findings. Hence, no developed framework is found in the study by ground theory.

Result of Study

Findings

The study found that antimicrobial dressing is not considered the site for protection against central line insertion. Instead, combining various techniques can prevent bacteria from entering the body. The use of antimicrobial dressings to reduce CRBSI by reducing colonization is effective. Moreover, central venous catheters secure access in neonates. Moreover, it was found in the study that those patients who stayed for a long period in the hospital may suffer from care costs. It is found that both antimicrobial dressing and Tegaderm are effective in managing infections. Also, it was found that it is one of the best preventive measures against infections. Hence, the use of Tegaderm is found to be more effective than conventional approaches (Centers for Disease Control and Prevention [CDC], 2024).

Implications

Nursing implications are defined as the nursing-related consequences of diseases, such as the nursing implications of administrating blood pressure and providing antibacterial dressings.

Contributions

The findings of the study contribute to the knowledge of nurses. It administers them to acquire new terminologies and techniques to provide antibacterial dressing to the patients.

Ethical Consideration

- It takes a couple of months to approve the study by an Institutional Review Board.
- The purpose, risk, methods, and alternatives to the research have been informed accurately.
- Participation decisions have made voluntary
- The patient and staff privacy is being protected

Conclusion

(National Commission for the Protection of Human Subjects of Biomedical and Behavioral Research, 1979).

It is found in the research study that Antimicrobial dressing is not considered as the ensuring site central line insertion. Rather, the mix of different methods can forestall microscopic organisms to go into the body. The use of antimicrobial dressings to decrease CRBSI by diminishing colonization is compelling. Also, central line catheters secure access in neonates. Besides, it is found in the research study that patients who have remained in the doctor's facility for a long time may experience the effects of care costs. It has been discovered that both antimicrobial dressing and Tegaderm are powerful in overseeing diseases. Likewise, it has been discovered that there are outstanding preventive measures against contamination. Subsequently, the utilization of Tegaderm has been discovered to be more powerful than ordinary methodologies. These propelled systems additionally had the upside of diminishing medicinal costs for the patients and the length of time they would remain at the healing facility. As indicated by the diverse articles assessed in this audit, it was presumed that in addition to the fact that it was basic to execute propelled innovation in diminishing these contaminations. It is concluded that nurses are also required to undergo appropriate training and the implementation of new techniques (Buetti et al., 2022).

References

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