

**(CLABSI Reduction in NICU by Using Best Practice Care to Reduce Infection): Quality
Improvement**

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Quality improvement aims to continuously advance the excellence of care and improve outcomes of patient health, patient safety, and healthcare services through data analysis (Houser, 2023). Knowledge, skill, and attitude are factors linked to data collected to determine changes to improve care quality (QSEN institute, 2020, Table 4). Knowledge from data analysis relates to the quality of care by recognizing issues that require addressing for patient care to improve. Skills measured patient care improvement through charts, diagrams, information on current care, and analysis of implemented changes (QSEN Institute, 2020, Table 4). Attitude relates to quality improvement by understanding the value of improving patient care as it relates to the outcome of the health and safety of the patient (QSEN Institute, 2020, Table 4). The quality improvement of the implementation of best practice care in the healthcare setting helps to reduce the spread of infection. The significance of using best practices to reduce the spread of infection is that it lessens patient complications and financial burdens and improves patient satisfaction of care.

Article Summary

Introduction (note that the key points is flush to the far left)

Quality improvement of central line management in the neonatal intensive care unit (NICU) by discovery and implementation of best practices resulted in a reduction of central line-associated bloodstream infections (CLABSI) (Bierlaire et al., 2020). The research aimed to reduce the prevalence of CLABSIs in the NICU and improve morbidity and mortality of

deficient birth weight neonates and neonates with severe conditions requiring a central line (Bierlaire et al., 2020). Researchers improved care and prevented infection with advanced central line management by requiring sterile gloves for medication administration, good hand hygiene, sterile dressing care, catheter removal, a checklist of care tasks, and a specialized team (Bierlaire et al., 2020).

Overview

Researchers identified that improving hand hygiene/sterility, catheter materials, and efficiency reduced the spread of infection (CLABSI), resulting in quality improvement in mortality and morbidity of the clients (Bierlaire et al., 2020). Knowledge of the differences in central line management among various practices identified the issues causing an increased spread of infection (Bierlaire et al., 2020). The articles skills use comparison charts and analyzing various practices helped identify the specific techniques of central line management to improve (QSEN institute, 2020, Table 4). After applying improved central line management, education, and skills checklists, quantitative data analysis determined the reduced prevalence of CABSIs (Bierlaire et al., 2020). The article's attitude references the value of quality improvement in NICUs by preventing CLABSIs and prolonging the health and longevity of neonates (QSEN institute, 2020, Table 4).

Quality Improvement

Implementing hand hygiene, safer sterile catheter equipment, task checklists, and specialized teams are valuable to healthcare (Bierlaire et al., 2020). The tasks, equipment, and protocols implemented in the research article can impact more clients and health care services in settings such as medical-surgical floors or long-term care facilities in future research. Pre-implementation

resources would include research to be done first to verify that the same protocols are beneficial to a different population with central line management. The proper committees must approve the changes to hospital protocols, and healthcare staff will need training. Intra-implementation resources would include specialized nurses or educators in central line care must be added to the staff to maintain quality and verify correct protocol (Bierlaire et al., 2020). A system to incorporate the checklist of equipment and tasks of central lines for nursing documentation helps analyze those appropriate measures. Post-implementation, hospitals, and researchers will review data every six months to verify the continuation of quality. Researchers must stay updated with new information to continue the reduction of infection in the healthcare setting progressively.

Improving the management of central lines to reduce infection will come at a cost from hiring specialized staff, training nurses, and updating catheter equipment. Client satisfaction will improve with more minor health complications due to infection. The nursing satisfaction with new protocols and training comes with push-back or non-compliance (Bierlaire et al., 2020). Nurses need continued education to help stay relevant to current patient care, and the improved central line management is a reminder to adapt and improve the clients' health and safety. Patient safety is enhanced by incorporating advanced equipment and educating staff on procedures to prevent infection. Nursing safety improved by reducing cases of hospital-acquired infection from unsatisfactory central line care. Although implementing a safer protocol costs time and money, the payout of the reduced prevalence of infection and improved client outcomes are more valuable.

Application to Nursing

Here add in a summary of the information learned to the application to practice. Follow the MEAL paragraph formatting and use Grammarly.com. Be sure to cover all aspects within the rubric. Be sure to use double space and to tab over for your first line of a new paragraph.

Practice

Paragraph goes here discussing the application to practice. Review the rubric for full requirements. Follow the MEAL paragraph formatting and use Grammarly.com.

Education

Paragraph goes here discussing the application to education. Review the rubric for full requirements. Follow the MEAL paragraph formatting and use Grammarly.com.

Research

Paragraph goes here discussing the application of research. Review the rubric for full requirements. Follow the MEAL paragraph formatting and use Grammarly.com.

Conclusion

Write a conclusion here in your overall paper. Review the rubric for full requirements. Follow the MEAL paragraph formatting and use Grammarly.com.

References

Bierlaire, S., Danhaive, O., Carkeek, K., & Piersigilli, F. (2021). How to minimize central line-associated bloodstream infections in a neonatal intensive care unit: A quality improvement intervention based on a retrospective analysis and the adoption of an evidence-based bundle. *European Journal of Pediatrics*, 180(2), 449-460.

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Houser, J. (2023). *Nursing research: Reading, using, and creating evidence* (5th ed.). Jones & Bartlett Learning.

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