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Standard Use of VALGuard to Prevent Central Line Infections

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Background

- In 2023, C9 & D9 had an increase in central line bloodstream infection's (CLABSI)
- Central line infections pose a significant risk to patients, leading to increased morbidity, mortality, and healthcare costs
- Currently, Children's Hospital lacks a policy mandating the use of protective dressings over central lines
- VALGuard, a protective dressing designed to prevent contamination of central lines, is readily available on each floor



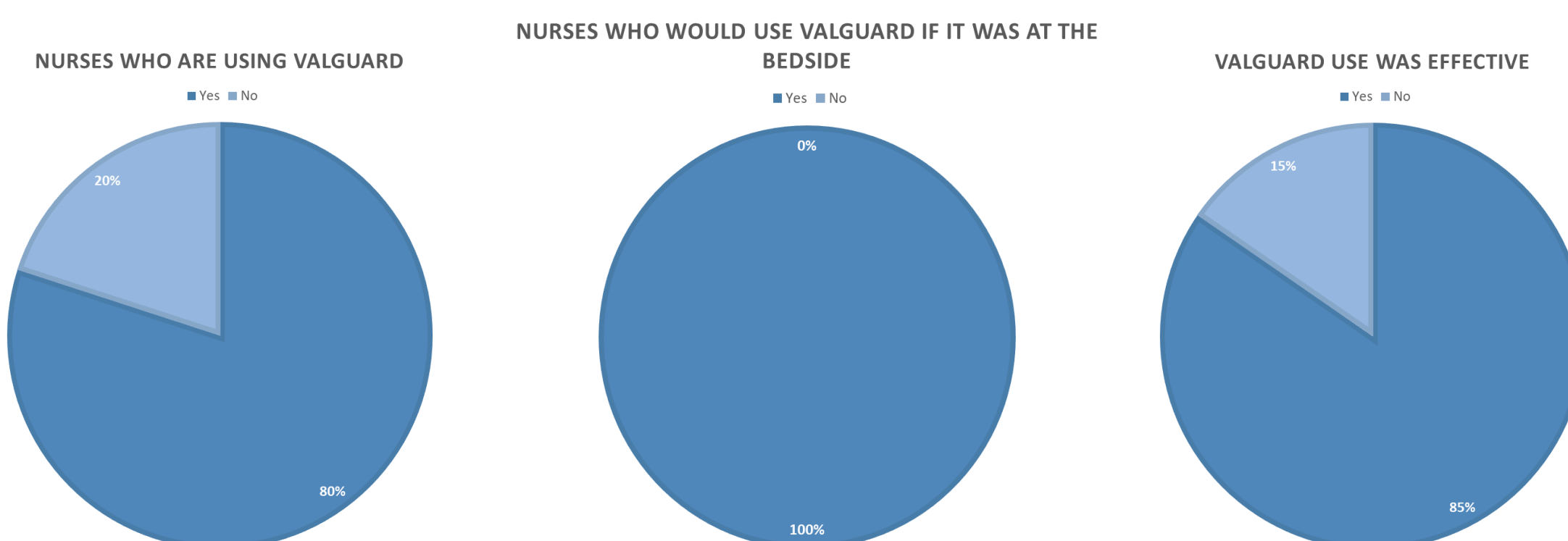
(Covalon 2024)

Literature Review

- Major risk factors for catheter-related infections include prolonged catheter placement, frequent catheter manipulation, thrombogenic catheter materials, catheter location, and the use of occlusive transparent plastic dressings (Darouiche et al., 1999)
- Proper maintenance and care of a CVAD fall within nursing practice, and implementing interventions can significantly decrease the patient's risk of central line-associated bloodstream infection (Jarding et al., 2021)
- Implementing a transparent, semipermeable dressing to cover the insertion site can reduce the patient's risk of central line-associated bloodstream infection (Jenks et al., 2016)

PICO Statement

The purpose of this evidence-based project is to implement and evaluate the standard use of the VALGuard dressing for pediatric patients with central lines to reduce the risk of central line infections



Let's Work Together to Reduce the Risk of CLABSI!



Methodology

- ITU & pulmonary nurses were audited and asked if VALGuards were in place with patients under their care with central lines
- D9 and C9 nurses were surveyed on their personal opinions of the overall effectiveness of VALGuards.
- CLABSI rates were monitored while the audits were performed over time for D9 and C9
- Patients with central lines who are at risk for contamination were monitored while VALGuards were in place

Outcomes

- 80% of nurses on D9 and C9 currently use VALGuards regularly
- 100% of the nurses said they would use a VALGuard if it was provided at the bedside
- VALGuards were effective in preventing central line infections 85% of the time
- VALGuards were effective in preventing external contamination 100% of the time when in place

Practice Recommendations

- If a central line is present, adhere to the standard of using a VALGuard to prevent external contamination
- Incorporate the VALGuard into standard practice by including the protective dressing in the Central Line Cap Change Kit
- If a Central Line is present, have the VALGuard stocked at bedside to promote use
- Encourage health care workers to practice a new standard of patient safety by keeping a VALGuard in place when a central line is accessed
- Provide education on the use and application of the VALGuard to all team members involved in direct patient care



References

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