Nurses’ Perceptions of the Care and Management of Central Lines

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Introduction:
The Joint Commission, CDC, INS, SHAE and IDSA all have guidelines on the care and maintenance of central lines focusing on similar components. The Joint Commission created a potential maintenance bundle in 2013 including the following components:
• Daily necessity
• Hand hygiene
• Dressing change
• Administration set change
• Access port sanitizing
• Health care personnel training and competency
The purpose of the comprehensive bundle is to decrease or eliminate Central Line Associated Bloodstream Infections (CLABSIs).

Purpose:
The purpose of this study was to understand nurses’ knowledge pertaining to the care and management of central lines.

Methods:
A quantitative descriptive design was used utilizing a 19 item data collection tool. The participants were 98 RNs employed in acute care, critical care and intravenous therapy departments at a 319 bed tertiary care, non-profit medical center.

Results:
A majority of the nurses were knowledgeable with the following maintenance bundle components:
• Labeling of lines for change out at 24 or 96 hours (100%)
• Hand hygiene (97.7%)
• Timely removal of lines (85.9%)
• Chlorhexidine bathing while line is in place (84.1%)
• Needleless connector change out (71.4%)
The nurses were not as knowledgeable with the following maintenance bundle components:
• Alcohol impregnated caps (53.5%)
• Dressing changes (29.4%)
A majority of the nurses indicated they received orientation as a new hire and ongoing education/training. (73%)

Conclusion:
The study found a gap in the nurses’ knowledge and recommend tailoring education/training to address this. It is critical that nurses follow and understand evidence-based practice guidelines pertaining to central line care and maintenance. Ongoing education, training, and evaluation of the effectiveness of the training is imperative.

References: (available upon request)