Patient CLABSI Prevention Education Among In-Patient Hemodialysis Patients

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Purpose/Objectives: Patient awareness of CLABSI risks and manifestations is a key element in the chain of central venous catheter (CVC) care to promote patient involvement and engagement in prevention of CLABSIs. Hemodialysis patients with CVCs need to be empowered with appropriate CLABSI prevention education and must play an active role in their self-care with support from hemodialysis nurses. The main objective of the patient education intervention is to assess the patient's knowledge, understanding and awareness of hemodialysis CVC.

Design: Pre and post questionnaire with patient education intervention

Setting: The study was performed in a 500-bed teaching hospital in Southern California.

Sample: Eight in-patient hemodialysis patients with CVCs receiving hemodialysis (HD) treatments during their hospital admission, randomly selected for a bedside 1:1 hemodialysis nurse patient education intervention. These patients were either acute kidney injury or chronic end-stage renal disease (ESRD) patients.

Methods: Hemodialysis patients who were alert and oriented were selected to have an interactive 1:1 nurse-patient bedside 10-minute education session. Education included the purpose of the CVC, importance of handwashing, appropriate use of face mask and patient head position during dressing change, signs and symptoms of infection, and basic parts of the CVC. Efforts were made to deliver simple language.

Results: Findings identified that employing visual and tactile educational techniques were effective in CLABSI patient education. Not only cognitive and kinesthetic learning was emphasized, but also the patient educator was able to tap into the patient's affective learning domain. Influencing the affective domain is one of the most complex and difficult teaching-learning aspects.

Conclusions: The simulated use of a CVC attached to a 1:1 scale anatomic heart model was effective in eliciting patient interest in the interactive session.

Implications: Hemodialysis nurses have the opportunity to employ interactive patient education techniques to educate patients during HD treatments which lasts 3 to 4 hours bedside. Retention of knowledge is more effective since there is reinforcement as exemplified in Albert Bandura's Self-Efficacy Theory that suggests that self-efficacy is a major determinant of engagement in self-care behavior.

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