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Educational Program for RNs Related to the Use and Function Mechanical Prophylaxis in VTE Prevention

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Venous thromboembolism events (VTE) are one of nine hospital-acquired events monitored by organizations, such as The Joint Commission, that are considered preventable when the proper safeguards are in place. Practice recommendations by the National Institute for Health and Care Excellence and The American College of Chest Physicians include adhering to pharmacological and nonpharmacological therapy for at risk patients. In patients with contraindications to pharmacological prophylaxis, mechanical therapy provides adequate protection against VTE when used correctly. Registered nurses within the acute care setting are key players in ensuring that mechanical therapy is implemented and maintained at the bedside. The purpose of this quality improvement project was to assess nurse understanding on the use and function of mechanical prophylaxis. The project included a pretest, educational program, and posttest design on a surgical unit at Rhode Island Hospital. The Logic Model Framework guided the quality improvement project. Twenty-one nurses completed the pretest (66%) and 21 attended the educational sessions and completed the posttest (66%). Pretest scores ranged from 2.4 to 4.2 out of a possible 5 points for each question, with a mean response rate of 3.6. In comparison, posttest scores ranged from 3.5 to 4.6, with a mean response rate of 4.3. The average posttest response rate increased by 0.7 points. Seventeen nurses completed a program evaluation (n=17; 60%). Three themes were derived after analysis of open ended responses by nurses from the program evaluation. The themes that emerged included; 1) educating patients on the importance of mechanical prophylaxis and advocating its use, 2) knowledge of the A-V foot pump as an alternative compression device, and 3) defining immobility and adequate timing for mechanical prophylaxis. Overall, the findings supported increased understanding on the use and function of mechanical prophylaxis by nurses after attending the educational program. Further research is needed to determine if incorporating this educational program in new hire orientation or developing a formal nursing policy on mechanical prophylaxis would increase nurse and patient compliance.

Title:

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Keywords:

Mechanical Prophylaxis, Nurse Education and Nurse Role

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Abstract Summary:

This quality improvement project aimed to educate registered nurses on the importance of mechanical prophylaxis in high-risk patients. Content included: nursing knowledge of mechanical therapy; discussion of alternative SCD devices and contraindications to using; proper sizing; required patient care and education; nurse documentation of device usage; and parameters for discontinuation.

Content Outline:

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Statement of the Problem
Review of Key Literature
Theoretical Framework
Methods
Results
Summary and Conclusions
Implications for Advanced Practice

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Author Summary: Mollie Garrison is currently an MSN student at Rhode Island College (RIC) and is working toward her ACNP degree. She has worked 8 years within cardiothoracic surgery at Rhode Island Hospital and her experience with post-surgical care has influenced her project. Her major paper is geared toward providing education to RNs on the importance of mechanical therapy in VTE prevention in the post-operative patient. This education was completed in partial fulfillment for her MSN degree.