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“IMPROVING VENOUS THROMBOEMBOLISM PROPHYLAXIS KNOWLEDGE AMONG REGISTERED NURSES ON A MEDICAL-SURGICAL INPATIENT UNIT IN THE MIDWEST”

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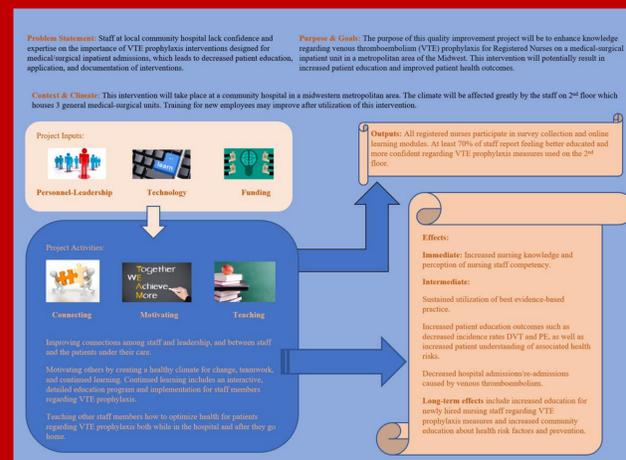
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Purpose

- The purpose of this quality improvement project was to enhance education regarding venous thromboembolism prophylaxis for registered nurses on a medical-surgical inpatient unit at a hospital in the Midwest.
- An educational focus should result in a better nursing workforce and improvement in the nursing staff members' confidence and capability. With an improvement in knowledge of VTE prophylaxis, this hospital will be able to provide higher quality care, decrease adverse events due to hospital admission, and improve nursing education.
- Project Questions:
 - What is the level of knowledge of nursing staff regarding VTE prophylaxis interventions immediately prior to an educational intervention?
 - What is the level of knowledge of nursing staff regarding VTE prophylaxis interventions immediately following an educational intervention?

Background/Significance

- Healthcare costs: 7-10 billion each year
- Third most common vascular disease
- Problem even among healthy outpatients
- One nurse's perception was that staff at a local community hospital in the Midwest lacked confidence and expertise on the importance of venous thromboembolism (VTE) prophylaxis interventions designed for medical/surgical inpatient admissions. If there truly was lack of expertise, this could lead to decreased patient education, application, and documentation of interventions. These patients are at increased risk for VTE, which includes both deep vein thrombosis (DVT) and pulmonary embolism (PE), due to their decreased health and admission status.



Methods/Implementation

- Quality Improvement (QI) study
- Use purposive sampling: Medical-Surgical floor RNs
- Pretest & Posttest design
- Multiple choice questions
- Educational intervention via video
- Additional demographics survey
- Risks were minimal and fully disclosed to participants. Informed consent assumed by choosing to participate. Risks included psychological and emotional stress, eye strain and test anxiety. This study underwent IRB approval for exempt review by IRBSON, PSU, and Olathe Health QRRC.
- This was a pilot study. Content validity was ensured through panel of experts and healthcare workers with experience in the field.
- Target Population & Inclusion Criteria:
 - Approximately 50-60 RNs were invited
 - FT/PT/PRN on the medical-surgical unit
 - Day or Night shift
 - Can read and comprehend the English language
 - Are 18 years of age or older
 - *Also available to any RN in the hospital that chooses it as an “elective”

	Mean	N	Std. Deviation	Std. Error Mean
Pair 1 Pre-test Score	66.53	19	11.452	2.627
Post-test Score	94.84	19	5.640	1.294

Results & Implications

- The **null hypothesis** is that there will be no difference in the means of the pretest scores and the means of the posttest scores.
- The **alternative hypothesis** is that the mean knowledge score after participating in the VTE educational intervention will be significantly different from the mean knowledge score before participating in the VTE educational intervention.
- Limitations included:
 - Single-site study
 - Homogenous group: race
 - Only one unit
 - Less recruitment due to COVID-19
 - Limited funding and sponsorship
- Implications for Nursing Practice:
 - Educate patients and families
 - Update curriculum in nursing schools and hospital new hire orientation
 - Make more resources available within the hospital, such as in the policies manual, online training modules, and educational conferences
- The alternative hypothesis was supported by the data. The study was found to be statistically significant with an average improvement of knowledge of 28.316% shown by posttest scores of Registered Nurses.

	Mean	Std. Deviation	Paired Differences		t	df	Sig. (2-tailed)
			Std. Error Mean	95% Confidence Interval of the Difference			
Pre-test Score - Post-test Score	-28.316	12.601	2.891	-34.389 -22.242	-9.795	18	.000