

ROLE OF NURSES IN THE MANAGEMENT OF VTE


Ishaan Dhaneshwar and Krish Raina, The GTF Group

ABSTRACT

This is our effort to look closely at the significant role of a nurse in guiding patients who suffer from VTE. From patient education to various forms of risk assessment, we have studied many factors of the VTE recovery process to conclude how nurses play a crucial role and are much needed in this process. The nurses use their wide variety of skills and knowledge to ensure patients have a safe recovery. The project idea originated from Ms. Priya Lokasundaram, who is a nurse and GTF mentor and our association with Dr. Margaret Callahan, the Provost of Loyola University and a nurse by profession, is a tribute to Florence Nightingale who spearheaded the movement to make the career of nursing the most trusted out of all professions.

INTRODUCTION

- Nurses are well trained in caring for the patients
- Nurses play a very major role in the management of VTE
- Nurses have the most interactions with the patient in the hospital setting
- Nurses take on many different responsibilities whether it's diagnosing the patient, implementing interventions, and even educating the patient on VTE



Name?
Used for?
Responsibilities of Nurse?
Side effects?
Education for patient?

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VTE A MAJOR PROBLEM

- VTE is known to be a very common cause of hospital death and disability.
- Despite VTE being preventable, it is still a major issue that places a burden on resources and the medical system, delays discharges, increases readmissions, and brings about some concerning health complications.
- Thromboprophylaxis, which is one of the greatest primary prevention techniques against VTE, is often underused due to shorter hospital stays, symptoms occurring after discharge, and the significant costs. All these highlight the seriousness of VTE.

VTE DIAGNOSIS

- VTE is very challenging to diagnose
- Routine screening for VTE is not economically or clinically feasible
- Early identification of VTE is extremely important
- Interventions must be initiated quickly
- The nurse spends significant face-to-face time with patients constantly assessing the patient during each interaction
- A quick and early identification of VTE by the nurse can dramatically decrease the possibility of negative health consequences



VTE RISK ASSESSMENT

- Nurses often use Risk Assessment Models (RAM's) to create an individualized risk assessment for each patient
- The nurses will collect data on the medical history of the patient to gain an understanding of risks and individualized treatment plan
- VTE nursing assessment forms are being used by many hospitals

VTE INTERVENTIONS

- RAM's usually have specific interventions that can be implemented immediately based on a patient's risk
- Nurses are at the optimal position to quickly implement interventions based on the patient's risk assessment
- Nurses are responsible for administering and monitoring pharmacologic treatments, both oral and injectables
- Nurses are responsible for ensuring that the patient's lab work remains in therapeutic range (ex. INR estimations following warfarin)
- It is the nurse's responsibility to monitor for any adverse reaction to the medication and identify it quicker than other providers due to having more time with the patient
- Nurses also play a significant role in non-pharmacologic treatments such as encouraging early ambulation, ensuring use of Inter Pneumatic Compression devices (IPCs) while hospitalized, and education on graduated compression stockings.

VTE PATIENT EDUCATION

- It is the nurse's responsibility to ensure the patient is informed and educated throughout the process
- Nurses keep track of developing signs and symptoms and give the patient's information to the physicians on a regular basis
- Since lifestyle plays a big role in one's risk to VTE, nurses are often charged to develop a personalized health plan where they recommend lifestyle changes
- Nurses advocate for patient autonomy and provide emotional support to the patient and family because the treatment process can be very stressful and emotionally taxing
- The nurse helps the patients explore all the options they have regarding physical therapy, psychological therapy, support groups, etc.

A MAJOR ISSUE WITH NURSE IMPLEMENTATION TECHNIQUES

- A study conducted on the nurse's knowledge in regards to DVT prevention and risk factors gave a survey with questions asking how often nurses implement certain interventions
- The statements with the 3 highest percentages of nurses who replied never to implementing certain techniques were:
 - Use of graduated compression stockings
 - Educating patients to avoid injury
 - Administering anticoagulants as a preventative measure in the outpatient setting
- Nurses were not implementing these techniques due to lack of practice guidelines and knowledge on prevention techniques
- Use of RAMs and other protocols that are used in the hospital setting should be used in the outpatient setting to prevent such issues

CONCLUSIONS

- Nurses are at the frontline of thromboprophylaxis and VTE treatment and are major advocates for their patients. Nurses are essential for patient education, risk assessment processes, interventions, and diagnosis, and these are just to name a few of the ways that nurses aid patient recovery. Intervention provided by nurses can save lives through looking for signs and symptoms that cause VTE suspicion and through assessment of VTE risk on admission and throughout the hospital stay.

A TRIBUTE TO FLORENCE NIGHTINGALE

- Florence Nightingale is considered the founder of modern nursing. She spearheaded the movement to make the career of nursing the most trusted out of all professions for many years in a row. Nurses would not have played this important role in patient care without her efforts. She paved the way for all modern day nurses and upcoming nurses to be part of one of the most noble careers out there. We would like to acknowledge that this research would not be possible without the inspiration from Ms. Nightingale.



FUTURE RESEARCH

- In the future, we plan to conduct research on why the discrepancy of VTE protocols in the outpatient setting exists and determine methods to improve upon VTE thromboprophylaxis in this setting.

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REFERENCES

- Venous Thromboembolism: Scope of the problem and the nurse's role in risk assessment and prevention <https://www.sciencedirect.com/science/article/abs/pii/S1062030306000641>
- Nurses Knowledge and Practices Regarding Risk Factors and Prevention of Patients Diagnosed with Deep Vein Thrombosis <https://www.mutagens.co.in/jgb/vol.10/06/100602.pdf>