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# *STUDY OF COMPLIANCE RATE OF VENOUS THROMBOEMBOLISM (VTE) PROPHYLAXIS FORM IN IN-PATIENT DEPARTMENTS*

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## INTRODUCTION

Venous thromboembolic disease is a severe and potentially life-threatening condition, with an estimated annual incidence of deep vein thrombosis (DVT) at 1 per 1000 population in Western countries. Traditional unfractionated heparin (UFH) has conventionally been the primary choice for initial management of DVT, aiming to prevent pulmonary embolism and recurrent thrombosis [1].

Ensuring effective prevention of venous thromboembolism (VTE) involves meticulous attention to each phase of the process: (1) evaluating both VTE and bleeding risks, (2) prescribing VTE prophylaxis suitable for the assessed risks, and (3) administering the appropriate VTE prophylaxis based on risk factors. In 2005, to enhance VTE prevention performance at Johns Hopkins Hospital, the Centre for Innovations initiated a VTE Collaborative comprising two physicians, one nurse, and one pharmacist dedicated to quality improvement in VTE management [2]. Thromboprophylaxis using unfractionated heparin (UFH) or low-molecular-weight heparin (LMWH) has demonstrated efficacy in improving outcomes and reducing mortality rates in both medical and surgical patients, including those with cancer [3].

Therefore, it is important to conduct a VTE risk assessment to every patient being admitted with the help of VTE prophylaxis form. This form helps clinicians and nurses to rule out the risk factors or prepare the patient for prophylactic management to prevent any chances of developing VTE. Thus, serving as an important tool in ensuring compliance with the guidelines and protocols for VTE prevention in hospitals-

1. Compliance with VTE prophylaxis is crucial in hospital wards due to several reasons.
2. Introduction of a standardized VTE risk assessment and decision-making approach based on the risk status of the patient.
3. Use of standardized VTE risk assessment and decision-making approach helps reduce errors in the areas of medical management.

4. Contributes research through data collection and quality improvement initiatives for VTE prevention strategies, patient safety and quality care.

## RESEARCH OBJECTIVES

1. To determine the current compliance rate of health care professionals in completing VTE prophylaxis forms in the concerned hospital wards
2. To identify the reasons for non-compliance or incomplete VTE prophylaxis form completion in hospital wards.
3. To identify any barriers specific to hospital ward settings that hinder compliance with VTE prophylaxis form completion and explore potential strategies for improvement.
4. To compare compliance rates across different hospital wards to identify any variations and potential areas for targeted interventions.

## RESEARCH METHODOLOGY

This study employed a cross-sectional study design and was set in Narayana Multi Speciality Hospital, Jaipur. The study population included patients admitted to various wards, namely MICU, CCU, SICU, HDU, General Ward, ANC ward, CTVS ward, Private ward, Semi-private Ward, and PICU from February 22nd to May 22nd, 2023. The inclusion criteria encompassed all admitted patients during this period, while the exclusion criteria pertain to those in OPD, Post OP ward, and NICU. Data would be collected using a detailed questionnaire covering aspects such as specialty name, audit area, Medical Record Number (MRN), verification of current prophylaxis, VTE risk assessment, identified risk levels, recommended prophylaxis, contraindications, prophylaxis administration, and re-assessment of VTE risk. The study duration spans from February 22nd to May 22nd, 2023, with a sample size of 615 patients, excluding the dates March 19th to April 4th due to the hospital's closure during a protest against the Right to Health bill. The sampling technique involved the inclusion of all participants

admitted to the specified wards during the designated time frame. Data collected from IPD case files, and the analysis plan entailed descriptive analysis based on data obtained within the defined time period. Ethical considerations involved obtaining consent from all participating patients.

## RESULTS & DISCUSSION

The compliance rate of VTE prophylaxis form in the IPD departments where the lowest compliance rate of 95% was observed in the CTVS ward and the highest compliance rate was 100% in the General Ward and ANC ward. the compliance rate of 100% in the filling out of the Pain Assessment form. Most wards achieved a compliance rate of 99% or 100% for VTE prophylaxis form, indicating a high level of adherence by the Hospital protocol towards the prevention of Venous thromboembolism (VTE). However, a compliance rate of 95% was achieved in the CTVS ward indicating reasons for lower compliance rate prompting appropriate measures in addressing them. Depending upon the workload of the doctors, ratio of doctors per patient, number of patients, it was observed that doctors sometimes forget or lack awareness to fill every form that was mandatory as per the hospital guidelines for patients being admitted. This mistake, although not life threatening, can still affect the quality care and safety of patients.

## CONCLUSION

The compliance rates for VTE prophylaxis form, Pain assessment form and Fall assessment form, from February 22nd, 2023, to May 22nd, 2023, indicated proper and high adherence to the hospital protocols in the given hospital wards. Most wards have achieved a compliance rate of 99% - 100% in all the three forms, proving the hospital's goal towards providing optimum patient safety and quality care. It was also concluded that the compliance rate for VTE prophylaxis form was lower than the other two forms included in the study as shown in the compliance rate in CTVS ward being only 95% thus suggesting the need for improvement in this area.

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