Prevention and Management of Deep Vein Thrombosis (DVT) in ICU patients

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IIHMR UNIVERSITY

EHCC ETERNAL HEART CARE CENTRE & RESEARCH INSTITUTE

ETERNAL HOSPITAL

Brief history and description

Eternal Hospital (EHCC) Jaipur was established in 2013 by Dr. Samin K. Sharma, in collaboration with Mount Sinai Hospital, New York. Initially a cardiac care, it grew into a multi-specialty NABH & JCI-accredited hospital. In 2021, it became the first in Rajasthan to perform TAVI. EHCC offers advanced care across specialties and has added a new 100-bed facility in Sanganer, serving both private & government scheme patients.

Vision & Mission

- A center of excellence in area of medicine with highest international standard at affordable cost for the community around the globe.
- To redefine healthcare by improving outcomes and experience of patients through cutting edge research & personalized clinical care including innovative, preventive, diagnostic, therapeutic and rehabilitation services

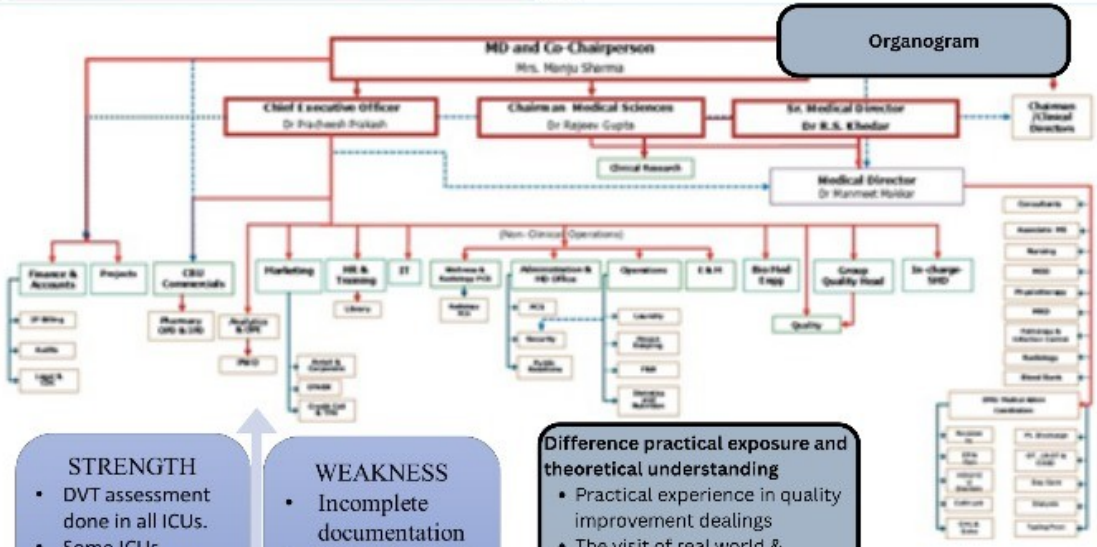
Project Undertaken

- Prevention and Management of Deep Vein Thrombosis in ICU Patients.
- Objective is to Identify at-risk patients, ensure timely assessment & evaluate prophylaxis intervention.
- Patients across multiple ICUs over a 2.5-month period so there is 240 patients
- Retrospective audit

Results & Findings

- Low-risk patients formed the majority.
- Moderate-risk patients were inconsistently managed—only ~30% to 80% received proper intervention, depending on the
- In some ICUs, 100% intervention compliance was observed.
- Overall Prophylaxis Rate: Only 43.86% of all eligible patients received appropriate intervention.
- Documentation issues and inconsistent reassessment found in multiple units.

Organogram



Evaluation Process

- Used a standard DVT risk assessment checklist.
- Patients who are in ICU.
- Prophylaxis interventions were checked against risk scores.
- Reassessment data was reviewed for consistency and completeness.

Causes Identified

- Incomplete or inconsistent documentation of risk assessment and prophylaxis.
- Dr occasionally avoided pharmacological prophylaxis due to perceived bleeding risks.
- Lack of awareness among ICU staff.
- No uniform follow-up system to ensure reassessment.

Suggestions

- Make DVT assessment mandatory within 24 hours, reviewed by the treating physician.
- Train ICU staff periodically on DVT prevention and management protocols.
- Revise DVT forms to clearly separate contraindications and clarify scoring.
- Conduct weekly audits for quality checks.
- Encourage electronic tracking for real-time alerts and follow-ups on reassessments.

STRENGTH

- DVT assessment done in all ICUs.
- Some ICUs achieved 100% intervention compliance.

WEAKNESS

- Incomplete documentation
- Gaps in timely prophylaxis

OPPORTUNITIES

- Modify form
- Weekly audits and reviews

THREATS

- Risk of PE due to missed interventions
- Medical complications limiting prophylaxis use

Difference practical exposure and theoretical understanding

- Practical experience in quality improvement dealings
- The visit of real world & communication with departments
- Underlying exposure to daily challenges in the hospital
- Knowing practical work versus a theoretical study
- Real environment teamwork and communication

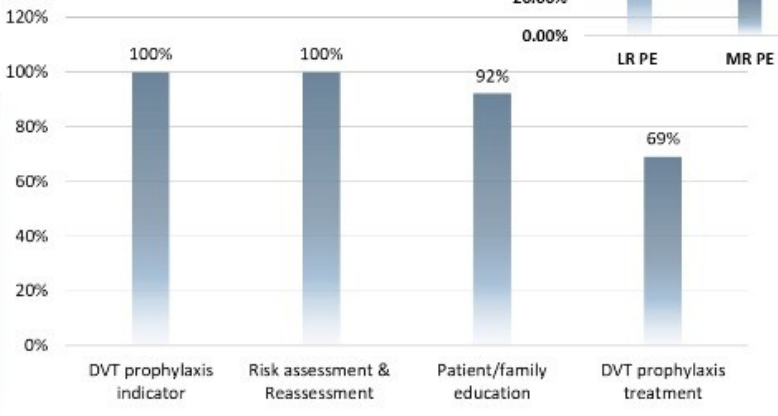
Learning During Internship

- Gained hands-on experience in clinical quality assessment and hospital protocol.
- Understood how to apply DVT risk stratification tools in real ICU .
- Observed gaps between risk assessment and actual interventions.
- Learned data collection and evaluation methodology including retrospective analysis.

Challenges faced during internship

- Poor communication among nursing and support staff
- Shortage of trained personnel in ICU and PCS
- Incomplete & inconsistent DVT documentation
- Uncoordinated clinical and non-clinical services

COMPLIANCE



ANALYSIS