

DISSERTATION SYNOPSIS

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1. TITLE

Assessing IV Cannulation Compliance: CAHO validated PREM Tools

2. INTRODUCTION

- **Background:** Intravenous (IV) cannulation is one of the most frequently performed invasive procedures in hospital settings, enabling the administration of fluids, medications, and blood products. Despite its routine nature, IV cannulation can be a source of significant discomfort, anxiety, and complications for patients if not executed and monitored appropriately. Globally, there is an increasing emphasis on not only performing clinical procedures safely but also ensuring that the patient's experience and satisfaction are systematically captured. Patient-Reported Experience Measures (PREMs) offer a structured means to gather direct feedback from patients regarding their healthcare encounters. The Consortium of Accredited Healthcare Organizations (CAHO) has introduced validated PREM tools tailored for various procedures, including IV cannulation, to help institutions assess service quality, identify gaps, and improve patient-centric care. These tools enable a deeper understanding of patient perspectives related to staff behaviour, communication, pain management, hygiene, and procedural efficiency.
- **Importance of the Study:** Clinical audits often focus on outcomes, overlooking patient-reported experiences in routine care. IV cannulation, though common, rarely includes patient feedback in quality assessments. This study addresses that gap using a CAHO-validated PREM tool to capture patient perspectives. It aims to identify compliance gaps, training needs, and areas for service improvement. The approach aligns with NABH standards and promotes patient-centred care in line with global benchmarks.
- **Applicability of Results:** The results of this patient experience assessment will provide evidence on the current state of IV cannulation practices at EHCC Hospital, guide targeted improvements, and support informed decision-making within the Quality Department.

- **Purpose of the Study:** To assess IV cannulation practices from the patient's perspective using the CAHO PREM tool, identify key areas of improvement, and promote evidence-based enhancements in routine care delivery.

3. RESEARCH QUESTION

What is the level of compliance with patient centred IV cannulation practices at EHCC Hospital, and how can patient experience insights be used to improve care quality and procedural standards?

4. OBJECTIVES

- To assess the current level of compliance with IV cannulation best practices from the patient's perspective using the CAHO-validated PREM tool.
- To identify key factors influencing patient discomfort or dissatisfaction during IV cannulation.
- To evaluate interdepartmental variation in patient-reported experiences related to IV cannulation.
- To recommend actionable strategies for enhancing patient comfort, safety, and overall satisfaction during IV cannulation.

5. HYPOTHESIS

- There is a significant correlation between adherence to patient-centred IV cannulation practices and improved patient-reported experience scores across departments.

6. MATERIAL AND METHODS

- **Study Design:** Observational study
- **Setting:** The study will be conducted at EHCC Hospital, focusing on inpatient wards, where IV cannulation is frequently performed.
- **Study Population:**
 - **Inclusion Criteria:** Patients (age ≥ 18) who have undergone IV cannulation during their hospital stay.
 - **Exclusion Criteria:** Emergency cases, Incapacitated Patients, children under the age of 9 years, and patients under sedatives.
- **Study Tools:** A CAHO-validated Patient-Reported Experience Measure (PREM) tool specific to IV cannulation will be used to gather data. Structured questionnaires will be administered post-procedure.
- **Duration of Study:** The study will be conducted over a period of 8 weeks, from **April 1, 2025, to May 31, 2025.**
- **Sample Size:** A total of 100 patients

- **Sampling Technique:** Stratified random sampling to ensure proportional representation from each department.
- **Data Collection Procedure:** Patient responses will be collected through face-to-face interviews using the CAHO PREM tool.
- **Operational Definitions:**
 - **IV Cannulation Compliance:** Adherence to best practices such as explanation of procedure, hand hygiene, pain management, and proper technique as perceived by the patient.
 - **PREM (Patient-Reported Experience Measure):** A standardized tool developed by CAHO to capture patient experiences regarding care delivery.

7. DATA ANALYSIS PLAN

- Data will be analysed using descriptive statistics (mean, percentage scores) for patient responses using **MS Excel**.
- Comparative analysis across departments will be performed to identify significant trends or gaps.
- Graphical representation will be used to visualize department-wise compliance levels.

8. ETHICAL CONSIDERATIONS

- **Informed Consent:** Informed consent will be taken from all participating patients after explaining the purpose of the study. Participation will be entirely voluntary.
- **Data Privacy and Security:** All patient data will be kept confidential. Responses will be anonymized and used solely for quality improvement purposes. No identifiable information will be disclosed.

9. IMPLICATIONS OF RESEARCH

- The findings will provide valuable insights into patient experience during IV cannulation at EHCC Hospital.
- Recommendations based on patient feedback will help improve care quality, enhance staff communication, and promote procedural standardization.
- The study supports EHCC Hospital's commitment to patient-centred care and continuous quality improvement aligned with NABH and CAHO guidelines.
- It will also serve as a reference for training, SOP enhancement, and policy formulation in clinical departments.

10. REFERENCES

- Consortium of Accredited Healthcare Organizations (CAHO). (2023). *PREM Toolkit for Routine Procedures*.

- **World Health Organization. (2016).** *Standards for Improving Quality of Care for Hospitalized Patients.*
- Black, A. & Singh, R. (2021). **Patient Experience in Routine Procedures: Measuring What Matters.** *Journal of Healthcare Quality*, 50(1), 12–20.