

DISSERTATION SYNOPSIS



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Title: Medicine Dispensing Turnaround Time in General ward at Fortis Escorts Hospital Jaipur

1.INTRODUCTION

Turnaround time (TAT) of medicine dispensing for general ward is taken as the time of medicine dispensed to administering the medication to the patient.

Timely access to medication is crucial for optimal patient outcomes in healthcare settings. Delays in medication dispensing can disrupt treatment schedules, reduce treatment effectiveness, and adversely affect patient outcomes. Therefore, understanding and optimizing Medicine Dispensing Turnaround Time (MDTT) is critical in general wards. This study aims to evaluate MDTT in the general ward at Fortis Escorts Hospital Jaipur. Medicine Dispensing Turnaround Time refers to the elapsed time between a physician's prescription and the medication being dispensed to the patient. Analyzing this metric can help assess the efficiency of the medication dispensing process and identify areas for improvement.

Timely access to medication is crucial for patient treatment:

Effective Treatment: Delays can disrupt treatment schedules and reduce effectiveness (Smith et al., 2020).

Better Patient Outcomes: Timely medication can manage symptoms and improve the quality of life (Johnson & Lee, 2019).

Treatment Adherence: Delays can lead to missed doses and reduced treatment effectiveness.

Reduced Stress: A reliable system fosters trust and reduces patient anxiety (Brown et al., 2018).

Improved Efficiency: Faster dispensing improves patient flow and staff resource allocation.

By analyzing turnaround time, we can identify areas for improvement to ensure optimal patient care.

2. Research Gap

The research gap primarily focuses on identifying the major areas of improvement in turnaround time that the general ward needs for medicine dispensing to achieve better patient outcomes, improve service efficiency, and ensure optimal patient care. This study aims to highlight the turnaround time specifically in the general ward, evaluating the factors responsible for longer turnaround times for dispensing medications in this setting. Additionally, it seeks to develop targeted interventions aimed at reducing medicine dispensing turnaround time in the general ward at Fortis Escorts Hospital Jaipur.

3. Rationale

Limited Research on General Ward Medicine Dispensing Times

Research on medicine dispensing times has often concentrated on specialized departments such as oncology or critical care units (Smith et al., 2020; Johnson & Lee, 2019). There is a gap in understanding how these processes function within the general wards of multispecialty hospitals. The general ward environment has unique challenges and workflow patterns that differ significantly from those of specialized units.

Diverse Patient Needs in General Wards

Patients in general wards present with a wide range of medical conditions and treatment requirements. This diversity necessitates a highly efficient medication dispensing process to ensure timely administration of treatments, which is essential for patient recovery and positive outcomes. Delays in medication dispensing in the general ward can disrupt care schedules, leading to potential complications and prolonged hospital stays.

Identification of Bottlenecks and Inefficiencies

By analysing medicine dispensing turnaround time in the general ward, we can identify specific bottlenecks and inefficiencies within this setting. Understanding these issues will allow us to

develop targeted interventions aimed at streamlining the medication dispensing process. This can include improvements in prescription processing, pharmacy workflows, and medication delivery systems.

Potential Benefits of Optimizing Medicine Dispensing Turnaround Time

Enhanced Patient Outcomes: Timely access to medications is critical for adhering to treatment plans, potentially improving the effectiveness of treatments and overall patient well-being. Reducing delays can lead to faster recovery times and reduce the incidence of medication-related complications.

Improved Operational Efficiency: Faster medication dispensing can enhance patient flow within the general ward, allowing for better resource allocation and utilization of staff time. This can contribute to overall hospital efficiency, reduce patient wait times, and improve the quality of care provided.

Cost Savings: Optimizing the medicine dispensing process can result in cost savings for the hospital by reducing the length of hospital stays, minimizing wastage of medications, and improving inventory management.

4. Research Question

What is the current average turnaround time for dispensing medications in the general ward at Fortis Escorts Hospital Jaipur?

Are there specific factors associated with longer turnaround times for dispensing medications in the general ward (e.g., medication type, patient demographics, complexity of treatment regimen, insurance pre-authorization requirements)?

How does medicine dispensing turnaround time in the general ward at Fortis Escorts Hospital Jaipur compare to national benchmarks or turnaround times in other general wards in similar hospitals?

5. Objectives

To measure the average turnaround time for dispensing medications in the general ward at Fortis Escorts Hospital Jaipur.

To compare the current medicine dispensing process in the general ward against established national benchmarks or practices in similar settings.

To identify factors contributing to variations in medicine dispensing turnaround time within the general ward.

6. Outcome variable

Primary Outcome Variable: Time elapsed between a physician's prescription and the medication being dispensed to the patient in the general ward. This directly measures the efficiency of the medication dispensing process.

Secondary Outcome Variables:

Patient Satisfaction: Measured through surveys to see if wait times affect their experience with medication dispensing.

Medication Adherence (Proxy): Tracked by monitoring refills or reported missed doses to see if turnaround times influence how well patients stick to their treatment plan.

7. Methodology

Study Design: Retrospective observational study.

Sample Size: The study will include approximately 700 patients in the oncology department undergoing chemotherapy over three months.

Sampling Technique: Probability sampling to ensure representativeness.

Data Collection: Data will be collected using a checklist for reviewing guidelines and through observation, including patient demographics, medical history, length of stay, and discharge details.

Duration of Study: Three months (April 3, 2024 - July 3, 2024).

Data Analysis Plan:

Descriptive Statistics: Number and proportion of medications dispensed within standard turnaround time (TAT).

Analysis by Medication Type and Urgency: Group medications by type (, supportive) and urgency (urgent, routine), and analyses the number and proportion dispensed below and above the standard TAT.

Patient Demographics Analysis: Distribution of patients by age, gender, provisional diagnosis, etc.

SWOT Analysis: Identify facilitating and hindering factors affecting medicine dispensing turnaround time.

8. Ethical consideration

Ensuring ethical conduct is paramount in this study. Patient privacy will be protected by anonymizing data whenever possible. Informed consent will be obtained for any surveys or interviews, clearly explaining the study's purpose and data use. Data collection activities will not disrupt patient care or cause undue stress. Robust data security measures will be in place to protect patient information. Finally, findings will be communicated transparently to patients, healthcare providers, and hospital administration to foster trust and inform decisions about potential improvements to the medication dispensing process.

9. References

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