

Synopsis for Dissertation Submitted



The IIHMR University, Jaipur

for the partial fulfilment for the award of the degree of
Master of Business Administration (MBA)
in
Hospital and Health Management

By

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2024

A Study On Turn Around Time Of Nursing Call Bell Response System At a Multispeciality Hospital

- **INTRODUCTION:**

Assessing patient satisfaction is a critical component of ensuring high-quality healthcare delivery in any medical setting, including the In-Patient Department (IPD) at Godrej Memorial Hospital in Mumbai. As a renowned healthcare institution, Godrej Memorial Hospital is dedicated to providing compassionate and evidence-based care to all patients admitted to its IPD department. The study seeks to identify specific areas within the IPD where there may be gaps or deficiencies in patient care, communication, and service delivery.

In alignment with the title "Nursing Call Bell Response System & TAT in Response Time: A descriptive study " this evaluation will explore the role of technology in enhancing patient care and response times. Specifically, the study will investigate how the implementation of a Nursing Call Bell Response System can bridge service excellence by facilitating timely responses to patient needs. By utilizing technology as an enabler, Godrej Memorial Hospital aims to streamline communication between patients and healthcare providers, ultimately improving overall service delivery and patient satisfaction within the IPD department. Patient satisfaction within the In-Patient Department (IPD) at Godrej Memorial Hospital, Mumbai, encompasses a comprehensive assessment of the medical services provided to hospitalized patients. With a focus on promoting holistic wellness and ensuring optimal patient care, this evaluation examines various aspects such as communication effectiveness between healthcare providers and patients, quality of clinical care, accessibility of services, patient satisfaction levels, and coordination of care among multidisciplinary teams, cultural competence, safety measures, and follow-up care protocols. By meticulously analyzing these components and leveraging technology through the Nursing Call Bell Response

System, Godrej Memorial Hospital endeavours to continually enhance the patient experience, uphold clinical excellence, and foster an environment conducive to healing and well-being within its IPD department.

- **RESEARCH QUESTION:**

How can the implementation of a Nursing Call Bell Response System enhance service excellence and improve response time in healthcare settings?

- **OBJECTIVES :**

1. To assess the current response time to nursing call bells at Godrej Memorial Hospital IPD.
2. To evaluate the effectiveness of implementing a Nursing Call Bell Response System in reducing response time.
3. To determine the impact of improved response time on patient satisfaction and outcomes.

- **HYPOTHESIS:**

Implementation and Evaluation of a Nursing Call Bell Response System will significantly reduce response time to patient requests, leading to higher levels of patient satisfaction and improved clinical outcomes.

- **MATERIAL AND METHODS:**

STUDY DESIGN: This paper presents a study of data collected from the nursing call bell system over one month, where key parameters are analyzed, including

1. Floor number
2. Bed number
3. Number of times a patient has called
4. Time of the call
5. The time the call was responded to by the nurse.

This cross-sectional study aims to evaluate patient satisfaction and response times.

I. SETTING: The study will be conducted in the IPD of Godrej Memorial Hospital, Mumbai, encompassing only 2nd floor (General ward, Twin sharing, Economy ward and Suite room). The study will encompass 2nd floor IPD of hospital. Patient wellness regarding medical services, with a specific focus on nurses and overall service quality during hospital stays, will be assessed

1. STUDY POPULATION: The study population includes all patients admitted to the IPD in 2nd floor at Godrej Memorial Hospital during the data collection period.

- Inclusion Criteria :

- A. Patients admitted to the IPD who have used the nursing call bell system at least once during their stay.

- B. Patients willing to participate in the study and provide feedback.

- Exclusion Criteria:

- A. Patients admitted to units where the nursing call bell system is not operational.

B. Patients unable to provide feedback due to medical or cognitive reason.

2. **STUDY TOOLS:** The primary tools for data collection of TAT will include

- **Nursing Call Bell System Logs:** To record the time of the call and the response time.
- **Patient Satisfaction Questionnaires:** To gather patient feedback on the responsiveness and quality of nursing care.
- **Staff Interviews:** To gain insights into the challenges faced by nursing staff in responding to call bells promptly

II. **DURATION OF STUDY:** The data collection period will span 1 month, during which nursing bell response system will be monitored 24 x 7 for a month.

III. **SAMPLE SIZE:** A sample size of 30 beds will be selected from the hospital's IPD across 2nd floor.

DATA COLLECTION PROCEDURE :

The data for this cross-sectional study was collected over a one-month period from the 2nd floor of the In-Patient Department (IPD) at Godrej Memorial Hospital, Mumbai. The data encompassed various room types, including twin sharing, economy ward, general ward, and suite rooms. The comprehensive dataset captured the 24-hour call system activity, including calls made during different shifts (morning, afternoon, evening, and night).

1. **Collection from Nursing Call Bell System:**

- **Parameters Recorded:**
 - Floor Number
 - Bed Number
 - Number of Times a Patient Has Called
 - Time of the Call

- Time the Call Was Responded to by the Nurse

Total Entries:

- A total of 1,400 response entries were recorded from the nursing call bell system logs.

2. Recording Time Stamps: The exact time of each call made by patients and the corresponding response time by nurses were logged automatically by the system.

IV. OPERATIONAL DEFINITIONS: Response time defined as the duration from call bell activation to nursing response. Patient satisfaction measured using Likert scale questions regarding perceived response time and overall satisfaction.

- **DATA ANALYSIS PLAN:**

The TAT was calculated by determining the difference between the time the call was made (T_{call}) and the time the call was responded to (T_{response}) for each of the 1,400 entries.

Formula for Calculating TAT

$$TAT = \sum_{i=1}^N (T_{\text{response}} - T_{\text{call}}) / N$$

Where:

- T_{call} = time when the call was made.
- T_{response} = time when the call was responded to
- N is the total number of calls.

- **ETHICAL CONSIDERATIONS:**

Informed consent will be obtained from all study participants. Measures will be implemented to ensure data security, privacy, and confidentiality in accordance with ethical guidelines.

- **IMPLICATIONS OF RESEARCH:**

The findings of this research will provide valuable insights into the effectiveness of Nursing Call Bell Response Systems in improving service excellence and response time in healthcare settings. Implementation of such systems has the potential to enhance patient satisfaction, optimize resource utilization, and ultimately improve clinical outcomes.