

Rescheduling and cancellation of surgeries in the OTs of Bhagwan Mahaveer Jain Hospital

TITLE:

Evaluating factors associated with the cancellation and rescheduling of elective surgeries.

RESEARCH QUESTION:

What are the key factors that are contributing to the rescheduling and cancellation of surgeries in the operating theatres of BMJH, What interventions can be made to reduce avoidable cancellations and improve the efficiency?

OBJECTIVES:

- To identify the primary reasons for cancellations and rescheduling, which include patient-related, administrative and medical-related
- To determine the frequency and rate of rescheduling in the hospital's Ots
- To assess the impact of rescheduling and cancellations on the operating theatre utilization, workload, etc.
- to evaluate the effectiveness of current preoperative planning and communication among the surgical team
- to recommend measures and strategic interventions aimed at reducing cancellations and, in turn, enhancing productivity.

HYPOTHESIS:

An intervention approach that targets the preoperative assessment protocols, scheduling practices, and interdepartmental communication can significantly reduce the rate of elective surgery cancellations

MATERIAL AND METHODS

Study design:

A Descriptive cross-sectional study will be conducted to assess the frequency and reasons for cancellations and rescheduling of elective surgeries, focusing on identifying gaps in preoperative processes or communication and scheduling systems.

Setting:

The study will be carried out at Bhagwan Mahaveer Jain Hospital, Bangalore, a multi-speciality tertiary care hospital with 16 functioning operating theatres used for both elective and emergency procedures.

STUDY POPULATION

Inclusion criteria:

All elective surgeries scheduled between 9:00 AM to 5:00 PM on working days
Surgeries listed on the OT schedule for the given study period

Exclusion criteria:

Surgeries scheduled on Sundays and public holidays

Emergency surgeries that are not pre-scheduled and require immediate attention

STUDY TOOLS:

Data will be collected using the following tools:

- Daily operating theatre schedule and case list
- Informal discussions with OT staff, management, and clinical departments to gather data
- OT logbooks and records maintained by the department

DURATION OF STUDY:

The study will be conducted over a period of 3 months, from March 2025 to June 2025

SAMPLE SIZE:

A total of 100-150 rescheduled or cancelled surgeries during the defined period will be included in the study. The final sample size will depend on the number of cases meeting the inclusion criteria within the time frame.

SAMPLING TECHNIQUE:

Convenient sampling will be used. Cases will be selected based on their availability on scheduled working days during the study period, and all the eligible cases will be included.

DATA COLLECTION PROCEDURE:

- **Data observation** of the scheduled surgeries in the operating theatre area.
- **Data extraction** from the daily OT schedules and logs
- **Discussions** with the relevant staff, including OT coordinators, nursing staff, etc to understand the reasons behind any surgery rescheduled or cancelled
- **Documentation**
 - Total number of scheduled elective surgeries
 - Number of surgeries conducted per schedule
 - Number of rescheduled surgeries and reasons
 - Number of cancellations and their reasons

OPERATIONAL DEFINITIONS:

Rescheduling of surgeries:

It refers to altering the originally planned timing of a surgery to a later or earlier time on the same day or shifting it to a different date altogether due to clinical or administrative reasons.

Cancellations of surgeries:

It is defined as the complete removal of a surgery from the OT schedule such that the procedure does not take place on the intended date, regardless of rescheduling status.

Operating theatre:

A sterile, designated environment in the hospital where surgical procedures are performed under strict aseptic protocols.

Elective surgery:

Any surgical procedure that is scheduled in advance, not requiring immediate intervention, and often planned to optimize patient and resource readiness

Emergency surgery:

A surgical procedure that must be performed without delay due to a life-threatening condition is usually not prescheduled

DATA ANALYSIS PLAN:

- Data will be compiled in Microsoft Excel for analysis
- Bar charts will be created to represent the total number of surgeries performed in each of the operating theatres
- Pie diagrams will be used to show the proportion of surgeries that were conducted as scheduled, rescheduled and cancelled
- Trends will be analysed by day, week, and department to identify patterns and peak cancellation times

ETHICAL CONSIDERATIONS:

- Ethical approval and administrative permission have been obtained from the hospital management
- As the study involves secondary data and non-identifiable observations, patients' informed consent is not required
- All the collected data will be handled confidentially, and no personal patient information will be used

IMPLICATIONS OF RESEARCH:

The study aims to:

- Identify the common causes for elective surgery cancellations and rescheduling
- Highlight systemic gaps in the preoperative assessment process, communication protocols, etc.
- Provide insights for hospital administration to implement targeted interventions
- Enhances patient satisfaction by minimizing disruptions and wait times associated with the cancellation of surgery

REFERENCES:

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