



The rationale behind the cancellation of the surgeries in the operation theatre and the rescheduling of the tertiary care hospital

Suneetha Raghu¹, Dr. Krishnappa J², Dinesh K³, Dr (Prof.) Zeanath C J⁴

¹Department of Hospital Administration & Quality (Research Scholar)

²Department of pediatrics – SDUAHER

³Department Anaesthesiology -SDUAHER

⁴Department of Nursing Administration

Corresponding author – Suneetha Raghu,

Abstract

Introduction: The operating room, which is the centre of a hospital, demands a large amount of financial and human resources. However, many patients who are called for surgery from waiting lists are not operated upon, and operating rooms are underutilized and stay empty for periods of time. Canceled planned operations show inefficiencies in management and increase patients' discomfort. In most hospitals, the cancellation of operations poses a serious issue. Elective surgical cases might be canceled for a variety of reasons. When cases are canceled on the day of operation, limited resources and labour are used inefficiently. In many situations, it also results in an extended hospital stay.

On the day of surgery, postponing elective procedures results in a waste of resources and an inefficient use of operating room (OR) time. Additionally, it is inconvenient for the family and patients. Furthermore, the cancellation of a day of surgery (DOS) results in a logistical and financial burden due to the need for an extended hospital stay, repeat pre-operative preparations, and opportunity costs from missed work and time. For these reasons, the current study was conducted to provide appropriate strategies to reduce DOS cancellation and rescheduling. **Aims & Objectives of the study** is to The aim of this research is to better understand the occurrence of elective surgical procedure cancellations and to determine the cause of the surgery cancellations in the operating room and the rescheduling procedure that followed in a tertiary care hospital

Methodology: Surgeries are selected by retrospective method and Source of data was Records maintained in the operation theatre and medical records department in the hospital, The medical records of all the patients, who had their operations cancelled on the day of surgery in all surgical units of the hospital, were audited prospectively. The number of operation canceled and reasons for cancellation were documented

Results: Collectively, the actions improved the efficacy and efficiency of the rescheduling procedure and resulted in a significant decrease, only 0.003% in the cancellation rate. Several crucial areas for improvement were identified by the tertiary care hospital's evaluation of elective surgical cancellations and rescheduling.

Keywords: Tertiary care hospital, Causes of cancellation, Patient-related factors, Elective surgery cancellations, Operating room utilization, Rescheduling

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I. Introduction

The operating room, which is the centre of a hospital, demands a large amount of financial and human resources. However, many patients who are called for surgery from waiting lists are not operated upon, and operating rooms are underutilized and stay empty for periods of time. Canceled planned operations show inefficiencies in management and increase patients' discomfort. In most hospitals, the cancellation of operations poses a serious issue. Elective surgical cases might be canceled for a variety of reasons. When cases are canceled

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On the day of surgery, postponing elective procedures results in a waste of resources and an inefficient use of operating room (OR) time. Additionally, it is inconvenient for the family and patients. Furthermore, the cancellation of a day of surgery (DOS) results in a logistical and financial burden due to the need for an extended hospital stay, repeat pre-operative preparations, and opportunity costs from missed work and time. For these reasons, the current study was conducted to provide appropriate strategies to reduce DOS cancellation and rescheduling.

Studies on the cancellation of elective surgical procedures provide insight into the difficulties and complications faced by global healthcare systems. Numerous studies have examined this problem from a variety of angles in an effort to pinpoint the underlying factors and trends that contribute to surgical cancellations. For example, Chalya et al. (2011) investigated the frequency, reasons, and trends of cancellations in a Tanzanian university teaching hospital. In a similar vein, Chiu, Lee, and Chui (2012) examined the frequency of cancellations as well as their causes in a hospital in Hong Kong. Optimizing operating room efficiency and patient outcomes requires an understanding of the causes of cancellations (Garg et al., 2009; Jonnalagadda et al., 2005).

González-Arévalo et al. (2009) investigated the reasons behind elective surgical operation cancellations in Spain, offering valuable perspectives on the difficulties encountered by healthcare providers operating within a distinct organizational and cultural milieu. Research from Australia (Keller et al., 2014; Schofield et al., 2005), India (Elrahman et al., 2014; Kumar & Gandhi, 2012; Naik et al., 2018; Talati et al., 2015), and other countries shows that the problem of cancellations is not limited by geography.

Administrative problems, poor planning, patient-related complications, and resource shortages are frequently cited as causes of cancellations (Kaddoum et al., 2016; Sanjay et al., 2007; Stavrou et al., 2014). Healthcare companies can maximize operating room utilization and reduce cancellations by identifying these characteristics and implementing solutions accordingly (Kumar & Sarma, 2003; Schofield et al., 2005; Tan et al.

There are many different reasons for cancellations, such as complications relating to the patient, problems with administration, insufficient preoperative evaluation, malfunctioning equipment, and unanticipated changes in the patient's health. It is imperative to comprehend these elements in order to optimize resource usage, improve surgery scheduling, and improve patient care.

Comprehensive preoperative evaluation, efficient resource allocation, excellent stakeholder communication, and proactive management of potential risk factors should all be part of the effort to reduce cancellations. Healthcare organizations can reduce the number of cancellations and improve the effectiveness and calibre of surgical treatments by tackling these issues.

II. Aims & Objectives:

The aim of this research is to better understand the occurrence of elective surgical procedure cancellations and to determine the cause of the surgery cancellations in the operating room and the rescheduling procedure that followed in a tertiary care hospital

III. Objectives

1. To determine the main causes of the elective surgery cancellations in the tertiary care hospital's operating room.
2. To assess the tertiary care hospital's current procedures and policies for rescheduling cancelled surgeries.
3. To provide evidence-based suggestions and guidelines for enhancing the tertiary care hospital's cancellation and rescheduling procedure.
4. To assess the success of actions meant to lower the frequency of cancellations and enhance the rescheduling procedure.

IV. Scope

This study's scope includes an in-depth study of the surgical cancellation and rescheduling process that took place in a tertiary care hospital's operating room. Analyse the frequency and main causes of elective surgery cancellations, including patient-related concerns, administrative problems, equipment malfunctions, and unanticipated clinical situations. An examination of the tertiary care hospital's procedures and policies for rescheduling cancelled surgeries Evaluation of current initiatives and tactics meant to lower cancellation rates and enhance the rescheduling procedure, creation of guidelines and recommendations based on evidence to improve the tertiary care hospital's cancellation and rescheduling procedure.

V. Methodology

Study design: descriptive study design

Study area: tertiary care hospital

Sample size: All elective surgeries for the year of January 2023 to March 2024

Study duration: January 2023 to March 2024

Sample collection and sampling method: Total 8863 surgeries are selected by retrospective method over a period of 15 month

Source of data:

- Records maintained in the operation theatre and medical records department in the hospital.
- The medical records of all the patients, who had their operations cancelled on the day of surgery in all surgical units of the hospital, were audited prospectively. The number of operation cancelled and reasons for cancellation were documented.

Inclusion Criteria: all elective surgery cases are included

Exclusion Criteria: emergency surgeries and Minor Procedures are excluded for this study

VI. Observations

The study's overall findings emphasized the complexity of elective surgery cancellations and the significance of all-encompassing approaches to lessen their effects. The tertiary care hospital can improve patient care and operational efficiency by optimizing its cancellation and rescheduling process, which involves addressing root causes, optimizing procedures, and encouraging stakeholder collaboration.

Table 1. Frequencies of Surgeries, Canceled Surgeries, Rescheduled Cases and Not Rescheduled Surgeries

Over a 15-month period from January 2023 to March 2024, Table 1 provides a comprehensive summary of the frequencies of surgeries, canceled operations, rescheduled cases, and surgeries that were not rescheduled. In the tertiary care hospital, the data is crucial for trend analysis and problem identification concerning surgery cancellations and rescheduling.

Months	Number of Surgeries Planned	Number of Canceled Surgeries	Number of Rescheduled Surgeries	Number of Surgeries not Rescheduled
Jan -23	598	35	31	4
Feb -23	429	24	20	4
Mar -23	507	22	21	1
Apr -23	500	18	13	5
May -23	520	23	21	2
Jun-23	583	15	12	3
Jul-23	637	10	8	2
Aug-23	604	14	12	2
Sep-23	535	7	5	2
Oct-23	446	10	7	3
Nov-23	693	9	7	2
Dec-23	770	4	4	0
Jan -24	726	1	1	0
Feb -24	721	0	0	0
Mar - 24	594	3	2	1
Total	8863	195	164	31

Table 1 explains that the total number of procedures performed throughout the 15-month period was 8863. 195 surgeries were canceled, of all procedures performed. Rescheduled surgeries are 164 of the total surgeries cancelled. Out of all the surgery performed, 31 were canceled, and the surgeries were not rescheduled.

Considering of the significant cancellation rates, it was necessary to examine any potential systemic problems. Despite the relatively high rescheduling rates, it should be a top priority to promptly reschedule all canceled surgeries. Processes for scheduling and communication should be made more efficient. Insights for focused interventions can be gained by carefully examining the causes of cancellations, as broken down in Table 2. With the ultimate goal of lowering cancellations and improving patient care, this comprehensive analysis of surgery postponements and cancellations over the course of a 15-month period provides the groundwork for strategic enhancements to hospital protocols.

Table 2. Rationale behind the Cancellation of the Surgeries

It is critical to determine the main causes of the 195 of procedures that are canceled. Issues pertaining to patients, administrative challenges, equipment failures, unforeseen clinical circumstances, and other variables are examples of potential causes. To identify these problems, a thorough data analysis and root cause analysis are done. The 164 rescheduling number indicates that although there are systems in place to reschedule postponed surgeries, they might not be entirely successful. Finding weaknesses and potential areas for improvement in the hospital's rescheduling procedures and policies may need a detailed examination.

Sl. No	Category	Cancellation Reasons	Frequency
1	Patient-Related Concerns	- Due to exams, Patient wants on later date - Intracranial hemorrhage due to hypertension - Patient developed cognitive deficits - Patient broke NPO - Unavailability of Patient attender - Patient had to leave due to personal reasons - Patient went DAMA - Patient not cooperative on operative table	51
2	Administrative Problems	- Delayed due to inspections - Leaves	10
3	Equipment Malfunctions	non-availability of required equipment	6
4	Unanticipated Clinical Situations	- Severe anemia - Patient developed fever - Patient had respiratory tract infection - Patient blood sugar and BP not optimized in pre-op, - Patient's extensive disease spread	20
5	Non-Availability of Doctors	- Emergency leave of operative surgeon - Unavailability of Operating due to bandh/ Strike	3
6	Non-Availability of OT or Prolonged OT	- Delayed due to Prolonged procedures - Emergency cases Schedule	8
7	Patient Unwillingness	- Patient not willing for surgery - Patient attenders unwillingness - Consent not signed	10
8	Patient Medical Fitness Issues	- Increased blood pressure - Fitness pending - Uncontrolled blood sugar levels - Patient developed fever - ECG changes noted after induction of anesthesia - Thyroid function test abnormal - Developed Breathlessness	30
9	Financial Issues	- Scheme not approved - Affordability of the cost	8
10	Non-Availability of ICU Beds for High-Risk Patients	Unavailability of ICU bed	6
11	Technical Issues	- Shortage of Camera monitor - Delayed investigations due to non-working equipment	9
12	Infection Control	- Wound infection - Culture sensitivity - Infection control - Fever due to infection	9
13	Unavailability of Blood	Required Blood products not arranged	3
14	Severe Clinical Deterioration	- Intracranial hemorrhage due to hypertension - Patient had ST depression after intubation - Patient had cardiogenic shock	18

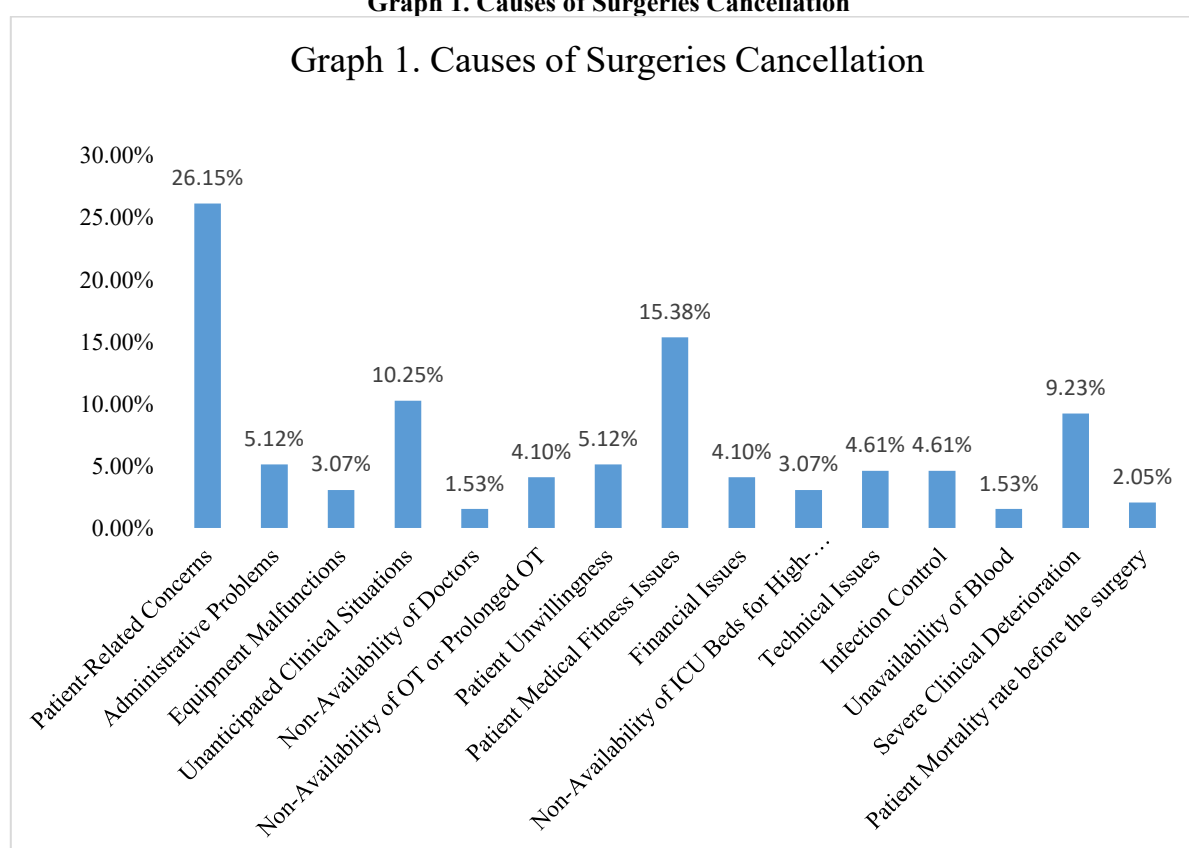
		- Uncontrolled hypertension and ECG changes - Patient developed fever with thrombocytopenia	
15	Patient Mortality rate before the surgery	Unwillingness for High risk Consent	4

Table 2. Clearly states that the most common reason for surgery cancellations is patient-related concerns, which tend to be brought on by cancellation, personal reasons, and serious clinical deterioration. Patient medical fitness issues, such as acute conditions needing prompt care and unforeseen clinical scenarios, are also important.

Cancellations caused by scheduling problems and administrative delays are partly caused by administrative delays and non-availability of overtime or prolonged overtime. Technical problems and equipment malfunctions draw attention to the need for improved resource management and upkeep. Financial difficulties and infection control are two less common but significant causes.

The tertiary care hospital can try to lower pre-surgery mortality and enhance the general results of elective surgical procedures by concentrating on these areas. Surgery cancellation rates may go down if these problems are resolved through enhanced patient assessments, streamlined administrative processes, and better resource management.

Graph 1. Causes of Surgeries Cancellation



Graph 1 shows the breakdown of surgical cancellations at a tertiary care hospital over a 15-month period, broken down by the causes for cancellation, from January 2023 to March 2024. Concerns Specific to Patients, the category with the largest percentage of cancellations, 26.15%, suggests that patient-related problems, like preferences, preparedness, or individual circumstances, play a major role in surgical cancellations. The 5.12% category under administration Problems indicates that modest but significant hospital administration problems, like scheduling errors or paperwork challenges, are the main reason for cancellations. Equipment Failures 3.07% Equipment failures account for a small portion of cancellations, but they are not a significant issue. This emphasizes the significance of keeping accessible equipment. Inadvertent Clinical Events 10.25 percent. The unpredictability of healthcare is highlighted by the fact that many cancellations are the consequence of unanticipated medical problems that develop before to or during operation. 1.53% of doctors are not available. Although the low percentage indicates that there isn't a strong correlation between doctor availability and cancellations, hospital administration should nevertheless take this into account. Prolonged or non-existent overtime at 4.10% an acceptable percentage of cancellations are because to problems with operating theatre availability or prolonged operation hours, suggesting possible difficulties with scheduling and resource

management. Lack of Willingness in Patients 5.12% of what one significant factor in surgical cancellations is patient resistance or hesitation, underscoring the significance of good patient education and communication. Medical Fitness Concerns among Patients 15.38% Preoperative evaluations and risk management are crucial, as seen by the cancellations in this category that resulted from worries about the patient's health or suitability for surgery.

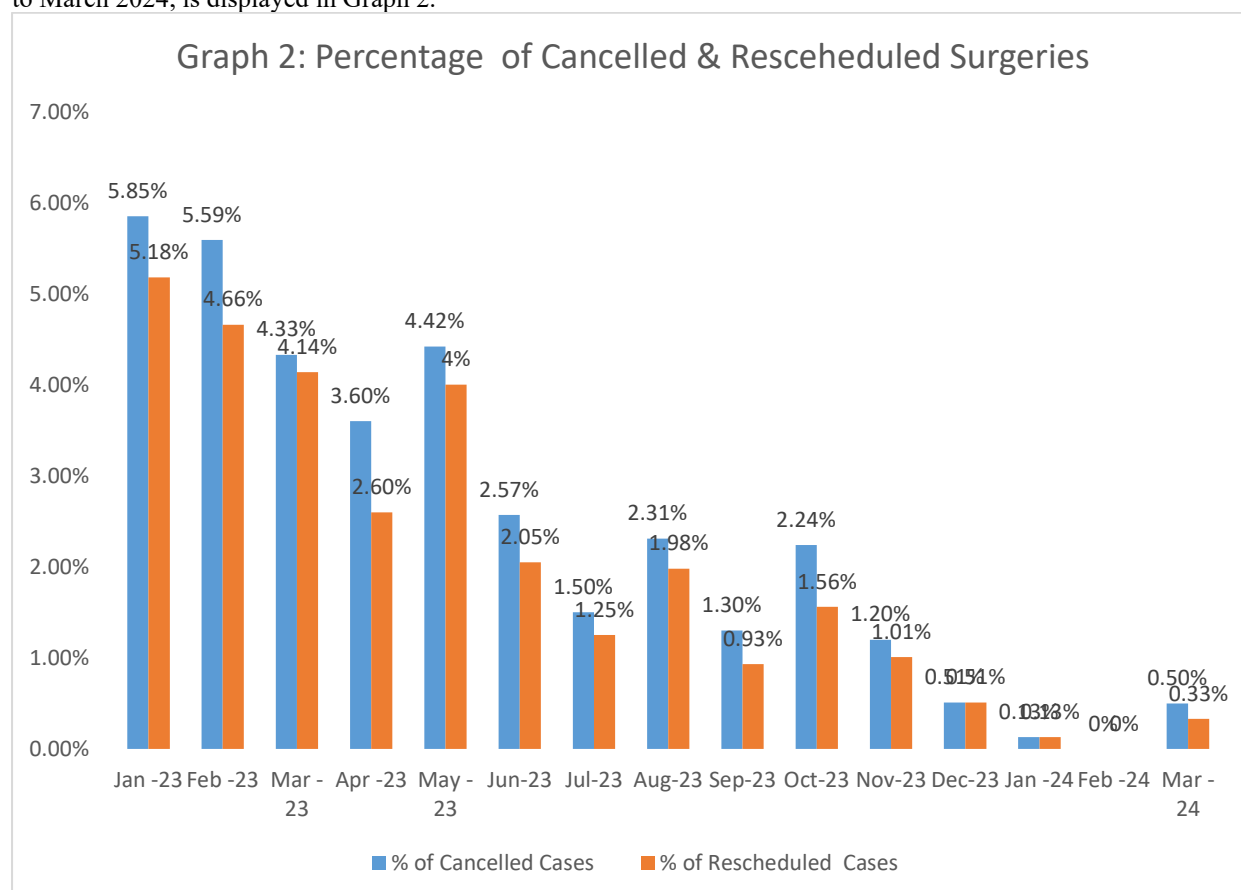
Finance-Related Problems 4.10% The modest percentage of cancellations resulting from financial constraints raises the possibility that socioeconomic issues may influence a patient's capacity to have surgery. 3.07% of patients at high risk did not have access to ICU beds. A small percentage of cancellations are caused by a shortage of intensive care unit (ICU) beds for patients who pose a high risk, underscoring issues with resource allocation. Infection Control (4.61%) and Technical Problems These categories include cancellations brought on by infection control concerns and technical difficulties, respectively.

These categories are vital to hospital operations and patient safety. Blood not Available 1.53% the significance of blood management practices is highlighted by this category, which implies that shortages of blood supply may account for a minor portion of cancellations. Clinically Severe Deterioration 9.23% this category shows cancellations brought on by a marked decline in the clinical status of the patient, highlighting the dynamic nature of health care and the requirement for ongoing observation. Prior to Surgery, 1.05 percent of patients died. Although it happens seldom, patient death before to surgery is a significant consequence that leads to cancellations and calls for careful risk assessment and response techniques.

Graph 1. Highlights the significant insights into the several reasons that affect surgery cancellations at the tertiary care hospital. These insights can help to improve cancellation and rescheduling of procedures, improve patient care, and maximize hospital resources.

Graph 2. Result of Canceled & Rescheduled Surgeries

A tertiary care hospital's 15-month surgery cancellation and rescheduling history, that includes from January 2023 to March 2024, is displayed in Graph 2.



The hospital has made progress in lowering the frequency of cancellations and successfully rescheduling surgeries, as seen by the positive trend in graph 2. There has been a noticeable decrease in the overall number of surgical cancellations during the course of the 15-month period. This pattern indicates that the hospital's actions and tactics have been successful in addressing the primary reasons for cancellation. The hospital's capacity to reschedule canceled surgeries has improved. The number of rescheduled surgeries has increased, which indicates

that the hospital has improved its rules and processes for handling cancellations and guaranteeing that patients have their surgeries on time. The hospital has been able to more accurately target its interventions by identifying and addressing the primary causes of cancellations, which include patient-related concerns, administrative issues, and equipment difficulties. This focused strategy likely helped to lower the number of cancellations.

The data indicates a favorable trend indicating improvements in the hospital's current rescheduling procedures and policies. Better patient communication, improved pre-operative evaluations, and expedited administrative procedures are a few examples of these enhancements. The data shows a positive trend, indicating the effectiveness of the steps implemented to improve rescheduling and decrease cancellations. Over time, it's possible that the essential modifications and advancements have been made with the assistance of ongoing observation and assessment of these acts.

According to the findings of Graph 2, the tertiary care hospital has significantly improved the rescheduling procedure and decreased the frequency of canceled elective surgeries. The upward trend suggests that the hospital's plans and initiatives are having the desired effect, as seen by increased patient satisfaction, better use of operating rooms, and general increased effectiveness in the provision of surgical treatment. This development is consistent with the goals of the study, indicating that the primary reasons for cancellations have been identified, procedures have been evaluated and improved, and practical steps have been taken to improve the hospital's cancellation and rescheduling procedures.

6.1 Improvement Measures

The tertiary care hospital adopted a number of improvement techniques based on the study's objectives in order to improve the rescheduling process and decrease operation cancellations.

In-depth Evaluation: carried out a thorough investigation of the causes of cancellations, classifying them as clinical circumstances, administrative issues, patient-related issues, and equipment difficulties.

Data Collection and Monitoring: To enable real-time modifications and focused interventions, a comprehensive data collection system was put in place to continuously monitor and evaluate the causes behind cancellations.

Streamlined Surgery Rescheduling Process: A standardized approach was created to ensure that canceled surgeries could be quickly and effectively rescheduled.

Automated Scheduling Systems: To maximize operating theater usage and minimize human mistake in booking, automated scheduling software was implemented.

Improved patient communication channels are intended to give patients prompt updates and assistance about their rescheduled operations.

Pre-Operative Assessments: Measures to alleviate potential problems (e.g., medical fitness, budgetary limits) before they result in cancellations have been strengthened in pre-operative assessment protocols.

Education and Training: According to the most recent data and recommendations, staff members received frequent training on the best ways to schedule and handle cancellations.

Better methods for allocating resources are provided to make sure the availability of vital resources such as ICU beds and blood supplies.

Support Services: Provided extra help in the form of financial support and counseling to solve patient-related issues.

Process Optimization: In order to lower errors and delays in the scheduling of surgeries, administrative processes were reviewed and improved.

Consistent Maintenance: To reduce malfunctions, a strict maintenance program was put in place for all surgical instruments.

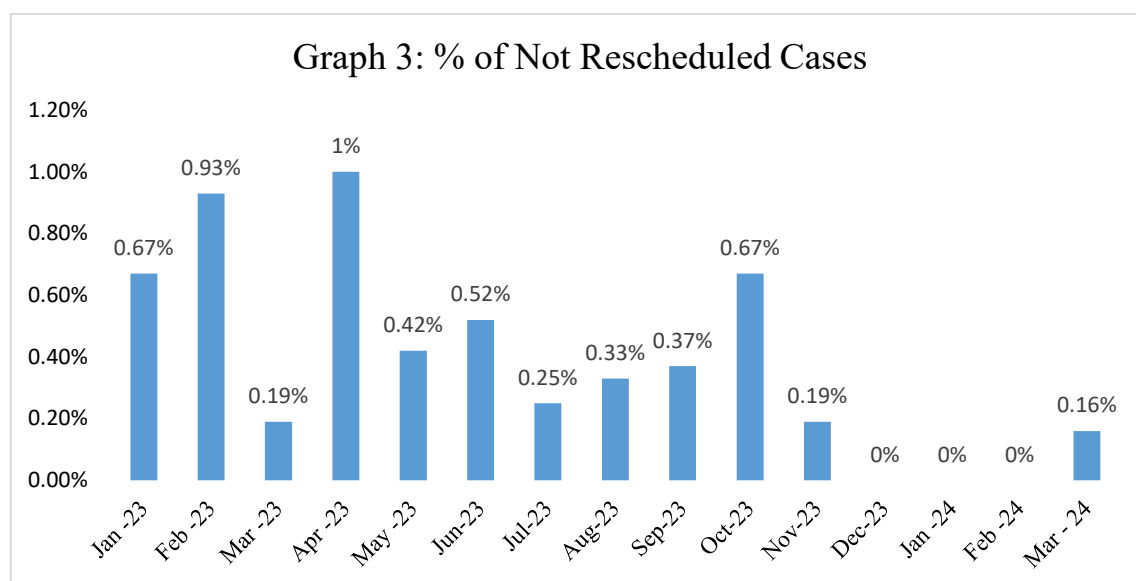
Backup Equipment: Made sure backup equipment was available in case of equipment malfunctions or cancellations.

Optimized Pre-Surgery Screening: Enhanced pre-surgery screening to detect possible clinical problems that can cause cancellations.

The hospital aimed to reduce the number of canceled elective surgeries, streamline the rescheduling procedure,

Graph 3. Result of Not rescheduled Cases

The table provided shows the percentage of surgeries that were not rescheduled each month from January 2023 to March 2024. The reasons for not rescheduling these surgeries include lack of cooperation from patients, patient unwillingness, severe clinical deterioration, and other patient-related concerns



Graph 3. Displays, these months see a comparatively greater percentage of cases that are not rescheduled; in April, this percentage peaks at 1%. This suggests early difficulties with the patient's compliance as well as other patient-related problems. Notably, the percentage of cases that are not rescheduled is declining; in March and July, it was as low as 0.19% and 0.25%, respectively. This shows that during these months, progress has been made in resolving the fundamental problems. The percentages vary from 0.19% to 0.67%, indicating a modest increase. This window may represent sporadic delays or particular events that impact rescheduling. By successfully postponing procedures and managing patient-related issues, the fraction of instances that are not rescheduled lowers to 0%. A minor increase to 0.16% may be brought about by single occurrences or particular patient situations that affect rescheduling.

While there have been variations in the percentage of cases that have not been rescheduled, the data shows a general trend toward improvement, particularly in the most recent months. Through targeted interventions, the hospital can address variables such as patient refusal, clinical deterioration, and other patient-related problems to further reduce the percentage of surgeries that are not postponed, improve overall patient care, and increase operational efficiency.

VII. DISCUSSION

The main causes of surgical cancellations are consistent with findings from additional studies. Surgery cancellations are significantly influenced by patient-related factors, including non-cooperation, severe clinical deterioration, and lack of consent, as demonstrated by studies conducted by Chalya et al. (2011) and Jonnalagadda et al. (2005). Similar patterns are shown by this study, which also notes a notable percentage of cancellations attributable to these problems. Research like those conducted by Naik et al. (2018) and Chiu et al. (2012) highlights how equipment problems and administrative inefficiencies affect surgery scheduling. This study recognizes the significance that administrative and technological challenges play in addition to the factors connected to patients. As mentioned by González-Arévalo et al. (2009) and Keller et al. (2014), unexpected clinical problems resulting in cancellations are a recurring topic. These results are supported by this study, which shows that unanticipated clinical changes are a major factor in cancellations.

Our study shows that the hospital's existing practices indicate that efforts to reschedule have improved over time. Initial procedural inefficiencies may be indicated by higher percentages of cancelled surgeries in the early months (e.g., April 2023, at 1%). Rescheduled policies have much improved, as seen by the decline to 0% in December 2023 and February 2024. Research such as that conducted by Kaddoum et al. (2016) and Garg et al. (2009) demonstrates the significance of effective rescheduling procedures in lowering the total number of cancellations. As several studies have shown, routine follow-ups and patient engagement techniques help to reduce the number of appointments that are not rescheduled.

The study findings and literature research support a number of recommendations that can improve the cancellation and rescheduling processes. Talati et al. (2015) propose that comprehensive pre-operative evaluations can aid in the early identification of potential difficulties. This Proactive strategy can lessen last-minute cancellations brought on by worsening clinical conditions. Unwillingness and lack of collaboration can be addressed by enhancing patient education and support programs. Patients' worries can be reduced by giving them accurate information regarding the advantages and hazards of surgery (Kumar & Gandhi, 2012). Reductions in

cancellations resulting from administrative problems can be achieved by streamlining scheduling and allocating resources more effectively (Kumar & Sarma, 2003).

The study shows that there is a tendency toward accomplishing this goal. Lower Number of Cancellations: The overall percentage of cancellations fell from 5.85% in January 2023 to 0.13% in January 2024, demonstrating the success of the actions put in place.

Increasing Rates of Rescheduling: Successful rescheduling efforts are demonstrated by the high number of rescheduled procedures (30.33%), which is supported by the decline in cases that were not rescheduled. The results of the study are consistent with previous research on surgical postponements and cancellations. The tertiary care hospital has improved rescheduling processes and decreased cancellations by a considerable margin. Maintaining and improving these gains will need ongoing efforts in patient education, administrative effectiveness, and proactive clinical assessments.

VIII. Recommendations

The following suggestions are made to improve the elective surgical procedure in the tertiary care hospital based on the evaluation of the data on cancellations and rescheduling and on knowledge gained from previous research.

8.1 Boost Assessment and Screening before Surgery

Comprehensive Assessments: To detect possible medical, administrative, or logistical problems early on, establish more stringent pre-operative screening methods. Interdisciplinary reviews, risk assessments, and thorough patient histories.

Improved Communication: To guarantee that all possible problems are found and resolved prior to the day of surgery, promote improved communication between anaesthesiologists, surgeons, and pre-operative teams.

8.2 Enhance Patient Education and involvement

Counselling Patients: Hold in-depth counselling sessions to help patients comprehend the advantages and disadvantages of their surgery. This will help to lower the number of cancellations caused by fear or confusion on the part of patients.

Succession Support: From the time of scheduling to the post-operative recuperation phase, provide patients with strong follow-up procedures and promptly resolve any problems that may arise.

8.3 Enhance Administrative Procedures

Simplified Scheduling: Make the most of operation appointments, reduce overlaps, and guarantee effective use of personnel and operating rooms by utilizing advanced scheduling software.

Clear Protocols: To guarantee uniformity and effectiveness in administrative procedures, establish explicit, standardized procedures for managing postponements and cancellations.

8.4 Better Resource Management

Equipment and Supply Management: To avoid cancellations caused by equipment problems, audit and maintain surgical equipment on a regular basis. Assure a dependable surgical supply chain for all required supplies.

Employee Availability: Put procedures in place to guarantee that critical medical staff is available, including contingency plans for unforeseen absences.

8.5 Put in place systems for continuous improvement and feedback

Feedback from Patients and Staff: Get regular input regarding the surgical process and scheduling from patients and surgical teams. Make use of these comments to pinpoint places that need work.

Data-Driven Decisions: Track and evaluate data on cancellations and rescheduling's on a regular basis to identify patterns and put evidence-based remedies into action.

8.6 Explore Particular Reasons for Not Rescheduling

Patient Unwillingness: Address the patient's reasons for not wanting to reschedule, including anxiety, false information, or practical difficulties. Interventions specifically designed to address these problems, including more counselling or administrative assistance, may be helpful.

Severe Clinical Deterioration: In situations when there is a significant decline in a patient's health, it is important to make sure that patients and their families are informed about the potential consequences of surgery and that appropriate channels of care are available.

Problems with Consent and Non-Cooperation: Create plans for dealing with patients who are unwilling to cooperate and consent-related concerns; you might want to engage legal and ethical experts to tackle difficult circumstances.

8.7 Boost Education and Training

Staff Education: Continually educate all surgical and administrative personnel on the best ways to schedule surgeries, communicate with patients, and handle cancellations.

Professional growth: Provide chances for staff members to continue their professional growth.

The tertiary care hospital can further decrease cancellations of elective surgeries and enhance the efficacy and efficiency of its rescheduling practices by implementing these suggestions into practice. This will improve patient outcomes, make best use of available resources, and help raise the standard of healthcare as an entire industry.

IX. Summary and Conclusion

The study's objectives were to identify the primary reasons why elective surgeries in a tertiary care hospital's operating room are cancelled, evaluate the practices and policies in place for rescheduling cancelled surgeries, offer evidence-based recommendations and guidelines for improving cancellation and rescheduling processes, and assess the effectiveness of actions implemented to lower cancellation rates and raise rescheduling rates.

A total of 8863 surgeries were planned during the 15-month period between January 2023 and March 2024. Of the total number of scheduled surgeries, 31.72%, or 195 surgeries, were cancelled. Concerns about patients (26.15%), problems with patients' medical fitness (15.38%), and unforeseen clinical circumstances (10.25%) were the main reasons for cancellations. 31 procedures (5.70%) were not rescheduled out of the 195 cancelled surgeries, whereas 164 (30.33%) rescheduled. The reasons for not rescheduling surgery included consent difficulties, serious clinical deteriorating, non-cooperation from patients, and patient refusal.

The percentage of unscheduled procedures varied, reaching a maximum of 1% in April 2023 and falling to 0% in December 2023, January 2024, and February 2024. There was an overall downward trend in the percentage of surgeries that were not rescheduled, suggesting that rescheduling efforts were improving. The study cited a number of important studies that offered information about the causes of surgical cancellations as well as possible ways to make improvements. Studies by Chalya et al. (2011), Chiu et al. (2012), and González-Arévalo et al. (2009) are a few notable references. These research supported the conclusions of this investigation by highlighting prevalent concerns such equipment breakdowns, administrative challenges, and patient-related factors.

Several crucial areas for improvement were identified by the tertiary care hospital's evaluation of elective surgical cancellations and rescheduling. Even though there has been a noticeable decrease in the number of surgeries that are not rescheduled, more work is still needed to address the root reasons of cancellations and improve the overall effectiveness of the surgical scheduling process.

References:

- [1]. Chalya, P. L., Gilyoma, J. M., Mabula, J. B., Simbila, S., Ngayomela, I. H., Chandika, A. B., & Mahalu, W. (2011). Incidence, causes and pattern of cancellation of elective surgical operations in a university teaching hospital in the Lake Zone, Tanzania. *African health sciences*, 11(3).
- [2]. Chiu, C. H., Lee, A., & Chui, P. T. (2012). Cancellation of elective operations on the day of intended surgery in a Hong Kong hospital: point prevalence and reasons. *Hong Kong Med J*, 18(1), 5-10.]
- [3]. Garg R, Bhalotra AR, Bhadoria P, Gupta N, Anand R. Reasons for cancellation of cases on the day of surgery-a prospective study. *Indian J Anaesth* 2009; 53:35-9.
- [4]. González-Arévalo, A., Gómez-Arnau, J. I., DelaCruz, F. J., Marzal, J. M., Ramírez, S., Corral, E. M., & García-del-Valle, S. (2009). Causes for cancellation of elective surgical procedures in a Spanish general hospital. *Anaesthesia*, 64(5), 487-493.
- [5]. Elrahman, A. A., Hamza, A. A., & El-Haj, M. A. (2014). Cancellation of elective general surgical operations at the day of intended surgery. *Glob J Med Res*, 14(3).
- [6]. Jonnalagadda, R., Walrond, E. R., Hariharan, S., Walrond, M., & Prasad, C. (2005). Evaluation of the reasons for cancellations and delays of surgical procedures in a developing country. *International journal of clinical practice*, 59(6), 716-720.
- [7]. Kaddoum, R., Fadlallah, R., Hitti, E., El-Jardali, F., & El Eid, G. (2016). Causes of cancellations on the day of surgery at a Tertiary Teaching Hospital. *BMC health services research*, 16, 1-8.
- [8]. Kumar R, Sarma RK. Operation room utilization at AIIMS, a prospective study. *J Acad Hosp Adm* 2003; 15:1-6.
- [9]. Keller, A., Ashrafi, A., & Ali, A. (2014). Causes of elective surgery cancellation and theatre throughput efficiency in an Australian urology unit. *F1000Research*, 3.
- [10]. Kumar, R., & Gandhi, R. (2012). Reasons for cancellation of operation on the day of intended surgery in a multidisciplinary 500 bedded hospital. *Journal of Anaesthesiology Clinical Pharmacology*, 28(1), 66-69.
- [11]. Kaddoum, R., Fadlallah, R., Hitti, E., El-Jardali, F., & El Eid, G. (2016). Causes of cancellations on the day of surgery at a Tertiary Teaching Hospital. *BMC health services research*, 16, 1-8.
- [12]. Magerlein JM, Martin JB. Surgical demand scheduling: A review. *Health Serv Res* 1978; 13:418-33.
- [13]. Naik, S. V., Dhulkhed, V. K., & Shinde, R. H. (2018). A prospective study on operation theater utilization time and most common causes of delays and cancellations of scheduled surgeries in a 1000-bedded tertiary care rural hospital with a view to optimize the utilization of operation theater. *Anesthesia Essays and Researches*, 12(4), 797-802.
- [14]. Sarang, B., Bhandoria, G., Patil, P., Gadgil, A., Bains, L., Khajanchi, M., & Bhandarkar, P. (2022). Assessing the rates and reasons of Elective Surgical Cancellations on the day of surgery: a Multicentre Study from Urban Indian Hospitals. *World Journal of Surgery*, 46(2), 382-390.
- [15]. Schofield WN, Rubin GL, Piza M, Lai YY, Sindhusake D, Fearnside MR, et al. Cancellation of operations on the day of intended surgery at a major Australian referral hospital. *Med J Aust* 2005; 182:612-5.
- [16]. Stavrou G, Panidis S, Tsouskas J, Tsaousi G, Kotzampassi K. An audit of operating room time utilization in a teaching hospital: Is there a place for improvement? *ISRN Surg* 2014; 2014:431740.
- [17]. Sanjay P, Dodds A, Miller E, Arumugam PJ, Woodward A. Cancelled elective operations: An observational study from a district general hospital. *J Health Organ Manag* 2007; 21:54-8.

- [18]. Schofield, W. N., Rubin, G. L., Piza, M., Lai, Y. Y., Sindhusake, D., Fearnside, M. R., & Klineberg, P. L. (2005). Cancellation of operations on the day of intended surgery at a major Australian referral hospital. *Medical Journal of Australia*, 182(12), 612-615.
- [19]. Talati, S., Gupta, A. K., Kumar, A., Malhotra, S. K., & Jain, A. (2015). An analysis of time utilization and cancellations of scheduled cases in the main operation theater complex of a tertiary care teaching institute of North India. *Journal of postgraduate medicine*, 61(1), 3-8.
- [20]. Tan, A. L., Chiew, C. J., Wang, S., Abdullah, H. R., Lam, S. S., Ong, M. E., ... & Wong, T. H. (2019). Risk factors and reasons for cancellation within 24 h of scheduled elective surgery in an academic medical centre: a cohort study. *International Journal of Surgery*, 66, 72-78.
- [21]. Talati, S., Gupta, A. K., Kumar, A., Malhotra, S. K., & Jain, A. (2015). An analysis of time utilization and cancellations of scheduled cases in the main operation theater complex of a tertiary care teaching institute of North India. *Journal of postgraduate medicine*, 61(1), 3-8.
- [22]. Talati S, Gupta AK, Kumar A, Malhotra SK, Jain A. An analysis of time utilization and cancellations of scheduled cases in the main operation theater complex of a tertiary care teaching institute of North India. *J Postgrad Med* 2015; 61:3-8. Vinukondaiah K, Ananthakrishnan N, Ravishankar M. Audit of operation theatre utilization in general surgery. *Natl Med J India* 2000; 13:118-21.
- [23]. Wildner M, Bulstrode C, Spivey J, Carr A, Nugent I. Avoidable causes of cancellation in elective orthopedic surgery. *Health Trends* 1991; 23:115-6.