



OPERATIONS; CANCELLATION ON THE INTENDED DAY OF SURGERY

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ABSTRACT... Objective: To find out reasons for cancellation of operation on the day of surgery in the Surgical Department of Civil Hospital Karachi. **Design:** Observational study. **Setting & Period:** All operation theatre bookings of the Civil Hospital Surgical Department from July 2010 to October 2010 have been studied by using the 'daily operating theatre lists'. Frequency of cancellation, type of surgeries cancelled and their reasons studied. **Results:** Out of total 455 cases, 97 (21%) surgical operations were cancelled on the day of surgery, highlighting patients' non-compliance as a major contributing reason, followed by the lack of operating room time and other causes. Among the less contributing factors were patient expiry on table, failure to administer anesthesia and delay in operation due to exams (engagement of patients in undergraduate exam in the college). **Conclusions:** Patients non-compliance is a major challenging factor that causes a large number of cancellations of operations in the Civil Hospital Karachi.

Key words: Surgical operations, operation theatre, cancellation, efficiency, efficacy, management

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INTRODUCTION

Operation theatre is one of the important departments that provides sound basis for an effective healthcare framework. It requires considerable human resource as well as budget so as to deliver the best results in an efficient manner. Though, all major hospitals make substantial investment in ensuring the on time availability of surgeons and theatre staff¹, a major problem that remain prevalent in all hospitals is the cancellation of operation at an eleventh hour. The situation leads to the underutilization and idleness of the operation theatres². In addition to it, cancellation of planned operations also establishes the inefficiency of management³.

Wastage of resources and inefficient use of operation theatres is highly attributed to the late cancellation of scheduled operations¹. Last minute cancellation provides consequences not only for hospitals but it also effect patient interests⁴.

Reports have been published that highlight the depressing effects laid by operation cancellation on patients^{5,6}.

Quality of patient care and overall hospital management can be assessed by carefully considering the parameter of operations cancellation⁷. A variety of studies have been conducted to examine the reasons associated with the late cancellation of operations. The reported incidence of cancellation in different hospitals ranges from 10% to 40%⁷. The reasons of cancellation can be classified as either avoidable or unavoidable. However, the major contribution in the cancellations has been provided by lack of operating room time⁸.

The aim of this study was to find out frequency and reasons for cancellation of surgery in the surgical department of Civil Hospital Karachi. Civil Hospital is one of the major health care providers in the city,

and optimum use of its resources is necessary to ensure providence of quality healthcare services. Identification of operation cancellation reasons will enable the management to make appropriate strategies and thus, make better use of its operation theatre facility.

METHODS

Operation theatre bookings of the Surgical Department of Civil Hospital Karachi were reviewed from July 2010 to October 2010. During that period total of 32 operation day theatre list were reviewed from one unit.

The surgical unit has two operation days per week and is equipped with three operation tables. Daily operating theatre list served as a major tool that has been used in this study. By using this list, a Performa has been prepared that recorded data by documenting the total number of operation performed in the study period, the number of operations cancelled and reasons for cancellation.

Data was analyzed by SPSS version 17 for descriptive statistics.

RESULTS

There were total 455 surgical operations booked during the study period of three months. Total 33 operative days were analyzed, out of them; one day full list cancelled due to law and order situation in the city (strike). The average cases per list scheduled were 14.2 cases.

Out of total 455 booked operations, 97 (21%) operations were cancelled. As most of cancelled patients did not come on the scheduled day of operation for cases under local anesthesia, non-compliance of patient has been identified as the major contributor for operations cancellation followed by lack of operating theatre time. On the contrary, Patient expiry on table (and next patient cancelled), failure to administer anesthesia and delay in operation due to students examination provided with the least contribution in the total cancellations of operation. (Table-I)

DISCUSSION

Findings revealed that 97 (21%) of all scheduled operations were cancelled on the day of surgery in a public sector hospital. Investigations have identified patients' non-compliance (not coming on the day as patient schedule under local anesthesia were not admitted and directly come in operation theatre on day of surgery) as a major reason for these cancellations. Civil Hospital being one of the major hospitals in Karachi is not preventable from operations cancellation that ultimately effects the efficient management of the health care setting. As a result, unavoidable consequences remain prevalent for both the hospital and patients.

	Frequency	%age
Non-compliance of patient (all cases scheduled under local anesthesia)	45	46.4
Shortage of time	12	12.4
Un-optimized condition of patients*	14	14.4
Patient expiry on table	1	1.0
Unplanned holiday due to strike	9	9.3
Failure to administer anesthesia	1	1.0
Delay due to exam	1	1.0
No operation needed because of change in patients condition **	5	5.2
Unavailability of operative instruments	2	2.1
No attendant with patient	5	5.2
No Informed Consent	2	2.1

Table-I. Reasons for cancellation of Surgery (n=97)

*These included uncontrolled hypertension, diabetes, lung problems and low platelets

** All patients were scheduled for secondary suturing from outpatient department

An efficient surgical service is one that is marked with lower rate of operation cancellation. In case of such annulment, operation theatre resources remain underutilized, costs rises along with an increase in the waiting lists⁹. It is difficult to neglect this fact that the underutilization of resources provides increased burden on general population, and specifically those who belong to lower socio economic class, as they are the ones more dependent on taking services of a public hospital. Underutilized costs are added by the hospital management to the services and are ultimately passed on to the patient;¹⁰ therefore, cancellations must be avoided so as to reduce this burden on general public.

As our study has collected data from lists prepared by the theatre staff, validity of this source might remain a major issue. However, operation cancellation reasons that have been identified with the help of Performa will be helpful for the hospital management in enhancing the efficacy of this major health service provider. This study highlighted many important dimensions to have more efficient utilization of operation theatre after rectifying common and avoidable reasons of cancellation.

Literature search has provided with number of studies that were conducted in different settings so as to evaluate reasons for operation cancellation^{1,10,11,12}. Though all the studies have identified similar reasons for cancellation of operations, the major contributing factor varies depending on the setting in which the study was performed. Lack of operation theatre time was identified as a major cause in the study conducted in India¹¹, whereas lack of theatre space and proper facilities was concluded as a main factor in the Tanzanian study¹². Our study has concluded non-compliance of patients as a major reason for cancellation which might be because of the reason that people in Pakistan are not provided with proper counseling before operation in busy outpatient department, and they remain in a chaotic condition that whether they should go with the surgery or not. Many patients requiring surgery under local anesthesia were diagnosed, booked

and operated by junior residents which may be one of the reason that many patients not turned up on the day of surgery. Patients should be properly optimized for surgery to prevent delay in cancellation. In this study, one patient was cancelled due to non-availability of double lumen endotracheal tube for anesthesia required for his surgery. If all departments work in harmony, these incidents can be avoided.

Our results imply that hospitals will not be able to deal with the problem of operation cancellation until specific attention is given to each phase of the operation process. Initial booking for operation, notification of patients' details, availability of the equipment as well as the staff must be ensured by the management. In addition to it, suitable steps must be undertaken by the administration so as to improve patients' compliance with the scheduled operation day. In case if they are faced with any query regarding operation, a proper therapy must be provided to them ensuring a win-win situation for both patient and hospital.

Furthermore, this research study provides ground for future research projects as the better utilization of the operation theatre can be assessed by taking assistance from the results provided in this paper. Future researchers can also comprehensively study patients' noncompliance so as to identify in detail the impact brought by this factor.

CONCLUSIONS

Non-compliance on the part of patients to be present on the scheduled day of operation is identified as a major contributor for the operations cancellation. There is an immense need of the effective steps that must be taken by the Civil Hospital management so as to ensure an effective and efficient use of its operation theatre facility.

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*“Sometimes it is not enough that
we do our best;
we must do what is required.”*

Sir Winston Churchill (1874-1965)