SHORT ARTICLE

OPERATIVE NOTES AT SURGICAL UNITS OF A TERTIARY CARE HOSPITAL

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ABSTRACT

Objective — *To assess the quality of operative notes in general surgery procedures.*

Study design — *Descriptive study.*

Place & Duration of study — *Civil Hospital Karachi.*

Methodology — *Operative notes for all procedures were typed and saved in a data retrieval system (Health Management and Information System, DOTS'78). A proforma was designed in accordance with the standards prescribed by Royal College of Surgeons of Edinburgh (RCSE) for taking down surgical case notes. The operative notes were studied and a proforma was filled for each. These were then compared with the prescribed standard for completion of documentation. The data was analyzed on SPSS 13.*

Results — *Out of a total of 100 notes, 99 had operating surgeons name mentioned, however, the time of surgery was missing in all. Approximately half of the notes surveyed did not mention the incision type, while operative diagnosis was mentioned in 92% of the notes. Post operative instructions were mentioned in 89% of the notes reviewed.*

Conclusion — *Standardized operative notes documentation was not found in the present study in most of the cases.*

Key words — *Post operative notes, Surgical case notes, Quality control.*

INTRODUCTION:

Operative notes are an important part of a patient's medical records. They are essentially the only first hand information regarding the procedures performed and operative findings during any surgical intervention. They not only provide information for continuous medical care but are also available for future references in clinical setups and legal matters. The importance of detailed operative notes is augmented by the evidence that most of the lawsuits are filed due to shortcuts taken in the operating rooms, during surgery or while inking the notes.[1] These shortcuts can be due to omitting steps, underestimating the findings or using abbreviations. Errors resulting from use of abbreviations in prescriptions have estimated to be as much as 11.4%.[2]

Traditionally, operative notes have been written by one of the junior members of the scrubbed team, often supervised by a senior surgeon, considered as an essential part of training. However, standardization of these notes were not done until recently, when different surgical societies developed guidelines, such as one issued by the Royal College of Surgeons of England.[3]

We performed this descriptive study to assess the operative notes in general surgical procedures at Civil Hospital Karachi (CHK) and compared them to the standards set by the RCSE.

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METHODOLOGY:

This proforma based study was conducted at the general surgery theater complex at CHK where operative notes for all procedures were typed and saved in a data retrieval system (Health Management and Information System, DOTS'78). One hundred consecutive operative notes were retrieved and reviewed retrospectively. A predesigned proforma, according to standards prescribed by RCSE, was filled for each surgical document.

Data recorded on the proforma included presence or absence of information regarding date and time of surgery, surgeon's name, assistant's name, procedure done, type of incision made, suture material used, operative diagnosis, preoperative findings, complications during the procedure (if any), details of tissue removed, closure technique, type of sutures used in closure, post operative instructions including oral intake, intravenous fluids, analgesia, antibiotics and instructions for the nursing staff. The data was then analyzed quantitatively for frequency and percentages using Statistical Package for Social Scientists (SPSS) version 13.

RESULTS:

In all the 100 operative notes that were reviewed date of surgery written was written but none of them had the time of surgery recorded. Post surgical notes had the name of operating surgeon, assistant and the operative procedure carried out in 99 cases. The type of incision made was mentioned in 55% of the notes and 72% did not mention the suturing material used.

The operative diagnosis was mentioned in 92% of the case notes while the details of operative findings were missing in 55%, and that of complications missing in 79% of the notes. In 22 notes details of tissue removed was mentioned while 37% stated closure techniques and 30% mentioned the suture used in closure.

The post operative instructions were written on 89% of the notes, 88% of notes had instructions for oral intake after surgery and 89% had instructions for intravenous fluids. The antibiotic medicines were prescribed in 91% and post operative analgesics in 91% of the cases, while 58% of the post operative notes had no instructions for the nursing staff.

DISCUSSION:

Our observation has brought to light several inadequacies in the record keeping of surgical procedures. Despite of the medico legal importance of the patient records none of the notes in our study had time of surgery mentioned on it. In the operating theatre complex, where this study was conducted, notes are computer based and every new record opens in a new window with specified space for name of operating surgeon, assistant, procedure carried out and operative diagnosis. Therefore, out of the 100 notes reviewed, almost all the notes had the name of the operating surgeon, assistant and the procedure carried out written on them, however, most of them had no information whether the notes were taken down by the consultant or the trainee doctors.

The descriptive text of the operative procedures and postoperative orders are usually written in specified place in the wards of the writer him/herself. Computer based recording of notes has shown increased efficiency in standardization of these notes.[4] As compared to the audit carried out at the ENT department at Hull Royal Infirmary, UK, where the operative diagnosis was mentioned in 46% of operative notes,[3] we found the diagnosis recorded in 92% of our notes, most likely due to specified space on the notes page. However, the operative findings were missing in 55% of the cases.

The overall recording of type of incision, closure techniques and suture used was found to be fairly inadequate as compared to audits in other parts of the world using the Royal College of Surgeons Guidelines for operative notes taking, prior to introduction of aid memoires in the operating rooms.[3,5] Instructions for the ward staff regarding postoperative care of the patient are an essential part of operative notes writing. Inadequate instructions, use of abbreviations, uncalculated drug dosage and frequency can be potentially life threatening.[2,6] Despite of its importance 58% of our notes had no nursing instructions for the nursing staff (table 1).

Audits in different parts of the world have motivated surgical teams to find ways to make the task of record keeping easier. The use of standardized operation notes sheet with headings and specified spaces for documentation act as aide-memoires. These aide-memoires and use of diagrams, illustrations as well as digital images along with descriptive explanations has

Table I: Post-operative Findings Mentioned in the Case Notes

Findings in the study	Number of case notes where mentioned (n = 100)
Post-operative instructions	89
NPO Instructions	88
Intravenous fluids	89
Antibiotics	91
Post-operative analgesia	91
Instruction for nursing staff	42

shown significant improvements in the quality of operative notes worldwide.[3,5-9] Introduction of computer based system has shown even greater accuracy, and was found to be quite easily manageable.[10]

CONCLUSIONS:

The findings from our survey demand urgent attention towards improvement in the current standards of operative notes writing, in operation theatres, not only for the sake of better patient record keeping but also for improved patient care and to minimize the errors in communication.

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