

Quality of Operation Notes in General Surgery: A Teaching Institute Experience

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ABSTRACT

Background: Operative notes are documents that describe essential information regarding all the details about the events that occurred in the operating room. However, there is a compromised quality of writing operation notes.

Objective: To assess the operative notes at a tertiary care hospital and compare those to the standards set by the Royal College of Surgeons England.

Methodology: An observational prospective study carried out in the department of general surgery for two months, February to March 2017. Altogether 167 operative notes were included and assessed according to the published guidelines by the Royal College of Surgeons England. Different parameters of writing operation notes were recorded on Excel sheet and analyzed.

Results: All 167 notes were handwritten of which 48 were written by the operating surgeon himself. None of the operation notes mentioned the time/duration of surgery. There were no illustrations/diagrams representing the operative procedure. The name of the patient was mentioned in all but the control number was scarce. Post-op instructions also lacked direction.

Conclusion: Several areas were highlighted lacking the useful information advocating the incomplete and incomprehensible manner of this essential document.

Keywords: Operative notes, General Surgery, Quality.

Introduction

In a general surgery department, where patients are mostly admitted for a surgical procedure, operation notes are a document that contains all information about the events that occurred in the operation theatre and is a major component of the patient's file and history. Operation notes are important in the clinical documentation that proves vital to the care and safety of the patient.^{1,2} These operation notes need to be flawless and should consist of all the parameters without which a compromise in patient care is inevitable. It also carries great importance being a legal document holding

information for litigation purposes. The General Medical Council recommends accurate, complete, comprehensive and legible records are to be maintained for every patient by the surgeon. They are vital for ideal patient care and long-term follow-up.³⁻⁶

Improving the quality of operation notes can help to prevent errors. Effective writing of these notes improves good communication between the healthcare providers that ultimately improves patient's care. The requirement is to improve our clinical practice, a standardized approach to

document needs to be adapted. Since there are no surgical guidelines for writing operative notes in Pakistan; hence there is need to know the seriousness of this situation in our local setup. The aim of this study is to assess the quality of written operation notes in our department of general surgery to highlight the discrepancies with the standards set by the Royal College of surgeons.

Methodology

A prospective observational analysis was conducted at the department of general surgery SZABMU/PIMS Islamabad during February & March 2017. All operative notes were analyzed and assessed against the guidelines from "Good surgical practice" by the Royal college of Surgeons⁸. A specifically designed checklist was constructed and assessment made manually of all the deficiencies as per the standards set. The following given point heads are taken from the royal college of surgeon's guidelines of "good surgical practice" the construct of all written/typed operative notes should always contain the following information in context of the patient undergoing a surgery.

Essential items to be included in operation notes
» Date and time
» Elective/emergency procedure
» Names of the operating surgeon and assistant
» Name of the theatre anaesthetist
» Operative procedure carried out
» Incision
» Operative diagnosis
» Operative findings
» Any problems/complications
» Any extra procedure performed and the reason why it was performed
» Details of tissue removed, added or altered
» Identification of any prosthesis used, including the serial numbers of prostheses and other implanted materials
» Details of closure technique
» Anticipated blood loss
» Antibiotic prophylaxis (where applicable)
» DVT prophylaxis (where applicable)
» Detailed postoperative care instructions
» Signature

Fig 1: RCS Guidelines for writing operative notes

All data was collected on a specially designed proforma and Statistical Package for the Social Sciences (SPSS) version 20 was used to analyze the data statistically.

Results

A total of 167 notes were reviewed by the department of general surgery of which only 48 operative notes were written by the primary surgeon. Patient's name was present in all notes but the patient control number was mentioned only in 30 cases.

Time of surgery is not mentioned in any of the operative notes neither in elective nor emergency procedures. Surprisingly there was no description of operation details in thirteen patients. In rest 154 cases, although operative findings were written there was no diagrammatic representation of the operative procedure.

The name of the anaesthetist was missing in 41 notes. Only 33 notes mentioned the name of the scrub nurse. Diagnoses are not mentioned in 18 cases and in 26 cases type of incision given is missing.

Out of total 31 mesh hernioplasties done, only 11 had the serial number sticker attached to the operation notes paper.

The record of sponge and gauze count at the end of surgery is missing in the majority of the notes and mentioned in only 18 cases. There was no description of blood loss and fluids infused per-op.

Post-op instructions were mentioned in all the notes, antibiotics and analgesia were mentioned in all the notes but 39 cases had no intravenous fluids direction. 24 cases were missing signature at the end of the notes. The histopathology sample handover was present in only 9 cases.

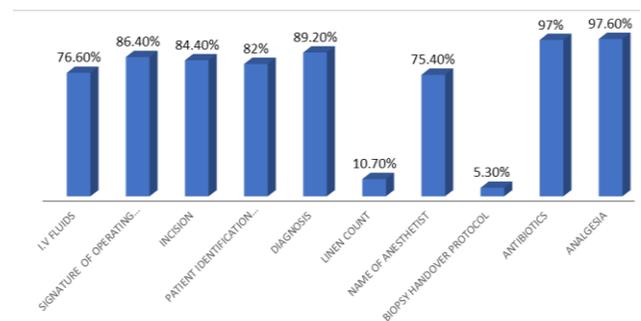


Figure 2: Percentage of post-operative instructions and documented events in operation note.

Discussion

Importance is given in ample amounts to operation notes and improvements need to be made for better documentation purposes, there have been many researches when operative reports have been scrutinized and they have shown to be inconsistent, deficient in quality or are

incomplete.⁶⁻⁹ The notes need to be comprehensive and complete, easy to understand, preferably to be written by the surgeon himself, if narrated or written by the assistant, required to be counter-signed. In narration, there can be incomplete information and are of poor quality.⁸

The operative sheets we used had no column for patient control number (a number specific to a patient, computer generated) and was therefore not written. Patient identification is very important, for all medical records and should be written as part of good clinical practice. In a study conducted in Tasmania, Australia patient identification was missing in 12 (6.8%) of notes.¹² Lack of patient identification in the notes show that they might get misplaced.³

Time duration was a major missing part of this study and other researches elsewhere. It was not mentioned in any case whether a procedure was an elective or an emergency. The name of the operating surgeon being present in all the notes, without the mention of the anesthetist in 41 cases, the name of the scrub nurse was a rarity being a major part of the operating team.

Amongst the things which were most important, operative findings carry the most significant weightage, illustrations and diagrams can aid in understanding the procedure for a third person in a better way. Missing diagnosis and sponge/gauze counts were found in a number of other studies.

Details consisting of per-op complications, estimated blood-loss, fluid replacement, blood transfusions need not to be missed, such was the pattern of construction in all the operation notes being assessed, since knowing such information could benefit in patient care and even legal issues, providing effective and appropriate treatment on follow-up. The operating surgeon's name is generally documented; this is demonstrated in our study (present in 100% of the notes) as well as a study coming from Ashford, UK,¹⁵ while the anesthetist was named in 95% of records, which was much higher than the 13.9% mentioned in a study from Omdurman Teaching Hospital in Sudan; however the operating assistant was mentioned in only 50% of our cases to the 92.6% from the above-mentioned study.¹⁶

The procedure conducted was mentioned in the majority (95%) of the operative notes. The notes regarding the type of incision made, operative diagnosis, operative findings, and details of closure technique were quite insufficient at 84.4%, 89.2%, 66.7%, and 56.7% respectively. The variation in records of many of these variables was

found in a number of other studies.^{11,13-15} The intraoperative complications/ problems were documented in only 2 of the operative notes; this was similar to findings in other researches, such as one conducted in Nigeria where only 3 notes (2.5%) included complications.¹¹ As most of the procedures looked at were elective procedures, therefore, the incidence of complications would be low, hence the author cannot be sure whether it is lack of documentation or otherwise.

Post-op instructions were adequately written with a 97% mention of antibiotics and analgesia. IV fluids being a major requirement in all patients because of the nil per oral interval was missing out in 29 cases. The dosage of certain drugs was missing, this can be highly unsafe for the patient, as once the patient is shifted to the ward under the care of another doctor, without thorough instructions, the patient might receive inadequate and improper care which can be fatal in situations where drug names or dosages are not calculated. The areas which are lacking essential information in the operative notes that could be improved include: mentioning the time of the procedure, type of surgery, operative diagnosis, operative findings, any complications during the procedure and complete instructions for postoperative care; avoiding the use of abbreviations and encouraging the use of diagrams for easier interpretation would also improve the quality of operative notes.⁹ whilst the using of a surgical performa can make things to mention easier to recall. All staff members should be trained how to write descriptive and comprehensive notes. Regular audits should be conducted for assessments and further improvements be carried out.

Conclusion

With the knowing of which details are being missed in operative notes, being incomplete and not up to the standard set by the Royal College of surgeons. Adjustments need to be carried out; there is room for improvement to standardize the quality of operative notes.

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