

## QUALITY OF OPERATIVE NOTES

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### ABSTRACT

**Objective:** To evaluate the quality of written operative notes of patients undergoing surgery in a tertiary care teaching hospital.

**Material and Methods:** It is a retrospective audit carried out in the department of surgery, unit II at Civil Hospital, Karachi over a period of three months from July to September, 2007. Randomly selected operative notes were assessed according to published guidelines of the Royal College of Surgeons in Ireland (Good Surgical Practice, 2004).

**Results:** Out of 185 operative notes analysed, 160 (86.5%) were written by the trainee surgeons, 24 (13%) by house officer and only one (0.5%) by consultant. The type of the operation was recorded in 181 (97.8%) of the operative notes, patient's identification in 115 (62.2%), type of incision in 163 (88.1%) and operative findings in 177 (95.7%). Operative complications were mentioned in only 30 (16.2%) of notes. Post-operative orders were recorded in 184 (99.5%) and abbreviations were used in 83 (44.9%) of notes. Only three notes did not have a signature of the person writing the notes. Legibility of the notes was assessed to be good in 155 (83.8%), fair in 20 (10.8%) and poor in 10 (5.4%).

**Conclusion:** Most of the operative notes were written by the junior members of the operating team who did not have the sufficient knowledge and skill. This was evident since some critical details were missing in the notes.

**Keywords:** Operative Notes, Quality, Audit, Medical Records, Guidelines.

### INTRODUCTION

Operative notes are an important part of patients' records and maintaining a full and proper record is a professional responsibility of every surgeon. They are not only used as evidence in medico-legal cases but also provide a valuable learning source for surgeons in training. Immediate post-operative, pre-discharge hospital and long-term patient care are all influenced by the quality of the record.

Previous studies from different parts of the world have shown that operative notes are often lacking in basic details.<sup>1-4</sup> We were unable to find any local reference from the literature search. In this study, we evaluated the quality of written operative notes of patients undergoing surgery in a tertiary care teaching hospital. As there are no national guidelines about writing operative notes so we utilized the published guidelines of the Royal College of Surgeons in Ireland (Good Surgical Practice, 2004) as a standard.<sup>5</sup>

### MATERIAL AND METHODS

A retrospective audit was carried out in the department of surgery, unit II at Civil Hospital, Karachi over a period of three months from July to September, 2007. Randomly selected operative notes were assessed according to published guidelines of the Royal College of Surgeons in Ireland, 2004 (Table-I).<sup>5</sup> Data was collected by one author (RA) in a specially designed proforma which was then evaluated by the help of SPSS version 10.

### RESULTS

A total of 185 operative notes were analysed. Majority of records 160 (86.5%) were written by the trainee surgeons, 24 (13%) by house officer and only one (0.5%) by consultant / registrar. The type of the operation was recorded in 181 (97.8%) of the operative notes. The time of the operation was recorded in 128 (69.2%) and patient's identification in 62.2%. The name of the surgeon, anesthetist and technician were recorded

**ROYAL COLLEGE OF SURGEONS IN IRELAND  
OPERATIVE NOTES GUIDELINES<sup>5</sup>**

- Date and time
- Elective/emergency procedure
- The names of the operating surgeon and assistant
- The operative procedure carried out
- The incision
- The operative diagnosis
- The 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
- Postoperative care instructions; and
- A signature.

Table 1

in 184 (99.5%), 168 (90.8%) and 163 (88.1%) respectively. Type of incision was mentioned in 163 (88.1%) and operative findings in 177 (95.7%). Operative complications were mentioned in only 30 (16.2%) of the notes. This may be related to acts of omission or the fact that the operation was uneventful. Post-operative orders were recorded in 184 (99.5%) notes. Abbreviations were used in 83 (44.9%) of notes with most common being AAA (After All Aseptic) and ASD (Aseptic Dressing). Only 3 (1.6%) notes did not have a signature of the person writing the notes (Table-2). Legibility of the notes was assessed to be good in 155 (83.8%), fair in 20 (10.8%) and poor in 10 (5.4%).

**DISCUSSION**

Writing an operative note is a core skill in surgery. It is the responsibility of the surgeons that there are legible operative notes for every operative procedure. They can be used for provision of additional medical care, planning future operative procedures, research projects, audit, quality assurance, billing and medico-legal conflicts.<sup>6-8</sup> It is interesting to note that in our study, majority of the notes were written by most junior member of the surgical team of the respective case i.e. Resident or House Officers. However Flynn MB, et al.<sup>6</sup> has reported that 61% of notes were dictated by surgical residents, whereas 39% by faculty surgeons. Our results point out the casual attitude of surgeons in record keeping. Many junior members of the surgical team did not have the sufficient knowledge and skill in writing operative notes neither they have formal training.<sup>9</sup> This was evident since some

**RESULTS OF OPERATIVE NOTES AUDIT  
(n=185)**

	Yes	%
Date	178	92.6
Time	128	69.2
Patient Identification	115	62.2
Diagnosis	182	98.4
Type of Surgery	181	97.8
Surgeon	184	99.5
Anaesthetist	168	90.8
Anaesthesia	149	80.5
Technician	163	88.1
Incision	163	88.1
Findings	177	95.7
Operative Steps	184	99.5
Suture Details	89	48.1
Closure	129	69.7
Post-op Notes	184	99.5
Signature	182	98.4
Operative difficulties	30	16.2
Use of Abbreviations	83	44.9

Table 2

critical details were missing in the notes.

The notes accompany the patient into recovery and to the ward and should be in sufficient detail to enable continuity of care by

another doctor. Flynn MB, et al. has reported that 76% of operative notes contained one or more deficiencies like incomplete description of all surgical procedures performed (56%), an inadequate description of the indications for procedures (49%).<sup>6</sup> Another operative notes audit showed important omissions in a high percentage of operative delivery notes, with less than 80% of case notes documenting skin incision time and type, important surgical findings, type of uterine incision. Only 41% and 35% of delivery notes having complete signature with printed name and correct time and date, respectively.<sup>10</sup>

Patient identification was mentioned in only 62.2% of our notes. A study from District General Hospital showed that 16% of their operative notes did not have patient identification.<sup>11</sup> This assumes importance as there are chances of operative notes getting lost / misplaced due to lack of patient identification.

Operative notes are often produced as evidence in medico-legal cases.<sup>7</sup> Illegible and incomplete notes, besides use of confusing abbreviations are a common source of weakness for a surgeon's defence. Although it's a subjective assessment but, most of our notes (83.2%) were legible or the procedure can be understood from the description given, by the junior doctor collecting the data.

All surgeons should be aware of the importance of medical records especially about operative notes and comply with that. Surgical trainees and House officers should be given information about standards at departmental induction or during their training. Recognizing the importance of operative notes and promoting a culture of its use as a tool for training can help in improvement of surgical services and patient care.

In view of our findings we would like to recommend that:

1. Like surgical procedures, operative notes should be either written or directly supervised by the operating surgeon and should be used as a teaching tool for the trainee.
2. Formal training sessions regarding operative notes shall be incorporated in teaching curricula, which will result in significant improvement in the quality of operative notes.
3. To record all the vital information, a standard proforma with aide memoire should be available at all times in the operation theatre.

4. There is a need for standard national guidelines for documenting operative notes.

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