**ORIGINAL ARTICLE**

# Evaluation of Operative Notes in General Surgery Unit - Are standards being met?

MUHAMMAD RAFAIH IQBAL, SAAD JAVED, HUSSNAIN HAIDER, *MUHAMMAD ASHRAF, KHALID JAVED ABID*

## ABSTRACT

**Objective:** To access the quality of operative notes written for the patients undergoing surgery in the department of general surgery.
**Materials and Method:** It is a retrospective audit carried out in the Department of Surgery, West Surgical Unit, Mayo Hospital Lahore over a period of 1 year from July 2008 to July 2009. All the patients undergoing either elective or emergency surgery, their operative notes were accessed according to published guidelines of the Royal College of Surgeons of England (Good Surgical Practice, 2008).
**Results:** A total number of 1829 operative notes were analyzed.1284 (70.2%) were written by postgraduate trainees, 536 (29.3%) by the house surgeons and only 9 (0.49%) were written by the consultants. Type of surgery was mentioned in 1306 (71.4%) notes, Surgeon name in 1805(98.7%) type of anaesthesia in 1821(99.6%), operative findings in 1644(89.9%), operative steps in 1796 (98.2%) and post-operative orders in 1829(100%) notes. Time was mentioned in only 993 (54.3%), patient's name in only 1136(62.1%), name of the anaesthetist in only 717(39.2%) and the diagram was made only in 635(34.7%) notes.
**Conclusion:** Most of the operative notes were written by the junior members of the operating team who did not had sufficient knowledge of the procedures and the technique of writing.
**Keywords:** Operative Notes, Quality, Audit, Guidelines.

## INTRODUCTION

Operative notes form an important part of the medical record of the patients, as they are not only used for medico-legal purposes and appropriate management of the patients but also provide valuable learning source for the doctors in training. A number of studies have been carried out internationally with most of them demonstrating that the operative notes are often deficient in the basic details[1,2,3]. In this study we used the guidelines for the operative notes published by the Royal College of Surgeons of England (Good Surgical Practise, 2008) as the standard.

## MATERIAL AND METHOD

It is a retrospective audit carried out in the Department of Surgery, West Surgical Unit, Mayo Hospital Lahore over a period of 1 year from July 2008 to July 2009. All the patients who had undergone any surgical procedure in the department in the above-mentioned period were included in the study and their operative notes were analysed taking the guidelines published by the Royal College of Surgeons of England (Good Surgical Practise, 2008: Table 1) as the reference [4,5].

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*Department of Surgery, King Edward Medical University/Mayo Hospital, Lahore*
*Correspondence: Dr. Muhammad Rafaih Iqbal Email: drrafaihiqbal@hotmail.com*

Table 1: Royal College Of Surgeons Of England Guidelines on Operative Notes

- 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 problem/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 the prosthesis and other implanted materials
- Details of closure technique
- Post operative care instructions
- A signature

## RESULTS

Total 1829 operative notes were analysed and the results tabulated. 1284(70.2%) notes were written by the Postgraduate trainees, 536(29.3%) by the house surgeons and only 9 (0.49%)by the consultants. Date, time and the patient's identification were mentioned in 1626(88.9%), 993(54.3%) and 1136(62.1%) notes respectively. Name of the

operating Surgeon, Assistant and the Anaesthetist was mentioned in 1805(98.7%), 1785(97.6%) and 717(39.2%) notes respectively. Incision was documented in 1364(74.6%) and per-operative findings were mentioned in 1644(89.9%) notes. Operative steps, Suture details and closure details were mentioned in 1796(98.2%), 1666(91.1%) and 1547(84.6%) notes respectively. An important but the negative thing found was that the diagnosis and diagram was mentioned in only very low numbers being 891(48.7%) and 635(34.7%) notes respectively. On the basis of the number of the essential things to be mentioned in the notes, legibility of the notes was found to be good in 1498 (81.9%), fair in 230 (12.5%) and bad in 101 (5.5%).

Table 2 (n=1829)

| | Number | %age |
|---|---|---|
| Date | 1626 | 88.9 |
| Time | 993 | 54.3 |
| Patient's identification | 1136 | 62.1 |
| Diagnosis | 891 | 48.7 |
| Type of Surgery | 1306 | 71.4 |
| Operating Surgeon | 1805 | 98.7 |
| Assistant | 1785 | 97.6 |
| Anaesthesia | 1821 | 99.6 |
| Anaesthetist | 717 | 39.2 |
| Incision | 1364 | 74.6 |
| Findings | 1644 | 89.9 |
| Operative steps | 1796 | 98.2 |
| Suture details | 1666 | 91.1 |
| Closure details | 1547 | 84.6 |
| Post operative notes | 1829 | 100 |
| Signature | 1814 | 99.2 |
| Operative difficulties | 176 | 9.6 |
| Use of abbreviations | 1304 | 71.3 |
| Diagram | 635 | 34.7 |

## DISCUSSION

Documentation is an essential part of all the medical fields. In Surgery it is even more important as the situation may vary minute to minute. Writing operative notes may seem simple and easy but it is really technical and demanding. Operative notes are not only essential in appropriate medical care of the patients but also form an essential part of the research projects, audit, billing and medico-legal purposes[6,7].

Nowadays it has become a habit that the operating surgeons do not write the notes rather they either advice their assistants to write or they dictate it to them. In our study about 70% of the notes were written by the residents and another 29% by the House Surgeons while only 0.5% were written by the operating surgeon. However Flynn MB, et al has reported that the surgical residents dictate 61% of the notes[8]. Many of the junior doctors either Residents or House Surgeons do not have enough knowledge and skill to write the appropriate notes and so they are liable to miss the key information in the notes. Flynn MB, et al has reported that 76% of the operative notes contained deficiencies like incomplete description of the surgical procedure (56%). Another study documented that only 41% and 35% of the notes have signature with correct date and time mentioned respectively. In our study patient identification was documented in 1136 (62.1%) and the date and time in 1626 (88.9%) and 993 (54.3%) respectively while a study by Mathew J, et al (9) reported that 16% of the operative notes did not had the patient identification.

A worrying aspect from our study was that diagnosis was mentioned in only 891 (48.7%) of the cases while a diagram was made in only 635 (34.7%) cases. Diagnosis, which is very essential for the proof of the surgical procedure, should always be documented while a diagram not only explains many aspects of the surgery but also useful for the junior doctors in understanding the procedure performed.

Considering the above-mentioned findings from our study we would recommend that:

1. All the operative notes should be written completely according to certain guidelines by the operating surgeons so that the junior members of the team can adopt the trend.
2. Training courses should be arranged for the junior doctors so that they also learn how to write complete and adequate operative notes.
3. Specific proforma's should be designed so to avoid the missing of any aspect.

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