ORIGINAL ARTICLE

An Audit of Operation Notes within a General Surgery Department at a tertiary care hospital

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ABSTRACT

Objective: To check the quality of operative notes within General Surgery department at the Shaikh Zayed Hospital Lahore, Pakistan

Materials & methods: This was a prospective audit, consisting of 200 operation notes in each audit cycle (2 audit cycles), randomly picked during 5 months time from 1st July 2012 to 1st November 2012. Good Surgical Practice by The Royal College of Surgeons of England was used as the standard for this audit. During the first audit cycle notes of 200 patients were studied. Based on the results of first audit cycle certain recommendations made, changes implemented and then 200 more operation notes audited in second audit cycle to see the results after changes.

Results: The results of first audit cycle clearly showed that our operation notes were inadequate in certain areas as time of operation, nature of operation (emergency/elective), and signature. After implementing the changes based on our recommendations the second audit cycle's results showed tremendous improvement.

Conclusions: This study shows that our operative notes were not up to the mark initially. But after proper training of doctors and providing them awareness about the importance of Post-operative notes, according to the latest guidelines, improvement have been found in all parameters of operation notes and now our operation notes fulfill the criteria set by Good surgical practice 2008.

Keywords: Surgical audit, operation notes

INTRODUCTION

Operative notes are a very important piece of information as it is a record of all the events that takes place during an operation in theatre. Therefore operation notes must be comprehensive, complete and contain accurate information regarding that particular operation, and the operating surgeon who performed the procedure. Incomplete, inaccurate operation notes waste the time of the other clinician looking retrospectively through patient's notes. And most importantly these incomplete operation notes are a safety risk for the patient. Many a times operative notes are produced in court as evidence in medico-legal cases. Illegible and incomplete operative notes leave the surgeon with a weak defense if aggressively questioned.

MATERIALS & METHODS

This was a prospective audit, consisting of 400 operation notes randomly picked during 5 month time from 1st July 2012 to 1st November 2012. Good Surgical Practice by The Royal College of Surgeons of England was used as the standard for this audit. During the first audit cycle notes of 200 patients were studied, recommendations made and for the second audit cycle the improvements noticed in another 200patients' notes. SPSS software (version 17) was used for data analysis.

Standards: The Royal College of Surgeons "Good Surgical Practice 2008" (1) was used as the standard for this audit. Section 1.5, Record Keeping, details the information that should be included in all operative notes:

1. Ensure operative notes are legible
2. Date and time
3. Elective/emergency procedure
4. Names of operating surgeon and assistant
5. Operative procedure carried out
6. The incision
7. Operative diagnosis
8. Operative findings
9. Any problems/complications
10. Details of tissue removed, added or altered
11. Identification of any prosthesis used, including serial numbers
12. Details of closure technique
13. Postoperative care instructions
14. A signature

According to Royal College of Surgeons "Good Surgical Practice 2008"legibility was graded as readable, partly illegible and totally illegible. If 1 or more part of the operative note was illegible it was

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graded as partly illegible. If 3 or more parts were illegible it was graded as totally illegible.

RESULTS

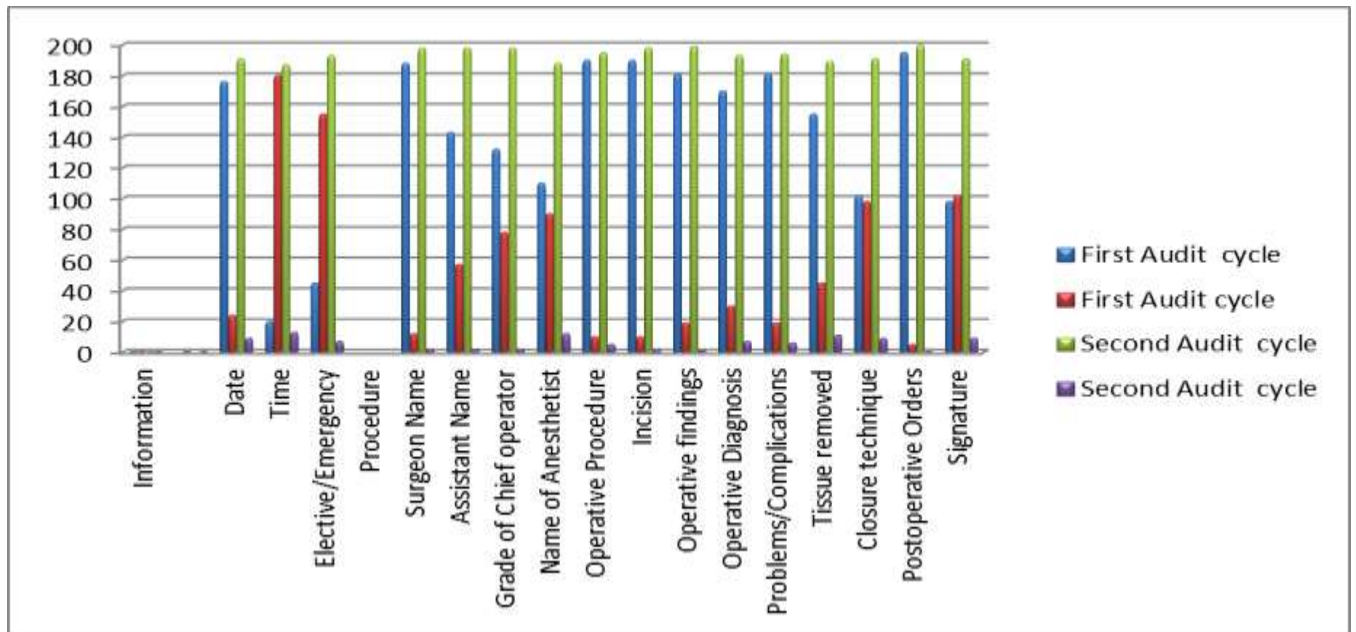
The results of first audit cycle clearly shows that our operation notes are inadequate in certain areas as time of operation, nature of operation (emergency/elective), and signature. That is in 90% of the operation notes; the time of operation was not mentioned. Similarly in 77% of notes, it was not mentioned that whether the operation was elective or emergency and 51% operation notes were not signed. Also 49% of the operation notes didn't mention the closure technique, 39% of operative notes didn't mention the surgical grade of the operator, and 45% of operative notes didn't mention the name of the anesthetist.

Table 1:

	First Audit cycle	**First Audit cycle**	**Second Audit cycle**	**Second Audit cycle**
Information	**Indexed**	**Not Indexed**	**Indexed**	**Not Indexed**
Date	176	24	191	09
Time	20	180	187	13
Elective/Emergency Procedure	45	155	193	07
Surgeon Name	188	12	198	02
Assistant Name	143	57	198	02
Grade of Chief operator	132	78	198	02
Name of Anesthetist	110	90	188	12
Operative Procedure	190	10	195	05
Incision	190	10	198	02
Operative findings	181	19	199	01
Operative Diagnosis	170	30	193	07
Problems/Complications	181	19	194	06
Tissue removed	155	45	189	11
Closure technique	102	98	191	09
Postoperative Orders	195	5	200	0
Signature	98	102	191	09

Table 2: Operation notes legibility

First Audit cycle		**Second Audit cycle**	
Readable	110	Readable	189
Partly illegible	51	Partly illegible	11
Totally illegible	39	Totally illegible	00



In order to rectify all these problems of documentation in operation notes, standardized operation note sheet with heading and specified space for documentation can act as aide- memoires[9]. This aide-memoires and pro forma based documenting system has been shown to improve the quality of documentation[5-7,8,9,11-13]. Junior doctors must be trained and taught how to write an operative note as it can improve the quality of those notes. Re-audit to ascertain any improvement in practice.

Second Audit Cycle: After implementation of above mentioned recommendations, we noticed that our operation notes showed tremendous improvement in legibility. All the parameters got improved. The mentioning of time alone improved up to 96%. The nature of procedure showed improvement up to 97% and the signatures went up to 96%. The details of all the deficient areas and their improvements (Table 1).

DISCUSSION

The operation notes are very important piece of information for the patients as well as doctors. As this is the only document which exactly tells the sequence of events that takes place with the patient in operation theatre. Sometimes we might have to produce these notes in court for medico legal purposes. So these notes must be complete, legible and comprehensive. The results of this audit highlight the areas of deficiency in operation notes. Incomplete, faulty operation notes made reviewing them very time consuming, cumbersome while on other occasions it was rendered impossible. The operative notes reviewed in this audit were written by SHO and Registrars and didn't differentiate results to a specific group. In this present study, documentation of operative notes was not up to the mark, leaving much to be desired due to missing of important information. But this is not the case with this study only as certain other studies also documented the same[2,3,5,6,7,9-13]. This study has shown the inadequacies of our operative notes and highlighted the areas of inadequacies. Many studies [4, 7, and 8] have clearly demonstrated the benefits of using a standard pro forma which is based on Royal College of Surgeons of England guidelines in order to improve the quality of operation notes. In this current study, all the operation notes reviewed were hand written. This factor is similar to the study of Morgan et al[11]. In this study, in 90% of operation notes the time of operation was not mentioned. Khan et al[9] in their study emphasized the medico-legal importance of this fact.

CONCLUSION

This study shows that our operative notes were not up to the mark initially. But after proper training of doctors and providing them awareness about the importance of Post-operative notes, according to the latest guidelines, improvement have been found in all parameters of operation notes and now our operation notes are up to the mark and fulfill the criteria set by Good surgical practice 2008.

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