The Degree of Completeness of Operation Report in Two Tertiary Institutions in Nigeria

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ABSTRACT

The operation report documents the intra- and post-operative surgical events; it easily communicates these events between clinicians. The quality of this report depends on its completeness and clarity. These reports serve as tools for further decision making, quality assurance, patient outcomes research and also have medico-legal implications. To assess the degree of completion of operation notes in two tertiary hospitals in Nigeria, we reviewed operative reports daily over twelve weeks, checking for degree of completion of individual fields. Twelve fields considered important were extracted from our report format and validated as essential by two general surgeons from both institutions and accepted by members in the study group. These fields were checked in each report to determine the degree of completion of the write-up. Data analysis was done with SPSS 17 for Windows (SPSS Inc. Chicago, Illinois) and reported as simple percentages. A total of 245operative reports were reviewed, involving 123 (50.2%) elective procedures; 11 (4.5%) did not specify the class of procedure (elective or emergency). Consultants undertook 50% of the procedures while trainees made the write-up in 212 (86.5%). No field was 100% complete. The drain (39%) and pack (47.8%) fields recorded the worst completion rate. Type of skin closure (60%), operations details (72.2%), blood loss (62.9%), and post-operative orders (73.9%) were low. There is compelling need for improving the technical quality of operative reports in our practice. Surgeons must teach and supervise their trainees on techniques of operations report writing to prevent avoidable litigations.

Keywords: Operative report, completeness, supervision, litigations

INTRODUCTION

The operative report is an important record which concisely documents surgical procedures and its content must closely reflect the actual operation performed. It serves as a medium for communicating the intra- and post-operative events between colleagues and other healthcare providers. It is also very important in making further decisions on patient care, measurement of operative outcome, quality assurance, practice patterns research and medico-legal practice[1,2]. It is considered good practice for the operating surgeon to record the operation notes as he does so with a better accuracy than his assistant[3].

Documentation of the operative report could be by either dictation or completing a prepared paper or electronic format. The electronic format is easier and preferred but the paper format applies in our practice and is routinely written immediately upon completion of the procedure and filed in the patient's case record. It contains instructions for patient care. The quality of an operation report strongly depends on its completeness, timeliness and consistency[1]; the proficiency of the recorder in the specified procedure is therefore very important in making a report meaningful in line with the functions earlier listed.

We have not audited the quality or completeness of the operations record in our practice but recent accounts within and without our institutions of poorly written, delayed or unwritten reports hours or days after a procedure prompted this audit which spans twelve weeks and involves all the surgical specialties and sub-specialties in our institutions. We hope to make our findings known to all surgeons and trainees in our institutions and we expect that it will lead to an improvement in our current practice of clinical records keeping.

MATERIALS AND METHODS

Settings: This study is conducted in two contiguous tertiary health facilities in South-South Nigeria.

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Inclusion criteria: The operation records of consecutive patients undergoing elective or emergency surgery in all surgical specialties or sub-specialties.

Exclusion criteria: The records from units where the authors work were excluded from the study.

Methods: Operative notes from both institutions were compared and were very similar in many fields. Twelve fields considered important were extracted and validated by two general surgeons from both institutions and same further evaluated and accepted by members in both study groups. The pre-operative diagnosis, operation performed (intra-operative diagnosis), operative findings and details, type of anaesthesia, estimated blood loss and post-operative orders were considered as very essential fields. A pilot study was conducted over one week to test the instrument used in recording our findings.

We concurrently reviewed patient's operations records daily for twelve week from March to June 2014, checking for entries made by the recorder in each of the selected fields. Fields left empty were recorded as incomplete even if the relevant information was documented elsewhere in the report or in the patient's case notes. All the surgeons, excepting members of the study group, were unaware of the study being conducted to eliminate bias.

Data Analysis: Analysis was done with SPSS 17 for Windows (SPSS Inc. Chicago, Illinois) and reported as simple percentages.

RESULTS

A total of 245 operations reports were analysed over twelve weeks, involving 123(50.2%) elective and 111 (45.3%) emergent procedures. Obstetric procedures 102 (41.6%) were most common. The class of procedure was not indicated in 11(4.5%). Consultants undertook 123 (50.2%) of the procedures while trainees entered the records in 212 (86.5%). No field was 100% complete. The drain (39%) and pack (47.8%) fields recorded the worst completion rate. Type of skin closure (60%), operations details (72.2%), blood loss (62.9%), and post-operative orders (73.9%) were low. Poor documentation spanned across all specialties/ sub-specialties as well as cadre of surgeon.

Table 1: Class of procedure including cadre of surgical staff involved in its execution and documentation.

Characteristic	Frequency (%)
Type of Operation	
Elective	123 (50.2)
Emergent	111 (45.3)
Unspecified	11 (4.5)
Surgeon	
Consultant	123 (50.2)
Senior registrar	98 (40.0)
Registrar	24 (9.8)
Operative Note Recorder	
Consultant	30 (12.2)
Senior registrar	104 (42.4)
Registrar	108 (44.1)
Unspecified	24 (9.8)

Table 2: Surgical sub-specialty including the number of procedures. Office procedures are not included.

Specialty	No. of cases (%)
Obstetrics	102 (41.60
General surgery	32 (13.1)
Urology	30 (12.2)
Paediatric surgery	24 (9.8)
Orthopaedics	17 (6.9)
Cardio-thoracic	14 (5.7)
Burns and plastics	13 (5.3)
ENT	4 (1.6)
Maxillo-facial	3 (1.2)
Neurosurgery	3 (1.2)
Ophthalmology	1 (0.4)

Table 3: Selected fields from the operative notes showing the percentage completion rate of different fields

Fields	Frequency (%)
Date of operation	242 (98.8)
Pre-operative diagnosis	244 (99.6)
Intra-operative diagnosis	243 (99.2)
Type of anaesthesia	239 (97.6)
Type of incision	224 (91.4)
Intra-operative findings	211 (86.1)
Full details of procedure	177 (72.2)
Use of packs	117 (47.8)
Swab count	122 (49.8)
Type of wound closure	147 (60.0)
Estimated blood loss	154 (62.9)
Post-operative orders	181 (73.9)

DISCUSSION

Accurate and complete documentation of patient's clinical information is an essential cognitive skill which forms part of good clinical practice and should be demonstrated by surgeons and taught to surgical trainees through the period of residency training. The operations report records the intra- and post-operative events and must be explicit and clear. The Royal College of Surgeons of England guidelines specifies that ''Surgeons must ensure that accurate, comprehensive, legible and contemporaneous records are maintained of all their interactions with patients''[4]. The result of this study confirms fears that the skills at clinical records keeping, particularly the operation records, is unacceptably poor across all surgical specialty or sub-specialty irrespective of cadre of surgical staff.

Literature search on the topic of operative note writing or clinical documentation in Nigeria and Africa yielded little. This presupposes the topic is yet to be critically appraised by clinicians in the continent despite complaints of absent or inadequate documentation and maintenance of quality clinical records highlighted at conferences and accreditation or re-accreditation inspection of training facilities. It is indeed not unusual for parts or the entire patient records to be missing in our practice. This impedes adequate care, follow-up and clinical research. We fear that medical litigations arising from these cases will become rife as society becomes more enlightened.

Particular aspects of poor operative records keeping include omission of important fields[5], use of confusing abbreviations, and incomplete or illegible notes[6]. This study examined only the omission of fields. We observed that general fields such as date of operation and type of anaesthesia which are required in all operations but does not involve technical knowledge of an operation were more than 90% completed while fields specifically related to techniques of the procedures were poorly completed. We could not easily deduce reasons for this observation but we could reasonably assume that many trainees who wrote the notes in this study do not fully understand the details of the procedures they assisted in or performed. Although techniques of operative report writing or dictation is not taught trainees, they are often made to write or dictate the operative reports unsupervised; creating room for poor quality report. This situation is not only peculiar in low income countries. Human error, in particular illegible writing or unclear instructions, is often identified as a significant cause of failure in operation note audit.[7]Studies from the US evaluating the operation note as an insurance billing document revealed more than 60% of notes by trainees were incomplete and only 45% of the dictations made within 24hours after the procedure[8,9].

Most operations involve blood loss and this must be clearly documented as it determines the need for replacement therapy. Same goes for swab count, use of packs and tourniquets, wound length and closure technique as well as the post-operative orders. Failure to document these information in the appropriate fields provided for in the recording format, as revealed by this study, call to question the quality of care as the process of documentation consumes little time. We did not consider the practice of leaving blank a field and documenting same information in other sections of a patient's record an appropriate practice as it could be assumed the information was provided retrospectively.

There is an urgent need for surgeons in the continent to institute interventional measures aimed at correcting poor documentation of clinical information and improve on patient care and gain the confidence of colleagues and patients. One very effective intervention that is proven to bring about improvements in complete documentation is behavioural change. Cohen[10] and colleague observed an improvement in the practice of documentation in excess of 70% among trainees when completing operative notes after instituting behavioural changes. These changes must apply to both surgeons and trainees and requires frequent appraisals to become effective. We consider it mandatory for surgeons to routinely write their reports and only allow experienced trainees do so under direct supervision.

Every report should carry the clear identity of its writer at the end. Regulation on documentation in both institutions where this study was done expects all clinicians to write their names, designations and sign every report. This allows for such a person to be corrected or traced when issues pertaining to the operations record arise. Failure of a recorder to indicate his name at

the end of the operation report is inappropriate practice. We observed that some reports did not bear the identity of the writer or a signature was so irregular to be traced to an individual. Also, failure to document the elective or emergent nature of a procedure falls short of good clinical practice.

A limitation with complete documentation in the operative note in our practice is the use of a universal recording format in writing operative notes irrespective of type of procedure or specialty involved; we did not consider this a major challenge though. Attention to details, legibility and promptness in documentation are of utmost importance. Specialty specific operative notes which list all the fields which are peculiar to a procedure have the advantage of ensuring that most of the important fields in an operation are fully documented.

We intend repeating this study after making our findings known to surgeons in our practices and discussing possible approaches to improving our practice of documentation. This we hope will produce a change in our attitude towards documenting patient's information and a commensurate improvement in the degree of completeness of records.

SUMMARY

There is compelling need for proper documentation of intra-operative events and improving the technical quality of records in surgical practice. Surgeons, particularly in low income countries, must teach and supervise their trainees on techniques of operations report writing to prevent avoidable litigations and increase the visibility of their practice through proper outcome research.

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