

An audit of anaesthetic record keeping

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Summary

An audit of anaesthetic records was performed to determine the rate of completion and adequacy of such records. Less than one third of all records was complete and legible. In one quarter of all anaesthetics, no record of any kind was made. The remaining 45% were all incomplete or illegible in some or all respects. It is concluded that the standard of record-keeping in this random sample falls far short of the minimum acceptable standard.

Keywords:

Anaesthesia, Anaesthetic records, Medicolegal.

Introduction

One of the duties of any medical practitioner is to keep records of all consultations and procedures performed on their patient population. This applies to any medical discipline. The obvious implications of good records are useful statistics on patient profiles, patient numbers, and disease and procedural profiles. Of equal importance is the medicolegal benefit of such records. Claims against a practitioner may be negated by inclusion of pertinent facts. Similarly, the omission of detail by the practitioner may make a similar claim indefensible.

The anaesthesiologist differs somewhat from most other practitioners. In most instances their initial consultation is on the ward in the day of surgery. Their record of the pre-operative assessment and the intra-operative data is usually confined to a hospital patient file. The anaesthesiologist does not usually keep a personal hard copy of every record. However, such records may provide an invaluable guide to subsequent practitioners involved with the patient, providing indications of any complications, or, equally importantly, the absence of such problems during previous anaesthesia. If an enquiry arises, the anaesthesiologists' record system will then be tested. An audit of some of these records was performed. The medicolegal implications of the audit and the record-keeping system are discussed.

Methods

A local hospital with a broad range of practice was selected. At this hospital, the patient notes contain a preprinted record for the use of the anaesthetist. A time period of one week was assigned and the week was randomly selected.

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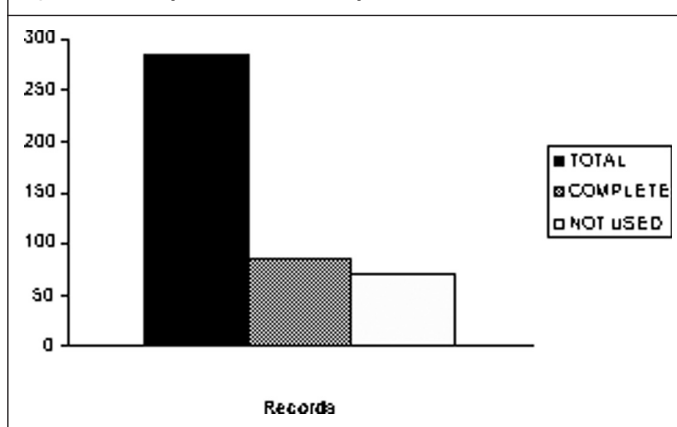
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A questionnaire was constructed asking

1. Was the anaesthetic record used?
2. Was the record legible?
3. Were the drugs used noted?
4. Were the patient observations noted?
5. Were any clinical examination findings described?

The staff in the post-anaesthetic recovery room was informed of the questionnaire and its use. However, the anaesthetists working in the hospital were unaware of the audit. The questions were simply to be answered yes or no. No patient details, surgical procedures, physician's names or time were to be recorded but all records of patients passing through the post-operative recovery room were to be scrutinized. Patients transferred directly to high care or intensive care units were excluded. Thus the audit encompassed a sample of routine anaesthetic procedures and is thus a reflection of the general standard of record keeping, and does not reflect the standard of record-keeping on the more complex cases.

Figure 1. Overall pattern of record completion.

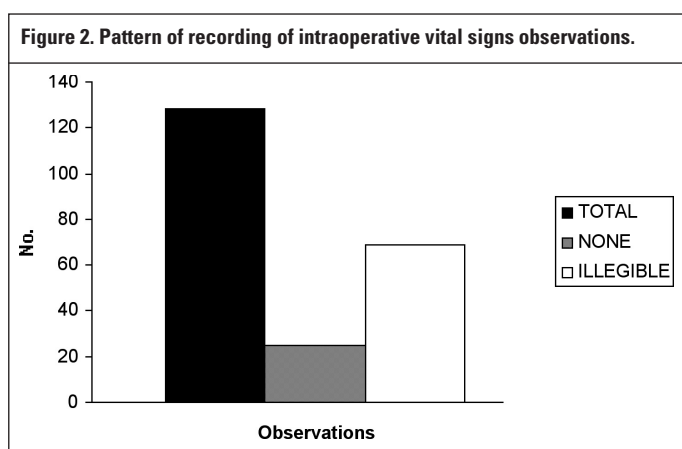


Results

A total of 284 records were scrutinized. Of these records, 85 (29.9%) were complete and legible. 71 Records (25%) were not used at all by the anaesthesiologists (Fig 1).

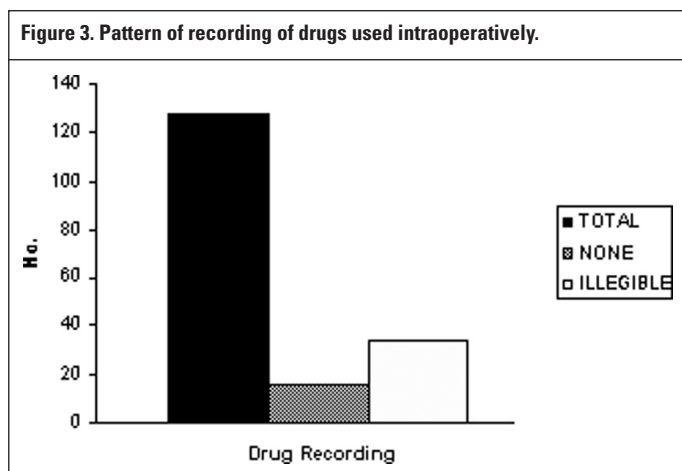
The remaining 128 anaesthetic records (45%) were used by the anaesthesiologists, but various aspects of the recorded data were either illegible or incomplete. Analysis of this data revealed the following shortcomings.

Intraoperative vital sign observations were not intelligible in 69 cases (53%) and absent in 25 instances (19.5 %; Fig 2). Together with those notes in which no record was made, this means that in 140 cases (49% of the total), no useful record of vital signs pertaining to the anaesthetic were available. A further 18 records were designated as incomplete, thus resulting in a total of 158 records in which the vital signs would have been of minimal use as a record of events.



Drugs used by the anaesthesiologists were not recorded in 16 cases (12.5%) and were illegible in 34 instances (26.5%; Fig 3). Thus in 40 records, the drug information recorded by the anaesthesiologist was valueless. In a further 4 cases, the drug record was legible, but incomplete.

Clinical examination notes regarding the preoperative assessment of the patient were absent in 100 cases (78.1%).



Discussion

The sample of medical records obtained for this study yielded extremely disturbing results. The fact that only 29.9% of anaesthetic records met the minimum standards required for data

entry and legibility not only represents unacceptable practice, but also places anaesthesiologists whose records are inadequate or incomplete at serious medicolegal risk.

The seriousness of the situation is emphasised by the following quote from the textbook *Anesthesia* edited by Ronald Miller:

“The medical record is the cornerstone of defense in a mal-practice suit. If information is missing from the medical record, the plaintiff’s attorney will argue to the jury, “If it is not on the record, it did not occur” or will question the anaesthesiologist’s motive for not recording the data. It is imperative, therefore, that the anaesthesiologist record all pertinent events on the record in a timely fashion. Should an emergency event occur that necessitates the anaesthesiologist’s undivided attention, someone else should be enlisted to serve as a scribe, if possible, to continue recording events. The routine elements of an anaesthetic record, such as gas flow rates, drug dosages, timing of events, and frequent vital sign recording, must be performed diligently.”¹

Although it may be argued that this represents American medicolegal practice, where the risks of legal action being taken against medical practitioners is considerably higher than it is in South Africa, South African practitioners ought to be aware of the requirements laid down by their own Society. In Document II of the Guidelines for Practice published by the South African Society of Anaesthesiologists, under the section “recommended facilities for safe anaesthetic practice in hospitals” the following recommendation is made:

“A record of the anaesthetic technique, patient responses to anaesthesia, and other pertinent medical information pertaining to the anaesthetic should be made by the practitioner delivering an anaesthetic.”²

It is particularly pertinent for anaesthetic practitioners to be aware of the fact that, by and large, theatre nursing staff make extensive records of the events in the operating theatre. While these records may not always be completely accurate, the fact that they exist will be accepted by a court of law as providing reasonable guidelines to the events in the operating theatre in the absence of satisfactory documentation to the contrary. Thus, should there be a problem occurring during an anaesthetic procedure, or arising from such a procedure in the post-operative period, an anaesthetic practitioner who has not completed an acceptable anaesthetic record would be placed in a difficult, perhaps impossible medicolegal position. Certainly, should there be a dispute between the nursing staff and the anaesthetist regarding events in the operating theatre, the written record will be given far more weight by the court, and in the absence of a written anaesthetic record, the burden of proof will rest with the anaesthetist to demonstrate that his or her version of events is the correct one.

There are further concerns arising from the survey. Given the above recommendation from the society, it is clear that a practitioner who does not complete an appropriate record of the anaesthetic technique and patient responses will not be conforming to the standards of practice recommended by the society. This, too, may have medicolegal consequences. It is of particular concern that there was no record of preoperative assessment in 78% of the records examined. One of the most frequent complaints presented to the clinical practice committee of the Society by patients relates to preoperative assessment and the charges levied for the service. If no record of

such an assessment is made, it is difficult to see how a claim for payment could be sustained if a patient insists that no such examination took place.

From the purely clinical viewpoint, the standards of practice revealed in the survey are also unacceptable. The record of any previous anaesthetic may be particularly valuable to a subsequent anaesthetist who is required to provide anaesthetic services to a patient. Knowledge of any previous difficulties may forewarn a subsequent anaesthetist of potential problems, and an accurate record of the absence of such difficulties, particularly relating to previous endotracheal intubation may be invaluable in planning the management of a patient in whom a difficult airway may be suspected. It is unrealistic to expect anaesthetists to remember the details of every anaesthetic they administer, but a patient could reasonably anticipate that an anaesthetist would be aware of any previous problems with anaesthesia that the patient experienced. If an anaesthetist were called upon to anaesthetise any given patient on subsequent occasions, it would be expected of the practitioner to be aware of any previous problems that he or she had experienced. The only way to ensure this is to make a detailed anaesthetic record of each and every anaesthetic.

There are relatively few studies of the adequacy of anaesthetic record-keeping. However, while deficiencies in certain aspects of the record have been noted³ and the incidence of properly complete anaesthetic records has been reported as being <35%,⁴ none of them has reported such a high incidence of total absence of any form of anaesthetic record as found in this survey. One study, which reported an overall acceptable level of anaesthetic record-keeping of 72% with only 1% of the records being illegible, commented that standards of anaesthetic record-keeping needed to be improved, particularly for the preoperative period.⁵ Other studies have commented on the relative inaccuracy of manual record-keeping, and there is little doubt that computer-generated records, while not perfect, provide more accurate clinical information.⁶⁻⁹ Another review found that between one third and two thirds of pre-operative records were deficient and suggested that the provision of a well-designed pre-operative evaluation form improved the quality of the pre-operative record keeping.¹⁰ However, these recent publications all reflect a much better level of record-keeping than we have found in this study, and the relative inaccuracy of manual records does not in any way excuse the absence of acceptable records found in the present study. It is worth noting that, in the hospital in which the survey was conducted, a pre-printed anaesthetic record is made available for use of the anaesthetist.

While a single, isolated, random sample such as this one may not be representative of anaesthetic practice in the country at large, it, nevertheless, represents an extremely worrying

trend. It is, of course, possible that some of these practitioners regard the anaesthetic record as their personal document, and made their own anaesthetic records which they kept for themselves. However, it would be poor anaesthetic practice not to make such a record available to the recovery room staff who may need to take rapid action on the basis of agents already administered to the patient. Therefore, the findings of this study, even if private records were made, probably represent unacceptable practice.

In summary, this study revealed an entirely unacceptable standard of anaesthetic record-keeping in the study sample. The standard of practice expected by SASA involves the completion of a relevant anaesthetic record. Anything less than this falls short of the expected standard of anaesthesiologists in South Africa.

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