# Record Keeping by Anaesthetist in a Developing Country

Ebirim NL Buowari YO

#### **ABSTRACT**

**Background**: Record keeping is important in every organization, especially in health facilities. It gives information about the course of treatment and progress of disease. Data from records can be used for research, audit and to improve healthcare.

Methodology: The study was conducted in four theatres of the University of Port Harcourt Teaching Hospital Theatres: orthopaedic, labour ward, ear nose and throat and oral maxillofacial surgery Theatres. This is a forty month retrospective study from January, 2008 to April, 2011. The physician anaesthetics' theatre register and the perioperative nurses' theatre register were compared.

Results: During the study period 5069 cases were recorded by the nurses and 3227 by the physician anaesthetist in the theatres studied. The nurses recorded 548 in the orthopaedic theatre, 4181 in labour ward theatre, 84 in oral maxillofacial surgery theatre and 256 in the ear nose throat theatre. The anaesthetist recorded 200 in the orthopaedic theatre, 2842 in the labour ward theatre, 58 in the oral maxillofacial surgery theatre and 127 in the ear nose throat theatre. The difference between the perioperative nurses and physician anaesthetist theatre registers was 348(63.50%) in orthopaedic theatre, 129 (50.39) in ear nose throat theatre, 1339(32.03%) in the labour ward theatre and 26 (30.95%) in the oral maxillofacial surgery theatre.

**Conclusion**: Physician anaesthetists are not keeping complete records. Record keeping should be emphasized in the training of anaesthetists.

**Keywords:** Record keeping, anaesthetist, developing country.

## INTRODUCTION

A health record may be defined as any relevant record made by a healthcare practitioner at the time of or subsequent to a consultation and / or examination or application or health management. A health record contains the information about the health of an identifiable individual recorded by a healthcare professional <sup>1</sup>. The medical record is a powerful tool

that allows the physician to assess the patient's medical history and identifies problems or patterns that may help determine the course of healthcare <sup>2</sup>. Good medical record keeping is at the forefront of medical practice <sup>3</sup>. Complete and accurate medical records will meet all legal, regulatory and auditing requirements. Medical records may be used by several medical practitioners. It will contribute to comprehensive and high quality care for patients by optimizing the use of resources, improving efficiency and coordination in team based and interprofessional settings and facilitating research <sup>2</sup>. Some countries have standards for health record keeping.

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 all medical disciplines. The obvious implications of good records are useful statistics on patient profiles, patient numbers and disease and procedural profiles 4. The principal purpose of medical records and notes is to record and communicate information about patients and their care 5. Medical records are kept by every skilled staff in the hospital setting including the doctor, nurse, administrative staff, therapist, laboratory personnel, radiologist, and pharmacist. Medical records are important to further the diagnosis or on-going clinical management of the patient, conduct clinical audits, promote teaching and research, be used for administration purposes, be kept as direct evidence in litigation or for occupational disease or injury compensation purposes, be used as research data, be kept for historical purposes, promote good clinical and laboratory practices, make case reviews possible and serve as the basis of accreditation 1,3,5,6. Medical records are also used as source of data for hospital service activity, reporting, and monitoring the performance of hospitals 5.

Styles of record keeping may vary from practitioner to practitioner or in different institutions <sup>6</sup>. The record may be paper or electronic depending on the financial capability, resources and technology available at the health facility. The advantages of paper record is that it requires less time for training as the individual just have to read the title /heading of the different columns, portable to patient care, can easily be moved from place to place. Some of the disadvantages of keeping paper records are that some contents may be missing, illegible, misfiled in the file room and discontinuity across institutions. In developing countries, some records may be misplaced. The disadvantage of electronic record keeping is that it requires special

Department of Anaesthesiology, University of Port Harcourt Teaching Hospital, Port Harcourt, P.M.B 6173, Rivers State, Nigeria.

Correspondence: Dr. Longinus N Ebirim, Department of Anaesthesiology, University of Port Harcourt Teaching Hospital, Port Harcourt, P.M.B 6173, Rivers State, Nigeria.

Email: ginebirim@yahoo.com

training and the computer or computer accessory such as flash pen, CD-rom; external hard drive may be affected by virus.

The anaesthetist differs somewhat from most other practitioners <sup>4</sup>. Anaesthetist works in the theatre and the intensive care unit in institutions where there are no intensivists. Anaesthetist keeps two sets of record in most health institutions, the anaesthetic theatre record of all procedures performed in the theatre and also an anaesthetic chart. The anaesthetic record (anaesthetic chart) shows individual patient's response to surgery and anaesthesia <sup>7</sup>. It is an essential part of patients' medical record. When patients come to the theatre, both the anaesthetist and perioperative nurses keep records. The aim of this study is to check if anaesthetists keep proper and complete record of cases that come into the operating room.

#### **METHODOLOGY**

This study was conducted at the University of Port Harcourt Teaching Hospital, Port Harcourt, Nigeria. It is tertiary teaching hospital with partial accreditation for residency training in anaesthesiology for the National Postgraduate Medical College of Nigeria and the West African College of Surgeons. The records of the

anaesthetists and perioperative nurses were compared for number of cases recorded. Paper record is what is kept at the health facility. It was a 40 month retrospective comparative study from January, 2008 to April, 2011. The perioperative nurses keep three sets of patient records in the theatre: at the theatre reception, in the operating room and at the recovery room. The physician anaesthetists only keep records in the operating room after each procedure. The anaesthetic register has several columns: serial number, name of patient, sex, age, diagnosis, procedure, name of surgeon, name of assistant surgeon (s), name of anaesthetist (s), type of anaesthesia administered, any complications, time anaesthesia was induced and time surgery ended. For the purpose of this study, records from the orthopaedic, labour ward, oral maxillofacial surgery and ear nose throat theatre were used.

#### **RESULTS**

During the study period, 5069 procedures were performed in the orthopaedic, labour ward, ear nose throat theatre and oral maxillofacial surgery theatres. The perioperative nurses take records immediately the patient arrives the theatre reception, operating room, and recovery room. The anaesthetist only takes records when the procedure is over. The result is as presented in table I

Table I: Comparison of the perioperative nurses and physician anaesthetist operating room records

| Theatre            | Perioperative        | <b>Anaesthetist Record</b> | Difference   |
|--------------------|----------------------|----------------------------|--------------|
|                    | <b>Nurses Record</b> |                            | (%)          |
| Orthopaedic        | 548                  | 200                        | 348(63.50%)  |
| Labour ward        | 4181                 | 2842                       | 1339(32.03%) |
| Oral maxillofacial | 84                   | 58                         | 26(30.95%)   |
| Ear nose throat    | 256                  | 127                        | 129(50.39%)  |
| Total              | 5069                 | 3227                       | 1842(36.34%) |

# **DISCUSSION**

A good medical record is important for the healthcare for a patient and can also be helpful for the doctor if there is any question or compliant about the care of the patient 8. From this study, there was disparity between the perioperative nurses and anaesthetist records of the same theatre. The difference was more in the orthopaedic theatre which accounts for 63.50% and least in the oral maxillofacial surgery theatre which represents 30.95%. There may be several reasons for this disparity. This may be due to hectic work schedule, forgetfulness, and the physician anaesthetists not taking record keeping important. The perioperative nurses submit daily records to the head nurse for every shirt duty; that may be the reason why they are religious with record keeping. The primary purpose of the medical record is to enable physicians to provide quality healthcare to their patients. The health record is a document that tells the story of the patient and

facilitates, each encounter they have with health professional involved in their care  $^2$ . In a Nigerian study by Desalu et al of an audit of anaesthetist record keeping, found poor standard of record keeping and recommended daily monitoring may improve record keeping  $^7$ .

#### **CONCLUSION**

Good record keeping is part of providing good quality medical care. Record keeping by anaesthetists should be emphasized as they are legal documents and used for retrospective studies in future to improve practice.

## **REFERENCES**

1. Guidelines on the keeping of patient records. Health professional council of South Africa. Second edition. Booklet 15. Pretoria. 2007. 5-7.

- 2. College of physicians and surgeons of Ontario. Medical records. Toronto. 2012. 2-24.
- 3. Raza M. Good Medical Record Keeping. Internal J Collaborative Res Internal Med Public Health. 2012. 4(5): 535-543.
- 4. Raff M, James MFM. An audit of anaesthetic record keeping. Southern Afr J Anaesth Analg. 2003. 7-9.
- 5. Academy of medical royal colleges. A clinician's guide to record standards- part 1: why standardise the structure and content of medical records? London, 2008, 1-6.
- 6. Neupane Y, Sinha P, Rayamajhi P, Guragain R. Rolling audit: defensible record keeping. Nepalese J ENT Head Neck Surg. 2010. 1(2): 26-27.
- 7. Desalu I, Olanipeku O, Agbamu P. An audit of anaesthesia record keeping at the Lagos University Teaching Hospital. Nigerian society of anaesthetists. 17th scientific conference and annual general meeting. Book of abstracts. 2009.
- 8. Stevens R. The medical record. Cole's medical practice in New Zealand. 2011. 101-110.