Original Article ISSN (O):2395-2822; ISSN (P):2395-2814

Clinical Record Keeping Survey of Patients Admitted to Misurata Central Hospital.

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Received: April 2017
Accepted: April 2017

ABSTRACT

Background: The current survey are to evaluate the quality of patient identification documentation and medical notes writing in our public hospital and to ensure compliance with the international clinical record keeping requirements. **Methods:** This is a retrospective cross-sectional survey of randomly collected case notes from the hospital documentation and information office, where 100 case notes for patients who were admitted during 2015, from five hospital wards and a total of 500 case notes were reviewed and its completeness was assessed in the contents of hospital medical files as frequencies (%). **Results:** The patient's registration number, Unit, Name, Age, Nationality, Admission and Discharge dates were recorded in (85-100%) of cases in almost all wards. Mother's name, Birth date, Marital status, Profession, Place of work, Phone number in General Medicine, General Surgery and Orthopaedic wards were recorded in (<20% of cases). Address, Final diagnosis, Outcome also were recorded in (<50%) in General Medicine wards, and in (80-100%) in Surgery and Orthopaedic wards. All the late parameters were recorded in (92-100%) in Obstetric ward. Regarding pediatric wards, the same data were recorded in (60–85%) for all parameters. Regarding Time, round's leader, doctor's name and Signature on the clinical entry notes were all recorded in (<40%), doctor's Designation was not written at all. **Conclusion:** This survey shows the documentation of important patient information is lacking behind the international standards. Poor documentation in medical records might compromises the quality of care, had a medico-legal implications and undermine analyses based on retrospective medical files reviews.

Keywords: Case notes, Documentation, Patient information, Record keeping.

INTRODUCTION

The medical record by definition is a "collection of data on a patient including an identification, history, statement of current problem, diagnosis and the treatment procedures and progress notes.[1] Case note documentation is a vital process to insure proper recording of patient's data and keystone to improve communication between different professionals. Proper documentation of patient care is frequently the Achilles heel of Clinical services and has implications for research outcomes, including the development of medical report.[2] The clinical record has many functions, the most important of which are listed in [Table 1].

Higher Standards of recording are a must requirement in providing care for the community members and should be accurate and not vague or open to misinterpretations. It is vital that the medical professionals are concern about legibility and meticulous about clinical details and appropriate medical record keeping.[3] They must keep clear, accurate and legible records which include reporting the relevant clinical findings, the decisions made, the information given to patients, and any drugs prescribed or other investigation and treatment. Structured information which needs to be included in clinical records is listed in [Table 2]. Self-assessment and clinical audits and surveys can help improve the standards of medical record keeping. This would help in identifying the deficiencies, mistakes and shortfalls in medical records documentation and design, implement and review plans to rectify these shortfalls. The objectives of the current survey are to evaluate the quality of patient identification and medical notes writing in our public hospital and to ensure compliance with the international clinical record keeping requirements.

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MATERIALS AND METHODS

The retrospective cross-sectional survey of randomly collected case notes from the hospital documentation and information office, 100 case notes from each one of the main five hospital wards (General Medicine, Surgery, Orthopaedic, Obstetric and Paediatric), patients were admitted during the year 2015, The

patient's information and clinical entry notes was entered into a predesigned survey pro-forma [Appendix 1]. The relevant details consist of the patient's bio-data (clinical history, examination and investigation are not included), completed by the admitting doctor and the clinical entry notes in progress which are entered by round's attending clinicians. A single observer was analyzed the patient's file, filled the pro-forma and assessed It's completeness in the contents of hospital medical files (standard) as frequencies (%).

Table 1: The purposes of clinical records.

To act as a working document for day to day recording of patient care.
To store a chronological account of the patient's illnesses, its context and who did what and to what effect.
To aid communication between team members.
To allow continuity of approach in a continuing illness.
To record any special factors that appear to affect the patient or the patient's response to treatment.
To record any factors that might render the patient more vulnerable to an adverse reaction to management.
To record the advice given to clinicians.
To provide medico-legal information.
To provide clinical audit and research.
To inform analyses of clinical activity.
To allow contributions to national datasets, morbidity and mortality registers, etc.

Table 2: Structured information needed to be included in clinical record.

Clinical notes should include:
Patient demographics.
Time, Date
Reasons for the current admission
The scope of examination
Positive exam findings
Pertinent negative exam findings
Key abnormal test findings
Diagnosis or impression
Clear management plan and agreed actions
Treatment details and future treatment recommendations .
Medication administered, prescribed or renewed and any drug allergies.
Written (or oral) instructions and/or educational information given to the patient.
Documentation of communications with patient and family (level of awareness of the situation and acceptance of the plans).
Name, designation and signature of medical professional.

Table 3: Patient Identification (Bio-data).

Parameters	Medicine	Surgery	Orthopaedic	Obestatric	Paediatrics
Registration Number	100%	100%	100%	100%	96%
Unit	98%	100%	100%	100%	96%
Bed Number	92%	95%	98%	85%	85%
Name	100%	100%	100%	100%	100%
Mother's Name	2%	13%	13%	-	72%
Husband's Name	-	-	-	40%	-
Age	96%	94%	94%	99%	100%
Birth Date	1%	10%	13%	-	65%
Place of Birth	-	-	-	-	62%
Nationality	80%	88%	85%	100%	81%
Marital status	18%	16%	14%		-
Address	48%	82%	80%	100%	91%
Profession	0%	5%	2%	92%	-
Phone Number	0%	10%	7%	-	-
Place of work	0%	5%	2%	-	-
Admission Date	100%	96%	96%	99%	100%
Discharge Date	99%	94%	96%	92%	83%
Final Diagnosis	28%	100%	98%	100%	85%
Outcome	24%	86%	83%	100%	68%

The standards of the study are based on pre-designed medical file for each speciality ward in our hospital which includes:

1. Sufficient biographical and demographic information (i.e. Registration number, Unit, Bed number, Name, Age/date of birth, sex, mother's name, husband's name (obstetric files), profession, race/ethnicity, residential address, emergency contact or patient phone number), Admission date, Discharge date, Final diagnosis and outcomes (either discharged, died, left against medical advice or transferred to other hospital).
2. Case note clinical entry: are initiated by the clinician who attending the ward round, must be legible handwriting which is dated, timed and the name, designation and signature of the medical professional who wrote this entry. It also will include the name of the clinical round leader.

This is a descriptive survey, hence the Data was gathered and analyzed, frequency and percentages were determined.

RESULTS

The results of the survey are shown below:

Patients Identification:
The patient's registration number, Unit, Name, Age, Nationality, admission date and Discharge date were recorded in 85-100% of cases in almost all wards. Regarding other bio-data (Mother's name, Birth date, marital status, Profession, Place of work, Phone number) in Medicine, Surgery and Orthopaedic wards were recorded in < 20% of cases. Address, Final diagnosis, outcomes also were recorded in <50% in General Medical wards, and (80-100%) in General Surgery and Orthopaedic wards. All were recorded in (92-100%) of cases in Obstetric ward, except the husband's name where it was recorded in only 40 % of cases. in the pediatric wards, The overall parameters of the previous data were recorded in 60 – 85 % for all parameters [Table 3].

Table 4: Advantages of keeping good medical record and disadvantages of poor clinical records.

Good clinical records	Poor clinical records
• Aid the sharing of relevant information and multidisciplinary team communication • Aid coordination of care • Aid continuity of care • Aid informed decision making for patient management • Improve availability of data for risk assessment • Improve availability of data for route cause analysis in the investigation of serious incidents • Improve audit capabilities • Provide informative evidence in a court of law • Aid targeting of diagnostics and treatment plans without unnecessary repetition • Improve time management.	• Misinform healthcare professionals. • Increase medico-legal risks. • Lead to unnecessary repetition of tests or other investigations. • Prolong hospital admission. • Defective patient care • Lead to serious incidents.

Professional Identifications:
The importance of entry notes are recognized worldwide. In this survey the date on entry notes was recorded in 50-75% in all wards except in medical ward only in 5%. Regarding Time, round's leader, doctor's name and Signature were all recorded in < 40 %. In all case notes of all wards the doctor's Designation was not recorded (0%) [Figure 1].

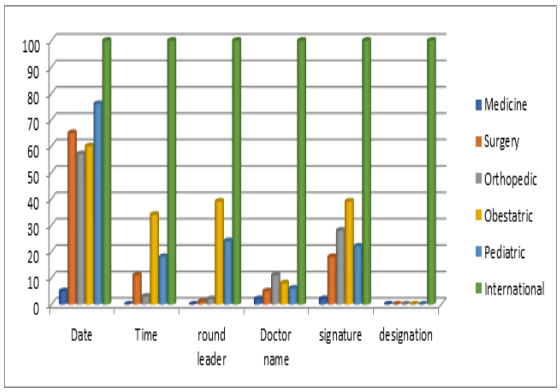

Figure 1: Case note clinical entry documentation in all hospital wards.

DISCUSSION

In developed countries clinical practice has achieved near-universal computerization. The rising demands on healthcare systems and associated costs require a much more efficient and transparent means of recording, transmitting and accessing reliable clinical information in order to manage and deliver high quality care to patients, and populations. Electronic prescribing alone has probably improved efficiency and quality of care, and reduced medication errors. Increasing the use of other functions, such as accessing online decision support and maintaining registries of patients, is likely to lead to further health gains, especially in managing chronic conditions. The challenges can only be met by the development and use of electronic health records (EHRs) in which data are recorded consistently across all contexts. The implementation of national standards for the clinical structure and content will facilitate shared care, enable interoperability between locations and yield comparable data to support the management and monitoring of services realizing benefits for patients, clinicians and services.[5]

Documentation of important clinical information is poor in general even in the records of patients in tertiary care hospitals.[6] Higher Standards of recording are called for, since the quality of record does not only affect the individual patient, but also the qualities of medical care in general.[7] The advantages and disadvantages of keeping good or poor clinical records, respectively, are summarized in [Table 4].[8] Clinical records has medical and legal relevance and therefore it must be complete, legible and of the highest quality [Figure 2].[9]

Appendix 1: Audit Pro-forma.

Patient Identification	**No**	**Yes**
Registration Number	❒	❒
Unit	❒	❒
Bed Number	❒	❒
Name	❒	❒
Mother Name	❒	❒
Husband Name	❒	❒
Birh date	❒	❒
Place of Birth	❒	❒
Nationality	❒	❒
Marital Status	❒	❒
Nationality	❒	❒
Address	❒	❒
Profession	❒	❒
Phone Number	❒	❒
Admission Date	❒	❒
Discharge Date	❒	❒
Final Diagnosis	❒	❒
Fate	❒	❒
Case Note Clinical Entry		
Date	❒	❒
Time	❒	❒
Round's Leader	❒	❒
Doctor's Name	❒	❒
Signature	❒	❒
Designation	❒	❒

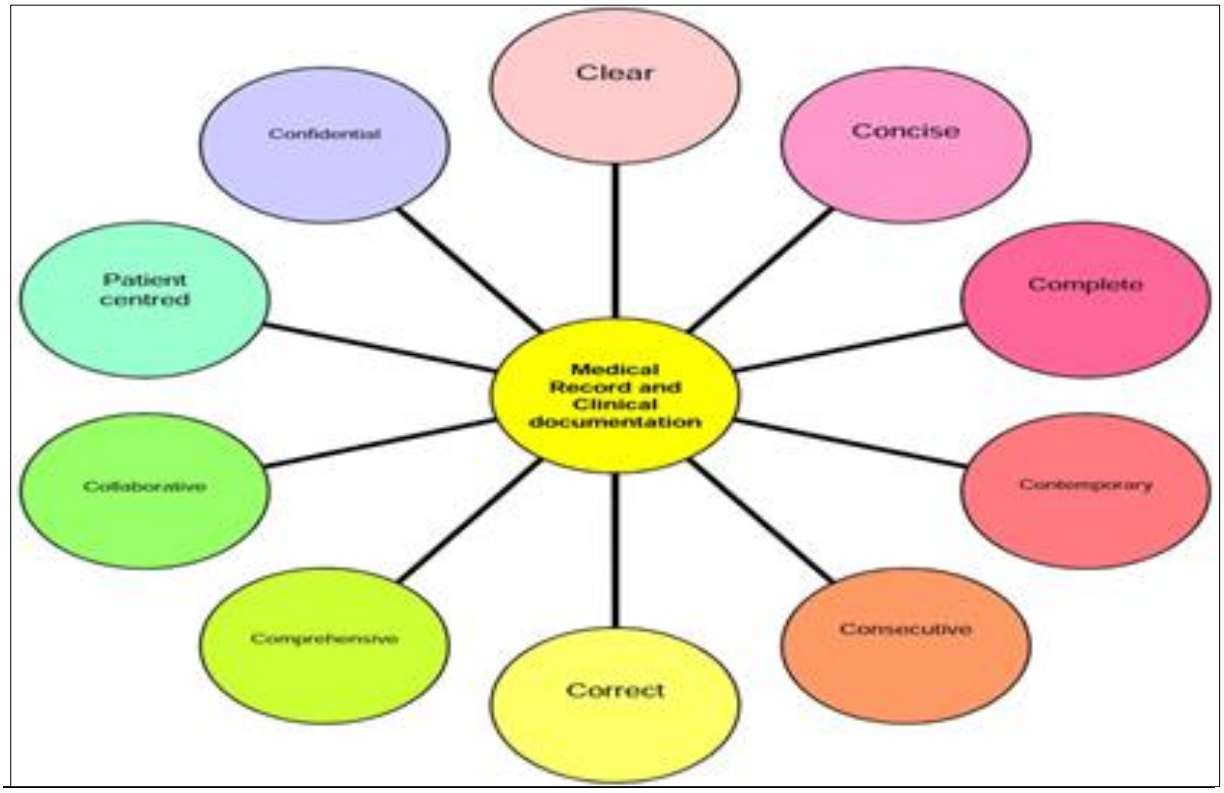

Figure 2: Guidlines of medical record and clinical documentation.

Our public teaching hospital still maintaining hand written patient's identification and clinical entry in predesigned space filling style case note booklet. One of the major problems which have been identified in documentation of medical records in this survey was illegibility and insufficient entry of bio-data and clinical data. About half of the patient's bio-data was documented in most of the time i.e 80 - 100% of the cases while the other half was poorly recorded, documentation of daily progress notes regarding date, time, round's leader, and professional identification were poorly recorded in general, and was obviously very poor in medical ward, where in many cases the notes are not written at all. As the hospital uses a pre-designed case note booklet for writing the bio-data therefore it seems

the documentations were better in these entries. On the other hand the clinical records which were entered in free text sheets of the case notes the documentations were very poor. This support the notion that well designed, structured case notes can help in overcoming part of the problem.[10-12] Also, as partners in efforts to achieve a quality practice setting the clinical staff, medical record staff and leaders have a shared responsibility to create and maintain environments that support competent clinicians in providing qualitative patients care.[13] Some of the problems could be eliminated if the quality record assurance intensified by re-educating and reinforcing the habit of proper recording of relevant clinical data, these should be taught as an integral subject in daily rounds and teaching programs.[14] Ongoing audits in documentation also, will certainly maintain the completeness and integrity of medical documentation and identify any gaps and suggest solutions.[15,16] The later hopefully will encourage the clinicians to be more accurate when they know that their medical records will be audited. We emphasize and highlight the needs for carrying out such detailed surveys and audits regularly into the contents of medical notes, suggest and implementing changes locally in all hospital departments. Illegibility of case note entries, deficient systematic way in history, examinations, progress notes in patient's condition, difficulty in doctor's identification and an excessive usage of non-universal abbreviations were the other flaws noted during this survey. These along with discharge document can be the subjects of any future surveys or clinical audits.

CONCLUSION

Documentation of important patient's identification and clinical informations are either poor or incomplete and they seems to be of low priority and the data entry personnel do not have the sufficient knowledge and training to comply with the international standards. Poor documentation in medical records results in poor communications between professionals which could lead to wrong clinical care decisions or unnecessary legal implications and can compromises the quality of the medical care provided. Documentation; If you haven't written it, you haven't done it.[17]

Recommendations:

The following changes were suggested and used to develop an action plan in ensuring quality documentation practice:

1. Incorporate strategies, policies and procedures that strengthen effective and to support accurate and concise documentation practices in medical records within the work setting.
2. Suggest Ways and means to improve and overcome the deficiencies.
3. Provision of adequate time allocation to document appropriately and review previous documentation as part of patient care.
4. Encouragement, appropriate information, education, and orientation of clinical staff to be involved in decision making in relation to selecting, implementing and evaluating medical records as an integral and core part of practice and professional responsibility.
5. Establish cornerstone audit for ongoing regular auditing practices regarding improving medical record quality in all hospital wards.
6. Quality assurance should be taught as an integral subject in medical schools so those medical students are aware that medical documentation was under constant scrutiny.
7. Computerization of medical records will eliminate eligibility, allow on-line networking with all departments within the hospital and certainly help in medical record archiving.

Acknowledgements

The authors would like to thank members of the documentation and information office in our hospital for their help and assistance in accessing the case notes.

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How to cite this article: Alfoghi M, Ramadan MB. Clinical Record Keeping Survey of Patients Admitted to Misurata Central Hospital. Ann. Int. Med. Den. Res. 2017; 3(4):PE01-PE05.

Source of Support: Nil, **Conflict of Interest:** None declared