

AUDIT OF MEDICAL RECORD DOCUMENTATION OF PATIENTS ADMITTED TO A MEDICAL UNIT IN A TEACHING HOSPITAL NWFP PAKISTAN

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ABSTRACT

Objective: To audit the medical record documentation of patients admitted to a medical unit in year 2005 at a teaching hospital NWFP Pakistan.

Material and Methods: The retrospective audit was conducted in the Medical "C" Unit of Government Lady Reading Hospital Peshawar from 1st January 2005 to 31st December 2005. Out of 3944 patients admitted during 2005, 200 case notes were randomly selected and subjected to audit. The clinical notes were broadly analysed for documentation of six parameters. Each parameter's documentation was to be graded as very good, good, average, poor, or not documented.

Results: Personal bio-data was documented good in 194(97%) cases; history and examination were good in 22 (11%) cases; diagnosis was very good in 48 (24%) cases; Investigation were documented very good in 18 (9%) cases and good in 134 (67%) cases; Progress notes were good in 156 (78%) cases and treatment was documented good in 186 (93%) cases. In 82 (41%) charts, one or more of the six selected items were not documented at all. Investigations were not written in 20%, progress notes in 12%, history and examination in 9%, diagnosis in 6%, treatment in 3% and bio-data in 1% of the case notes

Conclusion: Documentation of important clinical information is poor even in the hospital charts of patients admitted in tertiary care hospital. Poor documentation in medical records might reduce the quality of care and undermine analyses based on retrospective chart reviews.

Key Words: Clinical audit, Case notes, Patient information, Documentation.

INTRODUCTION

The history of clinical audit goes back to 1828 when Florence Nightingale drew up forms of enquiry in order to look at standard of care in workhouses, which latter on revolutionized the nursing. Ernest Codman championed the contrasting 'clinical' approach in his search for full and honest appraisals of surgical errors.¹ Recently clinical audit is enjoying as high profile life as it is impossible to pick up any newspaper or journal concerned with medical management without seeing an article on audit.² Clinical audit is a systematic and critical analysis of the quality of patient care including the procedure used for diagnosis and treatment, the use of resources and the resulting outcome. Clinical audit is to review clinical care against agreed medical profession standard in order to identify the shortcomings and opportunities for improvement. It seeks to ensure

that the current knowledge is properly used in decision-making.³ Audit becomes more useful if the audit cycle is completed i.e. a further round of audit is contemplated after the first (intervention) to assess its efficacy.⁴ Documentation of patient care is frequently the Achilles heel of Clinical services. Proper documentation of clinical record is of paramount importance.⁵ Poor documentation reduce the quality of care and undermine analyses based on retrospective chart reviews. Documentation of important clinical information is poor even in the hospital charts of patients with severe conditions. This quality-of-care issue has implications for health services and research outcomes, including the development of medical report. Self-assessment and audit can help improve the standards of medical record keeping.⁶

The aim of the current study is to evaluate the quality of medical notes writing in a medial

unit of a tertiary care hospital. This would help in identifying the deficiencies, mistakes and shortfalls in medical records documentation. Finally ways and means are to be suggested so as to improve and overcome the deficiencies.

MATERIAL AND METHODS

The audit was conducted in medical “C” unit, department of medicine, postgraduate medical institute government Lady Reading hospital Peshawar, NWFP Pakistan. It included patient case notes admitted during the year 2005. Patients whose charts were listed as missing were not included in the review. (n=32).

All the case notes of medical “C” unit for the year-2005 were collected from record room of Lady Reading hospital Peshawar. Total numbers of patients admitted the unit in year 2005 were 3944. Thirty-two charts were listed as missing leaving only 3912 (sampling frame) for the audit. Two hundred case notes (sample size) were selected from the pile in simple random manner (using random table) and were subjected to audit. The patient's information's was entered into a pre-designed audit pro-forma having all the relevant details. A single observer who would assess it as per agreed standard, analyzed the patient's chart and filled the proforma. Six parameters were assessed in the contents of medical notes. These included documentation of

1. Bio-data of the patient.
2. History and physical examination.
3. Diagnosis.
4. Investigations recorded.
5. Daily progress notes of the patient and
6. Treatment / intervention record.

The bio-data included the name, age (date of birth), gender, weight, address and telephone number of the patient. The history and examination was analyzed and assessed as per standard clinical methods. The diagnosis including primary

(provisional and final diagnosis) and the secondary diagnosis and its completeness were taken into account in order to assess its grade. We maintained a structured sheet for investigation to be written in chronological order. Investigations were graded as per completeness of flow sheet and documentation of any other diagnostic intervention like lumber puncture, pleural and liver biopsy. The daily progress notes were classified accordingly as to whether the notes are comprehensive or not, and whether they are written daily. Treatment included medications or any therapeutic intervention. Medications were assessed as to whether

1. The drugs are written with trade and generic name.
2. The dose and frequency of administration is written or not.
3. Date of starting and stopping a drug is written or not.

Any other therapeutic intervention performed like, ascitic or pleural fluid tap, chest intubation or others are documented or not.

The overall grade was assigned to each one of the six parameter depending on the completeness and quality of documentation. Each parameter's documentation was in turn graded as very good, good, average, poor, or not documented.

This is a descriptive study (audit) hence the frequency and percentages were determined.

RESULTS

We had a total of 3944 admissions in year 2005. The numbers of patients admitted in male unit were 1871 and the number of patients admitted in female unit was 2073. Thirty-two charts were listed as missing leaving only 3912 for the audit. Out of these two hundred case notes were scrutinized.

In 97% (n=194) of our patients personal data was recorded in good manner. In 4 charts (2%) bio-data was recorded in an average way. In

DOCUMENTATION OF THE SIX PARAMETERS

PARAMETERS	Very good		Good		Average		Poor		Not written		Total n = 200	
	n	%	n	%	n	%	n	%	n	%	n	%
Bio-data	-	-	194	97%	4	2%	-	-	2	1%	200	100%
History and Exam.	-	-	22	11%	98	49%	62	31%	18	9%	200	100%
Diagnosis	48	24%	128	64%	10	5%	2	1%	12	6%	200	100%
Investigation	18	9%	134	67%	6	3%	2	1%	40	20%	200	100%
Progress notes	2	1%	156	78%	18	9%	-	-	24	12%	200	100%
Treatment	-	-	186	93%	8	4%	-	-	6	3%	200	100%

Table 1

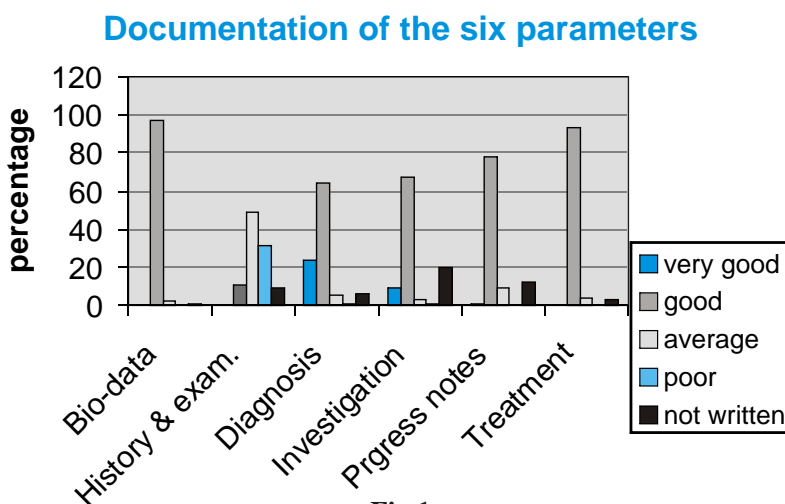


Fig.1

only two patients out of 200 (1%) bio-data was not written at all.

History and examination was not documented in 9% (n=18) of our patient while in 31% (n=62) or cases it was written poorly. Only in 11% (n=22) cases good history was recorded and in the rest 98 case notes (49%) history writing was placed in average category. Complete diagnosis was written in 24% (n=48) of the charts (very good) while it was good in 64% (n=128) of the cases. In 6% of the charts (n=12) no discharge diagnosis was recorded and in the rest diagnosis documentation was graded as poor to average. Investigations were documented in 76% (n=142) of the file in efficient manner (very good to good). In 20%, (n=40) these were not written on investigation flow sheet. Progress notes were written in most (86%) of the studied patients whilst in 12% (n=24) no record of progress notes was available. The treatment including medication or any other intervention was recorded in good manner in 97% (n=184) of the patients. In 10 patients (5%) it was written in a average manner while in 3% (n=6) of the case notes no record of any treatment or any other therapeutic intervention was there (Table-1). Deficiencies were revealed in documentation of all the six parameters selected. In 41% of the charts there was gross deficiency in the sense that one or more of the six selected items were not documented at all. Investigations were not written in 20%, progress notes in 12%, history and examination in 9%, diagnosis in 6%, treatment in 3% and bio-data in 1% of the case notes (Fig-1).

DISCUSSION

In developed countries clinical practice has achieved near-universal computerization. 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.⁷

Our tertiary care public sector hospitals are gradually catching up with computerization but most of them are still maintaining hand written patient's notes. Our main area of deficiency was in the domain of the documentation of good history and physical examination. The house officer or trainee medical officer routinely does this exercise. The importance of history and examination is recognized worldwide. In 9% of our patients no history and examination was written. In 31% it was recorded in very poor and clumsy manner. In the rest 60% the history and examination record was very good (11%) to average (49%). Patient bio-data was properly documented most of the time i.e. 97% of the cases. The nursing staff in pre-structured sheet mostly writes the patient personal data.

Complete diagnosis was listed in 24% of our case notes. In another 64% it was graded as good documentation. In 6% diagnosis was not written at all. In 5% incomplete (average) diagnosis was recorded. Investigations were well documented in 9% (very good) and good manner in another 67% of files. In 20% investigation were not recorded at all and in the rest 4% either poorly or incompletely (average) recorded. Documentation of daily progress notes and treatment was good in majority of case notes (78%). In 12% files no record of progress notes was available. In 93% of charts treatment documentation was placed in good category while in 3% of cases no treatment or any other intervention was mentioned in the file. The latter groups of patients were for observation only.

We use a pre-designed form for writing

bio-data and investigation. We therefore found better documentation in the domain of bio-data and investigation as compared to the other parameters. This support the notion that well designed, structured case notes can help in overcoming part of the problem.^{8, 9} We could not find any similar local study to compare our result with. A study from Malaysia showed deficiencies in documentation of all the above parameters.¹⁰ In another review only 26% of the structured letters written about the patient contained a complete set of information sought by General practitioners and hospital staff.¹¹ Poor documentation in medical records might reduce the quality of care and undermine analyses based on retrospective chart reviews. There is room for improvement through education, organization and documentation. Only then retrospective studies based on scanning of old case notes could be validated. Illegibility of case note entries, difficulty in doctor's identification and an excessive usage of abbreviations were the other flaws noted during this audit. These along with discharge document can be the subjects of any future audit.

CONCLUSION

Documentation of important clinical information is poor even in the charts of patients in tertiary care hospital. Higher Standards of recording in internal medicine are called for, since the quality of record does not only affect the individual patient, but also the qualities of medical care in general. All clinical departments and hospitals should carry out detailed studies into the contents of their medical notes.

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