

MISCONDUCT IN MEDICAL RECORDS DOCUMENTATION OF PATIENTS ADMITTED TO SURGICAL DEPARTMENT AT BASRAH GENERAL HOSPITAL. A CROSS SECTIONAL STUDY OF 250 MEDICAL RECORDS

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Abstract

Medical health records form an essential part of a patient's present and future health care, so proper recording and documentation is mandatory because improper record keeping can result in poor management as well as declining medical claims.

The aim of this study is to evaluate the degree of writing patient's medical records and the adherence of medical staff to document patients' information's in accurate and proper manner as a guide for management protocols.

This is a retrospective descriptive cross sectional study, carried out in Al-Basrah General Hospital from 1st of January to 15th of February 2015, 250 medical records randomly selected, admitted for both urgent and elective surgeries from the total number of records registered at 2015, The Information from the records are documented on scoring questionnaire arrange by the researchers.

The documentation varies from item to other, for information related to patient identity: name, address, occupation presented completely in 70%, 19.2%, and 60.9% respectively. Regarding medical history, the chief complaint was written in medical term in 39.2% while the duration of illness was documented in 57.2%, whereas present illness, review of system, past, social, family & drugs histories were completely presented in 17.6%, 1.6%, 19.6%, 3.6%, 2%, 20.8% respectively. 38.8 % for general examination, 66% for systemic examination, 32.4% for vital signs, 94.8 % for preoperative & operative anesthetic notes, and 46.8% for operative surgeon notes were not presented at all. The investigations & treatment present in 71.6% & 56.8% respectively while diagnosis was not mentioned in 87.4%. Regarding follow up, nursing notes, consent were not present in approximately 30% of data. The admission sheet was not present in 2.8% while discharging summary report was not present in 97.2%. For diet, height, weight, fluid chart were not recorded in 100%. A comparison between urgent & elective surgeries reveals that the recording was slightly better for elective but this is not statistically significant. The documentation of patient medical records in surgical department of Al-Basrah General Hospital is poor, the majority of sheets in the records lack most of Information that its presence is fundamental for patient management, and the majority of data are not documented in complete and proper manner.

Introduction

Medical record is a chronological written account of patient's examination and treatment that includes the patient's medical history, physical examination, results of diagnostic tests and procedures, medications and therapeutic procedures¹.

Medical records form an important part of the management of a patients, they form an essential part of a patient's present and

future health care. As a written collection of information about a patient's health and treatment, they are used essentially for the present and continuing care of the patient. In addition, medical records are used in the management and planning of health care facilities and services, for medical research and the production of health care statistics². It is very important for the treating doctors to document the

management of a patient under his care. Medical records keeping has evolved into a science by itself. This will be the only way for the doctor to prove that the treatment was carried out properly, otherwise the lines of management will not be correct. Moreover, it will also be of help in the scientific evaluation and review of patient management issues³.

The maintenance of complete and accurate medical records is a requirement of health care providers and is generally enforced as a licensing or certification prerequisite⁴.

It is important for the doctors and medical establishments to properly maintain the records of patients for two important reasons. The first one is that it will help them in the scientific evaluation of their patient profile, helping in analyzing the treatment results, and to plan treatment protocols and follow up. It also helps in planning governmental strategies for future medical care. But of equal importance in the present setting is in the issue of alleged medical negligence. The legal system relies mainly on documentary evidence in a situation where medical negligence is alleged by the patient or the relatives. In an accusation of negligence, this is very often the most important evidence deciding on the sentencing or acquittal of the doctor³.

The medical record is made up of a number of forms, which are all used for a specific purpose. The basic set of forms in the inpatient medical record includes²: Front sheet, which covers identification, final diagnoses, patient code and the attending doctor's signature.

Consent for treatment that must be signed by the patient before any medical or surgical intervention.

Correspondence and legal documents received about the patient (referral letter, requests for information, etc.)

Discharge summary, if required by the hospital authority. The patient's history, results of a physical examination,

provisional diagnosis, proposed tests and care.

Clinical progress notes (Follow-up) recording the patient's daily treatment and reaction to that treatment written by the attending doctor and other health care professionals. Nursing notes recording daily nursing care.

Operation report if an operation is performed. Laboratory reports including hematology, histology, microbiology, etc. And other reports such: x-ray, us, etc.

Other sheets like hospital admission sheet, hospital staying sheet, treatment sheet, fluid chart, temperature chart, anesthetic notes, etc.

Medical recording needs the concerted effort of a number of people involved in patient care. The doctor is the prime person who has to oversee this process and is primarily responsible for history, physical examination, treatment plans, operative records, consent forms, medications used, referral papers, discharge records, and medical certificates. There should be proper recording of nursing care, laboratory data, reports of diagnostic evaluations, pharmacy records, and billing processes. This means that the paramedical and nursing staff also should be trained in proper maintenance of patient records³.

The medical record serves as the central repository for planning patient care and documenting communication among patient and health care provider and professionals contributing to the patient's care.

An increasing purpose of the medical record is to ensure documentation of compliance with institutional, professional or governmental regulation⁴.

Improper record keeping can result in declining medical claims. It is wise to remember that (Poor records mean poor defense, no records mean no defense). A properly obtained consent will go a long way in proving that the procedures were conducted with the concurrence of the patient. A properly written operative note

can protect a surgeon in case of alleged negligence due to operative complications. It is important that the prescription for drugs should be legible with the name of the patient, date, and the signature of the doctor. An undated prescription can land a doctor in trouble if the patient misuses it. There are also many records that are indirectly related to patient management such as accounts records, service records of the staff, and administrative records, which are also useful as evidences for litigation purposes. Medical recording needs the concerted effort of a number of people involved in patient care³.

The aim of this study is to evaluate the degree of writing patient's medical records and the adherence of medical staff to document patients' Information in accurate and proper manner as a guide for management protocols.

Patients and methods

A retrospective descriptive cross sectional study, routine data-based, extended for six weeks (first of Jan.-fifteen of Feb. 2015) carried out in Al-Basrah General Hospital (Dept. of general surgery).

About 250 medical records randomly selected, admitted for both urgent and elective surgeries from the total number of records registered at 2015 for patients operated-on and discharged from the hospital included in the study.

The Information from the records are documented on questionnaire arranged by the researchers which includes the following variables: type of surgery (elective or urgent), name, occupation, address, chief complaint, duration of illness, present illness, review of system, past history, drug history, social history, family history, general examination, systemic examination, vital signs, preoperative anesthetics notes, operative anesthetic notes, operative surgeon notes, investigations, treatment sheet, diagnosis, follow up sheet, nursing notes, fluid chart,

diet, weight, height, admission sheet, patient consent and discharging summary report.

Scoring system was applied on the questionnaire.

All variables are classified according to their documentation into: Hospital admission sheet, Front sheet, Patient consent, Discharging summary reports, preoperative anesthetic notes, operative anesthetic notes, operative surgeon's note, general examination and vital signs, systemic examination, follow-up sheet, nursing note sheet and fluid calculation sheet.

None: means nothings was written (get 0 score).

Incomplete: means there is some data missed or not clear (get score 1).

Complete: means all details in this sheet is written according to academic manners (get score 2).

There are some exceptions for (duration of illness, investigations, treatment sheet, diagnosis, diet, weight & height) which only classified into:

None which means nothings was written (get 0 score).

Present which means these data is written (get 1 score).

From total score of 50 marks, each medical record is assessed individually and get its specific score and then rating into 5 classes which include:

Clear failure < 10 marks

Failure 10- 4 mark

Accepted 25-34 mark

Good 35-44 mark

Very good 45-50 marks

Data were fed on computer software (SPSS: Statistical package for social science version 20). After thorough and careful checking, data were analyzed in the form of descriptive tables and bar charts.

Results

In this study the frequencies & percentages of certain information are demonstrated in the following tables.

Table I: Frequencies and percentages of name, address & occupation.

	None	Present		Total
		Incomplete	Complete	
Name	7 (2.8 %)	68 (27.2 %)	175 (70 %)	250 (100)%
Address	6 (2.4 %)	196 (78.4 %)	48 (19.2 %)	250 (100)%
Occupation	9 (3.6 %)	90 (36 %)	151 (60.9 %)	250 (100)%

Table II: The frequencies & percentages of writing chief complaint & duration from history sheet

	None	Present		Total
		In medical terms or diagnosis	In patient words	
Chief complaint	44 (17.6%)	98 (39.2 %)	108 (43.2 %)	250 100%
Duration	107 (42.8%)	143 (57.2 %)		250 100%

Table III: The frequencies & percentages of writing present illness & review of system from history sheet.

	None	Present		Total
		Incomplete	Complete	
Present illness	60(24 %)	146(58.4 %)	44(17.6 %)	250100%
Review of system	139(55.6 %)	107(42.8 %)	4(1.6 %)	250100%

Table IV: The frequencies & percentages of writing past, social, family & drug history from history sheet.

	None	Present		Total
		Incomplete	Complete	
Past history	84(33.6 %)	107(46.8 %)	49(19.6 %)	250100%
Social history	131(52.4 %)	110(44 %)	9(3.6 %)	250100%
Family history	168(67.2 %)	77(30.8 %)	5(2 %)	250100%
Drug history	70(28 %)	128(51.2 %)	52(20.8 %)	250100%

Table V: The frequencies & percentages of writing general exam, vital signs & systemic exam from examination sheet.

	None	Present		Total
		Incomplete	Complete	
General exam	97(38.8 %)	127(50.8 %)	26(10.4 %)	250100%
Systemic exam	165(66 %)	75(30 %)	10(6 %)	250100%
Vital signs	81(32.4 %)	169(67.6 %)	Zero(0%)	250100%

Table VI: The frequencies & percentages of writing anesthesiologist & surgeon notes.

	None	Present		Total
		Incomplete	Complete	
Preoperative anesthetic notes	237(94.8 %)	8(3.2 %)	5(2 %)	250(100%)
Operative anesthetic notes	237(94.8 %)	4(1.6 %)	9(3.6 %)	250(100%)
Operative surgeon notes	117(46.8 %)	49(19.6 %)	84(33.6 %)	250(100%)

Table VII: The frequencies & percentages of writing investigations, treatment sheets & final diagnosis.

	None	Present	Total
Investigations	71(28.4 %)	179(71.6 %)	250(100%)
Treatment	108(43.2 %)	142(56.8 %)	250(100%)
Diagnosis	196(87.4 %)	54(21.6 %)	250(100%)

Table VIII: The frequencies & percentages of writing follow up sheet, nursing notes & fluid chart

	None	Present		Total
		Incomplete	Complete	
Follow up sheet	79(31.6 %)	87(34.8 %)	84(33.6 %)	250(100%)
Nursing notes	75(30 %)	66(26.4 %)	109(43.6 %)	250(100%)
Fluid chart	250(100 %)	ZERO(19.6 %)	ZERO(0 %)	250(100%)

Table IX: The frequencies & percentages of writing diet, weight & height of the patients

	None	Present	Total
Diet	250(100 %)	Zero(0 %)	250(100%)
Weight	250(100 %)	Zero(0 %)	250(100%)
Height	250(100 %)	Zero(0 %)	250(100%)

Table X: The frequencies & percentages of writing admission sheet, patient consent & discharging summary reports.

	None	Present		Total
		Incomplete	Complete	
Admission Sheet	7(2.8 %)	109(43.6 %)	134(53.6 %)	250 100%
Patient Consent	64(25.6 %)	134(53.6 %)	52(20.8 %)	250 100%
Discharging Report	243(97.2 %)	5(2 %)	2 (0.8 %)	250 100%

Table XI: Difference between elective and urgent surgeries according to the scores

		Elective surgery	Urgent surgery	total
Score	clear failure > 10	8 (4.79 %)	7 (8.43 %)	15
	Failure 10-24	124 (74.25 %)	67 (80.72 %)	191
	Accepted 25 - 34	33 (19.76 %)	9 (10.84 %)	42
	Good 35 - 44	2 (1.19 %)	zero (0 %)	2
	very good 45 - 50	zero (0 %)	zero (0 %)	0
Total		167	83	250

$X^2 = 5.149$ df = 3 p value = 0.16

Table XII: Assessment of medical records according to the scoring system.

		frequency	percent
Score	Clear failure : < 10	15	6.0 %
	Failure : 10 - 24	191	76.4 %
	Accepted : 25 - 34	42	16.8 %
	Good : 35 - 44	2	0.8 %
	Very good : 45 - 50	Zero	0.0 %
	total	250	100.0 %

Discussion

The information contained in the medical record allows health care providers to determine the patient's medical history, examination and provide informed care. The medical record serves as the central repository for planning patient care and documenting communication among patient and health care provider and professionals contributing to the patient's care. An increasing purpose of the medical record is to ensure documentation of compliance with institutional, professional or governmental regulation⁵. Our study is to evaluate the degree of writing patient's medical records and the adherence of medical staff to document patient's information in accurate and proper manner, The data used in our study cannot be verified for its completeness and accuracy but we believe that this study provides sufficient evidence about the quality of documentation in surgical department at Al-Basrah General Hospital which could be generalized to others hospitals in the city.

Our assumption in the current study was that: anything was not recorded or documented was considered not done and neglected even it might be done.

We will discuss each item in the patient's records individually according to our results and emphasized the importance of recording this information.

First: We should look at how a patient and his or her medical record are identified. Accurate identification of a patient is the backbone of an effective and efficient medical record system².

Certain Information are collected from the front sheet that include : name, address

and occupation of the patients, these data seems to be the best information that are recorded since the majority of the data is documented despite that many of them are not clearly and not completely recorded specially the patient address as 78% of them are incomplete, but the result that attract the attention is some of medical records lack the name of the patient in the front sheet, even though it was small percent, only 2.8 % but this must not occur as shown in Table I.

Second: The history of a patient is the single most useful and important element in making an accurate diagnosis⁶, much more valuable than either physical examinations or diagnostic tests. The medical interview is the process of gathering data that will lead to an understanding of the disease and the underlying physiological process. The objective is to obtain an accurate and comprehensive picture of the patient's situation⁷.

The documentation of medical history was generally inadequately performed as shown in the results (Tables II, III, IV). Regarding the chief complain although that 43.2 % are recoded clearly and in patient words but there is 39.2 % of them are written in medical terms and sometimes the final diagnosis replaced the chief complaint which is not up to the standards of writing chief complaint in medical books.

It is worse regarding the duration of illness whereas in 42.8 % of history sheet, the duration is not present and this may be the same for review of systems, past history, social history, family history and

drug history that carry approximately similar percentages of failure and their completeness have so poor percentages.

The present illness, which includes the circumstances surrounding the onset of recent health changes and the chronology of subsequent events that have led the patient to seek medical care, is essential to understanding the course of the disease process and it may consider the most important topic in history taking⁷ but in our result the reverse is noticed whereas only 17.6 % of these topics were written properly and clearly represent patient condition while 58.4 % was incomplete data, and unfortunately 24 % of these sheets left empty.

Third: The physical examination is the recording of observations of the patient. This includes the general examination, vital signs and examination of the different organ systems, especially ones that might directly be responsible for the symptoms the patient is experiencing⁸. Together with the medical history, the physical examination aids in determining the correct diagnosis and devising the treatment plan. This data then becomes part of the medical record⁹.

Despite of the importance of the physical examination, the degree of documentation in our locality is low as shown in Table V. The general examination in 38.8 % of the data does not present at all and only 10.4 % is written completely while the majority which represents 50.8 % are satisfied by written: conscious and oriented.

For the vital signs, the condition is worse, whereas no one recorded them completely and there is 32.4 % of unrecorded data while the majority of recording was incomplete or fake.

The worst for systemic examination which carry the highest percentage of failure whereas 66 % of the data are not recorded at all, hence how to reach accurate diagnosis without specific systemic examination? how to elicit positive signs and denied the negatives?

Fourth: When surgery was done for any patients, the preoperative and operative anesthetic notes as well as the operative surgeon notes must be recorded in their own sheets.

The anesthesiologist does their initial consultation only in the theater just before the surgery. Their record of the pre-operative assessment and the intraoperative data is usually confined to a hospital patient file¹⁰.

In this study, 94.8 % of these notes is absent and sadly to say it is real (Table VI). Such records may provide an invaluable guide to subsequent practitioners involved with the patient.

The matter is slightly better for operative notes recording whereas 33.6 % of them recorded completely and in clear way, and 19.6% their recording is incomplete and lack many information like names of surgeon and anesthesiologists, date of operation, name of the patient signatures and many information related to the details of the surgery. However the big problem is in the reaming percentage which is 46.8% (Table VI) that's left empty and there is no any evidence shows that the surgery was done despite in the admission sheet was written that there is surgery for something.

Fifth: The formulation of an accurate diagnosis is often facilitated by the use of certain investigations⁷ and fortunately in 71.6% of our reviewed records, the investigations are attached while in the remaining others there is no evidence of doing investigations (Table VII), although in certain circumstances there is no need for sophisticated investigations but at least simple investigations like blood test should be present as a part of pre-operative preparations and investigations. After the history, examinations and investigations, the specific diagnosis become clear mostly in order to do operation or in certain conditions the diagnosis is reached intra operatively⁷, however the diagnosis must be found and documented in the medical records for

those who are discharged, but in this study 87.4 % of these records lack the scientific diagnosis in medical terms.

Although The doctor is the prime person who has to over sees the process of recording but this process needs also the concerted effort of all medical staff³, one of them is the pharmacists, as the prescription for drugs should be legible with the name of the patient, the name and signature of the pharmacist must be present in the treatment sheet as well as to other detailed information related to the drug prescriptions, but what show in our results (Table VII) is that 43.2% of medical records have empty treatment sheet.

Sixth: When a patient is hospitalized, daily updates are entered into the medical record documenting clinical changes, new information. All these are entered by all members of the health-care team (doctors, nurses, physiotherapists, dietitians, etc.). They are kept in chronological order and document the sequence of events leading to the current state of health¹¹. Regarding this study, the follow-up and nursing notes have approximate results, since their documentations is not available at all in 31.6 % and 30 % respectively, while their completeness is 33.6 % for follow-up notes and slightly better for nursing notes which is 43.6 % and the remaining was incomplete (Table VIII).

The unaccepted results were for the fluid chart, diet, weight and height of the patients whereas 100% was the fortune of non-recoding data (Tables VIII & IX).

Seventh: Any patient admitted to the hospital must have an admission sheet which is the first paper in the medical records and this sheet contain information related to patient identity, patient case, final diagnosis, the names and signatures of doctors and other information. The same for discharge, there is what's called discharging summary reports which must contain a summary of patient condition and the management he or she received during hospital stay.

Fortunately only 2.8% of the admission sheet was empty, and 43.6 % missed certain data, while the majority which is 53.6% was complete (Table X).

The reverse and the worst was noticed for discharging summary reports whereas 97.2 % of them were empty, and 2 % was incomplete while only 0.8% was of complete recording (Table X).

The patient consent for treatment is the principle that a person must give their permission before they receive any type of medical or surgical treatment or examination¹².

This study shows that patient consent is neglected in 25.6 % of the data while 53.6 % of them are written incompletely, some lacks the name of patients and some with no signature of surgeons. but it is complete in only 20.8 % of the records where all spaces are complete and properly filled (Table X).

Eighth: Elective surgery or elective procedure (from the Latin eligere, means surgery that is scheduled in advance because it does not involve a medical emergency). By contrast, an urgent surgery is one that cannot wait until the patient is medically stable, but should generally be done immediately, today or tomorrow as soon as possible, Most surgeries are elective¹³.

The comparison between the two types of surgery (elective & urgent) reveals that the result is slightly better for elective surgeries, but both of them shows the same pattern of presentation whereas the majority of both of them is in the field of failure 74.25% for elective & 80.72% for urgent. The deference between these two types of surgery is statistically not significant (Table XI).

Ninth: To summarize our results and to evaluate the degree of writing the medical records and the degree of adherence of medical staff to document patients' information, we found that (Table XII) is enough to determine the state of the recording in this hospital, whereas the major percentage which is the 76.4 %

belongs to failure that means such percentage of medical record does not exceed 25 mark from 50 according to our scoring system, and it is disappointing to say that 6% of the medical records do not get more than 10 marks and marked as clear failure.

There is only 16.8% of them get between 25-34 marks and they marked as accepted results. however and although there is large percentage of failure but what make us happy that there is percentage even it is too small 0.8 % that gets marks between 35-44 marks and they marked as good result.

We searched for percentage occupy the space of very good which means gets more than 45 marks but unfortunately 0% take this space.

Tenth and finally: As general, the results that are obtained from this study which reveals that the degree of documentation in this locality is low, are similar to study that was done in Kuwait, Saudi Arabia, Bahrain, Qatar, UAE, Oman, Afghanistan and India, in which the author undertook the study of importance of medical

records and Problems of Medical Records. and found that there was no clear concept of Medical Record System in some hospitals were so poorly organized, missing records, non-viability of laboratory and radiology reports resulted in creation of new records and new investigation orders, on each visit by the patient and there was no continuity in patient care¹⁴.

Conclusion

From the results, we conclude that the documentation of patient medical records in surgical department of this hospital is poor as general, whereas the majority of the records 82.4% (206/250) do not get more than 25 marks from 50 regarding the scoring system. We always must remember that poor surgical reports mean poor defense, no records means no defense.

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