ORİJİNAL ARAŞTIRMA ORIGINAL RESEARCH

Study on Rate of Knowledge, Attitude and Practice of Medical Students towards Method of Medical Records Documentation at Mazandaran University of Medical Sciences Affiliated Therapeutic and Teaching Centers

Mazandaran Üniversitesi Tibbi Bilimlerine Bağlı Tedavi ve Eğitim Merkezi'nde Tıp Öğrencilerinin Tıbbi Kayıtların Dokümantasyonu ile İlgili Bilgi, Tutum ve Uygulama Oranları Üzerine Bir Çalışma

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ABSTRACT Objectives: History, Clinical findings, all procedures done, and patient response to treatment are written in clinical records and contents of clinical records are indicators of physician evaluation. If clinical records are provided precisely, clear and systematized, they indicate the clinical thinking and they facilitate patient diagnosis process. These records have an important role in coordinating between professional staff that they share in patient care. Since the physicians and medical students are involved more in medical records documentation than the other hospital staff, thus, knowledge on their attitude and practice towards the principles of medical records documentation was undertaken. **Material and Methods:** This is a descriptive study, which is done about the rate of knowledge, attitude, and practice of 207 medical students of Mazandaran University of medical sciences in affiliated educational hospitals. Descriptive and inferential statistical analysis were used for the collected data, they were described and classified in tables absolute and relative frequency of distribution. For comparison of the hospitals, regarding observing designed principals in the context of medical filing complement, considering the filled questionnaires the minimums score designated as 1 and maximum 5 that is very poor to excellent. Then the mean of score was calculated and considered for the comparison of hospitals. For the determination of the relationship between knowledge, attitude, and practice, β Kendall's Tau Test used. **Results:** The majority of the participants had low knowledge (77.8%) about medical records documentation. Most of them did not have good attitude (54.1%) about completion of medical records, significance and value of medical records documentation in treatment, education, and research. **Conclusion:** Results indicate that incompletion of medical records at the university affiliated hospitals are due to lack of awareness of the students towards the method of medical records documentation. In addition, lack of considering to the completion of records in evaluation of the students can affect the practice of them.

Key Words: Medical records, documentation, inpatients, Sary, Mazandaran, Mazandaran University of Medical Sciences

ÖZET Amaç: Klinik kayıtlarda hikâye, klinik bulgular, yapılan tüm işlemler ve hastanın tedaviye yanıtı yazılıdır ve klinik kayıtların içerikleri hekim değerlendirmesinin göstergeleridir. Eğer klinik kayıtlar tam, açık ve sistematize olursa, bu klinik düşünceyi gösterir ve hasta tanı sürecini kolaylaştırır. Bu kayıtlar, hasta bakımını paylaşan profesyonel personel arasındaki koordinasyonda önemli bir role sahiptirler. Hekimler ve tıp öğrencileri diğer sağlık personelinden daha fazla tıbbi kayıtları kullandıklarından bu çalışmada tıbbi kayıt dokümantasyon ilkelerine karşı tıp öğrencilerinin tutum ve uygulama bilgileri ele alınmıştır. **Gereç ve Yöntemler:** Mazandaran Üniversitesi Tıbbi Bilimlerine bağlı eğitim hastanelerindeki 207 tıp öğrencisinin bilgi, tutum ve uygulama oranları hakkında yapılan tanımlayıcı bir çalışmadır. Toplanan veri için tanımlayıcı ve dolaylı istatistik analiz yapıldı. Veriler mutlak ve göreceli sıklık dağılım tablolarında tanımlandı ve sınıflandırıldı. 1 ila 5 arası, çok kötüden çok iyiye doğru puanlama yapıldı. Daha sonra hastanelerin karşılaştırılmasında ortalama skor hesaplandı ve dikkate alındı. Bilgi, tutum ve uygulama arasındaki ilişkinin saptanmasında β Kendall's Tau Testi kullanıldı. **Bulgular:** Katılımcıların çoğunluğu (%77.8) tıbbi kayıt dokümantasyonu hakkında az bilgiye sahipti. Tıbbi kayıtların tamamlanması, tedavi, eğitim ve araştırmada tıbbi kayıt dokümantasyonunun önemi ve değeri hakkında çoğunun (%54.1) iyi bir tutumu yoktu. **Sonuç:** Sonuçlar, üniversiteye bağlı hastanelerde tıbbi kayıtlardaki yetersizliğin, tıbbi kayıt dokümantasyon yöntemine karşı öğrencilerin farkındalıklarındaki eksikliğe bağlı olduğunu göstermektedir. Ayrıca, öğrencilerin değerlendirilmesinde kayıtların tamamlanmasındaki dikkatsizlik öğrencilerin uygulamalarını etkileyebilir.

Anahtar Kelimeler: Tıbbi kayıtlar, dokümantasyon, yatan hasta, Sary, Mazandaran, Tıbbi Bilimler Mazandaran Üniversitesi

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Documentation in the medical record facilitates diagnosis and treatment, communicates pertinent information to other caregivers to ensure patient safety and reduce medical errors, and serves an important medical-legal function in risk management.[1] Quality of documentation may also reflect the quality of care delivered, although recent studies have suggested that medical record documentation in the outpatient setting tends to underestimate the actual performance of preventive healthcare services and other indicators of quality of care. [2-4] The core of health information system in the hospital lies in the medical records.[5] As a primary means of communication between health care workers, a properly documented medical record is essential to good clinical care. [6-9]

The medical record of today does not only reflect your care of the patient, but has become a communication tool to a wide variety of players.[9]

Medical records are commonly used to measure quality of care. However, little is known about how accurately they reflect patients' clinical condition. Even less is understood about what influences the accuracy of provider's documentation and whether patient characteristics impact documentation habits.[10]

The hospital medical record has become increasingly exposed to retrospective audits by third party insurers, quality assessment studies, and billing inquiries. As a result, the demand for complete documentation in the record has steadily increased during the past few years. Institutional medical practices are subject to a variety of regulations and standards.[11]

In improving the quality of treatment, different tools are implied for evaluation of way of recognizing coding and way of caring in there for it providers data about the disease the rendered care and treatment procedures. Thus is way it is important in evaluating the quality of care given.[12]

Kahooei (1999- 2000) study on 188 students at Semnan university of medical science showed that majority of the subjects under study had poor knowledge on medical filing and had positive attitudes towards its promptness and its stand on treatment education and research.[13] At the university affiliated hospitals physicians and the students are more involved in medical file recording, therefore study on the knowledge attitude and performance related to filing system is necessary to help prepare education planning through identifying the deficiency.

MATERIALS AND METHODS

In this descriptive study, from the total number of 255 medial students at different level of education, 207 (81.18%) of them participated. Data were collected in questionnaire (Comprising 10 question having four score related to knowledge, 10 question having 0 to 2 score related to attitude and check list for performance, prepared based on the instruction given in the medical recording standard documentation approved by the ministry of health and medical education of Iran (in cladding reception sheet discharge, brief of file, medical history and physician's instruction) and determine its avidity by referring to the measuring total with the help of the relevant instructors and benefiting medical record department faculty members view knowledge and attitude of the students under study towards principles of medical writing were designated as week (0-10), moderate (11-20), good (21-30), excellent (31- 40) and weak (0-5), moderate (6-10), good (11-15), excellent (16- 20) respectively, also their trainees students performance about the completion of medical history differentiating university affiliated hospitals was shown as weak (0-5), moderate (6-10), good (11-15) and excellent (16-20). About determining their performance, medical history for trainees, reception sheet, discharge brief file brief, medical history and physician's instruction for attends and interns for the comparison of the hospital regarding observing the planned principles about completion of medical record documentations completion (a bout filing reception sheet, discharge brief fibe, brief medical history, physicians instruction).

Using Likert test by giving score of 1 to the very weak and 5 to the excellent, them mean score

was obtained and used for comparison of the hospitals.

For statistical analysis of the obtained data, descriptive and inferential methods were used. Moreover, with arrangement of the total for the absolute and partial distribution, the data were described and classified. Also for determining of the relations between knowledge, attitude and performance of the subjects under study, β Kendall's Tau Test used and for analysis of the data SPSS software were used.

RESULTS

In this study, 207 students enrolled for study of which 78 were trainee, 87 and 42 post graduates total shows frequency distribution on the students rate of knowledge about the principle of have poor knowledge, medical records, majorities of them knowledge on principle of writing report (Table 1, 2).

Performance to wards principles of medical writing in order to determine the performance of the trainee students about completion of medical history the way of completion was studied separately for each educational hospital (Table 3).

The trainee students at the Zareh hospitals scored the highest performance that is 100(Excellent) and the interns and attends scored 45.4% and 37.5% that is good, respectively.

For the relationship between knowledge and attitude β Kendall's Tau Test used method was used because two variables were grading it was 0.008, p value= 0.467, which is not significant.

For the relationship between knowledge and performance β Kendall's Tau Test used method was used. Finding was 0.005. p value= 0. 438. Which is not significant? Relationship between performance and attitude considering the above condition using β Kendall's Tau Test used method was 0.003 and p value= 0. 967. It is not significant.

DISCUSSION

Result of this study showed that the student did not have proper knowledge on medical documentation. E.g. 9.7% of them knew about the time of writing medical history, which it is very important for physical examination, diagnosis, and treatment by the other physicians.

In case of the interviewing is not recorded the consultant physicians should be informed and it should be done within 24 hours after admitting.

Most of the students did not know that if in emergency condition an oral prescription is ordered it should be recorded in the medical history sheet and confirmed. Majority of the students were unaware on writing abbreviation and final diagnosis and operation, many improper abbreviations were used which were confusing during research, ethical follow up, or continuing treatment, diagnosis of operation by the other surgeons. It was expected that the attends know better than the intern on taking medical history, but it was in contrast. The reason may be their heavy duty and shortage of time.

Kahooei et al. in descriptive and analytical study on the knowledge and practice, rate of 134 medical assistants and students regarding medical documentation of provided care in 2000-2001. A twelve-section questionnaire and a checklist were used after confirming their validity and reliability showed that 60% of assistants did not know legal

TABLO 1: Frequency distribution on the Mazandaran Medical University student's rate of knowledge on filing medical record 2004

Knowledge	Trainee		Intern		Attend		Sum	
	N	%	N	%	N	%	N	%
Weak	57	73.1	69	79.3	35	83.3	161	77.8
Moderate	19	24.3	18	20.7	7	16.7	44	21.2
Good	2	2.6	-	-	-	-	2	1
Sum	78	100	87	100	42	100	207	100

TABLO 2: Frequency distribution of the student's attitude towards principles of medical record writing at the Mazandaran Medical University affiliated hospitals in 2004.

Attitude	Trainee		Intern		Attend		Ssum	
	N	%	N	%	N	%	N	%
Weak	7	9	5	5.7	4	9.5	16	7.7
Moderate	27	34.6	36	41.4	16	38.1	79	38.2
Good	44	56.4	46	52.9	22	52.4	112	54.1
Sum	78	100	87	100	42	100	207	100

TABLO 3: Frequency distribution of the trainee student's performance about completion of medical history separately for each hospital at university affiliated hospitals in 2004.

Performance	Bo Ali Hospital		Imam Hospital		Fatima ZahraHospital		Zare Hospital		Razi Hospital		Sum	
	N	%	N	%	N	%	N	%	N	%	N	%
Weak	6	21.4	3	10	-	-	-	-	-	-	9	11.5
Moderate	5	17.9	14	46.7	5	55.6	-	-	1	16.7	25	2.1
Good	9	22.1	9	30	4	44.4	-	-	5	83.3	27	34.6
Superior	8	28.6	4	12.3	-	-	5	100	-	-	17	21.8
Sum	28	100	20	100	9	100	5	100	-	-	78	100

aspects of documentation, 74.8% of them did not know how to use abbreviations in final diagnosis and surgeries. 85.8% did not know duration of confirmation of verbal orders. The relationship between knowledge and educational course was significant ($p< 0.05$). Only 10 % completed the medical chart legally. Most of assistants tended to record clinical data. There was a significant relationship between practice, education course and knowledge ($p< 0.05$).[6, 10]

Table 2 is about the attitude of 54.1% of the students under study have good attitude towards medical documentation for patients indicating that majority of the cases under study have good attitude towards medical writing. Also 88.9% of them believe that recording o clinical data is considered as a supportive for proper caring of the patients and 65.7% of them believed that medical documentation is duty of the consultant physician. Also 49.3% believed that the secretary of the hospital department should not do documentation duty. Because such persons about 55.1% were against of writing medical record by medical records students because they are not in direct contact with the patients.

Table 3 showed the performance of the society understudy. It was shown that performance of 34.6% trainees on completion of medical history sheet was good and 11.5% were weak. Considering the important of medical history sheet on diagnosis of diseases and subsequent treatment, it is necessary that all of the students completed it properly. In this regard, 41.4% of trainees were good and 50% of them were moderate. A study about the quality of medical filing on three intestinal diseases done by that Ziaei et.al in 1995 showed that Beheshti University affiliated hospitals. Though the trainees took history and documented in the file, but the contents were not valuable.[9]

It was found that the attends has higher performance as compare to the intern students. The reason may be that the formers have more experience and responsibility given to them. Mashoufi et al. (2001) reported that 68.8% of the files on discharge sheet and 76.3% did not mention about positive discharge recommendations.[11]

The results indicated that medical record documentation by health care givers were not arranged well.[11]

Therefore it is concluded that our finding as compare to above mentioned study enjoys better status regarding completion of admission and discharge sheets 63.2% of interns and 57.1% of at-

tends performed well. About 50.6% of the interns and 31% of attends completed medical order sheet and 48.3% of interns and 33.3% of attends completed short records well.

Likert Scale showed that the average of the hospitals as follows:

Imam Hospital	14.43%
Fatemeh Zahra Hospital	15.5%
Zareh Hospital	16.33%
Boali Hospital	17.22%
Razi Hospital	18.83%

It was found that the improper medical record documentation at Mazandaran Medical Sciences University is due to not explaining its importance to the medical students and unawareness to its legal responsibility.

Physicians are very busy; therefore, proper medical documentation is bad and a problem for them. In addition, no emphasis from administrators.

Based on the obtained results, the following suggestions are recommended:

1. Principal of medical records documentation and its legal aspects be content of semiology subject.

2. Constituting of continuous medical education or medical records documentations workshop for medical students.

3. Educational codifications in relation to evaluation score of medical student's clinical skill due to completion of medical records for them.

4. Promoting of medical records committee at teaching and therapeutic centers.

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