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ORIGINAL ARTICLE

Rearrangement of Morning Report Sessions: An Action Research

Background: Morning report (MR) is one of the most common methods in medical education. It is effective for improvement of the communication skills, problem solving abilities, and clinical reasoning among learners. This study aimed to evaluate and rearrange the MR sessions in the department of obstetrics and gynecology of Imam Reza Hospital in Mashhad University of Medical Sciences.

Method: This study was an action research. The first step included observation of current sessions, formation of focus groups, and conducting a training workshop regarding the principles of MR. 46 individuals including 25 medical interns, 14 residents, and 7 faculties participated in the study within two months. Then, evaluation of the sessions was done and the effect of the intervention was evaluated.

Results: Some of the significantly improved items are: the method of patient selection by selecting common diseases (P=0.010), announcing the patient's file number (P=0.000), the patient's follow up (P=0.000) and declaring the person responsible for patient's follow-up (P=0.000), writing the list of the patients on the board before the meeting (P=0.042), proper management of the meeting (P=0.000), referring to proper articles (P=0.000), and managing the duration of the presentation (P=0.000), documenting the summary of the patient history (P=0.000), documenting the key points of history (P=0.000), providing appropriate feedback to the provider (P=0.010), and paying attention to complications (P=0.001).

Conclusion: The methods of holding MR differ from defined standards in many educational centers worldwide. Thus, various aspects of meetings, including structural principles of holding MR, timing, patient selection, attention to intern and resident training at different stages, and compliance with ethical issues still need to be reviewed.

Keywords: Medical education, Morning reports, Obstetrics, Gynecology

ساماندهی جلسات گزارش صبحگاهی: یک مطالعه اقدام پژوهی

زمینه و هدف: گزارش صبحگاهی یکی از رایج ترین روش ها در آموزش پزشکی است. برای بهبود مهارت های ارتباطی، توانایی حل مسئله و استدلال بالینی بین فراگیران موثر است. هدف ما این بود که جلسات گزارش صبحگاهی را در بخش زنان و زایمان بیمارستان امام رضا(ع) دانشگاه علوم پزشکی مشهد بررسی کرده و ساماندهی نماییم. روش: در این مطالعه یک اقدام پژوهی انجام دادیم. گام اول، شامل مشاهده جلسات جاری، تشکیل گروه های متمر کز و برگزاری کارگاه آموزشی در خصوص اصول برگزاری گزارش صبحگاهی بود. 46 نفر شامل 52 کارورز پزشکی، 14 دستیار و 7 عضو هیات علمی در مدت دو ماه در مطالعه شرکت کردند. ارزیابی جلسات انجام شد و تأثیر مداخله مورد ارزیابی قرار گرفت.

یافته ها: برخی از موارد با تغیییر معنادار به دنبال مداخله آموزشی عبارتند از: روش انتخاب بیماری های شایع (P=0.010)، اعلام شماره پرونده بیمار (P=0.000)، ایمار با انتخاب بیمار (P=0.000) و اعلام مسئول برای پیگیری بیمار (P=0.000)، نوشتن لیست بیماران روی تابلو قبل از جلسه (P=0.042)، مدیریت صحیح جلسه (P=0.000) مراجعه به مقالات مناسب (P=0.000)، مدیریت مدت زمان ارائه (P=0.000) مستندسازی خلاصه شرح حال بیمار (P=0.000)، مستندسازی نکات کلیدی تاریخچه مستندسازی بازخورد مناسب به ارائه دهنده (P=0.000) و توجه به عوارض (P=0.000)، ارائه بازخورد مناسب به ارائه دهنده (P=0.000) و توجه به عوارض (P=0.000)،

نتیجه گیری: روش برگزاری گزارش صبحگاهی در مقایسه با استانداردهای تعریف شده در بسیاری از مراکز آموزشی در سراسر جهان متفاوت است. بنابراین، جنبههای مختلف جلسات از جمله اصول ساختاری برگزاری جلسات، زمان بندی، نحوه انتخاب بیمار، توجه به آموزش کارورز و دستیار در مراتب مختلف و رعایت مسائل اخلاقی همچنان نیاز به بررسی و اصلاح دارند.

واژههای کلیدی: آموزش پزشکی، گزارش صبحگاهی، زنان و زایمان

إعادة ترتيب جلسات التقرير الصباحي: بحث عملي

الخلفية: التقرير الصباحي (MR) هو أحد الأساليب الأكثر شيوعًا في التعليم الطبي. وهو فعال لتحسين مهارات الاتصال وقدرات حل المشكلات والتفكير السريري بين المتعلمين. تهدف هذه الدراسة إلى تقييم وإعادة ترتيب جلسات التصوير بالرنين المغناطيسي في قسم أمراض النساء والتوليد في مستشفى الإمام الراف في جامعة مشهد للعلوم الطبية.

الطريقة: كانت هذه الدراسة عبارة عن بحث إجرائي. تضمنت الخطوة الأولى مراقبة الجلسات الحالية، وتشكيل مجموعات التركيز، وإجراء ورشة عمل تدريبية حول مبادئ MR . شارك في الدراسة ستة وأربعون فردًا، من بينهم 25 متدربًا طبيًا و14 مقيمًا و7 كليات، خلال شهرين. ومن ثم تم تقييم الجلسات وتقييم تأثير التدخل..

النتائج: بعض البنود التي تم تحسينها بشكل ملحوظ هي: طريقة اختيار المريض عن طريق اختيار الأمراض الشائعة (P=0.010)، الإعلان عن رقم ملف المريض (P=0.000)، متابعة المريض (P=0.000)، وعلان الشخص المسؤول لمتابعة المريض (P=0.000)، وكتابة قائمة المرضى على اللوحة قبل الاجتماع (P=0.000)، والإدارة السليمة للاجتماع (P=0.000)، والإدارة السليمة للاجتماع (P=0.000)، والإدارة المقالات المناسبة المرضى العرض التقديمي (P=0.000)، وتوثيق ملخص تاريخ المريض (P=0.000)، وتوثيق النقاط الرئيسية للتاريخ (P=0.000)، وتقديم الخدمة (P=0.000)، والاهتمام بالمضاعفات (P=0.000).

الاستنتاج: تختلف طرق إجراء الرنين المغناطيسي عن المعايير المحددة في العديد من المراكز التعليمية في جميع أنحاء العالم. وبالتالي، فإن الجوانب المختلفة للاجتماعات، بما في ذلك المبادئ الهيكلية لعقد الرنين المغناطيسي، والتوقيت، واختيار المريض، والاهتمام بتدريب المتدرين والمقيمين في مراحل مختلفة، والامتثال للقضايا الأخلاقية، لا تزال بحاجة إلى المراجعة.

الكلمات المفتاحية: التعليم الطبي، التقارير الصباحية، أمراض النساء والتوليد

مارننگ رپورٹ سیشنز کی دوبارہ ترتیب: ایک ایکشن ریسرچ

پس منظر: صبح کی رپورٹ (MR) طبی تعلیم میں سب سے زیادہ عام طریقوں میں سے ایک ہے۔ یہ سیکھنے والوں کے درمیان مواصلات کی مہارت، مسئلہ حل کرنے کی صلاحیتوں اور طبی استدلال کو بہتر بنانے کے لیے موثر ہے۔ اس مطالعہ کا مقصد مشہد یونیورسٹی آف میڈیکل سائنسز میں امام رضا ہسپتال کے شعبہ امراض نسواں اور امراض نسواں میں ایم آر سیشنز کا جائزہ لینا اور ان کو دوبارہ ترتیب دینا تھا۔

طریقہ: یہ مطالعہ ایک ایکشن ریسرچ تھا۔ پہلے مرحلے میں موجودہ سیشنز کا مشاہدہ، فوکس گروپس کی تشکیل، اور MR کے اصولوں کے حوالے سے ایک تربیتی ورکشاپ کا انعقاد شامل تھا۔ دو ماہ کے اندر 25 میڈیکل انٹرنز، 14 رہائشیوں اور 7 فیکلئی سمیت 46 افراد نے مطالعہ میں حصہ لیا۔ پھر، سیشنوں کی تشخیص کی گئی اور مداخلت کے اثر کا جائزہ لیا گیا۔

تعاقبے: کچھ نمایاں طور پر بہتر ہوئی چیزیں یہ ہیں: عام امراض (P = 0.010) کو منتخب کرکے مریض کے انتخاب کا طریقہ، مریض کے فائل نمبر (P = 0.000) کا اعلان، مریض کا فالو اپ (P = 0.000) اور فرد کو ذمہ دار قرار دینا۔ مریض کی پیروی کے لیے کا فالو اپ (P = 0.000)، میثنگ سے پہلے بورڈ پر مریضوں کی فہرست لکھنا (P = 0.000)، میثنگ کا مناسب انتظام (P = 0.000)، مناسب مضامین کا حوالہ دیتے ہوئے (P = 0.000)، اور پریزئیشن کی مدت کا انتظام کرنا (P = 0.000)، مریض کی تاریخ کا خلاصہ دستاویز کرنا، فراہم کنندہ کو مریض لائے قراہم کرنا (P = 0.000) اور پیچیدگیوں پر توجہ دینا (P = 0.000)، مناسب رائے فراہم کرنا (P = 0.000)، اور پیچیدگیوں پر توجہ دینا (P = 0.000)

تعیجم: MR کے انعقاد کے طریقے دنیا بھر کے بہت سے تعلیمی مراکز میں طے شدہ معیارات سے مختلف ہیں۔ اس طرح، میٹنگز کے مختلف پہلوؤں، بشمول ایم آر کے انعقاد کے ساختی اصول، وقت، مریض کا انتخاب، مختلف مراحل پر انٹرن اور رہائشی تربیت پر توجہ، اور اخلاقی امور کی تعمیل کا ابھی بھی جائزہ لینے کی ضرورت ہے۔

کلیدی الفاظ: طبی تعلیم، صبح کی رپورٹس، پرسوتی، امراض نسواں

INTRODUCTION

The medical training program encompasses various teaching methods to meet the necessary criteria for training experienced physicians. In this regard, the morning report (MR) is one of the most common methods in medical education (1). In this educational method, recently admitted patients are reported by interns and residents on the night shift under the supervision of the on-call specialist. MR provides an interactive atmosphere in which residents and medical students are able to develop their diagnosing methods, clinical reasoning, and patient management skills. Previous studies have investigated the most efficient ambiance of MR sessions and reported that the process of disease, diagnostic work-up, and evaluation tests are considered important, while arguments of basic science, use of narrations, and subspecialty knowledge are less essential (2, 3). Moreover, it is widely suggested that the MR is more effective when it is managed by a single faculty member to provide an approximately one-sided view of the subject rather than by multi-faculty members (2). In the educational process of MR, the participants try to solve a diagnostic puzzle by discussing the patients. The introduction of patients can be from a short discussion about each of the patients admitted during the previous night to a complete introduction of a newly admitted patient or a hospitalized patient with unusual and interesting findings (4).

There is a general consensus that one of the paramount clinical approaches presented in the MR is clinical reasoning (5). Clinical reasoning is the process of gathering information, analyzing the data, and reaching clinical management for the patient (6). In the mind of an experienced clinician, the illness is formed as a step-wise process and the input of patients' knowledge enables the clinician to reach a diagnostic accomplishment. However, training in the concept of clinical reasoning is considered to be one of the underlying methods of education in the medical field which provide an educational setting for students to get fully informed of the diagnostic process (5). It is also reported that training in clinical reasoning requires applicable clinical knowledge and experience (5). Morning report session, along with clinical rounds and outpatient training, is one of the common, useful, and valuable methods in clinical training. This method has indicators and standards that, when completed, play an effective role in helping medical students to learn. The morning report is also used to describe patient-based conferences (7), which are held in the presence of the head of the department, professors, and senior assistants. Among other factors, MR is also known as a tool for evaluating clinical services and quality assurance. However, MR is reported to have an impact on escalating communication skills and socializing learners, improving professionalism, raising questions, and problem solving abilities (7,8). In this study, the researchers aimed to rearrange the morning report sessions in the department of obstetrics and gynecology of Imam Reza Hospital in Mashhad University of Medical Sciences

METHODS

This research was conducted in Obstetrics (OB) and Gynecology (GYN) Department of Imam Reza Hospital of Mashhad University of Medical Sciences. It was an action research. The participants were 25 medical students (interns), 14 OB & GYN residents and 7 professors. Informed consent forms were completed by them. Convenient Sampling was chosen. Data was collected by using a checklist which was extracted from the guideline of managing morning report announced by Iran Ministry of Health and Medical Education. The research steps are as follow:

Observation:

The morning reports presented in the OB & GYN Department of Imam Reza Hospital were observed for three weeks by one of the experts of the medical education development center (one of the project managers) and the analyzed information was recorded in a checklist. After completing the three weeks, the obtained information was provided to the Obstetrics and Gynecology department faculties. The relevant checklist was completed by the project managers based on the method of implementation, the presented cases, number of presentations, the environmental condition, and the design of the morning report sessions.

Forming a focus group:

After three weeks of observation, the focus group was held in two separate sessions including a special meeting for the faculties of the Obstetrics and Gynecology Department and project managers, and another meeting with interns, assistants, and project managers. The impression of the learners was collected and categorized. Also, the faculties declared their opinions about the morning report sessions. After analyzing the data, the obtained information was provided to the Obstetrics and Gynecology Department.

Conducting a training workshop regarding the principles of morning report sessions:

In order to teach patient introduction methods, two meetings were held in two weeks. In these sessions, emphasis was placed on the list of problems to reach the initial diagnosis. These meetings were planned in the form of two separate workshops, and the topics of the treatment plan for the assistants were discussed, mentioning the method of reaching differential diagnoses. In addition, training on the method of confirming the final diagnosis and, most importantly, how to manage and evaluate the morning report for the academic staff members was explained in detail. After analyzing and interpreting the information, a problem list was prepared and solutions were considered to solve them.

One of the important issues that had to be resolved was the requirement of managing the sessions by one of the professors, determining the more important topics and cases for the morning session, providing evidence-based related content, and emphasizing the follow-up of patients, for which, solutions were considered.

Subsequently, for the duration of three weeks, the morning report sessions presented in the Obstetrics and Gynecology

Department of Imam Reza Hospital were observed by one of the experts of the medical education development center, and the collected data was recorded using the predesigned checklist. Finally, the data was collected by SPSS 16 and was analyzed.

RESULTS

A total of 46 individuals participated in the study including 25 medical interns, 14 residents, and 7 faculties during two months. Final Analysis is reported in 3 tables.

Table 1. Items regarding the patient selection method in the morning report session					
Variable		Before intervention Number (Percentage)	After intervention Number (Percentage)	p-value	
Referred patient	Suitable	10 (66.7%)	7 (46.7%)	0.269	
	Unsuitable	5 (33.3%)	8 (53.3%)	0.209	
Complicated patient	Suitable	9 (60%)	9 (60%)	1.000	
	Unsuitable	6 (40%)	6 (40%)	1.000	
Patient with no response to therapy	Suitable	1 (6.7%)	5 (33.3%)	0.169	
	Unsuitable	14 (93.3%)	10 (66.7%)	0.109	
Common disease	Suitable	3 (20%)	10 (66.7%)	0.010	
	Unsuitable	12 (80%)	5 (33.3%)		
Change of diagnosis during admission	Suitable	0 (0.00%)	4 (26.7%)	0.10	
	Unsuitable	15 (100%)	11 (73.3%)		
According to the curriculum	Suitable	0 (0.00%)	1 (6.7%)	1.000	
	Unsuitable	15 (100%)	14 (93.3%)		
Patients referred by the faculties	Suitable	0 (0.00%)	2 (13.3%)	0.438	

Table 2. Items related to the quality of the morning report session				
Variable		Before training Number (Percentage)	After training Number (Percentage)	p-value
Writing patient's data on board	Suitable	10 (66.7%)	15 (100%)	0.042
	Unsuitable	5 (33.3%)	0 (0.0%)	0.042
On time Presence of faculties	Suitable	8 (53.3%)	11 (73.3%)	0.256
On time Presence of faculties	Unsuitable	7 (46.7%)	4 (26.7%)	0.230
On time presence of residents	Suitable	10 (66.7%)	9 (60%)	0.705
On time presence of residents	Unsuitable	5 (33.3%)	6 (40%)	0.703
D	Suitable	8 (53.3%)	13 (86.7%)	0.100
Presence of the faculty responsible for the session	Unsuitable	7 (46.7%)	2 (13.3%)	0.109
Presence of senior resident	Suitable	14 (93.3%)	15 (100%)	1.00
Presence of semor resident	Unsuitable	1 (6.7%)	0 (0.0%)	1.00
December 19 of the first section of the section of	Suitable	1 (6.7%)	0 (0.0%)	1.00
Presence of the faculties of other educational groups	Unsuitable	14 (93.3%)	15 (100%)	1.00
	Suitable	1 (6.7%)	0 (0.0%)	1.00
Presence of clinical librarian	Unsuitable	14 (93.3%)	15 (100%)	
	Suitable	2 (13.3%)	14 (93.3%)	0.00
Proper management	Unsuitable	13 (86.7%)	1 (6.7%)	
	Suitable	1 (6.7%)	7 (46.7%)	0.035
Simple entertainment	Unsuitable	14 (93.3%)	8 (53.3%)	
	Suitable	3 (20%)	15 (100%)	0.00
Patient file number recording	Unsuitable	12 (80%)	0 (0.00%)	

Table 2. Continued				
Variable		Before training Number (Percentage)	After training Number (Percentage)	p-value
Introducing the patient without interruption by	Suitable	8 (53.3%)	11 (73.3%)	0.256
faculties	Unsuitable	7 (46.7%)	4 (26.7%)	0.230
Resident's comments on intern's work	Suitable	12 (80%)	13 (86.7%)	1.000
Resident 8 comments on intern 8 work	Unsuitable	3 (20%)	2 (13.3%)	1.000
Comments of senior resident for the junior ones	Suitable	14 (93.3%)	15 (100%)	1.000
	Unsuitable	1 (6.7%)	0 (0.00%)	1.000
Coordination of patient introduction by senior	Suitable	11 (73.3%)	15 (100%)	1.00
resident	Unsuitable	4 (26.7%)	0 (0.0%)	1.00
Use of media	Suitable	2 (13.3%)	1 (6.7%)	1.00
Ose of media	Unsuitable	13 (86.7%)	14 (93.3%)	1.00
Referencing to books	Suitable	2 (13.3%)	17 (56.7%)	0.000
Referencing to books	Unsuitable	13 (86.7%)	13 (43.3%)	0.000
Defense de cutiles	Suitable	0 (0.00%)	5 (33.3%)	0.042
Referencing to articles	Unsuitable	15 (100%)	25 (83.3%)	0.042
Detient colories for follow up	Suitable	0 (0.00%)	15 (100%)	0.000
Patient selection for follow-up	Unsuitable	15 (100%)	0 (0.00%)	0.000
S-14	Suitable	0 (0.00%)	15 (100%)	0.000
Selecting patients for follow-up	Unsuitable	15 (100%)	0 (0.00%)	
	Suitable	15 (100%)	14 (93.3%)	1.000
The session atmosphere	Unsuitable	0 (0.00%)	1 (6.7%)	1.000

Variable		Before training Number (Percentage)	After training Number (Percentage)	p-value
Physical examination	Suitable	35 (94.6%)	37 (100%)	0.493
	Unsuitable	2 (5.4%)	0 (0.00%)	
Signs	Suitable	35 (94.6%)	37 (100%)	0.493
	Unsuitable	2 (5.4%)	0 (0.00%)	
Pathophysiology	Suitable	1 (2.7%)	0 (0.00%)	1.000
	Unsuitable	36 (97.3%)	37 (100%)	
Risk factors	Suitable	1 (2.7%)	6 (16.2%)	0.107
	Unsuitable	36 (97.3%)	31 (83.8%)	
First diagnosis	Suitable	20 (54.1%)	35 (94.5%)	0.000
	Unsuitable	17 (45.9%)	2 (5.4%)	
Para-clinic findings report	Suitable	34 (91.9%)	37 (100%)	0.240
	Unsuitable	3 (8.1%0	0 (0.00%)	
Differential diagnosis	Suitable	3 (8.1%)	25 (67.6%)	0.000
Differential diagnosis	Unsuitable	34 (91.9%)	12 (32.4%)	
Step by step management	Suitable	8 (21.6%)	35 (94.6%)	0.000
	Unsuitable	29 (78.4%)	2 (5.4%)	
Prognosis	Suitable	4 (10.8%)	1 (2.7%)	0.179
	Unsuitable	33 (89.2%)	36 (97.3%)	

Table 3. Continued				
Variable		Before training Number (Percentage)	After training Number (Percentage)	p-value
Interpretation of para-clinic findings	Suitable	10 (27%)	30 (81.1%)	0.000
	Unsuitable	27 (73%)	7 (18.9%)	
Treatment design	Suitable	9 (24.3%)	35 (94.6%)	0.000
	Unsuitable	28 (75.7%)	2 (5.4%)	0.000
Resident's Presentation duration	Suitable	12 (32.4%)	29 (78.4%)	0.000
	Unsuitable	25 (67.6%)	8 (21.6%)	0.000
Paying attention to Senior resident education	Suitable	3 (8.1%)	25 (67.7%)	0.000
raying attention to Senior resident education	Unsuitable	34 (91.9%)	12 (32.4%)	0.000
Paving attention to Junior resident education	Suitable	22 (59.5%)	35 (94.6%)	0.000
Paying attention to Junior resident education	Unsuitable	15 (40.5%)	2 (5.4%)	
History Summary documentation	Suitable	1 (2.7%)	37 (100%)	0.000
instory Summary documentation	Unsuitable	36 (97.3%)	0 (0.00%)	
Dogumenting of her points	Suitable	0 (0.0%)	36 (97.3%)	0.000
Documenting of key points	Unsuitable	37 (100%)	1 (2.7%)	
Providing feedback	Suitable	14 (37.8%)	25 (67.7%)	0.010
r Toviding feedback	Unsuitable	23 (62.2%)	12 (32.4%)	
Summore and conclusion	Suitable	9 (24.3%)	35 (94.6%)	0.000
Summary and conclusion	Unsuitable	28 (75.7%)	2 (5.4%)	
Paying attention to errors and mistakes	Suitable	19 (51.4%)	22 (59.5%)	0.483
raying attention to errors and mistakes	Unsuitable	18 (48.6%)	15 (40.5%)	
Paying attention to complications	Suitable	13 (35.1%)	27 (73.0%)	0.001
r aying attention to complications	Unsuitable	24 (64.9%)	10 (27.0%)	
Time of summany presentation	Suitable	5 (13.5%)	35 (94.6%)	0.000
Time of summary presentation	Unsuitable	32 (86.5%)	2 (5.4%)	
Referral of the patient	Suitable	0 (0.0%)	27 (73%)	0.000
	Unsuitable	37 (100%)	10 (27%)	

According to the results of the Chi-Square and Fisher's test, it was revealed that these items had improved after participating in the training session: the method of patient selection by selecting common diseases (P= 0.010), announcing the patient's file number instead of mentioning the patient's name (P = 0.000), the patient's follow up (P = 0.000) 0.000) and declaring the person responsible for patient's (P= 0.000) were significantly improved. follow-up Furthermore, in terms of intern and resident's determinations, students' efforts to write the list of the patients on the board before the start of the meeting (P= 0.042), proper management of the meeting (P= 0.000), referring to proper articles to find suitable data (P = 0.000), and managing the duration of the resident's presentation (P: 0.000) were the elements that significantly improved after participating in the training session. Regarding the basic construction of the morning report, documenting the summary of the patient history (P = 0.000), documenting the key points of history (P= 0.000), providing appropriate feedback to the provider (P = 0.010), paying attention to complications (P = 0.001), and debriefing time (P = 0.000) were significantly developed after participating in the educational sessions. Moreover, regarding the elements of patient management, mentioning the initial diagnosis (P=0.000), mentioning differential diagnoses (P=0.000), mentioning step-by-step measures (P=0.000), Para clinical data interpretation (P=0.000), presentation of the treatment plan (P=0.000), and referring the patient to a meeting for follow-up (P=0.000) were meaningfully improved after joining the educational classes. From the educational point of view, paying attention to the education of the upper-year resident (P=0.000), and paying attention to the education of the lower-year resident (P=0.000) were upgraded. Other investigated factors did not significantly resulted in an improvement after the educational sessions.

DISCUSSION

The morning report session is considered to be one of the most valuable methods of medical education around the world, which is reported to have disparate structural principles. It is reported that the policy of the morning report sessions varies from a short introduction of each of the

patients admitted the night before to a full and long introduction of a specific patient (9). In 2013, medical ethical standards consideration was investigated from the student's point of view in the morning report training program at Imam Hossein (AS) Shahrud Teaching Hospital. The students were asked to fill out the questionnaire form and the result showed that after the implementation of this training, the patients were introduced almost with respect and human dignity, and the utmost care was taken in their introduction. The results of the current study showed that factors such as preserving the sanctity and dignity of the patient, preserving the general principles in collecting information, efforts to introduce the patient without announcing individual characteristics, and follow-up of the recently introduced patients after educating the patients the ethical standards were significantly improved and presented with better quality (10). In the present study, efforts with ethical standards, such as mentioning the file number instead of the patient's full name to maintain the confidentiality of the patient's secrets were significantly improved after the education. In one review study that was published in 2019 by Boroumand et al., the features of a good morning report program were listed, which included firstly dedicating one hour a week to the morning report after the end of the patient's visit, and secondly introducing 2-4 patients by the intern and the junior resident in such a way that 5 minutes are dedicated to the introduction of the patient and about 10-15 minutes to the discussion and conclusion (11).

In 2019, American researchers argued the basic principles of morning report meetings and discussed the most proper ways of meetings such as holding them in a classroom and away from the patient's bedside (12). In the universities of our country, the morning session is usually held in a classroom, and the patient's bedside teaching is held as a clinical round session.

In 2018, 225-morning report sessions were discussed in the internal medicine department at US teaching hospitals. The results of the survey indicated a wide range of methods that have been used to hold these meetings in different universities. The most common way of holding a meeting was to introduce a patient using slides and media, which was chosen by the senior resident on duty the night before. Most patients who were presented had rare manifestations or lifethreatening disorders (13). In the present study, methods of patient selection were different, the researchers generally

elected more common diseases which were more important to professors and students than choosing rare diseases, and the outcome was associated with a higher educational burden.

In 2017, professors of the surgery department of a teaching hospital in the United States reviewed and scored the morning report sessions in 3 phases. In the first phase, the weakness of surgical residents in presenting the morning report session of trauma patients was evaluated. In the second phase, the assistants were trained in communication cases, and in the third phase, re-evaluation was carried out. The results of the evaluations showed a significant improvement in the quality of the presentation of the sessions after the participation of residents in the training sessions (14). In the present study, holding a training session led to a significant improvement in the quality of sessions in many areas, from patient selection to summation and follow-up.

The methods of holding morning reports, which are considered to be one of the main tools of medical education differ from the defined standards in many educational centers around the world. In this regard, it should be mentioned that various aspects of the meetings, including the structural principles of holding the meeting, timing, patient selection, attention to intern and resident training who at different educational stages, compliance with ethical issues, etc., still need to be reviewed.

CONCLUSION

The methods of managing morning report sessions differ from gold standards in many educational centers worldwide. Various aspects of these meetings, including structural principles of holding MR, timing, patient selection, attention to intern and resident training at different educational stages, and compliance with ethical issues still need to be reviewed. Ethical Considerations: Ethical issues including plagiarism, informed consent, misconduct, data fabrication and/or falsification, double publication and/or submission, redundancy, etc. have been completely observed by the authors. Ethical code of the project IR.MUMS.REC.1398.299.

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REFERENCES

- Ways M, Kroenke K, Umali J, Buchwald
 Morning report: a survey of resident attitudes. Arch Intern Med. 1995;155(13):1433-7
- 2. Demopoulos B, Pelzman F, Wenderoth S. Ambulatory morning report: An underutilized educational modality. Teach Learn Med. 2001;13(1):49-52.
- Gross CP, Donnelly GB, Reisman AB, Sepkowitz KA, Callahan MA. Resident expectations of morning report: a multiinstitutional study. Arch Intern Med. 1999;159(16):1910-4.
- 4. Baeza-Yates R, Ribeiro-Neto B. Modern information retrieval: ACM press New York; 1999.
- Kassirer JP. Teaching clinical reasoning: case-based and coached. Academic medicine. 2010;85(7):1118-24.
- 6. Elstein AS, Shulman LS, Sprafka SA. Medical problem solving: a ten-year retrospective. Eval Health Prof. 1990; 13(1):5-36.
- 7. Amin Z, Guajardo J, Wisniewski W, Bordage G, Tekian A, Niederman LG. Morning report: focus and methods over the past three
- decades. Academic Medicine. 2000;75(10):S1-S5.
- 8. Bassiri A, Kassen B, Mancini G. Improving the format of morning report. Academic medicine. 1995;70(5):342-3.
- Moharari R, Soleymani H, Nejati A, Rezaeefar A, Khashayar P, Meysamie A. Evaluation of morning report in an emergency medicine department. Emergency Medicine Journal. 2010;27(1):32-6.
- 10. khaje Mozaffari J, Sohrab MB, Hossaini RZ, Zolfaghari P, Najafi F, Yahyaei E. The effect of educational intervention on the degree of

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compliance with standards of medical ethics in 2020;11(2): 77-87. Persian. morning report sessions. Medical Ethics Journal. 2017;11(39):19-25. Persian.

11. Boroumand RM, Mousavi SR, Seyfizadeh T. Qualitative improvement of the morning report as an effective teaching method. Horizon of medical science education development.

12. Goyal A, Garibaldi B, Liu G, Desai S, Manesh R. Morning report innovation: case oriented report and exam skills. Diagnosis. 2019:6(2):79-83.

13. Heppe DB, Beard AS, Cornia PB, Albert TJ, Lankarani-Fard A, Bradley JM, et al. A

Multicenter VA Study of the Format and Content of Internal Medicine Morning Report. Journal of general internal medicine. 2020;35(12):3591-6. 14. Ottinger ME, Monaghan SF, Gregg SC, Stephen AH, Connolly MD, Harrington DT, et al. Trauma morning report is the ideal environment to teach and evaluate resident communication and sign-outs in the 80 hour work week. Injury. 2017;48(9):2003-9.