يک گزاره: کیفیت آموزشی، میزان شرکت و نظرات دانشجویان از اجرای جلسات آوری در مراکز درمانی کودکان می‌باشد.

روش: این تحقیق بخشی از پروژه بزرگ به‌نام کیفیت آموزشی سایه‌های درمانی کودکان در مراکز درمانی شورا و جامعه می‌باشد. این پروژه شامل چندین جلسه آوری در مراکز درمانی کودکان در شهر مشهد بود. در این تحقیق، محققان به‌عنوان صادقانی برای اجرای جلسات آوری در مراکز درمانی کودکان معرفی شده‌اند.

езультат: نتایج این تحقیق نشان می‌دهد که جلسات آوری در مراکز درمانی کودکان به بهبود کیفیت آموزشی بیمارستان‌های شهر مشهد کمک می‌کند. این کارکرد بطور خاص در افزایش شرکت و نظرات دانشجویان از اجرای جلسات آوری در مراکز درمانی کودکان می‌باشد.

کلید واژگان: کیفیت آموزشی، میزان شرکت، نظرات دانشجویان، کودکان، مراکز درمانی
**INTRODUCTION**

One of the most important components of medical education is the morning report. The morning report is a kind of patient-based conference in which professors, residents and other medical students gather to discuss about patients (1). In other words, morning report is an educational process in which participants try to solve a diagnostic problem by discussing about cases (2). Therefore, the purpose is to provide education based on the introduction of newly admitted patients and discussion of problems, how to handle and ultimately the diagnosis and treatment. Morning report is an inseparable element of educational programs for medical students, interns and specialized residents, especially in pediatrics and internal medicine (3).

The morning report was initially conducted in non-teaching hospitals. Before the daily practice, physicians and shift nurses reported patients’ problems to the head of the ward (4). The purpose of this program was changed in educational hospitals (5). As a result, morning reports are considered as one of the key elements in the medical students' curriculum. Studies show that this session is the most valuable educational conference in hospital wards (1) and is recognized as a tool for evaluating clinical services for quality assurance. Among its other roles are its impact on teaching, communication skills training and socialization of learners, improvement of professional indices, strengthening of thinking skills, questioning and problem solving, assessment of students’ performance and discussion about the desired or undesired consequences of the measures taken (6).

The main applications of morning reports include gaining an overview of the activities carried out in the ward, analysing various diagnostic and therapeutic aspects of patients, recognizing undesirable events and their causes, and interacting with the medical staff (7, 8). In general, the main purpose of morning reports is education (9).

Although different educational groups participate in these sessions, the main target community is the residents (10). The residents discuss the diagnostic and treatment problems of the patients (11). Other medical students are not usually active in this program and find these sessions boring. Sometimes, the level of scientific discussion is so high that they can not follow the conference (12). Haghdoust et al. (2005) showed that despite the fact most morning reports are not lectures, in most departments, professors ask questions and the residents answer them; interns and externs played less effective role in the sessions. Of the important findings of their research were the lack of clarity of the duties of residents, interns and students in these sessions and the lack of effective role played by students and even interns (13). Also, due to the presence of residents, faculty members may tend to direct the discussion to more specialized cases. A study by Spekard et al. (2000) showed that in many cases (73%), residents choose the topics of morning reports, while less than 20% of medical students participate in the selection of topics, and therefore morning reports are more specialized (14), while the general medical students often need general knowledge and skills. Although interns used to have little role in the morning reports in the past, many programs are now being designed to meet the needs of interns at these sessions (15).

Most studies have focused mainly on shortcomings of morning reports, and rarely a study is conducted on improving the morning reports. The first step in promoting the morning report process is to allow the education groups to modify the morning report session and turn it into a learning facilitator. Plans must also be made to meet the learning needs of different learners. The review of related resources suggests that some believe that participants in the morning report should also be at the same level (16). In order to overcome the specialization problem of the morning report sessions in Mashhad’s Paediatrics group, a medical report specific for general medicine was designed that runs in three hospitals of Qaem, Imam Reza and Dr. Sheikh. These sessions are held with the presence of general paediatrics professors, medical students and emergency residents. The presence of general professors causes special emphasis on general discussion and avoiding the direction of the topics to specialized discussions. The emergency resident will also assist students in identifying patients and better organizing and possibly completing additional information during the session. Therefore, the assistant has only a facilitator role and may be asked questions only when needed.

Given that the morning report takes 1-1.5 hours of the useful time of all members of the medical group in teaching hospitals, it seems that it is necessary to evaluate its role in educating learners and gaining their attitude towards its structure to improve the current conditions as well as educational objectives (3). Knowledge about the morning report improved the attitudes of medical students and can also result in quality improvement of morning reports (1). Ken and Newbell believe that students' standards must be considered before developing the curriculum, and the inclusion of students’ characteristics, variables and interests is the most difficult part of the curriculum, as university instructors are increasingly faced with heterogeneous student groups (17). Therefore, the present study tries to investigate the condition of morning reports of general medicine from the perspective of Mashhad’s pediatric interns and to plan for better holding of these sessions.

**METHODS**

This is a descriptive-survey study. The research population included 32 pediatric interns. Sample size was selected using Cochran formula (30 interns). Data were collected using a researcher-made questionnaire. The questions were selected based on the literature review of studies and studies on morning reports. The credibility of the questionnaire was estimated by experts and its reliability was calculated by the Cronbach’s alpha coefficient of 0.93. The questionnaire evaluated the interns' attitudes towards the morning reports specific for general medicine as compared with morning reports with the presence of residents. The interns expressed their views using a 4-point Likert scale, each was assigned grades of 1 to 4, respectively. To calculate the cutting point, since the number of items was between 1 and 4, the total score of the options was 10, which was divided by the number of options (4 options) and the number 2.5 was
In order to comply with ethical considerations, the questionnaires were completed without names and participants were assured that the information obtained would be confidential. Students were also free to choose whether to attend or not and even to withdraw from study at any time. The collected data were analyzed using descriptive statistical methods (mean and standard deviation) and inferential statistics (one-group T-test) and analyzed by SPSS 19. In the present study, the desirability of the component was the higher value of the experimental mean compared to the theoretical mean and the significance of T (1.96). The theoretical mean (cutting point) of each item was 60%. Therefore, if the obtained average (experimental) of the respondents in each component was greater than the mean and the obtained value (p < 0.05) was significant, it was considered as one of the components of interest. Otherwise, the attention to this low component would be evaluated.

**RESULTS**

Out of 30 questionnaires, all questionnaires were completed and collected (return rate equal to 100%). Participants included 11 males (36.66%) and 19 females (63.33%). The mean and standard deviation of the scores of the pediatric interns’ viewpoints regarding the components of morning reports are presented in Table 1. The data in Table 1 shows that given that the mean of all elements (except relaxation element) is higher than the cutoff point (2.5) and the observed difference between them is significant, it indicates that their condition is desirable. This means that interns recognize the role of these sessions regarding these elements as appropriate. In their view, these sessions give rise to more discussion in different fields, more opportunities for content presentation, question and answer, and more satisfaction, more educational benefit, and more opportunities for interns to be evaluated. As mentioned, regarding the component of mental relaxation, the observed difference between the obtained mean (2.794) with the cut-off point is not significant and is moderate. This means that holding morning report sessions specifically for general medicine and the absence of residents are still stressful and does not have much effect on their calm. The average of the total score of the questionnaire is 3.331. Therefore, it can be concluded that from the viewpoint of interns, specific morning reports for general medicine is desirable.

**DISCUSSION**

In this study, the quality of specific morning reports for general medicine was reviewed from the viewpoint of pediatric interns. The form of holding a morning report is depended to the audience and its purpose. The good morning report of general medicine is definitely different from that of residents. For example, Rabiee et al. (2015) found that pediatric residents prefer fewer patients to be investigated at each morning report session in order to have the opportunity to consider the important points more deeply. These researchers suggest that educational groups conduct one or more sessions of the morning report in a weekly manner with the presence of residents (apart from general medical students) in order to better deal with the proposed patients (18). In the present study, the morning report sessions were held once a week and each meeting was held for one hour, which began at 8 am in the morning and ended at 9 o’clock. The results of many studies also indicate that the appropriate time to hold a session is about one hour (6, 19), so the duration of the session is appropriate.

<table>
<thead>
<tr>
<th>No.</th>
<th>Variable</th>
<th>Index</th>
<th>Mean</th>
<th>Standard Deviation</th>
<th>T</th>
<th>sig</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>The opportunity to question and answer</td>
<td>3.382</td>
<td>0.696</td>
<td>7.382</td>
<td>0.000</td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>More discussion on general topics</td>
<td>3.529</td>
<td>0.706</td>
<td>8.496</td>
<td>0.000</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Presenting practical and key topics</td>
<td>3.411</td>
<td>0.783</td>
<td>6.789</td>
<td>0.000</td>
<td></td>
</tr>
<tr>
<td>4</td>
<td>More opportunities to study and present content</td>
<td>3.029</td>
<td>1.167</td>
<td>2.644</td>
<td>0.012</td>
<td></td>
</tr>
<tr>
<td>5</td>
<td>Helps writing prescriptions</td>
<td>3.500</td>
<td>0.825</td>
<td>7.062</td>
<td>0.000</td>
<td></td>
</tr>
<tr>
<td>6</td>
<td>More discussion on history presentation and correcting it</td>
<td>3.441</td>
<td>0.660</td>
<td>8.313</td>
<td>0.000</td>
<td></td>
</tr>
<tr>
<td>7</td>
<td>Discussion on the examination topics</td>
<td>3.470</td>
<td>0.662</td>
<td>8.547</td>
<td>0.000</td>
<td></td>
</tr>
<tr>
<td>8</td>
<td>Discussion on paraclinical topics</td>
<td>3.264</td>
<td>0.898</td>
<td>4.965</td>
<td>0.000</td>
<td></td>
</tr>
<tr>
<td>9</td>
<td>More emphasis on pharmaceutical forms</td>
<td>3.411</td>
<td>0.924</td>
<td>5.748</td>
<td>0.000</td>
<td></td>
</tr>
<tr>
<td>10</td>
<td>More knowledge on early encounter with emergency patients</td>
<td>3.470</td>
<td>0.861</td>
<td>6.572</td>
<td>0.000</td>
<td></td>
</tr>
<tr>
<td>11</td>
<td>Creating more opportunity for education</td>
<td>3.588</td>
<td>0.783</td>
<td>8.103</td>
<td>0.000</td>
<td></td>
</tr>
<tr>
<td>12</td>
<td>Possibility of better assessment of the intern</td>
<td>3.323</td>
<td>0.816</td>
<td>5.957</td>
<td>0.000</td>
<td></td>
</tr>
<tr>
<td>13</td>
<td>Creating mental relaxation</td>
<td>2.794</td>
<td>1.249</td>
<td>1.372</td>
<td>0.179</td>
<td></td>
</tr>
<tr>
<td>14</td>
<td>Creating satisfaction of intern</td>
<td>3.147</td>
<td>0.925</td>
<td>4.077</td>
<td>0.000</td>
<td></td>
</tr>
<tr>
<td>15</td>
<td>Total</td>
<td>3.331</td>
<td>0.624</td>
<td>7.766</td>
<td>0.000</td>
<td></td>
</tr>
</tbody>
</table>
The main purpose of a morning report is “medical education”. The method of achieving correct diagnosis and treatment, clinical reasoning in evaluating and managing complex cases, getting informed about new admissions, knowledge evaluation, individual and group attitudes and skills, solving diagnostic problems and improving skills, evaluating clinical performance as a tool for improvement and a means of monitoring clinical services are the specific goals of morning reports, which have been considered in various studies (16). In the Ministry of Health and Medical Education standards it is also mentioned that the patient should be accurately presented in the morning report, which includes symptoms, examination, paraclinics, differential diagnosis, diagnostic action, initial treatment and future plans (20). The results of this study showed that this type of morning report informed more educators about the viewpoints of interns to further discuss patient examination topics, paraclinical topics and resolve issues, and provide more background and discussion on the initial treatment of emergency patients and presentation of practical topics. The most important opinions of the participants in the study of Lameei and Aghlmand (2013) regarding the method of holding a morning report was to use the question and answer, avoid dispersed discussions and present practical discussions (16). Stiles et al. also found that morning report was a good tool for medical education and a good opportunity to strengthen patient care (19). A study by Salimzadeh et al. (2015) suggests that morning reports have led to an increase in the awareness of how student’s morning report sessions are held, self-esteem in presenting histories and mastering the clinical findings of patients, the power of clinical reasoning and the incentive to take patient histories (21). However, the findings of the present study are not consistent with the results of Ziaei et al. (2013). In their study, in the student’s perspective, 41.8% of the general medicine’s morning report sessions were only partly educational, and 38.2% of the students believed that the professors’ comments were always or most of the time tedious and unattractive. They stated that in average, professors aim to reproach. In their study, in general, the role of morning report sessions in terms of teaching and transferring concepts has been reported by students as poor. Many of them (66.7%) mentioned the way of presenting the questions in the form of question and answer, and 33.3% mentioned lecture as the method of presenting content (22).

The results of the present study showed that the morning reports specific for general medicine and the separation of students from residents did not cause significant mental relaxation in interns.

Morning reports cause fear and anxiety in both educators and learners. Learners’ fears are usually because they are asked to deal with topics scientifically in front of their classmates. Consequently, when learners do not have an idea to answer the morning report questions, they are embarrassed, and when they respond to it, it causes happiness. Even some faculty members are anxious to attend these sessions, because students think that professors know the answers to all questions, and when they are not able to diagnose or when they have limited of knowledge, they are considered to be excused. This is especially the case for specialists who may be presented with a case which is far from their clinical practice (23). In the study of Lameei and Aghlmand (2013), all three groups of students, interns and residents have emphasized the creation of a learning environment and its requirements, such as avoiding fear, accountability, controversy and judgement. In relevant scientific sources, topics such as fear of morning reports, defense responses and emotional damages caused by fear, anxiety in the morning reports, and the satisfaction of the participants and the creation of a positive and enjoyable environment have been considered (16). Although it is expected that the interns will be more relaxed due to the lack of residents and specialized professors at this session, the results of this study indicate that interns still have stress in general medicine’s morning report sessions and do not feel much calm. Therefore, it is necessary to investigate the reasons of the uncomfortable feeling of interns at these sessions. Considering that the results of the study showed that interns are satisfied with the morning report sessions specific for general medicine, holding specific sessions for residents and fellowship residents and evaluating them can also be considered by educational planners.

The results of this study only examined the students’ opinions about the morning reports specific for general medicine, and further research can examine the impact of these special sessions on the performance of students.

ACKNOWLEDGMENTS

The authors would like to thank all pediatric interns who participated in this study.

Conflict of interest: No conflict of interest was involved in this study.

REFERENCES

7. Wenger NS, Shpiner RB. An analysis of morning report: implication for internal
Quality of Morning Reports of Mashhad Hospitals


