



Case-Based Education: Stress during Learning in Morning Report Sessions

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Authors' contributions

This work was carried out in collaboration between all authors. Author MA designed the study wrote protocol and performed analysis. Authors SY and FH guided and corrected corresponding author. Authors GN and MA wrote the first draft and managed the literature searches. Finally all authors accepted the manuscript.

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ABSTRACT

Background: Morning report has long been regarded as a stressful session for students and lecturers. This study aims to evaluate the main indices regarding stress.

Materials and Methods: In a university including 5 hospitals and 25 academic wards, three indices regarding stress were evaluated including talking interruption, serving snacks and systematic feedback.

Results: In none of the wards, serving snacks during teaching sessions was observed. In 53 out of 73 (72%) talking interruption was demonstrated.

The score of systematic feedback was 48%.

Conclusion: Talking interruption in morning report sessions is high and systematic data gathering (feedback) from learners is low. Serving snacks is ignored at all.

Keywords: Medical education; learning; evaluation; morning report.

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1. INTRODUCTION

One of aspects in medical students' learning in many institutions is morning report sessions as an educational gathering. Various educational groups participate in morning report sessions; however medical students are the main target population [1]. Different parameters have been regarded as stress-provoking in the atmosphere of teaching sessions. Some of the effective factors in stress reduction or promotion include, interruption by paging, eating in sessions, having stress in the process of preparation for conference, the role of resident as teacher and fear and shame of not being able to answer questions. Multiple paging and asking students about case management will undoubtedly interrupt learning process [2]. Results of a study revealed that (frequent) paging is a stress-provoker and reducing it will result in less error due to stress [3]. Eating snacks is described in educational sessions as atmosphere softener [4]. In a study where residents acted as teachers, stress reduction in sessions was observed [5]. It is a common practice that residents hold the session, select the patients and discuss the diagnostic issues [6]. Being in front of others for introducing patients causes fear, especially due to ambiguity of questions which might be asked. Faculty members are afraid of false high expectations about their knowledge in view of learners [7].

Another important issue is asking students' suggestions to optimize learning objectives [8-9]. While there are many factors which can play role as stressor in morning report sessions, this study aims to investigate whether three effective factors in stress are present at morning report sessions at the studied institution: Whether students are being verbally interrupted, whether snacks are being served and whether students have the opportunity to give feedback and suggestions to improve their learning environment.

2. MATERIALS AND METHODS

After obtaining the permission of educational administrators of 5 academic hospitals of a medical university, and taking agreement from each ward director, a trained person gathered information. Training of the person included 5 sessions of participation in morning report sessions besides researcher. After each session a discussion was planned based on practical problems of the experience. Five sessions were pre-scheduled and after 5 sessions researcher made sure of the qualification of the trained person. Attending of the trained person in morning report sessions for evaluation were randomly divided in different days of a week. Learners were average medical students of the studied university including both sexes. All the general hospitals of the studied university included in the study. Sub specialty hospitals and departments were excluded from the study. Clinical wards divided in two category of surgical versus non-surgical wards. Surgical wards included gynecology, surgery and orthopedics. Remaining wards including neurology, infectious disease, pediatrics, internal medicine, psychiatrics, emergency medicine and intensive care unit categorized as non-surgical wards. Major wards included 4 main departments of gynecology, surgery, pediatrics and Internal medicine.

Participation and direct observation of the trained person in morning report sessions covered two items of serving snacks in the sessions and students' talking interruption. If students' case presentation and discussion was listened completely, interruption was considered negative. Even if one verbal interruption by the faculty members occurred during learner's speaking, "talking interruption" was regarded as positive. Regarding systematic feedback (asking learners' suggestions to improve quality of learning sessions), the chief residents and ward directors were interviewed. In this regard any systematic written questionnaire or

verbal asking such as providing a session or any kind of activity for organizing data gathering from learners was regarded acceptable as “systematic feedback”. If each of these two sources of information that is chief residents and ward directors confirmed the systematic feedback, 50 points were assigned and if they were replied negatively, no point was given. Evaluation was repeated 3 times in each ward. Data analysis was done by SPSS software program Ver. 17. Mean and frequency were used, if where appropriate.

3. RESULTS

In one out of 25 wards (ICU), just one time of evaluation was permitted, resulting in 73 times morning report participation and evaluation.

In none of sessions snack was served. Interruption of students talking was observed in 53 out of 73 times (72%). Fig. 1 present different situations for students' talking interruption in the whole university besides surgical, non-surgical and major, minor wards.

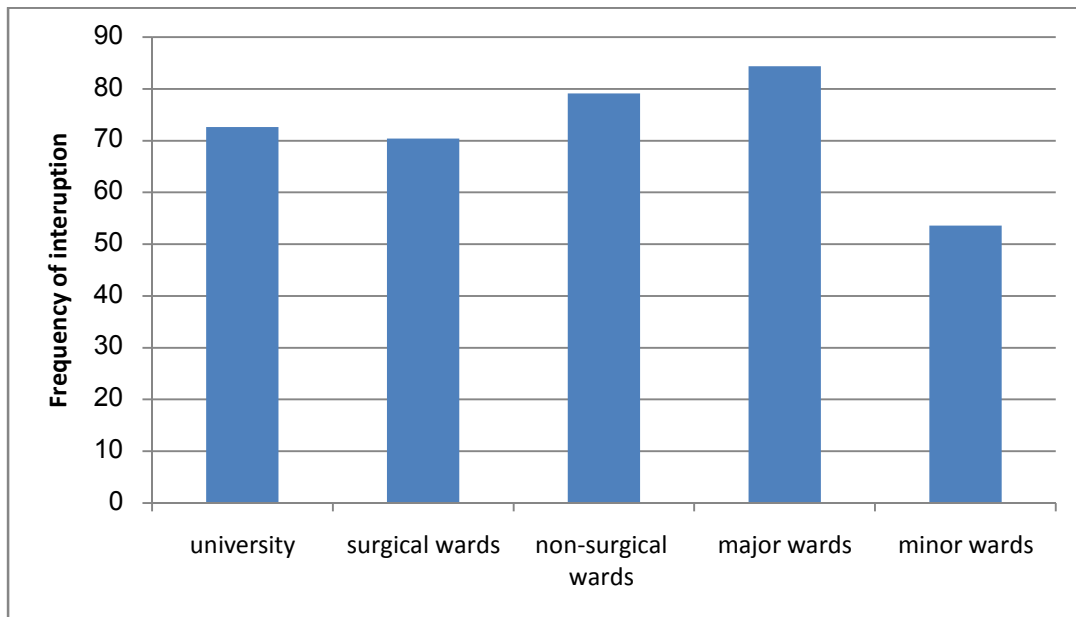


Fig. 1. Patterns of student talking interruption in surgical vs. non-surgical and major vs. minor wards of the studied university

Situation of different wards regarding talking interruption are presented in Fig. 2.

The systematic feedback regarding morning report sessions in 25 wards achieved a total score of 48%. Differentiating surgical and non-surgical wards demonstrated score of 44% and 50%, respectively.

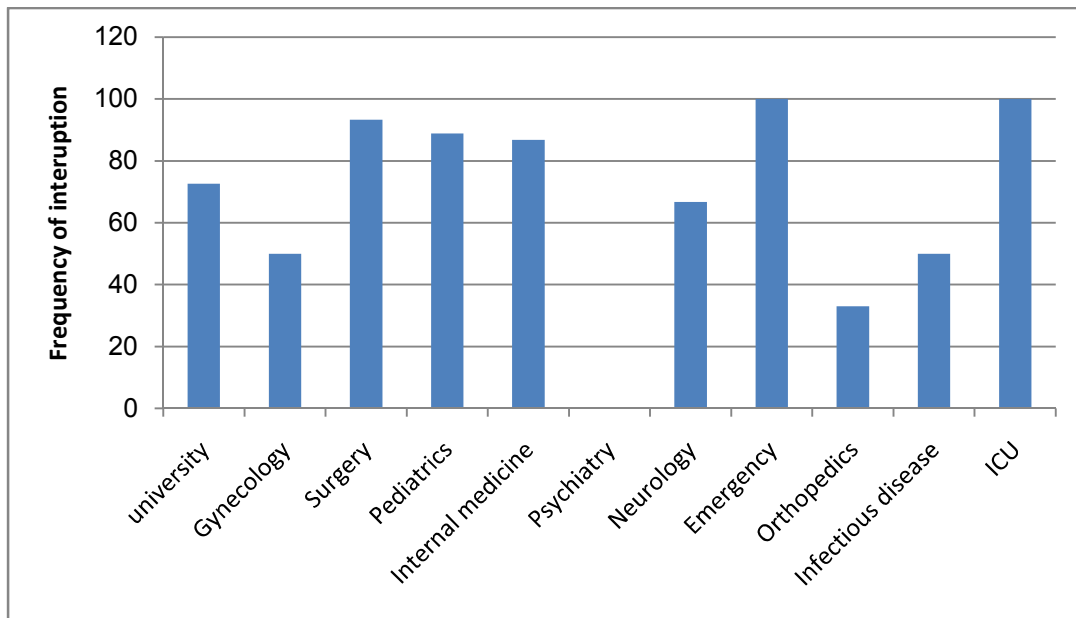


Fig. 2. Patterns of student talking interruption in different wards of the studied university

4. DISCUSSION

Students and faculty members are both affected by fear and stress [5]. Stress negatively influences learning in general and in special field of medical education [10].

In the present study, students' talking interruption, shown in 72% of morning report sessions. Stress influences negatively in learning [11]. One of the main aspects of deep understanding is strategy of student directed learning [12]. Listening and giving feedback seems to be in favor of students' needs, increasing deep learning and students' talking interruption might work against it.

More interesting is that students' talking interruption is different in various educational wards. For instance in psychiatric ward, no interruption was observed in the sessions (Fig. 2). It might be due to faculty members' understanding and knowledge of communication skills that are supposed to be at maximum in psychiatric department. Furthermore, in ICU and emergency wards, talking interruption happened in 100% of sessions (Fig. 2). It might be due to more stressful setting and legal responsibilities in emergent and difficult situations such as emergency ward and intensive care units resulting in more stress about patient care. In the present study ICU and emergency medicine wards are categorized in non-surgical wards. It caused surgical category to exhibit less talking interruption in comparison to non-surgical wards (Fig. 1). On the other hand, major wards playing a prominent effect on medical education revealed more talking interruption in comparison to minor wards (Fig. 1). This finding might be due to less attention to learners in minor wards. Whatever the cause is, it is very essential to manage it.

In the present study, serving simple snack was observed in none of the morning report sessions, although, eating is regarded as a relaxing factor in the atmosphere of educational conferences [4]. In a study conducted using a questionnaire in 412 educational programs, 61% of hospitals provided food and drink during their sessions [13]. It seems to be a simple and efficient way for reducing stress in educational spaces such as morning report sessions, and this will help not only in reducing stress but also in providing physical energy that both will improve learning.

Total score of feedback in morning report sessions was 48% in the present study. Faculty members and directors of educational wards were not aware of students' opinions most of the times, resulting in ignorance of the learner's idea. While sometimes small change in management might result in high level of students' satisfaction. In a study, just 122 out of 358 learners (34.1%) reported high satisfaction in morning report sessions. Responses of 166 learners (46.4%) indicated moderate satisfaction and the remaining asked students were dissatisfied [14]. Maximizing communication of students is main part of learning. In a study 68% of learners were student, while they played role just in 20% of case selections [15].

5. CONCLUSION

Talking interruption in morning report sessions is high in the presented study. Reducing students' talking interruption by different methods such as arrangement of educational workshops for faculty members especially in emergency settings such as ICU and emergency medicine wards might increase learning. Systematic data gathering (feedback) from learners is low in the studied university. Knowledge of the learner needs and requirements might improve the educational planning. Serving snacks is ignored at all. This is a simple and helpful method to reduce stress and increase learning.

COMPETING INTERESTS

Authors have declared that no competing interests exist.

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