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Top Points in the Morning Report with Emphasis on Residents and Professors

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Abstract

Clinical education is presented in different forms in therapeutic environments, and the morning report has been one of the educational programs for learners for many years. Morning report is an important educational method in medical sciences and, along with Grand Round, is one of the most common and valuable methods in education. This educational method has characteristics and standards that, when fully observed, effectively help medical students learn. The main purpose of the present morning report is patient-based education, reviewing the diagnosis and treatment process, increasing the physician's ability to research about their patients, improving decision-making ability, and training based on the individual's ability. On the other hand, the morning report strengthens the students' presentation skills and strengthens the curiosity, research, and search in learners.

The main applications of the morning report are in obtaining an overview of the activities performed in the ward, analyzing various diagnostic and therapeutic aspects of patients, evaluating the performance of interns, evaluating the services provided to patients, recognizing adverse events and their causes, and interaction between medical staff. At least two and at most four patients should be included in full in each morning report session. Patients with a significant diagnostic or therapeutic ambiguity, patients with abnormal or rare conditions, and patients with an interesting point in the physical examination are among the candidates for introduction in the morning report. A successful morning report requires planning and organizing in different ways before, during, and after the morning report sessions.

Key Words: Medical Student, Morning Report, Professors, Residents.

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1- INTRODUCTION

Clinical education is essential to medical education. Without clinical education, it is impossible to train efficient and competent physicians. In the clinical setting, learning focuses on real issues in the professional environment, motivating learners through active participation. It is the only environment where the skills of taking a medical history, physical examinations, clinical reasoning, decision making, empathy, and professional commitment are integrated and learned. As physicians are trained in a real environment and interact with patients, their clinical education is fundamentally different from education in other fields (1-5). In teaching hospitals, various methods are used for learners to gradually develop the necessary abilities. One of these programs is the morning report. Morning report is an educational process where participants solve a diagnostic puzzle by discussing patients. Patient referrals can range from a brief discussion of every patient admitted overnight to the full introduction of a newly admitted patient with unusual and interesting findings (6-11). This study reviews credible studies and guidelines and provides valuable educational tips in the morning report with emphasis on assistants and professors.

2- MATERIALS AND METHODS

2-1. Data sources

In this review study, a systemic search of electronic databases of Medline (via PubMed), SCOPUS, Web of Science, ProQuest, CINAHL, ERIC, SID, Magiran, CIVILICA, and Google Scholar search engine was performed with no time limit up to March 2023, using the following keywords alone or in combination: "Morning Report, Standards of Clinical Education, Medical Education, Residents, Medical Students, Teachers, Professors, and Top Points". The search was performed independently and in duplication by two reviewers, and any disagreement between the reviews was resolved by the supervisor.

2-2. Study selection

Database search was done for suitable studies, books, and guidelines. Abstracts of the studies were screened for identifying eligible studies, full-text articles were obtained and assessed, and a final list of eligible studies was made. This process was done independently and in duplication by two reviewers, and any disagreement was resolved by a third reviewer. References were organized and managed using EndNote software (version X8).

3- RESULTS

3-1. History of the morning report

In the past, when coherent medical education did not exist, morning reports were held to meet medical necessities. Every morning, the doctor in charge of the ward was informed of the condition of the patients admitted the night before by the doctor and the nurse on duty. The primary purpose of the morning report was to monitor the performance of the caregiving team in the training hospitals the previous night (4). Morning reporting has a special place in most internal medicine education programs in the United States. This training program aims to introduce newly admitted patients and discuss the problems, how to treat them, and finally, the diagnostic and treatment program (12). The method of discussion in these meetings varies in different centers. The two main discussion forms are:

a. Case-oriented approach.

b. Evidence-based approach (similar to the problem-based approach).

The case-oriented approach is an old, traditional, and common method in most medical centers. In this approach, participants in the morning reporting passively learn information through

lectures and are mostly encouraged to recall all the material contained in scientific sources. In this type of discussion, the professors often give speeches, and the residents, interns, and students are mostly listeners. In medical education today, more emphasis is on the method of inquiry or evidence-based approach, which is an active research method based on self-learning. In this method, the morning report is an exercise based on patient problem-solving instruction (4, 13).

3-2. Importance of morning report

Morning report is:

- A mechanism for the head of the department to monitor the quality of work.
- An environment for evaluating clinical decisions of on-call residents by their colleagues.
- An opportunity for senior seniors to practice the teaching and leadership skills.
- A daily opportunity for residents and professors to interact and strengthen each other's morale about improving patient care and education (14).

3-3. Morning report session structure

A. Participants

- Professors of the relevant department
- Residents
- Interns
- Students
- Sometimes, doctors/staff working in the related educational and medical center
- In some cases, the medical education coordinator.

B. Session management

- In most cases, a faculty member manages the meeting.
- In some cases, the senior resident is in charge of managing the meeting.
- In other cases, other residents take on this role.

3-4. The focus of the discussion in the morning report

The highest priorities in the morning report sessions are as follows:

- Disease process (70%)
- Diagnostic examination (60%)
- Tests and procedures (nearly 50%)
- Evidence-based medicine
- Screening and prevention
- Medical ethics
- Research methods (4, 5, 14).

3-5. How to hold and manage the morning report

Generally, in the morning reporting session, the active learning method of the search-oriented questioner is preferred to the passive method of preserving and sponge-like accumulation of information.
Group discussions in these sessions can facilitate active learning. The following are suggested for selecting and introducing the patient(s), organizing, and managing the morning report session.

A. Stages

- Introduction of the patient by the resident or intern, including essential clinical, paraclinical, and imaging findings and symptoms, initial list of differential diagnoses, diagnostic approach, initial treatment, and patient's future treatment plan (approximately five minutes).
- Providing feedback from professors and senior residents at the meeting and asking questions of other members (about five minutes).

- Answering the questions and providing a brief overview of the latest disease evidence by the patient's resident (five minutes).
- Summarizing, and identifying the main educational points by the moderator (two minutes).

B. Patient selection

- The senior resident on duty should select from the patients admitted at the night shift to include in the morning report.
- Patients selected for referral in the morning report should be selected from interesting, challenging, and educationally valuable cases.
- It is recommended that every six to twelve months, the senior ward resident, in coordination with the head of the ward, prepare a list of priority diseases for introduction in the morning report.

C. Number of patients introduced in each session

- It is recommended to fully introduce at least two and at most four patients in each morning report session.
- It is recommended to record the number of referrals, hospitalizations, discharges, and deaths during the evening and night shifts on a whiteboard before the session begins.

D. Preparation and background

- It is best for the session manager and the senior resident to agree on the patients to be referred and the training points that need to be emphasized before the session.

E. Recordation and documentation

- The resident or intern responsible for introducing the patient should prepare a summary of the patient's history and the results of the discussions after the morning report and submit it to the session manager for signing.
- The original version of this report is recorded in the section file, and an image is recorded in the portfolio of the introducing person.

F. Follow-up

- The resident or intern responsible for introducing the patient should follow the results of diagnostic and therapeutic actions performed on the patient and add the final diagnosis and outcome of the patient to the mentioned report.
- It is recommended to report the follow-up results of the patients in the morning report every one to two months in a separate meeting in the presence of all professors and residents of the ward.

G. Evaluation

- It is recommended to evaluate the performance of the on-duty team (including patient management and presenting in the morning report) by designing a special form to fill in every session by the senior resident of the department and the professors present in the session.

H. Quality improvement

- It is recommended to continuously improve the quality of the morning reporting sessions by conducting periodical surveys on the participants on how to improve the quality of the sessions (4, 14-20).

3-6. Popularity of morning reports among residents

Research shows that morning reports have the highest educational value from the perspective of residents compared to conferences or other activities (21-24). The morning report is a popular training session for residents for several reasons.

- Residents must prepare and introduce a real patient in the morning report, and because they have chosen the

patient, they will be more responsible in the discussions.

- Experience has shown that residents usually select patients with diagnostic and therapeutic difficulty and add challenges and educational tips to the discussion by presenting them to professors and students (14, 4).

3-7. Ways to improve the morning report

- Determining the organizer, leader, and moderator of the meetings in advance.
- Providing an organized framework for meetings and recording and archiving reported cases.
- Developing a curriculum for specific educational purposes in morning reporting.
- Strengthening the method of searching and finding evidence.
- Encouraging students to think based on their senses and solve problems.
- Preventing the morning reporting session from deviating.
- Holding weekly or monthly meetings (revisiting) to follow up on previous cases.
- Designing case selection strategies based on the course objectives and the expected skills in students.
- Using data collection tools (Databases, Archives, and Logbook) to monitor the content of morning report sessions (4, 14, 25-29).

3-8. Tips on holding a morning report

- It is recommended to focus on the step-by-step teaching and learning skills by residents and in accordance with their academic year (i.e., for of interns and first-year residents, first focusing on taking patient's medical history and then in later stages, moving to more advanced skills).
- Before holding the morning report, it is recommended that the senior resident reviews the patients admitted in the last 24 hours and selects the patients to be introduced based on the specified criteria, and discusses the main educational points about each patient.
- A specific individual is chosen to lead, direct, and coordinate the parts of the patient discussion.
- Once a month, all patients referred during the month are reviewed and followed up, and their diagnostic/therapeutic processes are presented so that learners become familiar with the entire patient history (i.e., the course of the disease from beginning to end).
- A review article (by a senior resident or similar) should be searched regarding one introduced patient each week and presented to all residents, and an archive of new review articles on important diseases introduced in the morning report be created.
- An internal monitoring system should be provided for morning reporting to:
    - Periodically monitor and review the contents of the sessions to ensure that the training objectives are covered and duplication is avoided;
    - Guide on selecting patients to be referred in the future and determine the topics for future discussion;
    - Record the details of the introduced patients and the discussions of each session and compile a permanent file for them and create a coherent regular archive of information of the introduced patients.
- Professors and residents from different fields should participate.
- Incentive activities such as determining the best presenter.

- Goals should be planned and determined for each month by the senior resident (or other responsible people).
- An academic atmosphere should be prepared with no fear, intimidation, and insult, a spirit of inquiry and curiosity should be encouraged, and a positive environment for learning and, at the same time, away from rivalry should be provided.
- Patients previously reported in the morning report should be re-introduced at regular intervals and on time to update their disease information.
- Assessing and giving feedback to learners is essential. It is recommended to give feedback on the strengths in public, but criticisms should be given in private.
- Simple catering with coffee, tea, breakfast, and sweets can greatly soften the meeting and create a friendlier environment and reduce anxiety (4, 14, 26-36).

4- CONCLUSION

A successful morning report requires planning and organizing before, during, and after the sessions. Before making a successful morning report, the following questions must be answered:

- What are the goals in reporting in the morning?
- What is the composition of the participants?
- What is to be discussed and taught in the morning report?
- What are the criteria for selecting a referral patient?
- What is the meeting schedule?
- Who is the moderator of the meeting?
- Who is responsible for preparing the educational message of the day at the end of the morning report session?
- Who is responsible for following up with patients and informing others about the final diagnostic and therapeutic treatment of patients?
- Who is responsible for evaluating the meetings?
- Who will introduce patients, and in what format?
- Who is responsible for inviting professors from other disciplines and the general execution of the meeting?

This way, holding purposeful and pre-planned meetings improves the quality of education in the morning report.

5- AUTHORS' CONTRIBUTIONS

Study conception or design: RA, and BF; Data analyzing and draft manuscript preparation: MN, SI, MG, and SM; Critical revision of the paper: RA, and BF; Supervision of the research: BF and MN; Final approval of the version to be published: RA, MN, SI, MG, SM, and BF.

6- CONFLICT OF INTEREST: None.

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