

# Evaluating Morning reports by emergency medicine residents

## Abstract

### Background

Inpatient case-based teaching is used in morning report (MR). In light of the quick changes in medical practice, it's critical to gauge the residents' opinions of this teaching approach. In order to determine the viewpoint of emergency medicine residents on different parts of morning reports and to suggest a format based on our observations, our study used an observational cross-sectional methodology.

### Method

Residents of King Saud Medical City (KSMC), King Salman Hospital, Aliman General Hospital, and Imam Abdulrahman Alfaisal Hospital participated in an observational cross-sectional survey on morning reports. The residents were given a 22-item questionnaire that asked them about the objective, structure, and substance of the morning report as well as who would be the best choice to present and conduct it and how frequently it should be done. The statistical program "Statistical Package for Social Sciences" was used for the analyses (SPSS)

### Results

88.6% of residents agreed that the morning report should be presented by the post-call faculty. 53.3% of respondents said they preferred a general internist, while the chief resident who was conducting the report received a nearly identical response rate (54.6%). Discussion of particular intriguing instances was preferred by 34.6% of the residents since it would aid those 70% more in their post-graduate exams. The residents strongly agreed that management difficulties (86.6%) and diagnostic workup (90%) should be discussed in the morning report. Evidence-based medicine (66.6%) and disease processes (67.3% each) received equal ratings.

### Conclusion

Morning reports are a valuable instructional tool and ought to be a requirement of all postgraduate residency programs, both domestically and abroad.

**Key Words:** Residents, Emergency medicine, Morning report.

## **Introduction**

Establishing the Morning Report as a significant teaching tool for residency programs all over the world. It may provide a useful setting for both teaching and learning (1). In the morning report activity, patients who have been admitted via the emergency room (ER) are presented, and the attending and post-graduate trainees then discuss the situations. It serves as a useful case-based teaching conference that can cover a wide range of subjects (2,3). Since the cases are diverse, a wide range of subjects can be covered in a setting that serves all trainees at once.

The Morning Report can be used for a variety of things, but its most important use is case-based teaching. Other uses for the Morning Report include reviewing management choices, assessing residents' performance, assisting the Chief of Service in keeping track of developments, and conveying medical knowledge. It has been said that The Morning Report is the intellectual high point of the day (4). The fact that it is an interactive teaching session that incorporates students at all levels and places a focus on group case discussions and active learning offers several educational advantages for the residents (5).

There has been disagreement on the optimum structure and objectives of this activity because this method of teaching medical knowledge is not well established. In order to make recommendations for a more agreeable and productive morning report practice, we set out to evaluate residents' opinions on the topic.

## **Method**

The Department of emergency management conducted an observational cross-sectional survey. King Saud Medical City (KSMC), King Salman Hospital, Aliman General Hospital, and Imam Abdulrahman Alfaisal Hospital are all were included in the study in Riyadh, Saudi Arabia. Residents' information was gathered between January 2023 and March 2023. Following the Morning Report session, a 22-item questionnaire was given to the emergency medicine doctors, and they had four weeks to return the printed copy. There were about 150 emergency medicine

physician either Resident, Diploma, assistant Consultant, Consultant who attended the morning report at the emergency department.

Each class runs from 7:00 to 8:00 for an hour. It should be emphasized that each week, the final 15 minutes of three of these sessions are given over to orthopedic situations. Morning reports are scheduled to take place prior to the ED round, which typically lasts from 07:00.

All of the emergency residents, Diploma, Assistant Consultant, consultant and medical students worked that day and the prior night's shifts attend the morning reports. At least two academic staff members from that day and the night before also take part in these sessions. One of the academic staff members is tasked to lead the session each day. Cases are presented by medical students. They provide a thorough case history before going over the potential differential diagnoses. The resident then goes into detail on how the case was managed and treated. The session leader then leads the group through a highly involved conversation while making sure that a number of preset learning objectives are thoroughly covered.

All of the trainees who responded to the survey provided written, informed consent. The details of each response were kept private. The questionnaire, which asked for opinions on the purpose, format, content, frequency, and appropriate presenters of the morning report, was based on a 0–5 Likert scale and was divided into several stems. The responses were divided into two categories: negative responses (0–3) and positive responses (4–5).

For continuous variables, means and standard deviations were determined, and for categorical variables, frequency was used. Using the Pearson Chi-square test, a univariate analysis was carried out. The statistical program "Statistical Package for Social Sciences" was used for the analyses (SPSS).

The Institutional Review Board at King Saud medical city exempted the study from Ethical Review Committee approval, and the data collected were examined anonymously.

## Results

The mean age of 32.29 years (95% CI: 29.70-34.89). Residents made up 61.3% of the participants. The principal goal of the morning report was scored as "improving clinical problem-solving capacity" by 67% of the residents, followed by "improving presentation skills" by 63% and "conveying medical knowledge to the residents" by 59%. 20% and 13%, respectively, were not evaluated favorably for "evaluating resident performance" and "stimulating clinical research".

88.6% of residents agreed that the morning report should be presented by the senior Residents. 53.3% of respondents said they preferred medical students, while the junior resident who was conducting the report received a nearly identical response rate (54.6%). The internist (22.6%) and faculty (34%) were not preferred to perform the report, though. (Table 1)

Discussion of particular intriguing instances was preferred by 34.6% of the residents since it would aid those 70% more in their post-graduate exams. The structure of the morning report, "Bed-side instruction," received a rating of 59.3 from the participants. For the "distribution of handouts," 63.3% was noted. (Table 2)

The residents strongly agreed that management difficulties (86.6%) and diagnostic workup (90%) should be discussed in the morning report. Evidence-based medicine (66.6%) and disease processes (67.3% each) received equal ratings. Discussions of medical ethics, screening and prevention, and research methods received only moderately positive feedback from the residents. (Table 2)

The junior resident should deliver the patient history, according to the majority of residents (89.3%), who preferred the intern (82.6%). Medical faculty and students received very poor ratings from all participants for the presenter. (Table 1)

The majority (91%) thought that the activity should be attended by all residents and interns. Very few medical students, fellows, and faculty responded to the survey.

The two-weekly morning report was favored by the majority (69%) and was followed by the weekly report (18%) and the daily report (13%). The most preferred times were from 9 to 10 am

(83%) and from 14 to 15 pm (11%), respectively. 92% of the participants thought it was a successful teaching exercise overall.

Our analysis of the data between residents and other emergency medicine doctors revealed no discernible differences in the perceptions of residents about Morning Report (Table 1 & 2). The improvement in clinical problem-solving skills ( $p=0.020$ ), post-call faculty conducting the morning report ( $p=0.04$ ), handout distribution ( $p=0.034$ ), and bedside teaching ( $p=0.006$ ) during morning report were the only significant differences between the groups. (Table 1, 2)

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Table 1 Who will compile and deliver the morning report?

	overall 150 emergency physician	emergency residents	others	P-value
	N (%)	N (%)	N (%)	
<b>Asking about morning reports conduction?</b>				0.689
junior residents	82 (54.6)	42 (45.6)	40 (68.9)	0.043
senior resident	133 (88.6)	90 (97.8)	43 (74.1)	0.040
intern	34 (22.6)	26 (28.2)	8 (13.7)	0.511
medical student	80 (53.3)	46 (50)	34 (58.6)	0.087
faculty	51 (34)	34 (36.9)	17 (29.3)	0.540
Asking about morning reports presentation?			0	
junior residents	134 (89.3)	78 (84.7)	56 (96.5)	0.955
senior residents	69 (46)	37 (40.2)	32 (55.1)	0.511
intern	124 (82.6)	74 (80.4)	50 (86.2)	0.233
medical students	23 (15.3)	9 (9.7)	14 (24.1)	0.349
faculty	20 (13.3)	13 (14.1)	7 (12)	0.269

**Table 2: Morning report format and content**

	overall 150 emergency physician	emergency residents	others	P-value
	N (%)	N (%)	N (%)	
<b>Format of Morning Report</b>	129 (86)	71 (77.1)	58 (100)	
Review specific interesting cases	52 (34.6)	34 (36.9)	18 (31)	0.082
Review only last night's admissions	44 (29.3)	22 (23.9)	22 (37.9)	0.215
Review admission since last report	44 (29.3)	32 (34.7)	12 (20.6)	0.346
Presentation on a set format	58 (38.6)	29 (31.5)	29 (50)	0.682
Free presentation with time limit	56 (37.3)	19 (20.6)	37 (63.7)	0.493
Distribute Journal articles	60 (40)	36 (39.1)	24 (41.3)	0.184
Review for post-grad examination	112 (74.6)	62 (67.3)	50 (86.2)	0.490
Distribute handouts	95 (63.3)	44 (47.8)	51 (87.9)	0.034
Bedside teaching	89 (59.3)	57 (61.9)	32 (55.1)	0.006
			0	
<b>Contents of Morning Report</b>			0	
Diagnostic workup	135 (90)	71 (77.1)	64 (110.3)	0.338
Disease process	101 (67.3)	51 (55.4)	50 (86.2)	0.643
Tests and procedures	99 (66)	49 (53.2)	50 (86.2)	0.624
Evidence based medicine	100 (66.6)	55 (59.7)	45 (77.5)	0.480
Screening and prevention	85 (56.6)	54 (58.6)	31 (53.4)	0.741
Medical Ethics	74 (49.3)	50 (54.3)	24 (41.3)	0.388
Research methods	60 (40)	32 (34.7)	28 (48.2)	0.890
Management issues	130 (86.6)	86 (93.4)	44 (75.8)	0.928

## Discussion

While it incorporates a varied set of instructors and residents with various learning goals, morning report has the potential to become a mainstay for emergency medicine residency programs for years to come (6,7). It is regarded as an educational conference (8) where knowledge is shared and emphasis is placed on inpatient medical education (7) (9).

In this study, we looked at respondents' opinions on several elements of the morning report. Our findings revealed that the residents' top priorities for the morning report included "improving clinical problem-solving ability," "improving presentation skills," and "conveying medical knowledge to the residents." This was described in earlier research on the morning report, which considered medical education to be its main goal (2,9).

Morning Report is a case-based clinical teaching activity; it does not aim to stimulate clinical research. The participants in our survey's unfavorable preferences demonstrate this. The participants did not strongly support the notion of using a morning report to assess residents' performance [10]. Residents preferred post-call professors conduct the morning report, preferably a general internist. This is in line with past research (10).

Additionally, the majority of respondents thought that discussing management issues with diagnostic workup of specific interesting cases should be the standard for the morning report, despite previous studies suggesting that the selection and mode of case presentation vary greatly among programs and tend to reflect the preferences of the chief resident and attending physician (7). Also, participants preferred morning meetings to bedside sessions, a finding that is comparable to that made by Stickrath et al. in their study, which revealed that attending rounds was more beneficial than bedside learning (11).

Although the majority of respondents in our study thought that handouts were not helpful, Luciano found that this activity was improved by a toolkit that outlined expectations, taught lesson plans, and contained feedback forms (12).

In our facility, a problem-focused discussion on differential diagnoses and management challenges follows a step-by-step presentation of the entire history, physical examination, and laboratory data. It has been hypothesized that this strategy fosters clinical problem-solving abilities as well as making the debate more fascinating.

While most of the preceding research did not emphasize this need, the majority of the participants stated the desire that the conversations be focused on their recurrent cases.

Morning report should be attended by all residents, medical officers, interns, post-call faculty, and the chief resident, according to the residents, who preferred a junior resident or an intern to present the patients. As a result, residents might interact with faculty members in a setting where they could perhaps find role models (13).

Overall our participants thought the Morning Report was an effective teaching exercise and that it was beneficial to devote an hour to it twice a week. Like other instructional exercises, this one should be lively and provide outstanding results if carried out with a positive mindset and enough interpersonal relations (14). Recently, it was discovered that using a "morning report blog" in conjunction with case-based learning sessions had actual benefits (15).

### **Conclusion**

The residence clinical problem-solving abilities, presenting skills, and knowledge base are all enhanced by the morning report, an effective teaching strategy. The report should be directed by postcall faculty, preferably emergency medicine resident rather than a medical subspecialist. It is an exercise where learners can learn about the diagnostic process and management of particular fascinating instances.

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