

MORNING REPORT IS AN EFFECTIVE TEACHING ACTIVITY: FACULTY AND RESIDENTS PERSPECTIVES

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ABSTRACT

Objective:

To compare the perspective of faculty and residents on various aspects of morning report.

Design Cross sectional study

Place & Duration Of Study

Study conducted in July-August 2002 at the Department of Medicine, The Aga Khan University Hospital, Karachi.

Patients And Methods

A 22-item questionnaire was distributed to residents and faculty. It was meant to examine the perspectives of both groups about objectives and contents of the morning report. The format, person to present, participate and conduct the morning report were also examined in a Likert scale, single best response or open-ended questions.

Results

Forms were distributed to 117 individuals, of whom 84 (72%) responded. Improving presentation skills, problem solving ability and conveying medical knowledge, as the objective of morning report was rated highly.. The faculty (84%) indicated that the chief resident should conduct it whereas the residents (72%) preferred post-call internist to direct the report. Both groups (>90%) preferred that the junior residents should be the presenter. Both groups opted (76%) to discussly selected cases admitted previous night. Contents of morning report (discussion on diagnostic workup, disease process and management issues) was rated by the resident and the faculty as 97%, 70% and 85.5% respectively. The residents (78%) preferred morning report to be directed towards post graduate examination where as the faculty did not favor.

Conclusion

A remarkable similarity was found in residents and faculty for morning report in terms of improving presentation skills, problem solving ability, conveying medical knowledge, discussion on diagnostic workup, disease process and management issues. The residents also want contrary to the faculty that the morning report should be directed towards post graduate examination.

KEY WORDS: - Medical education, Training programme, Residency

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INTRODUCTION

Morning report is one of the most important teaching activities in almost all the residency training programs throughout the world. The purpose of morning report is education, evaluation of quality of service, discussion on ethical issues, evidence-based medicine, improving

presentation skills and evaluation of residents. It can be extremely effective for teaching the principles of diagnosis and management of diseases.^{1,2,3} In a multi-institutional study on resident's expectation of morning report it was found that most residents preferred challenging cases presented in a stepwise manner⁶ interactive discussion led by the attending physician with a broad spectrum of knowledge.^{1,3}

Evolution of morning report in our hospital is interesting. Initially it was conducted by the chairman, Department of Medicine, the cases presented were chosen by the chairman from the list provided to him by the senior resident. Later on post-call attending internist started to conduct the report. This format was followed for quite some time after that the attending internist was replaced by two faculty members to conduct the report. At present morning report is conducted by a single on-call faculty member. This is one-hour session, twice a week focusing on the management of hospitalized patients. The assigned faculty conducts the morning report in which the on-call team presents two to three interesting cases admitted last night. An intern or a resident present the case in a stepwise format, which is followed by discussion, related to the diagnosis and the management of the patient. All the residents, interns, medical officers, chief residents and the interested faculty attend the morning report. In this background we examined the perspective of the faculty as well as the residents at our institution to clarify different aspects of this extremely important teaching activity.

METHODS

Participants and Survey Contents

The participants were categorized as residents and the faculty. The residents group was comprised of the residents, interns, medical officers and the fellows. The faculty comprised of either full-time or non full-time internal medicine and medicine related sub-specialty faculty. A 22-item questionnaire was developed. The questionnaire was divided into multiple stems asking about the perspectives of both groups about objectives and contents of the morning report, format, which person to conduct, who will be the presenter and who should attend. Questions were based upon a five-point Likert scale, single best response and some questions with open-ended answers.

Questionnaire was distributed among all the participants and the response was asked to return in four week's time. Individual responses were kept confidential. Responders were also asked about their interest in subspecialty, qualification, year of post graduation and demographic characteristics.

STATISTICAL METHODS

Data was summarized as the means with standard deviations (for continuous variable) and as frequency and percentage (for categorical variables). Univariate analysis was performed by using the Pearson Chi-square test, and Fisher Exact test, where appropriate. A p-value <0.05 was considered as statistically significant. These analysis were carried out using the statistical software SPSS (version 10.0)

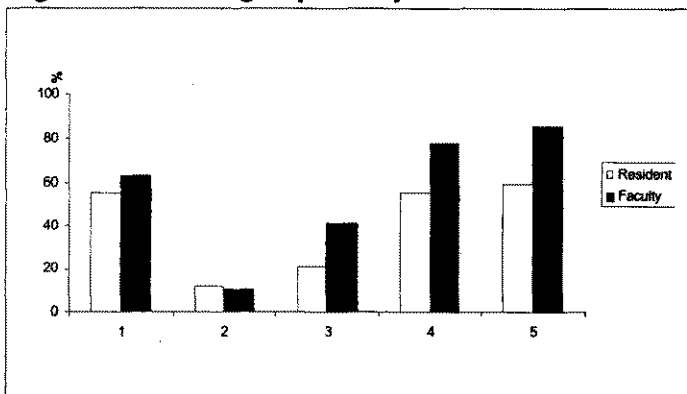
RESULTS

A total of 117 Questionnaires were distributed and 84 (72%) completely filled forms were received. Responses were analyzed under the following categories.

Morning Report Objectives

Improving the problem solving ability as the key objective of the morning report was rated by the residents and faculty as 59% and 86% respectively, The overall positive response was 68%. Improving presentation skills was rated by 78% of the faculty and 55% of the residents as the important purpose of the report. The overall positive response was 63%. Conveying medical knowledge to the residents was rated by 63% of the faculty and 55% of the residents as an essential goal. The overall positive response was 58%. Evaluating resident's performance and inspiring clinical research were not entertained highly by the residents as well as the faculty (Fig.1).

Fig. 1 - The Morning Report Objectives



1. Conveying medical knowledge to the residents
2. Inspiring clinical research
3. Evaluating Residents Performance
4. Improving presentation skills
5. Improving problem solving ability

Who should conduct the Morning Report

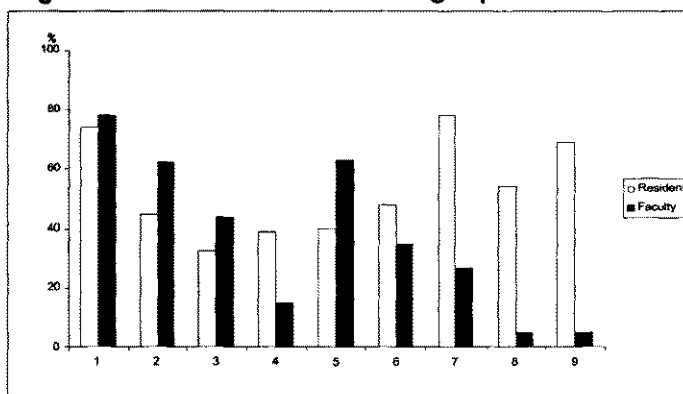
Chief Resident to conduct the Morning Report received 84% positive response by the faculty and 57% by the residents (p=0.072). The overall positive response was 66%. The post-call faculty was favored by 92% residents compare to 41% of the faculty p=0.004. There were similar response rate from the faculty (70%) and the

residents (72%) for an internist conducting the report. Similarly both groups rated low for the Chairman Department of Medicine to conduct the morning report 48% and 40% respectively.

The Format of Morning Report

Resident and Faculty groups favored 78% and 74% respectively to discuss the specific interesting cases. Moreover 62% of the faculty and 45% of the residents want only previous night admission to be reviewed. Free presentation with a time limit had a positive response by 63% of the faculty and 40% of the residents $p=0.121$. A set format of presentation did not receive a favorable response (Fig.II).

Fig. II - The Format of the morning report



1. Review specific interesting cases
2. Review only last night's admissions
3. Review admissions since last morning report
4. Presentation on a set format
5. Free presentation with time limit
6. Distribute Journal articles
7. Review for postgraduate examination
8. Distribute handouts
9. Bedside teaching.

Residents, feel that Morning Report should be directed towards reviewing cases for the postgraduate examination 78%; handouts distribution 54%; and a component of bedside teaching 69%. In contrast faculty did not favor residents perspective significantly and the positive response rate was 27%, 5% and 5% respectively $p<0.05$ (for all three parameters).

Contents of the morning report

To discuss management issues were favored by both groups; residents 92% and the faculty 96%. Diagnostic workup was marked by 100% of the faculty and 95% of the resident as an important element of the morning report. Disease process to be discussed was rated important by 64% of faculty and 76% of residents. Evidence based medicine was again regarded similarly by all the responder with 74% response by the residents and 75%

by the faculty. The residents as well as the faculty showed low positive response for; screening and prevention; to discuss medical ethics and research methods (Table I).

Table I. Morning Report-Faculty and Resident's Response

Parameters	Response	
	Faculty n = 28 n (valid %)	Residents n = 56 n (valid %)
Management issues	24 (96)	50 (92)
Diagnostic workup	28 (100)	53 (95)
Disease process	16 (64)	42 (76)
Tests and procedures	20 (77)	39 (72)
Evidence based medicine	21 (78)	40 (74)
Screening and prevention	10 (43)	26 (50)
Medical Ethics	11 (48)	25 (49)
Research methods	03 (14)	16 (33)
The presenter		
Junior Resident	24 (89)	49 (92)
Senior Resident	18 (72)	23 (50)
Intern	11 (48)	41 (79)
Medical Student	04 (18)	05 (12)
Faculty	00 (00)	08 (19)
Who should attend the morning report?		
Residents	28 (100)	55 (98)
Interns	28 (100)	55 (98)
Medical Officers	28 (100)	55 (98)
Fellows	20 (72)	40 (78)
Medical Students	24 (86)	42 (82)
Post-call Faculty	18 (72)	53 (100)
All faculty	07 (30)	21 (45)
Chief Resident	28 (100)	51 (98)

The Presenter

In the present survey 92% of the residents and 89% of the faculty believed that the junior residents should present cases. The faculty marked senior resident to be involved in the presentation by a 72% positive response, whereas 50% residents favored the same. All the participants rated medical students, faculty and the fellows very low, as the presenter in the morning report .

Who should attend the Morning Report

Both groups favored that all residents and interns should attend the morning report. In addition 100% of the residents wanted post call faculty to attend the report, in contrast to 72% of the faculty $p= <0.05$. There was a similar response rate among the two groups regarding the medical students, fellows and faculty to attend the morning report.

MISCELLANEOUS

In the present survey, majority of both groups (residents 75% and faculty 57%) preferred morning report twice weekly. However 36% of the faculty indicated that it should occur daily. The most suitable time preferred by residents (94%) and faculty (93%) was 8.00am to 9.00am. Both groups (residents and faculty) rated morning report as an overall effective teaching activity by 96% and 93% respectively.

DISCUSSION

Morning report meant patient-based conference, where residents, attending physicians, medical students and others health care professionals meet to present and discuss clinical cases.^{1,2,3} During this time-honored teaching activity, on call team on the previous day presents specific interesting cases for discussion^{4,5}. The objectives of the morning report have been evolved over the years in different institutions, and it is now conducted for diverse purposes. This includes; conveying medical knowledge, evaluation of residents capability, adverse drug reaction reporting, promoting decision making skills, patient management, self-directed learning and ethical issues.^{1,3}

During this survey, we examined the perspective of the residents and the faculty and compared the differences in their opinion. On most of the aspects of the morning report there were remarkable similarities between the groups but in few parameters significant dissimilarities were observed. This survey showed that, the residents and faculty are clear regarding the morning report objectives. However faculty rates higher for the objectives for example improving the problem solving ability, improving presentation skill and conveying medical knowledge although not significantly different from the residents. These findings are similar to the other studies highlighting the same objectives of morning report²

Most of the previous studies on morning report perceived medical education as the primary purpose of the morning report.^{6,9} Morning report is not a place to inspire clinical research, as it is a case-based clinical teaching activity, which was also evident by our faculty and the resident's negative preferences in the present survey. There was no difference between the two groups on these objectives. One important objective of the morning report outlined in another study was to use the morning report as a forum to evaluate the residents'. In the present survey both resident and faculty group did not favor morning report for this objective.

There was a significant difference among the faculty and the residents regarding who should conduct the morning report. Faculty believed that the chief resident should conduct the report, whereas residents want a post-call

faculty preferably an internist should conduct the morning report. Residents' perspective was consistent with the other studies which have also reported that internal medicine residents prefer the presence of a generalist physician at morning report². The person leading morning report was either a faculty member (70%) or a chief resident (30%).^{1,3} Internist should conduct the morning report is also strengthened by the fact that the cases presented during the morning report are of wide range of internal medicine subjects. Therefore a medical sub specialist or a fellow conducting the morning report did not get good response from the participants.

The selection and the mode of presentation of cases, varied greatly among programs reflecting most often the chief resident's and attending physician's preferences.^{6,10} At our institution after presentation of the history, important discussion on the differential diagnosis occurs with relevant thinking process about the laboratory investigations followed by discussion on the management issues. It has been postulated that this approach not only makes the discussion more interesting but also fosters clinical problem solving skills.¹¹⁻¹³ In this survey majority of the responders in both the groups endorsed that discussing management issues as the most important teaching method. They also believed that only specific interesting cases should be reviewed at the morning report. In addition most of them want that only previous night admissions should be discussed and there should be a free presentation with a time limit.

Residents at our institution are preparing for their postgraduate examination either of college of Physicians and Surgeons (CPSP) or Royal college of Physicians (RCP). Majority of them felt appropriate if the discussion during the morning report is directed towards their examination (this include bed side teaching and distribution of handouts as well). Most of the studies done earlier did not emphasize the need of this issue to be discussed in the morning report. Recent advances in postgraduate medical education place greater emphasis on evidence-based curricula and self-directed, learner-centered education and by incorporating evidence based medicine, morning report would become self-directed academic activity liked by the residents.¹⁴ Faculty group in this survey differed significantly from the residents' point of view for inclusion of postgraduate exam oriented format of the morning report.

Residents in the present survey rated diagnostic workup, disease process, and evidence-based medicine very highly as the likely topic for discussion in morning report, which is similar to the finding in other surveys^{2,14} Similarly medical ethics and research methods were rated quite low, which is also the case in many previously published studies.^{1,3}

The faculty at our survey believed that the junior residents should present the case and the senior residents should be on the backup and present the case when needed. At our hospital in the section of General Internal Medicine there is a team led by a senior resident and two junior residents. During on-call it is usually the junior resident who clerk the patient and discuss different aspects of the case with the senior resident. This includes diagnostic workup and management of the patient. Therefore faculty wanted that the senior resident should be prepared to discuss the case during the morning report. The faculty as well as the residents voted against medical students presenting the case at the morning report.

Both the groups agreed that morning report should be attended by all the residents, medical officers, interns, medical students, fellows, assigned faculty, and the chief residents. The morning report allows residents and the faculty to interact in an intellectually stimulating and comfortable environment; it is an important setting in which residents encounter potential role models.¹⁵⁻¹⁷

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