Emergency medicine teaching faculty perceptions about formal academic sessions: "What's in it for us?"

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ABSTRACT

Background: Little is known about factors affecting emergency physician attendance at formal academic teaching sessions or what emergency physicians believe to be the benefits derived from attending these activities.

Objectives: To determine what factors influence emergency medicine faculty attendance at formal academic rounds, what benefits they derive from attendance, and what differences in perceptions there are between full-time clinical and part-time clinical academic faculty.

Methods: A survey was sent to all emergency physicians with academic appointments at one institution. Responses were tabulated dichotomously (yes/no) for checklist answers and analyzed using a 2-person grounded theory approach for open answers based on an a priori analysis plan. Differences between full-time and part-time faculty were compared using the chi-squared test for significance.

Results: Response rate was 73.8% (48/65). Significant impediments to attendance included clinical responsibilities (75%), professional responsibilities (52.1%), personal responsibilities (33.3%), location (31.2%) and time (27.1%). Perceived benefits of attending rounds were: continuing medical education, social interaction, teaching opportunities, interaction with residents, comparing one's practice with peers, improving teaching techniques, and enjoyment of the format. There were no statistically significant differences between groups' responses.

Conclusions: Emergency physicians in our study attend formal teaching sessions infrequently, suggesting that the perceived benefits do not outweigh impediments to attendance. The single main impediment, competing responsibilities, is difficult to modify for emergency physicians. Strategies to increase faculty attendance should focus on enhancing the main perceived benefits: continuing medical education, social interaction and educational development. Faculty learn from themselves and from residents during formal teaching sessions.

Key words: medical education; residency; faculty development; teaching; grand rounds

RÉSUMÉ

Contexte : On sait peu de choses au sujet des facteurs qui influencent la participation des médecins d'urgence aux sessions de formation officielles ou de la perception des bienfaits que les médecins d'urgence retirent de ces activités.

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Objectifs : Déterminer quels sont les facteurs qui influencent la participation des médecins d'urgence aux sessions de formation, les avantages que les médecins en retirent et quelles sont les différences quant aux perceptions entre les médecins membres du corps professoral en pratique clinique à plein temps et ceux en pratique à temps partiel.
Méthodes : Un sondage fut envoyé à tous les médecins d'urgence occupant un poste d'enseignement dans un établissement. Les résultats furent tabulés dichotomiquement (oui/non) pour les réponses sur une liste de vérification et analysés à l'aide d'une théorie à base empirique à deux personnes fondée sur un plan d'analyse a priori. Les différences entre les médecins à plein temps et ceux à temps partiel furent comparées à l'aide d'un test du chi carré pour la signification.
Résultats : Le taux de réponse était de 73,8 % (48/65). Les obstacles importants à la participation comprenaient les responsabilités cliniques (75 %), les responsabilités professionnelles (52,1 %), les responsabilités personnelles (33,3 %), le lieu (31,2 %) et le moment (27,1 %). Les avantages perçus liés à la participation aux sessions de formation étaient : l'éducation médicale continue, l'interaction sociale, les possibilités d'enseignement, l'interaction avec les résidents, la comparaison des habitudes de pratique entre pairs, l'amélioration des techniques d'enseignement et le plaisir retiré de la formule. Il n'y avait aucune différence statistiquement significative entre les réponses des groupes.
Conclusions : Les médecins d'urgence de notre étude assistent à des sessions de formation peu fréquemment, indiquant que les avantages perçus ne l'emportent pas sur les obstacles à la participation. Le seul obstacle majeur, soit les responsabilités au travail, est difficile à modifier pour les médecins d'urgence. Des stratégies pour augmenter la participation des médecins enseignants devraient viser à rehausser les principaux avantages perçus : l'éducation médicale continue, l'interaction sociale et le développement de l'enseignement. Les enseignants apprennent d'eux-mêmes et des résidents au cours des sessions de formation officielles.

Introduction

Formal teaching sessions are an important part of emergency medicine (EM) residencies and help to ensure that core content is covered.[1–4] Sessions vary in scope, duration, content and format.[1–5] Little has been written about EM faculty perceptions of these activities, yet faculty attendance at teaching sessions is important. Residents are likely to benefit from content experts, who can highlight areas relevant for clinical excellence from the experienced provider's perspective. The communicator, medical expert, professional and scholar competencies of the Royal College of Physicians and Surgeons of Canada CanMEDS (Canadian Medical Education Directions for Specialists 2000 Project) framework can easily be used as a role model during formal teaching sessions.[6] Emergency physicians (EPs) can also demonstrate principled academic discourse, including how to establish and defend a point of view. Studies from disciplines other than EM have identified motivators for faculty members, such as refreshments, avoiding perceived negative consequences of absence, and recognition of contributions.[1,2,7] Faculty also gain exposure to evidence-based medicine, which can lead to practice reflection and change.[8]

Reports from other specialties may not be applicable to EPs. For example, with relatively small programs, formal academic sessions are often held on a city-wide basis and participants must congregate at a single site, regardless of current hospital appointment. EPs cannot reliably redirect patient responsibilities during a shift to allow attendance at teaching rounds, and shiftwork in general impedes consistent attendance at any regularly scheduled event. Local experience suggested that some faculty attend formal teaching sessions more frequently than others. We therefore sought to determine what factors influence EM faculty attendance at formal academic rounds, what benefits they derive from attendance, and what differences in perceptions there are between full-time clinical and part-time clinical academic faculty.

Methods

The 3.5-hour academic half-day at our institution consists of interactive resident seminars (1.5 h), interesting cases presented by the residents and discussed by faculty (1 h), and city-wide grand rounds presented by an expert faculty (1 h). Faculty are encouraged to attend the resident cases and grand rounds sessions.

We developed a questionnaire addressing the 3 main objectives of the study. Questions likely to generate a small number of concrete responses were phrased in checklist format. Questions likely to generate a range of responses

or for which likely responses were not easily anticipated were posed in open-ended short-answer format. A pilot questionnaire was sent to 5 selected faculty, and subsequently revised. The investigators agreed on an a priori analysis plan. The Academic Half-Day Survey is illustrated in Appendix 1 (p. 41); a copy of the survey can also be obtained from the authors.

Full-time clinical faculty were defined as those who work at least 14 shifts per month in a teaching centre, and part-time clinical faculty were those who worked less than 14 shifts per month and had at least 1 other defined professional responsibility. We electronically sent an introductory letter and survey to all faculty members with university or clinical teaching appointments. Non-responders received 2 further surveys at 3-week intervals. The 5 faculty who reviewed the initial questionnaire were excluded from the analysis. An independent third party collected, recorded, blinded and filed responses. The investigators accessed the completed questionnaires upon completion of data collection and were blinded to participants' identifying information.

Each investigator independently coded short-answer responses in standard grounded theory fashion.[9–11] The investigators melded their codes, settling initial coding discrepancies by consensus. The responses were then re-coded using the melded code by a single investigator (G.B.). Ten percent of the responses were independently coded by the second investigator. Checklist answers were assigned a numerical score mapped to the response for coding purposes. Answers to "impediments to attending grand rounds" and the narrative responses to choice of venue and timing were correlated as a check of data integrity (i.e., the degree to which respondents provide the same answer to similar questions). All data were entered into an Excel spreadsheet (Office Professional 2000, Microsoft Corp., Redmond, Wa.). Differences in answer distribution between response groups were assessed using the chi-squared test. Participants were told that consent to voluntarily participate was implied by the return of the survey. This study received institutional ethics board approval (SMHREB # 02-082C).

Results

Between June 28 and Aug. 14, 2002, surveys were sent to 65 faculty members. Of these, 48 (73.8%) responded, including 22 full-time clinical, 8 administrative/part-time clinical, 4 research/part-time clinical, 4 education/part-time clinical, and 10 part-time clinicians with varied additional responsibilities. Figure 1 shows that most respondents attend grand rounds less than 6 times per year, with 37 faculty (63.8%) saying they usually also come for resident cases.

Common impediments to attending included clinical (75%), professional (52%) or personal responsibilities (33%); location (31%) and time of rounds (27%) (Table 1). The most common perceived benefits of attending grand rounds and resident cases were continuing medical education (CME), social interaction, and observing new teaching techniques (Table 2). The most common downsides of attending the formal sessions were scheduling conflicts, suboptimal content and parking problems (Table 3). The differences in the distribution of answers between full- and part-time clinical faculty were not statistically different for any of the questions. Intra-respon-

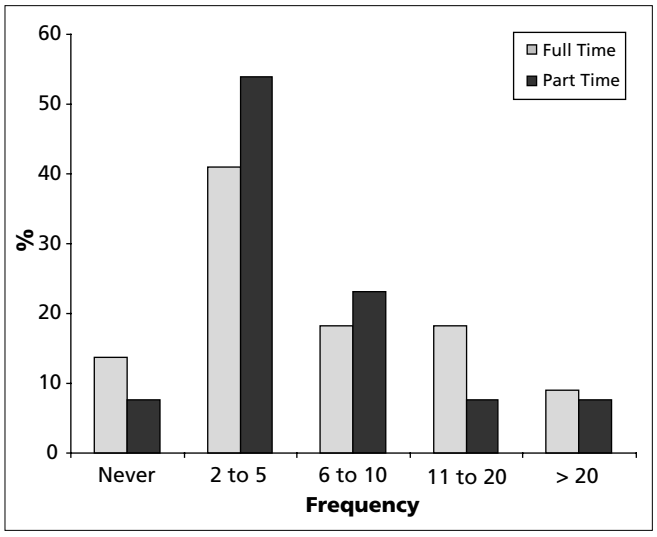

Fig. 1. Frequency of attendance at grand rounds

Table 1. Checklist of impediments to academic half-day attendance by emergency medicine teaching faculty

Impediment	Frequency of mention, %
Other responsibilities	
Clinical	75
Non-clinical	52
Personal	33
Location	31
Time of day	27
Not enough notice	15
Too busy	12
Irrelevant content	12
Day	9
Unaware of event/topic	5
Other	4

dent agreement on the 2 questions used to test internal consistency was 93.9% (31/33), suggesting a high degree of data integrity. No discrepancies of codes between the investigators occurred in the 10% of data that were doubly coded (agreement = 100%).

Discussion

Perceived benefits of teaching sessions

We determined what faculty perceive to be the benefits of attending formal teaching sessions. CME was mentioned most frequently, suggesting that faculty attend not only to teach, but also to learn. Support for this benefit has previously been reported for traditional grand rounds.[4] Our study, however, found this to be true also for case presentations lead by residents, who are unlikely to be perceived as an authority on the topic matter. We feel that this finding represents faculty member receptiveness to the 2-way flow of knowledge between staff and resident. Transfer of factual knowledge is only part of the perceived educational benefit. Faculty members also consider observing teaching techniques and comparing their practice patterns to those of their peers to be advantageous. Academic gatherings represent a unique opportunity for many EPs because they rarely observe their colleagues at work in the emergency department. The second most common benefit reported was social interaction. The opportunity to visit with colleagues outside of the clinical environment, including those from other institutions, seems important. Some faculty specifically identified interaction with residents beyond simply teaching as important. Small residency programs and discordant scheduling of residents and staff means that EP clinical interaction with residents may be less consistent than in other specialties. Accordingly, incorporating more time for social interaction may be one way to enhance faculty attendance and enjoyment of formal teaching activities. A very small percentage of respondents said that the opportunity to fulfill an obligation was a benefit of attending resident cases (Table 2). This would suggest that faculty attend because they want to, not because they feel they have to. Faculty often do not receive formal recognition for teaching activities and therefore may not be motivated to participate out of a sense of obligation.[7,12,13]

Table 2. Perceived benefits of attending academic sessions, as listed by faculty who participated in study (narrative responses)

	Type of academic session, % of respondents who listed each benefit	
Benefit	Resident cases	Grand rounds
CME	67	85
Teaching	29	25
See residents	24	23
Social interaction	17	77
Practice comparison	18	16
Format	15	5
Teaching techniques	Not mentioned	14
Obligation	7	Not mentioned

Impediments to attendance

In our study, 75% of faculty listed clinical or non-clinical professional conflicts as impediments to regular attendance. These differ from reports in other disciplines, which have cited non-academic influences on attendance such as refreshments and professional penalties.[1,2,7] Attendance would likely increase if individuals were already on-site when sessions occurred. There is no time when a large percentage of the EM faculty is reliably on-site and available to attend rounds. Academic sessions involving ward- and office-based faculty often occur in the early morning or at noon to compliment the conduction of clinical activities.[5] This strategy is not feasible in EM. For example, few EPs would be in the hospital at noon unless they were in the middle of a busy shift, or involved in administrative or scholarly activities. In addition, many other disciplines can interrupt clinical activities for scheduled academic sessions, but it is unusual to be able to leave the emergency department unattended for prolonged periods. Many part-time clinicians listed non-clinical professional conflicts, suggesting that it may be difficult for academic faculty to leave administrative or research activities. Traffic and parking limitations exist in our city, and thus approximately 20% of re-

Table 3. Perceived "downsides" of attending academic sessions, as listed by faculty who participated in study (narrative responses)

	Type of academic session, % of respondents who listed each "downside"	
Downside	Resident cases	Grand rounds
Parking problems	17	17
Schedule conflict	44	25
Suboptimal content	13	29
"Too busy"	Not mentioned	13
Quality of refreshments	Not mentioned	7
Classroom	Not mentioned	5
Staff attendance	Not mentioned	5
Nature of discussion	9	Not mentioned

spondents listed location as an impediment. Indeed, no single site would be likely to provide a solution for the majority of the faculty. Accordingly, only 11 faculty (18%) suggested a different venue as a recommended improvement.

Implications

Competing clinical and professional obligations are difficult to overcome. New technology such as videoconferencing may offset some impediments, but advantages must be weighed against the potential loss of the social interaction and bi-directional discourse facilitated by personal gatherings.[3,14] Our study demonstrates that these benefits are important to EPs. Directing planning efforts at satisfying EPs' desire for effective CME and social interaction are possible and may enhance the appeal of formal teaching sessions to faculty members. For example, despite seeing CME as a potential benefit, some faculty in our study felt that content was suboptimal. Designing faculty-specific sessions may help address this problem.

Limitations

Our study has several limitations. The number of faculty is small, and meaningful differences between full- and part-time faculty may not have been detected. Previous studies have shown that self-reporting may overestimate the real attendance as measured by sign-in logs.[15] Actual staff attendance therefore may be even lower than reported in our study, further emphasizing the need to address factors affecting attendance. The open-ended question format used for much of the survey may have permitted faculty to overlook important answers. A multiple-choice format may have lead to cueing of some further ideas; however, we felt it would restrict responses. By design, our study population was exclusively EPs. Generalization to other disciplines or more heterogeneous populations, therefore, should be done with caution.

Conclusions

Most EM faculty in Toronto infrequently attend formal city-wide teaching activities, suggesting that the impediments to attendance are greater than the perceived benefits. The main impediment — competing clinical responsibilities — is a fact of life for EPs; therefore strategies to increase faculty attendance should focus on enhancing the main perceived benefits, which are CME, social interaction and educational development. Faculty benefit from teaching done by their colleagues and by residents at these sessions.

Competing interests: None declared.

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Appendix 1. Academic Half-Day Survey sent electronically to all emergency medicine faculty members with full-time or part-time university or clinical teaching appointments at one institution (study population)

Part One

1. Attendance (*Place an "X" beside the **single most appropriate answer***)

Grand Rounds:	I never attend grand rounds	__
	I attend grand rounds 2–5 times per year	__
	I attend grand rounds 6–10 times per year	__
	I attend grand rounds 11–20 times per year	__
	I attend grand rounds more than 20 times per year	__
Resident Cases:	I never attend resident cases when I come for rounds	__
	I rarely attend resident cases when I come for rounds	__
	I usually attend resident cases when I come for rounds	__
Circumstances:	I only attend half-day if I am formally participating	__
	I only attend half-day if I am in the area already	__
	I attend half-day if the content is appealing	__
	I attend half-day out of habit	__

2. Impediments to regular attendance (*Place an "X" beside **as many as apply***)

The location for half-day	__
The day of the week	__
The time (Cases 1000–1100, Grand rounds 1100–1200)	__
The content is not relevant/helpful to me	__
I am inadequately informed about the topics/speakers	__
I was not aware that I was able/welcome to attend	__
My professional clinical responsibilities conflict with the time	__
My professional non-clinical activities conflict with the time	__
My family/recreational/personal activities conflict with the time	__
I am too busy to come regardless of location or time	__
Other 1. _____	
2. _____	

Part Two: Opinions About Half-Day

1. What, in your opinion, are the **positive** aspects of coming to **grand rounds**? (*Please list up to five in **descending order of importance** to you*)
2. What, in your opinion, are the **negative** aspects of coming to **grand rounds**? (*List up to five in **descending order of importance** to you*)
3. What, in your opinion, are the **positive** aspects of coming to **resident case presentations**? (*List up to five in **descending order of importance** to you*)
4. What, in your opinion, are the **negative** aspects of coming to **resident case presentations**? (*List up to five in **descending order of importance** to you*)
5. Which of the following formats for half-day would best suit you?
   a. Group A&B 0830, Cases 1000, Grand Rounds 1100–1200 hrs (current) __
   b. Grand Rounds 0830, Cases 0930, Group A&B 1030–1200 hrs __
   c. Grand Rounds 0800, Cases 0900, Group A&B 1000–1130 hrs __
   d. Other: _____
6. What would be your preferred venue for grand rounds?
   a. Keep it at MSH regularly (current) __
   b. Have it at another venue regularly __
      i. Suggested venue: _____
   c. Move it around on a fixed schedule __
      i. Suggested venues: _____
7. What, in your opinion, could be done to make the half-day more appealing to you?

Part Three: Professional Information

1. I am appointed to:
   a. Department of Medicine __
   b. Department of Family and Community Medicine __
   c. Department of Pediatrics __
   d. CCFP(EM) resident __
   e. FRCP Resident __
   f. None of the above __
2. My practice is:
   a. Full-time clinical emergency medicine __
   b. Part-time clinical emergency medicine and:
      i. Research __
      ii. Education __
      iii. Administration __
      iv. Other _____
   c. Part-time clinical emergency medicine and:
      i. Clinical family practice with office __
      ii. Other clinical practice with office __
      iii. Other clinical practice without office (e.g., trauma) __