Resident and Faculty Feedback: The Student's Perspective

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Background
Feedback from faculty members and residents is a critical component of undergraduate medical education. Little is known about how students assess the adequacy of feedback from faculty and residents.

Purpose
To report medical students' evaluations of clinical teacher feedback and to determine if students assess feedback given by residents differently than they assess feedback given by faculty.

Methods
Data were retrospectively collected from medical students' responses to end-of-clerkship questionnaire items that evaluated feedback from residents and attending physicians. The mean ratings of faculty feedback in four clerkships were compared with the mean ratings of resident feedback within each academic year from 1998 to 2002.

Results
Overall, the 1198 student evaluations of clinical teacher feedback were positive. Resident feedback was rated equal to or higher than faculty feedback in every clerkship; 5 of the 16 comparisons (31%) reached statistical significance.

Conclusions
Students believe feedback from residents is at least as valuable as feedback from faculty. Higher resident feedback ratings may have been due to a greater frequency of resident-student interactions as well as a more peer-level relationship between students and residents.

Background
Feedback refers to information describing students' performance in a given activity that is intended to guide future performance in that activity. Medical students who receive feedback have been shown to perform better on objective outcome measures than students who do not receive feedback. Accordingly, feedback is recognized as an important part of medical education.

Effective feedback is timely, expected, frequent, non-judgmental, non-threatening, and specific (based on direct observation of behaviors). Feedback that lacks these characteristics may fail to communicate useful information to the student. Because of the potential for variability in feedback, it is important for medical schools to monitor feedback given to students.

Typically, clinical faculty and residents are both responsible for teaching medical students and giving them feedback. Because attending physicians tend to have more teaching experience than residents, they might be expected to provide better feedback. However, on most clinical rotations residents spend more time with students and therefore have the opportunity to provide more frequent, specific feedback. Little is known about whether students value feedback from residents differently than they value feedback from attending physicians.

The purpose of this study is to report medical students' evaluations of clinical teacher feedback and to determine if students assess feedback given by residents differently than that given by faculty. To our knowledge, this is the first study that specifically compares student ratings of feedback from residents with feedback from faculty.

Methods
The University of Florida College of Medicine administers a questionnaire to third-year medical students at the end of each clinical clerkship. All questionnaires contained the same 2 items to assess feedback: (1) “Attending physicians provided regular feedback on student performance,” and (2) “Residents provided regular feedback on student performance.” Possible responses ranged from “poor” (1) to “excellent” (5) on a 5-point Likert scale. This study involved a retrospective analysis of student responses to these two items.

Questionnaires from Internal Medicine, Neurology, Pediatrics, and Surgery were included. Questionnaires from clerkships that did not provide feedback data from all 4 years relating to both the faculty and residents were excluded. For each clerkship within each academic year, mean student ratings of resident feedback were compared with mean ratings of faculty feedback using a t-test.

Results
Overall, students rated feedback from both residents and faculty in the range of good to very good. Mean scores ranged from 3.1 to 4.1 for faculty feedback and from 3.3 to 4.2 for resident feedback (3 = good, 4 = very good). Students rated feedback from residents equal to or higher than feedback from faculty in every clerkship each year. Resident feedback was rated significantly higher than faculty feedback in 5 of the 16 resident-faculty comparisons (1998: Neurology faculty 3.5±0.9, residents 4.1±1; Pediatrics faculty 3.4±1.1, residents 3.9±1.1; Surgery faculty 3.1±1.2, residents 3.5±1.2; 1999: Neurology faculty 3.7±1.1, residents 4.2±0.9; 2000: Surgery faculty 3.4±1.3, residents 3.8±1.1).
Discussion
In this study, student responses to end-of-clerkship questionnaires were retrospectively analyzed to assess and compare student perception of feedback given by attending physicians and residents. On average, students rated feedback from all clinical teachers (residents and attending physicians) as good or better. Resident feedback was rated equal to or better than faculty feedback. The difference was statistically significant for 31% of the faculty-resident comparisons.

Several factors may have contributed to higher ratings of resident feedback. One is amount of time spent with trainees. A study of internal medicine clerkship students found that the amount of time clinical teachers spent with students was related to student ratings of overall teaching effectiveness. Residents generally spend more time with medical students because faculty-student interactions tend to be limited. Therefore, time spent with students may have contributed to higher resident ratings.

Another factor that may have contributed to higher ratings of resident feedback is that students considered feedback from residents more personally acceptable. Generally, students and residents are closer in age and experience than students and attending physicians. Students and residents, therefore, have more of a peer relationship. Most likely, students feel less threatened by residents than by attending physicians.

We recognize several limitations of the present study. The first limitation is that the questionnaire wording, e.g., “Attending physicians provided regular feedback on your performance,” prevents drawing a precise conclusion about student perception of the effectiveness of feedback given. The next limitation relates to the difficulty of interpreting these subjective data. Even though feedback from residents was rated significantly higher in 5 of the 16 comparisons, it is difficult to know the educational or clinical significance of this difference. The important conclusion to draw is that students rated feedback from residents and faculty as roughly equivalent, with a slight favoring of feedback from residents. In addition to the limitations imposed by questionnaire wording and subjective data, there is also the potential for recall bias as a result of student inability to always recognize feedback.

Future studies could address these limitations to better assess and compare resident and faculty feedback. A more useful instrument to measure the effectiveness of feedback would be a questionnaire that specifically addresses the component parts of effective feedback. Another valuable approach might be to train students in recognizing and receiving feedback. Such training has been shown to improve students' ratings of feedback given. To address the issue of feedback recall, students could be surveyed multiple times during a clerkship.

In conclusion, this study shows that while medical students were satisfied generally with the level of feedback from all clinical teachers, they considered feedback from residents as good as or better than feedback from faculty. Because residents play a critical role in undergraduate medical education, it is valuable to assess feedback from residents as well as faculty. Further research is needed to more objectively determine the effectiveness of feedback given by residents and faculty.

References