structure of medical school). The classic model of mentoring as an intensive relationship with the goal of the protégé succeeding in a career similar to the mentor’s (Mann, 1992) may be impractical for medical students, who are often undecided about career goals and seek general advice and support. Students identified the dynamic medical school curriculum with many different courses and clerkships as impeding mentoring, and they endorsed research projects or extended preceptorships, previously described mechanisms to facilitate mentoring (Quinby & Kurfees, 1989; Shapiro et al., 1994).

Our findings may not represent the opinions of the entire class, or of students at other schools. The focus-group setting may have inhibited some students from sharing their opinions. However, focus groups were also a major strength of our study. Although students may have defined mentors variably, our open-ended questions yielded descriptions of students’ real or desired mentoring relationships and suggestions for improvement beyond those we hypothesized.

Medical students’ experiences with mentoring highlight their desire for supportive, personal and trusting relationships with faculty independent of specialty choice. Their recommendation that students be guided to take responsibility for pursuing mentoring in an environment that promotes faculty development suggests an agenda for medical schools seeking to improve mentoring.

Practice points

- What is already known about mentoring: Mentors play a crucial role in the development of young professionals.
- What this study adds: Medical students seek support and trust in their mentoring relationships, and desire individualized career guidance but feel their own career indecision often impedes mentoring.
- Suggestions for further research: Further study is needed to explore mechanisms to empower students to seek mentors and educate faculty about students’ mentoring needs.

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meet both their personal career and content needs. Availability of senior faculty is a key resource. Until more senior women and minority faculty are available, cross-gender and cross-ethnicity mentoring will need to be utilized.

Introduction

The importance of mentoring has been gaining recognition in the academic medical community. Mentorship is considered critical for launching a productive career (Bland & Schmitz, 1986; Rogers et al., 1990; Hitchcock et al., 1995). Medical school junior faculty with mentors rate their research preparation and skills higher than those without mentors (Palepu et al., 1998).

Mentoring is an element of academic culture that is likely influenced by department Chairs. While there has been inquiry into the perceived value of mentoring by junior faculty, the perspective of those in leadership positions has not been addressed (Jackson et al., 2003). We performed a qualitative study utilizing interviews of family medicine department chairs to explore their views and experiences with mentoring.

Methods

This was a qualitative inquiry into mentoring in United States departments of family medicine. As key informants, we chose Chairs of departments listed by the Association of Departments of Family Medicine. We emailed Chairs and then scheduled interviews by telephone. We used purposeful sampling to assure variability in Chairs’ length and of appointment, gender, and race/ethnicity. Chairs who were women and of minority race/ethnicity were purposefully oversampled, for example, women represented 7.5% of the 133 family medicine chairs nationwide, but 31% of our sample. After obtaining consent, participants were interviewed by telephone in January & February 2002. Interviews were scripted, but semi-structured and open-ended, and lasted 30 to 60 minutes.

Both investigators independently examined each audiotaped interview for important themes using an immersion-crystallization technique (Crabtree & Miller, 1992). After independently identifying themes, the authors met on three occasions to reach consensus on themes. Sampling was continued until no new themes were identified, i.e. we had reached saturation. The Institutional Review Board of the Medical University of South Carolina approved this research.

Results

Of the 18 Chairs contacted for an interview, 13 (72%) participated. Four participants were female. One participant self-identified as African-American and one as Latino. Number of years in the department ranged from 2–16; years as Chair ranged from 2–22. By region, five were Chairs of departments in the northeast United States, two in the southeast, four in the midwest, and two in the west. Identified themes follow.

Presence and value of formal mentoring

Four of the 13 department Chairs identified existing formal mentoring programs, although most felt that mentoring was important for faculty development.

‘Mentoring as a value is ingrained in departmental culture, making the department attractive to faculty because it is viewed as nurturing’ (Chair A).

‘There is a sense that the department takes responsibility for your career’ (Chair H).

While mentoring was felt to have overall value, several Chairs viewed it as a mixed experience that was dependent on the individuals involved. There was also concern that assigning mentoring pairs could ignore factors that contribute to fit in the relationship.

Chairs’ personal mentoring experiences

About half of the Chairs identified past mentoring relationships that had a significant impact on their careers. Three of the four women and one of the two minority Chairs said that they had not had significant mentors. In contrast, two of the seven white males said that they had lacked significant mentors. The Chairs’ own past experience with mentoring did not seem to have a relationship with the state of mentoring in their departments.

Unsatisfactory mentoring relationships

Most Chairs identified a lack of fit between mentor and mentee as the most usual source of dissatisfaction. Lack of progress of the mentee was also identified as a problem in some relationships. There was concern for issues of trust and vulnerability of the mentee. Chair C identified a past episode in their department of a boundary crossing by a male mentor with a female mentee that led to the departure of the female mentee. Chair E cited multiple abuses of department faculty by research mentors who were senior faculty in other departments:

‘We have been used to help write and get grants, but were filtered out after the grant was awarded. One person tried to have a mentor in another department for a K award and it was apparent that that was not working out. We had a bad experience in another department because we found the mentor guilty of some plagiarism’ (Chair E).

Mentoring women

There was no consensus on whether women mentees should be paired with male or female mentors. Three male Chairs who favored female–female pairings were worried about possible boundary crossings, sexual harassment, and difficulty giving criticism to women. Others felt that sensitivity of the mentor was more important than gender. Preferences for male–female and female–female pairings did not necessarily reflect the gender of the Chairs. Several Chairs felt that the experience of women in academic medicine was different and female mentees would benefit from the advice of another woman.
‘Don’t honestly see any distinction [between males and females] when it comes down to the professional mentoring relationship’ (Chair F, male).

‘If you are part of a minority, and women are not a minority except in positions of power in academe, you have an understanding of what it is to be a minority member. People in the majority, whether it be racial majority or gender majority, don’t notice the assumptions or the privilege of being in the majority, so that having a female mentor, she typically notices’ (Chair G, female).

Several Chairs suggested the concept of a system of multiple mentors for a female faculty member where she might have a male mentor for her interest area and a female mentor for lifestyle issues. Also, Chairs noted that there were not enough senior women to mentor all junior women faculty.

Mentoring minorities

Most Chairs felt that sensitivity was important and that like pairings were preferred, but often not possible. Answers were overall more tentative to this question than concerning mentoring to females.

‘That can be more challenging. I’m not as insightful when it comes to minorities [as compared to women]. I don’t have the confidence, perhaps, in guiding them in some areas’ (Chair F).

‘Pass. I don’t have a lot of experience’ (Chair K).

‘It’s hard to stand in their shoes. We’ve lost people over this. It seems to revolve around issues of trust’ (Chair N).

The concept of a system of multiple mentors again emerged.

‘If you can’t cross over so that white men can mentor blacks and women, then how could we ever change the demographic profile of a department?’ (Chair J).

A dynamic relationship

The mentoring relationship grows and evolves over time. Chairs felt that it was important for both mentor and mentee to recognize the changes in the relationship, with possible evolution into a peer relationship. Faculty may have both serial and multiple mentors, to accommodate their different and changing needs.

‘Mentees are like children and mentoring them is like parenting. New faculty will need almost constant attention for the littlest things. But those things are very important. After a while, they need you less. Mid-level faculty are like teenagers. They will go along for a long time and not need you at all, you won’t even see them, but when they do need you, they need you urgently and for a big problem’ (Chair J).

Discussion

Although most Chairs felt that mentoring was valuable, very few departments had formal mentoring programs. This gap between the great value placed on mentoring and its lack of existence in departments echoes previous findings (Johnson et al., 1999). The presence of a formal departmental mentoring program did not correlate with the Chairs’ own past experience with mentoring, contrary to our expectations.

A few Chairs were concerned about men mentoring women because of sexual harassment issues. However, most felt that there just were not enough senior women to mentor all of the junior women who could use their guidance. If numbers of senior women faculty were felt to be insufficient, this was even truer for minority faculty. Overall, mentoring for minorities did not seem to be as developed as that for women. One solution may lie in the strategy of multiple mentors.

Several limitations must be acknowledged. These interviews involved only Chairs of family medicine departments; however their experiences are likely not unique to academic family medicine. This was not an exhaustive survey of mentoring in departments of family medicine; rather we have attempted to probe in depth ideas about mentoring. We did not address the perspective of junior faculty mentees, although this has been reported in previous research (Jackson et al., 2003).

Academic medicine may benefit from more formal mentoring experiences for junior faculty, as it is generally felt to be of value and there is evidence supporting this (Palepu et al., 1998). This research highlights a possible conflict between requiring everyone to participate and making the program personalized. In formalizing the mentoring process, there is a potential to limit personal ‘fit’ in the relationships. Until more senior women and minority faculty are available, cross-gender and cross-ethnicity mentoring will need to be utilized.

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References


Does change from a traditional to a new medical curriculum reduce negative attitudes among students?
A quasi-experimental study

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SUMMARY The authors investigated whether a new type of medical school curriculum—with problem-based learning, integrated preclinical and clinical phases, and increased levels of contact between students, patients and teachers—is associated with lower levels of students’ negative attitudes towards medical training than is a traditional medical school curriculum. This association was found, and was confirmed by a comparison between students in a university that had changed from a traditional curriculum to a new curriculum. Curriculum design may explain differences in students’ attitudes towards medical school.

Introduction

A crucial question for teachers of medicine is how variations in medical school curricula influence the educational process (McManus, 2003). Over the past 50 years, most medical schools have employed either a ‘traditional’ curriculum, maintaining a division between preclinical and clinical phases, or a ‘new’ curriculum including integrated teaching, problem-based learning, more contact with teachers and seeing patients from the very beginning (Maheux et al., 2000). Negative attitudes towards medical school are considered part of a stress reaction that may reduce students’ learning ability and performance. The Perceived Medical School Stress (PMSS) instrument (Vitaliano et al., 1989) can also be used to measure negative attitudes (Gude et al., in press).

The curriculum of one of the Norwegian medical schools (School A) was reformed from traditional to new in 1996. The other medical school (School B) employs a traditional partition between the preclinical (two-and-a-half-year) and clinical (three-and-a-half-year) phases (Gude et al., 2003).

Uniform criteria and methods of student recruitment were applied. This enabled us to compare attitudes between students in School B and post-reform students in School A, and between pre- and post-reform students in School A. We hypothesized that the attitudes of students exposed to the new curriculum would be less negative than those who were exposed to the traditional curriculum (Wiers-Jenssen & Aasland, 2004) and wanted to test the following hypotheses:

(1) Students studying under the traditional curriculum will report higher levels of negative attitudes towards their medical school during all six years of the curriculum than students studying under the new curriculum.

(2) Students in School A will report lower levels of negative attitudes after the change to the new curriculum than before, while the attitudes of students in the traditional curriculum will remain relatively stable during the period studied.

Methods

Design

In this quasi-experimental study, post-reform students at School A comprised the experimental group, and students at School B and the pre-reform students at School A were controls.

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