Alexis D. Abernethy, PhD

A Mentoring Program for Underrepresented-minority Students at the University of Rochester School of Medicine

ABSTRACT

Mentoring underrepresented-minority (URM) students poses a special challenge because most medical schools have few URM faculty and many non-URM faculty hesitate to be mentors for URM students. Some medical students perform less well in the clinical years than would be expected from their pre-clinical performances. One factor is some students' difficulty in adapting to the culture of medicine, which mentors can help students overcome. The University of Rochester School of Medicine created the Medical Student Mentoring Program to address the needs of URM students and non-URM faculty who could be mentors.

The program, offered in 1995–96 and 1996–97, trained mentors, created a bicultural support group for URM students, and provided structured mentoring. Interviews were conducted with faculty and students to identify critical areas that influence the success of URM students in their clinical years; URM faculty, residents, and advanced students shared their experiences with the program students at reflection group meetings. Mentors participated in an initial orientation.

Of the 42 students eligible during 1995–1997, 30 participated and were assigned to 15 mentors. At the end of the program's first year, the students and mentors gave their reactions, and although there were some differences in their viewpoints, overall they considered the program useful. Non-URM faculty appreciated the support and guidance that allowed them to mentor URM students more effectively. The program ran formally for two years, and some of the mentoring relationships continued into the third year. Loss of funding and change in administrative leadership contributed to the ending of this program. Mentoring continues to be a priority at the medical center, and a new mentoring program has been developed for URM and non-URM medical students.

Acad. Med. 1999;74:356–359.

Mentoring contributes to the academic success of faculty and students.[1–4] Mentoring underrepresented-minority (URM) students poses a special challenge because there are few URM faculty at most medical schools and many non-URM faculty hesitate to be mentors for URM students.[2,5] Mentors tend to chose protégés like themselves, who share similar racial and cultural backgrounds. Non-URM faculty can be effective mentors to URM students, but they must be encouraged to initiate such relationships and to become more attuned to the needs of these students.[5]

Some students' performances during the clinical years are lower than expected based on their pre-clinical performances.[6] Of the many factors that can contribute to such performance deteriorations, one is some students' inability to adapt to the culture of medicine. All medical students face this adaptive task, but the process is often more complicated for URM students because they may face greater cultural differences. For example, some URM students whose cultural backgrounds encourage cooperation rather than competition may have difficulty being assertive during rounds. To address value conflicts that arise in cross-cultural interactions, de-Anda coined the term *bicultural socialization* to underline the

Dr. Abernethy *is assistant professor, Graduate School of Psychology, Fuller Theological Seminary, Pasadena, California, and formerly was clinical associate professor, Department of Psychiatry, University of Rochester School of Medicine, Rochester, New York.*

Correspondence and requests for reprints should be addressed to Dr. Abernethy, Department of Clinical Psychology, Graduate School of Psychology, Fuller Theological Seminary, 180 North Oakland Ave., Pasadena, CA 91101.

importance of exposing minority individuals to their own cultural groups and of providing significant exposure to socialization agents from the majority culture so that an individual's cultural and professional values are supported.[7]

PROGRAM DESCRIPTION

The Medical Student Mentoring Program, funded by the New York State Department of Health, was created to address the unique needs of URM students and non-URM faculty at the University of Rochester School of Medicine. The program operated in 1995–96 and 1996–97 with the goal of identifying and strengthening during the first two years of medical education key areas of performance that predict excellence for URM students in the clinical years. The program objectives were to offer instructional training for mentors, create a bicultural support group for URM students, and provide structured mentoring to URM students. It was expected that students who interacted more skillfully with faculty and understood critical unwritten rules of the third-year curriculum would perform more successfully during their clinical years. Underrepresented minorities in medicine were defined as African American, Hispanics/Latinos, and Native Americans.

When the program began in 1995–96, there were 28 URM students (26 African American, 2 Hispanic) in the first and second years of medical school. They participated in monthly discussion meetings, or "reflection groups." Twenty-three students were assigned to mentors, and 21 of them met with their mentors at least once.

The mentors were scheduled to attend two mentor-development workshops per year. Mentors were selected based on recommendations of URM and non-URM faculty, URM students, and administrators in the Office of the Associate dean and the Office of Ethnic and Multicultural Affairs. Potential mentors were contacted by the author through an invitational letter from the project director in the associate dean's office, the director of the mentoring program, and the associate dean of multicultural affairs and student affairs. This joint letter highlighted that the project was supported by the associate dean's office.

Initial interviews were conducted with faculty and students to identify critical areas that influence the success of URM students during their clinical years. Several positive student characteristics were identified (including verbal repartee and interpersonal style), and several problem areas were identified (poor communication skills, reluctance to seek help, and unwillingness to risk error).

Underrepresented-minority faculty, residents, and advanced students (primarily African Americans) shared their experiences with program students at reflection group meetings facilitated by a clinical psychologist. These presenters shared conflict-resolution strategies, gave feedback on appropriate behaviors, encouraged students to maintain a bicultural perspective, and discussed their experience as minorities. On average, eight students attended. The topics discussed were unwritten rules, case presentations, professionalism, handling mistakes, managing conflict, politics of medicine, assertiveness, determining residents' expectations, handling racially biased encounters, approaches to self-care, and residency.

Mentors participated in an initial orientation session that addressed mentoring, bicultural socialization, and the problem areas identified in the interviews of the non-URM faculty and non-URM students (faculty discomfort with people dissimilar to them, difficulty in giving feedback generally, especially to culturally different students, and lack of awareness of cultural biases). Mid-year workshops covered types of mentoring relationships, factors related to success for URM students, conflict resolution, and the cultural backgrounds of mentors. The mentors discussed obstacles and creative solutions that arose in their mentoring relationships.

The mentors were expected to share with students relevant information about their lives, give emotional support, and help them adapt to the culture of medicine.[3] Of the 42 students eligible during 1995–1997, 30 wished to participate and were assigned to 15 mentors. The first- and second-year students in the 1995–96 activities (the graduating classes of 1998 and 1999) were most actively involved—23 of them (90%) participated in various aspects of the program.

Half (seven) of the eligible first-year students in the graduating class of 2000 also were assigned to mentors in 1996–97.

PROGRAM EVALUATION

In May 1996, information was collected about the students' and mentors' reactions to the first year of the program 1995–96. First- and second-year students completed a survey on their mentors and the reflection groups. The mentors completed an evaluation of their assigned students. Some of the survey questions were open-ended and some used Likert-type rating scales. The reflection group survey covered September 1995 to May 1996; the student and mentor evaluations covered November 1995 to May 1996. Of the 23 students in the classes of 1998 and 1999 who participated, 16 students (70%) completed the survey, and 11 (73%) of the 15 mentors responded.

Twelve of the 16 responding students completed the reflection-group evaluation. They had attended an average of six sessions. They found particularly valuable having an open forum, being able to ask questions, meeting at convenient times, being informal, and being frank and open with one another. Some of the students commented that as they

had approached their third year, they felt better prepared to handle clinical education, had clearer expectations of potential difficulties, and had received information that would not be available in books. (See Table 1.) In informal feedback to the group facilitator at the end of the first year of the program (1995–96), the students reported that the reflection groups had been only moderately helpful in handling racial and cultural bias. Subsequent presentors to the group sessions were encouraged to give specific examples of racial challenges. The lower mean score on the racial-bias question probably reflects the experience of participants who attended only sessions where racial concerns were not a major focus.

Students and mentors each reported that they had covered a range of topics, including expectations for the third year, gender issues, race, summer research, residency, personal backgrounds, hobbies, and survival in medical school. Although the URM students were paired with white faculty, the mentors and students indicated that they had been able to discuss racial issues with some success. The issue of race emerged with six different mentors and their respective students. Students identified their mentors' openness and honesty as critical factors in facilitating discussion of this potentially sensitive issue.

The students reported that they had met with their mentors on average for three sessions that lasted an average of 63 minutes. The 11 mentors who completed the student evaluations responded similarly about the duration and frequency of meetings. The students were assigned to their mentors in October 1995; the holidays and exam schedule, in addition to a lack of response by faculty or students to an initial contact, interfered with the students' and faculty members' efforts to schedule meetings in November and December. These issues were addressed in January and resulted in more meetings in early 1996.

The mentors gave higher ratings of their satisfaction with the sessions with the students (mentors = 6.4, SD = .97; students = 5.1, SD = 1.8) and their sense of their students' comfort in discussing personal topics (mentor = 5.3, SD = 1.2; student = 3.7, SD = 2.1). The disparity between the student's and mentor's ratings may reflect differing expectations. Understanding these differences is an important area for future evaluation.

Table 1

Mean Ratings of Students Participating in "Reflection Group" Discussions as Part of the Mentoring Program for Underrepresented-minority Students, Rochester University School of Medicine, 1995–96*

Item	Mean	SD
Overall value of meetings	4.2	1.27
Discussions during faculty presentation	4.9	0.38
Discussions during clinical students' presentation	4.8	0.42
Valuable insights from faculty presentation	5.0	0
Valuable insights from clinical student's presentation	4.4	0.52
Helpfulness in handling racial or cultural bias	3.8	1.22
Experience would improve third-year performance	4.4	0.67

*Of the 28 underrepresented-minority students in their first and second years, 23 chose to participate, of whom 16 (70%) completed the survey. The rating scale was from 1 (not at all valuable/helpful) to 7 (very valuable/helpful).

IMPLICATIONS

The Medical Student Mentoring Program has important implications for URM medical students. Successful mentoring relationships can be established across racial lines, and multiracial relationships do not have to sidestep racial and cultural issues. Valuable insights of a few URM faculty and housestaff can be shared in a group format that benefits all students. In addition, program personnel with expertise in facilitating group process and addressing cultural misunderstandings are critical to the development of URM-mentoring relationships.

The structure of the program provides a model for other mentoring programs for all medical students. Critical features to be replicated are preparation of students and faculty, anticipation of difficulties that might arise in the relationship, program personnel to monitor and provide consultation to mentoring relationships, and documentation of the quality of the relationships.

In the first year of the program, 23 students (82%) participated in at least one dimension of the program (the reflection group or the mentoring relationship). This participation was not consistent throughout the two-year program period, but the initial responses of the students indicated their interest in this type of program. The logistics of scheduling and the demands of medical school present significant obstacles for any mentoring program, which must be adapted to the realities of medical faculty and students' lives. This program was designed in light of some of these realities. Additional efforts include modifying meeting expectations during examinations, adjusting meeting times to minimize conflict with social events, providing more structure in the mentoring relationships, and increasing the relevance of the reflection group topics. In the second year only 50% of the first-year students participated in the program. The lesser participation of the class of 2000 was related to several factors: the transition in leadership in the Office of Ethnic and

Multicultural Affairs, the lack of an opportunity to introduce the students to the program during orientation week (due to changes in it), and the impression of first-year students that the third year was distant and the first year was too early to be concerned with third-year performances.

The program ran formally for two years and some of the mentoring relationships continued into the third year. Loss of funding and change in the administrative leadership in the Offices of the Associate Dean contributed to the ending of the program. Mentoring continues to be a priority at the University of Rochester Medical Center, and a new mentoring program has been developed for URM and non-URM medical students.

Response rates of 66% and 70% to the mentor and reflection-group evaluations, respectively, are favorable response rates. A briefer questionnaire with a small financial incentive would have increased the response rate. Clinical performance data were not available at the time of the evaluation, so the relationship between third-year performance and program participation was not assessed. The general positive responses of students and faculty provide qualitative support for this mentoring program. While longitudinal design is the most appropriate approach to assessing the program's effect on clinical performance, this preliminary work suggests that fostering bicultural socialization and enhancing the faculty's mentoring skills are important dimensions that should be incorporated in mentoring programs for underrepresented-minority students.

The author gratefully acknowledges the New York State Department of Health and Offices of the Associate Dean for their support of this mentoring program. Special thanks to the project directors, Brenda Lee and Dr. Jose Bayona; the associate dean, Dr. Jules Cohen; project secretaries, Yvonne Moss and Cathy Collins; and the medical students and faculty.

REFERENCES

1. Freeman R. Towards effective mentoring in general practice. Br J Gen Pract. 1997;47:457–60.
2. Mann MP. Faculty mentors for medical students: a critical review. Med Teach. 1992;14:311–9.
3. Ricer RE, Fox BC, Miller KE. Mentoring for medical students interested in family practice. Fam Med. 1995;27:360–5.
4. Hitchcock MA, Bland CJ, Hekelman FP, Blumenthal MG. Professional networks: the influence of colleagues on the academic success of faculty. Acad Med. 1995;70:1108–16.
5. DeFour DC. Some thoughts on ethnic minority mentoring. Mentoring Int. 1990;4:14–7.
6. Richman JA, Flaherty JA. Gender differences in medical student distress: contributions of prior socialization and current role-related stress. Soc Sci Med. 1990;30:777–87.
7. deAnda, D. Bicultural socialization: factors affecting the minority experience. Soc Work. 1984; (March-April):101–7.