

Articles

Improving Cross-cultural Skills of Medical Students Through Medical School-Community Partnerships

LOIS MARGARET NORA, MD, JD; STEVEN R. DAUGHERTY, PhD; and
AMY MATTIS-PETERSON, *Chicago, Illinois*; LINDA STEVENSON, *Minneapolis, Minnesota*;
and LARRY J. GOODMAN, MD, *Chicago, Illinois*

Postulating that a program integrating language skills with other aspects of cultural knowledge could assist in developing medical students' ability to work in cross-cultural situations and that partnership with targeted communities was key to developing an effective program, a medical school and two organizations with strong community ties joined forces to develop a Spanish Language and Hispanic Cultural Competence Project. Medical student participants in the program improved their language skills and knowledge of cultural issues, and a partnership with community organizations provided context and resources to supplement more traditional modes of medical education.

(Nora LM, Daugherty SR, Mattis-Peterson A, Stevenson L, Goodman LJ: Improving cross-cultural skills of medical students through medical school-community partnerships. *West J Med* 1994; 161:144-147)

Many health care professionals lack important knowledge about the minority cultures that they serve. Although some teaching models and specific programs designed to improve professionals' ability to deal with diverse patient populations have been developed, the programs are neither widely publicized nor generally available.^{1,2} Some programs train people in foreign languages; others address cultural sensitivity generally; still others train health care professionals about the needs of specific minority groups.

We postulated that a program integrating language skills with other aspects of cultural knowledge was critical for developing skills, attitudes, and behaviors of medical students necessary to improve this health problem. We further postulated that a partnership with the targeted communities was a key factor in the development of an effective program.

Rush Medical College faculty worked with representatives of the Hispanic Health Alliance, a community-based organization in Chicago, Illinois, and the Center for Global Education of Augsburg College in Minneapolis, Minnesota, an organization with a strong presence in central Mexico, to develop a Spanish Language and Hispanic Cultural Competence Project to improve the medical Spanish language skills and enhance Hispanic cultural awareness of undergraduate medical students.

The reasons for concentrating this program on Spanish language and Hispanic cultures were as follows:

- Hispanics are the fastest-growing minority population in the United States. Currently numbering more than 20 million persons, the Hispanic population is expected to increase to more than 30 million persons by the year 2000.³

- Many factors work against Hispanic persons, particularly recent immigrants, receiving the best possible medical care. Disease prevalence and presentations differ from those of the majority population.^{4,6}

- Language can be a barrier—many Hispanics speak only Spanish. Cultural beliefs, values, and health practices may also affect access to, participation in, and, ultimately, benefit from care.^{7,9}

- Linguistic and cultural barriers are further complicated by the frequent perception of Hispanics as a single group.⁵ Despite a common language, Hispanics represent a variety of cultures. These heterogeneous populations differ in health problems and practices as well as in cultural systems. To be effective, interventions must be geared to specific populations;¹⁰

- The lack of Hispanic health care professionals is another barrier to receiving the best medical care. The number of Hispanic medical students and physicians is not proportional to the size of the population.^{12,13} Although the need to increase the number of Hispanic medical students and physicians has been recognized, and intensive efforts to accomplish this are underway, it is unlikely that there is a short-term solution.¹¹⁻¹³ Therefore, all medical

From Rush Medical College (Drs Nora, Daugherty, and Goodman) and Hispanic Health Alliance (Ms Mattis-Peterson), Chicago, Illinois, and Center for Global Education in Cuernavaca, Augsburg College, Minneapolis, Minnesota (Ms Stevenson). Ms Mattis-Peterson is currently with Latino Family Services, Detroit, Michigan.

During the development and implementation of this program, Dr Nora was a Group Ten member of the Kellogg National Fellowship Program.

Reprint requests to Lois Margaret Nora, MD, JD, Assistant Dean, Clinical Curriculum, Rush Medical College, 600 S Paulina St, #524, Chicago, IL 60612-3832.

students and physicians must be prepared to provide medical care to Hispanic persons in a way that is culturally competent.

Program Description

The Spanish Language and Cultural Competence Project has three component parts. The first is Spanish language training. Curricular blocks of 20 hours are offered in weekly two-hour class sessions, concentrating on medical terminology and physician-patient conversation. Additional informal Spanish conversation groups, led by bilingual volunteer faculty, are offered to reinforce classroom activities.

The second component, cultural competence training, also consists of 20-week curricular blocks offered in weekly two-hour sessions. This training includes didactic and small group sessions led by community experts who discuss a variety of topics. Demographic data, including geographic and regional differences in Hispanic populations, are provided, with particular emphasis placed on local demographics. Cultural differences between Hispanics and Anglo-Americans, the heterogeneity of the Hispanic community, and implications for health care are discussed. Nutrition, the acquired immunodeficiency syndrome, the status of women, traditional healing practices, and necessary skills for using interpreters are examples of class topics. Some classes involve excursions into the community.

A course syllabus, developed by the Hispanic Health Alliance, is provided to all attendees. In addition, supplemental materials are distributed by course faculty. By the end of each course, students have copies of articles, bilingual patient information sheets, and other materials that they can refer to in the future.

The third program component is an international seminar exploring issues of health care in a developing Hispanic country. The pilot eight-day experience was offered in June 1992. This experience afforded students an intensive learning experience concentrating on health policy and health practices in rural and urban areas of Mexico.

Students had a variety of experiences in Mexico. They planned and shopped for a meal using the average daily wage of a Mexican worker. They met with and observed practicing physicians, lay health promoters, and traditional healers. Students toured private and government-run hospitals, comparing these settings with those in the United States. Most important, students met with the citizens of Mexico—government officials, middle-class Mexican families, and indigenous peoples—and learned the health care situation from these perspectives. The importance of the social context of health care was emphasized through exposure to Mexico's culture and history and concerns related to its underdeveloped status, political system, and indigenous groups.

Local programming was the result of a partnership between the medical college and the Hispanic Health Alliance. The Hispanic Health Alliance is a nonprofit, community-based organization founded in 1983 and dedicated to improving the health status of Hispanics in

Chicago. The alliance accomplishes its mission, in part, through the Provider Education Project, which is designed to improve the language skills and cultural awareness of health care professionals. Language curriculum had been developed by the Provider Education Project. The coordinator of that program and a medical school representative worked together to develop the cultural competence curriculum.

The local curriculum used the resources and talents available through Hispanic groups and agencies in the Chicago area. In this way, Hispanic community members acted as the primary faculty in the cultural competence portion of the course. In addition, students had the opportunity to visit several ongoing projects addressing the needs of local groups.

International programming was developed by the medical college in partnership with the Center for Global Education at Augsburg College. Founded in 1982, the center has a commitment to provide experiential education programs that expand people's world view and deepen their understanding of issues related to global justice. A unique aspect of the center's work is that participants have the opportunity to learn from the disenfranchised and poor of the region studied as well as the decision makers.

The center maintains on-site staff and facilities in Mexico. It provided pertinent pretrip and posttrip background materials and coordinated local programming in Cuernavaca and surrounding areas of Mexico. The programming was developed by a medical school representative working with the center's staff. Through the partnership, the center developed new programming, and medical college participants were able to benefit from experiences that would have otherwise been impossible.

All program components were available to students in good standing in the medical college. Total costs of the local programming were about \$3,000. Course participants were asked to contribute \$80, although need-based assistance was available. The medical college underwrote the remaining costs. Costs of the international seminar were \$1,200 per participant. On average, participating medical students contributed 60% of the cost; substantial scholarship assistance was made available through two private donors and the Kellogg National Fellowship Program.

Cultural competence training was the only required component for all students involved in any aspect of the project. No student was permitted to limit participation to language training. This requirement evolved from a strong conviction that language training without cultural competence has the potential to do more harm than good; others concerned with the language and cultural competence have also presented similar concerns.¹⁴ This component was so successful that it has since been opened to the entire university community.

Program Evaluation

Participants in the medical Spanish language part of the project completed pre- and postcourse written tests of

Spanish into English and English into Spanish translations. This test had been previously developed and used by the language teacher as an assessment instrument for health care practitioners learning medical Spanish.

Cultural competence component participants and a control group of nonparticipants completed tests of knowledge of Hispanic health and cultural issues before beginning and near the end of the session. This test consisted of multiple-choice questions about disease prevalence, demographics, cultural perceptions, and traditional health practices of Hispanic communities. The test had been developed by our community-based organization partner and used previously to evaluate Hispanic cultural knowledge of physicians and other health care workers.

Participants and the control group also completed the misanthropy scale of Sullivan and Adelson.¹⁵ This scale modifies the ethnocentrism scale used by the University of California public opinion study and replaces reference to specific minority groups with more general wording. The test was used to measure general openness to those not like oneself. We included the misanthropy scale to help assess if students participating in such a program were more likely to be open toward other groups than nonparticipants and whether a course focused on a specific ethnic population could increase sensitivity to groups beyond the population studied. All participants attended discussion sessions. In addition, participants in the international seminar completed questionnaires specifically geared toward that experience.

Results

Local Programming

In the combined language-cultural knowledge program, 19 students began the course; an additional 4 students began cultural competence training. Common reasons for nonparticipation, despite initial interest, included time constraints and financial pressures. A total of 15 students completed the combined training. Reasons for discontinuing included academic difficulties (one student), dissatisfaction with language instruction (one student), and competing time demands from simultaneous required clinical clerkships (two students). Most participants were preclinical students, with time constraints a frequent reason given for nonparticipation of students in the third and fourth years of training.

Spanish language skills showed notable improvement as a result of the course. Test scores changed from an initial average of 60% to a posttest average of 75% proficiency. Some students had a dramatic improvement; one student raised her precourse score of 13% to a postcourse test score of 54% proficiency.

Testing of cultural knowledge also suggests a benefit of the course. For the control group, average precourse scores were 46% and postcourse, 42%. The participant group averaged 40% precourse and 58% postcourse. While control group scores did not change from pretest to posttest, course participants showed a significant improvement (paired comparison $t = 3.10$, $P = .007$).

Misanthropy scale results revealed no differences be-

tween course participants and the control group at the outset. Postcourse results show a trend, although nonsignificant, toward an increase in general acceptance of others in course participants compared to control group members. The small number of persons tested provides only limited power for this comparison and may account for the nonsignificant results.

Course discussion sessions provided important qualitative information not available through the testing. One student with no precourse Spanish language ability described being able to assist a Spanish-speaking woman during labor and childbirth as a result of her new skills. A second student detailed how the course helped her to recognize and intervene when inadequate language interpretation occurred in a clinical situation. Examples such as these offered inspiration to the entire participant group as well as to faculty. Many students noted the value of going into the community during the course. Students were enthusiastic about the course and its continuation.

International Seminar Component

In the international seminar, 11 persons, including 8 medical students, took part. Most students were at the end of their second year of medical school and preparing to begin clinical work. Of the 8 medical students, 6 were women. The most common reason for nonparticipation, despite initial interest, was a lack of financial resources. Some form of scholarship assistance was given to 7 students.

All students completed anonymous surveys. The respondents were uniformly positive about the experience, and all said that the seminar far exceeded their expectations. Two respondents had some concern about the intense scheduling, which included several 15-hour days, but could not identify any experience that they would eliminate or shorten.

Comments from these surveys and postseminar follow-up sessions are enlightening. Several students noted that experiencing the health issues of potable water, plumbing, and infrastructure firsthand was dramatic. The opportunity to meet with Mexicans, including indigenous persons, in their homes was an eye-opener for many. More than one student expressed awe in the presence of a traditional healer when she discussed various methods of diagnosing and treating health problems. In comments six months after the trip, four participants characterized the seminar as a life-changing experience.

Discussion

Several areas of knowledge are important for providing culturally competent health care. Specific information about disease prevalence and presentation in various populations must be known. Basic language skills, including medical terminology, may be useful. Scientific knowledge and language skills are inadequate by themselves, however.

Health care professionals should understand the effect that different language and nonverbal communication patterns, explanatory models of disease, and contextual fac-

tors may have on the expectations of patients and their perceptions of the behavior of physicians.¹⁴⁻¹⁶ An appreciation of cultural practices and possible ways to incorporate them into medical treatment can further enhance health care delivery.

The Spanish Language and Cultural Competence Project demonstrates a way to improve language skills and cultural competence in undergraduate medical students. This study shows that many medical students wish to enhance their language and cross-cultural skills and are willing to devote substantial energy toward doing so. Four hours per week of scheduled time is valuable for any person and particularly so for medical students. Most language training does require a regular and substantial commitment of time, however. Most students completed the program despite competing demands on their time. We see this as a testament to the perceived need and dedication of the students. This impression is supported by the number of students who attended (and requested additional) informal conversation groups.

Language skills and cultural knowledge were assessed using written examinations. Written tests may not adequately evaluate students' ability to communicate with Spanish-speaking patients. Although students noted that patient encounters were improved with their developing language skills, other methods of testing oral communication abilities are needed. We plan to develop simulated patient experiences to reinforce and evaluate language skills and other challenges faced by clinicians treating patients from another culture.

Course participants showed improvement in their cultural knowledge after the course compared to a control group. We think that the degree of improvement shown is what might be expected given the length of the program.

Our initial concern that students volunteering for a cultural awareness program might be those that least needed such a course was not supported by study results. Course participants and those who opted not to participate were equally tolerant at the beginning of the experience. On the other hand, there is a suggestion that the experience improved the tolerance of participants toward other groups. If further study supports this conclusion, an important implication may be that cultural competence programs directed toward one group may improve acceptance of persons across multiple other groups.

Two aspects of this program are particularly important. Cultural competence training was required of all participants. We thought that language training without associated cultural training could ultimately work against providing the best training and patient care. Second, the program was developed in partnership with community-based representatives. We thought that cultural competence training would be enhanced by having the community participate in designing and implementing the program.

Using community expertise was, in fact, critical to the cultural competence programming at the local and international levels. Partnership with a community-based organization helped identify issues to be addressed and

facilitated access to the community in a nonvoyeuristic fashion. Community experts provided insights that students would not have obtained from course readings or noncommunity-based speakers.

Working with community members presented certain challenges as well. Comfort with the teaching role varied among community experts. Instruction style frequently varied from that typically found in the medical school setting. Questions and comments from course participants were sometimes unwittingly insensitive. The tolerance and sense of humor that most local experts exhibited as they responded to insensitive remarks were extremely effective models for medical students hoping to perform credibly in cross-cultural settings.

Participants in the international seminar benefited from the trust that the local people placed in the local organizers and their willingness to extend this trust to our students. This was particularly important in the case of the indigenous and marginal communities visited. Without these previously established relationships, it is unlikely that our medical students would have had the opportunity to meet with a practicing traditional healer or to discuss personal medical histories with local residents.

Our study shows that medical students' ability to care for diverse patient groups may be enhanced by programs that link language study and training in cultural competence. Traditional modes of medical education are improved by community partnerships that provide an important context and resources to the student experience. As a result, medical students may be more adept at overcoming barriers present in multicultural situations, and the quality of health care provided to all populations can be improved.

REFERENCES

1. Kristal L, Pennock PW, Foote SM, et al: Cross-cultural family medicine residency training. *J Fam Prac* 1983; 17:683-687
2. Mao C, Bullock CS, Harway EC, et al: A workshop on ethnic and cultural awareness for second-year students. *J Med Educ* 1988; 63:624-628
3. Council on Scientific Affairs, American Medical Association: Hispanic health in the United States. *JAMA* 1991; 265:248-252
4. Sumaya CV: Major infectious diseases causing excess morbidity in the Hispanic population. *Arch Intern Med* 1991; 151:1513-1520
5. Frank-Stromborg M: Changing demographics in the United States. Implications for health professionals. *Cancer* 1991; 67(suppl):1772-1778
6. Wallace SP, Lew-Ting CY: Getting by at home—Community-based long-term care of Latino elders. In Barker J, Clark M (Eds): *Cross-cultural Medicine—A Decade Later* [Special Issue]. *West J Med* 1992; 157:337-344
7. Wells KB, Gelding JM, Hough RL, et al: Acculturation and the probability of use of health services by Mexican-Americans. *Health Serv Res* 1989; 24:237-257
8. Quesada GM: Language and communication carriers for health delivery to a minority group. *Soc Sci Med* 1976; 10:323-327
9. Klessig J: The effect of values and culture on life-support decisions. In Barker J, Clark M (Eds): *Cross-cultural Medicine—A Decade Later* [Special Issue]. *West J Med* 1992; 157:316-322
10. Furino A, Munoz E: Health status among Hispanics. Major themes and new priorities. *JAMA* 1991; 265:254-257
11. Petersdorf RG, Turner KS, Nickens HW, et al: Minorities in medicine: Past, present, and future. *Acad Med* 1990; 65:663-674
12. Jonas HS, Etzel SI, Barzanski B: Undergraduate medical education. *JAMA* 1989; 262:1011-1019
13. Ginzberg E: Access to health care for Hispanics. *JAMA* 1991; 265:238-241
14. Haffner L: Translation is not enough—Interpreting in a medical setting. In Barker J, Clark M (Eds): *Cross-cultural Medicine—A Decade Later* [Special Issue]. *West J Med* 1992; 157:255-259
15. Sullivan P, Adelson J: Ethnocentrism and misanthropy. *J Abnorm Soc Psych* 1954; 49:246-250
16. Clark MM: Cultural context of medical practice. *West J Med* 1983; 139:806-810
17. Meleis AI, Jonsen AR: Ethical crises and cultural differences. *West J Med* 1983; 138:889-893