A Snapshot of Cultural Competency Education in U.S. Dental Schools

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Abstract: During the last decade, cultural competency has received a great deal of attention in health care and the literature of many fields, including education, social services, law, and health care. The dental education literature provides little information regarding status, strategies, or guiding principles of cultural competency education in U.S. dental schools. This study was an attempt to describe the status of cultural competency education in U.S. dental schools. A web-based thirty-question survey regarding cultural competency education coursework, teaching, course materials, and content was sent in 2005 to the assistant/associate deans for academic affairs at fifty-six U.S. dental schools, followed up by subsequent email messages. Thirty-four (61 percent) dental school officials responded to the survey. The majority of respondents (twenty-eight; 82 percent) did not have a specific stand-alone cultural competency course, but indicated it was integrated into the curriculum. Recognition of local and national community diversity needs prompted course creation in most schools. Respondents at almost two-thirds of schools indicated that their impression of students’ acceptance was positive. Teachers of cultural competency were primarily white female dentists. Few schools required faculty to have similar cultural competency or diversity training. Thirty-three of the thirty-four U.S. dental schools responding to this survey offer some form of coursework in cultural competency with little standardization and a variety of methods and strategies to teach dental students.

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Growing diversity in the United States has had a tremendous impact on how health care is now delivered. To address disparities in health care, a new strategy of cultural competency has emerged to assist health care providers in working with diverse populations. Cultural competency has received much attention in health care literature and is considered an important element in elimination of racial and ethnic health disparities. One of the most universally accepted definitions of cultural competency is one born out of children’s mental health literature: cultural competence is a “set of congruent behaviors, attitudes, and policies that come together in a system, agency or amongst professionals and enables that system, agency or those professionals to work effectively in cross-cultural situations.” Betancourt et al. explain that “cultural competence in health care entails: understanding the importance of social and cultural influences on patients’ health beliefs and behaviors; considering how these factors interact at multiple levels of the health care delivery system. . . . finally, devising interventions that take these issues into account to assure quality health care delivery to diverse populations.” Reports from the Institute of Medicine and the U.S. surgeon general have pointed to areas of concern dealing with health care disparities along lines of race, culture, and ethnicity.

Another issue that exacerbates the problem of health care disparities is the low number of underrepresented minorities entering U.S. health profession schools. The number of underrepresented minority applicants and enrollees has not kept pace with their growth in the U.S. population. Studies have shown that minority practitioners tend to serve in underserved areas and treat minority patients. Without an increase in the number of minority enrollees in U.S. dental schools, more majority dental students and dentists will treat an ever-changing and increasingly diverse population and need to treat patients holistically, respectfully, and respectfully of cultural and social values.

In 2003, the Liaison Committee for Medical Education noted in its accreditation standards that “the faculty and students must demonstrate an understanding of the manner in which people of diverse cultures and belief systems perceive health and illness and respond to various symptoms, diseases, and treatments. Medical students must learn
to recognize and appropriately address gender and cultural biases in themselves and others, and in the process of health care delivery.” Formicola et al. suggested that dentistry and medicine collaborate on strategies to eliminate health disparities. While the Association of American Medical Colleges has produced some guidelines for cultural competency education, teaching methods, and strategies, dental education has not.

How cultural competency is woven into the fabric of the dental curriculum is difficult to determine based on available information. The purpose of this study was to perform an initial assessment of efforts of U.S. dental schools to implement cultural competency coursework in the dental curriculum. A snapshot of how cultural competency is integrated into dental education, including factors such as uniformity in classroom materials, length of courses, mandatory requirements to take the course, faculty, and curricular implementation will create a baseline for dental education and future efforts to better train dental students.

Methodology

This study was partially based on research by Dolhun et al. that examined cross-cultural education in U.S. medical schools. In that study, select medical schools were chosen based on national recognition of their endeavors to incorporate cross-cultural education into their curricula. We were interested in a system-wide view and thus surveyed all U.S. dental schools. We modified questions used by Dolhun et al. to develop a survey that consisted of thirty questions in four key areas: the schools, faculty/instructors involved in cultural competency education, student reactions, and course content/format (see Appendix).

A letter of invitation to participate in the study was emailed to those identified as assistant/associate deans for academic affairs at the fifty-six U.S. dental schools listed in the 2004-05 Directory of ADEA Institutional Members and Association Officers. We believed that these individuals would best know the individual academic curriculum at their dental schools. If the assistant/associate dean for academic affairs was not the most appropriate person to respond to the questionnaire, we asked recipients to direct the questionnaire to that person at their institution responsible for this course or area.

The email directed the recipients to a URL with instructions on how to access the questionnaire, complete the survey, and electronically return responses as provided by SurveyMonkey.com. Two weeks following the initial email message, a second request was sent, followed a week later by a third email to achieve higher participation. Due to the preliminary nature of the study, data are reported as frequencies.

Results

Of the fifty-six dental schools contacted, thirty-four (61 percent) responded to the survey. Of those thirty-four, eleven (32 percent) were private, and nineteen (56 percent) were state-supported. Four (12 percent) responding schools were private/state-related institutions. For clarity of presentation consistent with the questionnaire, results were divided post-response into school-related, faculty-related content, including course titles and formats, and student-related areas. Since not all respondents answered all questions, respondent numbers are reported with their respective percentages according to the number who responded to that question.

Cultural Competency in Dental School Curricula

The responses revealed wide variability in how cultural competency is taught across the dental schools that responded to this survey. Twenty-eight respondents (82 percent) reported that their school did not have a specific course devoted entirely to issues of cultural competency, but indicated that cultural competency was a component integrated into several courses. Six schools (18 percent) did offer a specific course on the subject.

Of eleven private dental schools, two had a specific course devoted entirely to cultural competency, while nine private schools did not have a specific cultural competency course. Three of the nineteen state-supported dental schools had a specific course devoted to cultural competency, but sixteen did not. Finally, one of the four private/state-related institutions had a specific course, while three did not.

The twenty-eight schools (82 percent) that did not offer a specific stand-alone course in cultural competency have the topic embedded into a broad and diverse offering of courses such as behavioral sciences, community dentistry, health promotion, ethics and professionalism, principles of patient management, oral pathology and oral diagnosis, and
problem-based learning. Some schools weave cultural competency throughout the clinical rotations, provide extramural rotations in underserved areas, conduct grand rounds that address the topic, and introduce cultural competency issues in other aspects of the clinical curriculum. At one school, cultural competency is integrated into its prematriculation program only. Four dental schools (12 percent) offered their cultural competency course as an interdisciplinary course with other schools or colleges on campus such as medicine and nursing.

One school offered the cultural competency course as an elective course for the students, while thirty-two schools (97 percent) reported that the topic of cultural competency was included in courses that were mandatory, core components of the curriculum. In spite of this, only slightly more than half (n=16; 53 percent) responded that students received academic credit for taking the course.

Respondents were asked to indicate the genesis of the schools’ cultural competency course. A majority of the schools (n=21; 81 percent) reported that they initially offered the course to meet the needs of a changing and diverse society and to prepare dental students to work in a diverse environment. The remaining schools (n=5; 19 percent) provided a variety of reasons for offering cultural competency in the curriculum, including supporting diversity initiatives at the school, using grant support to initiate the course, and offering their course in response to a specific incident.

Characteristics of Faculty

We were interested in the characteristics of faculty who teach cultural competency. The majority of those responsible for teaching or directing a cultural competency course were female (n=17; 61 percent) compared to eleven male instructors (39 percent). Six males and seven females had dentistry as their major field, compared to three males and four females who were listed with a background in social and behavioral science. The remaining six female teachers were reported to be in multicultural education (three), public health dentistry (two), and ethnic studies (one), while the other two males were reported as “other.” The ethnic background of individuals teaching cultural competency was predominantly Non-Hispanic Caucasian Americans (seventeen, 57 percent), with five (16 percent) African American, three (10 percent) Hispanic/Latino, and one (3.3 percent) multiracial. Four respondents (13 percent) reported having multiple individuals with different ethnicities serve as instructors.

We asked respondents if school faculty members were required to take diversity training. Five private, five state-supported, and three private/state-related institutions indicated that faculty take diversity training. Of these thirteen schools, five offered training as a one-time-only training session, four provided training annually, and one school offered training on a biannual basis. Three schools offered a diversity training course as part of faculty development and provided training three or four times per year.

We then asked if faculty were required to take the cultural competency course. The majority of schools (n=31; 97 percent) did not require faculty members to take a course in cultural competency. One dental school reported the cultural competency course for faculty was mandatory.

Course Titles, Formats, and Content

There was wide variability in the titles of courses in which cultural competency is addressed (Table 1). No two titles were the same. Lectures were the most common method used to teach cultural competency at the majority of responding schools (n=29; 88 percent), followed by small group discussion (n=22; 67 percent), case studies (n=18; 55 percent), videotapes or vignettes (n=12; 36 percent), and problem-based learning (n=8; 24 percent). To a lesser extent, patient observation (n=6; 18 percent) was used, followed by other active learning methods such as games, role playing, group presentations, and online courses. Course content areas are reported in Table 2.

The majority of respondents (n=20; 62 percent) indicated they did not use a specific cultural competency textbook or published cultural competency materials in their course, while twelve (38 percent) stated they did. Textbooks and published materials varied widely, with a few notable texts used more often than others. Published materials included journal articles, magazines, and popular press articles, while the most cited textbooks were Jong’s *Community Dental Health*, Transcultural *Health Care*, and *Dental Communication*. Another book cited by several respondents was the popular book *The Spirit Catches You and You Fall Down* by Anne Fadiman.

Cultural competency was offered in various years of the dental curriculum. There was clearly
some overlap in the responses, with the highest number (n=24; 83 percent) reporting the topic was addressed during the first year of dental school, twenty (69 percent) in the second year, eighteen (62 percent) in the third year, and eleven (38 percent) in the fourth year. Clearly, cultural competency information is presented in multiple years in the dental curriculum. The integration of cultural competency into students’ overall education in many schools complicated the portrayal of these data.

**Student Perception of Cultural Competency Curricula**

How cultural competency education is received by dental students is important. Survey respondents from a majority of schools (n=19; 63 percent) indicated that their students had a positive perception of educational activities related to cultural competency. One (3 percent) reported that students had a negative reaction, and ten (33 percent) indicated a mixed reaction. For course evaluation or assessment, twelve schools (37 percent) used some form of a pre- and post-test of students’ attitudes. Seven (58 percent) used a self-created instrument, and four (33 percent) used a standardized instrument, while one included assessment as part of an Objective Structured Clinical Examination (OSCE) with standardized patient stations.

**Discussion**

The purpose of this study was to conduct a preliminary assessment of the predoctoral dental education landscape related to cultural competency education. The American Dental Education Association considers enhancement of diversity in dental education (including increasing the numbers of students and faculty from underrepresented minority populations) and those among the oral health workforce as a major mission, yet little evidence of a trickle-down to its member institutions is apparent in the dental literature. Programs such as the Robert Wood Johnson Pipeline grants address diversity and outreach experiences, but these are limited to a few schools. Accreditation standards for dental education indirectly encourage attention to diversity in dental schools. The results of this study provide some insight into the integration of cultural competency in U.S. dental curricula.

The majority of respondents in this study indicated that the concept of cultural competency was integrated into their curricula, but only six of thirty-four responding schools offer a free-standing cultural competency course. However, integration of the topic into other didactic and clinical subjects suggests that, for most schools, cultural competency has a meaningful place in the overall curriculum. This meaningfulness or relevance is further supported by our finding related to the reasons for cultural competency inclusion in the curriculum. Most responding schools stated that their patient and community base and/or student body was diverse and that cultural competency education was a necessary component of a sound dental education. Further, several schools had already projected a more diverse

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**Table 1. Course titles in which cultural competency is addressed**

<table>
<thead>
<tr>
<th>Topic</th>
<th>No. of Respondents</th>
<th>% of Respondents</th>
</tr>
</thead>
<tbody>
<tr>
<td>Health Promotion</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Diversity, Attitudes, and Health Beliefs</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Special Patient Care</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Patient-Doctor</td>
<td></td>
<td></td>
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<tr>
<td>Introduction to the Prevention of Oral Diseases in Individuals and Populations</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Communication and Interpersonal Relationships and Patient and Cultural Sensitivity</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Integrated Problems in Practice Management</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Community Dentistry, Ethics, and Professionalism</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Professionalism</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Dentistry I. Principles of Patient Management</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Behavioral Science</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Patient Instructor Rotation</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Comprehensive Care</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Grand Rounds</td>
<td></td>
<td></td>
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<tr>
<td>Diversity Workshop</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Dental Health Care for a Diverse Population</td>
<td></td>
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</tr>
</tbody>
</table>

**Table 2. Topics covered in cultural competency coursework**

<table>
<thead>
<tr>
<th>Topic</th>
<th>No. of Respondents</th>
<th>% of Respondents</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cultural Barriers</td>
<td>33</td>
<td>100%</td>
</tr>
<tr>
<td>Linguistic Barriers</td>
<td>28</td>
<td>85%</td>
</tr>
<tr>
<td>Hispanic/Latina/o Cultures</td>
<td>27</td>
<td>82%</td>
</tr>
<tr>
<td>Access to Care</td>
<td>26</td>
<td>79%</td>
</tr>
<tr>
<td>Black/African American Cultures</td>
<td>25</td>
<td>76%</td>
</tr>
<tr>
<td>Disabilities</td>
<td>24</td>
<td>73%</td>
</tr>
<tr>
<td>Gender Issues</td>
<td>23</td>
<td>70%</td>
</tr>
<tr>
<td>Focus on Change in Attitudes</td>
<td>21</td>
<td>64%</td>
</tr>
<tr>
<td>Asian/Pacific Islander Cultures</td>
<td>19</td>
<td>58%</td>
</tr>
<tr>
<td>White/Caucasian Cultures</td>
<td>16</td>
<td>48%</td>
</tr>
<tr>
<td>Native American Cultures</td>
<td>14</td>
<td>42%</td>
</tr>
</tbody>
</table>
practice environment for their graduates and wanted to prepare them for their careers. The finding that a high percentage of responding schools offered some form of cultural competency education bodes well for dental education.

We were interested in knowing if students were positive, negative, or ambivalent about the cultural competency experience. The majority of respondents said students were positive about the course, and a third reported mixed reactions by students. Our survey did not permit a deeper analysis of student response; further research should investigate dental students’ perception of cultural issues in their overall education.

The faculty responsible for teaching this topic were primarily Caucasian and dentists by training. This can be perceived as a positive signal to students that faculty of the majority who are also clinicians value the teaching of cultural competency. More females than males were in charge of these courses, but the significance of this predominance is not clear and may simply reflect the faculty gender balance or interests of faculty at the responding schools.

Another finding worth noting is that few schools require faculty to undergo comparable training in either cultural competency or diversity. This divide between students and faculty may be generational, but may also compromise the success of cultural competency education. Students may embrace the importance of culture and ethnicity in dental school, but not have this reinforced by faculty. It would seem logical that schools initiating cultural and ethnicity issues into their curricula based on recognition of a changing local community and society at large would also train its faculty. This did not seem to be the case. Further research should address attitude and knowledge of faculty in the area of cultural competency.

Finally, there are several limitations to data in this study. The first is the variability of interpretation of the term “cultural competency.” The richness of topics (Table 2) covered in respondents’ courses suggests that the term is used broadly in dental education. Some respondents may not have perceived issues such as gender and age under the rubric of cultural competency. We also found that our question structure was such that there was some overlap in questions, occasionally making it difficult to separate responses adequately. For example, it was difficult to discern whether cultural competency was required or whether students received credit in all cases.

The preliminary nature of this report leaves much opportunity to study the role of culture and ethnicity in the dental curriculum. The large number of schools reporting some form of cultural competency education suggests an opportunity for sharing and further research into the benefits and outcomes of cultural competency in the dental curriculum. The importance of cultural competency in doctor-patient communication and outcomes of care should be studied, for example. A component of any cultural competency teaching program is aimed at improving communication skills. A 2002 article by Yoshida et al. in the Journal of Dental Education demonstrates that dental schools need to place new emphasis on developing students’ communication skills.

Conclusion

In this sample of thirty-four U.S. dental schools, the majority offered cultural competency in some form, although few schools had a stand-alone course devoted to this topic. A rich variety of topics and considerable integration of cultural competency marked the responses in this study. An important consideration for dental educators is whether there is a need for some standardization in how cultural competency education is delivered in the fifty-six dental schools. Future research should aim to describe in more detail the structure of student experiences and obtain student perspectives about the educational value of these activities.

REFERENCES
Survey of U.S. Dental Schools Regarding Cultural Competency Courses

The purpose of this survey is to determine the extent and depth in which cultural competency courses are included in the undergraduate dental education curriculum at the 56 U.S. dental schools. This survey will be sent via email with a URL attached to the academic deans at all 56 U.S. dental schools. All responses will be reported in aggregate form.

1. Name of person completing survey (excluded from survey results): ____________________________

2. Type of dental school you represent:
   □ Private
   □ State-supported
   □ Private/state-related

**Course Titles, Formats, and Content**

3. Does your dental school offer a course devoted entirely to the subject of cultural competency?
   □ Yes
   □ No

4. Is cultural competency offered as a:
   □ Stand-alone course
   □ Part of orientation program
   □ Component integrated into several courses
   □ Other, please specify ____________________________

5. If cultural competency is integrated into several courses, please describe how and/or in which courses.
   __________________________________________________________
   __________________________________________________________
   __________________________________________________________

6. Is your cultural competency course offered as an elective for your dental students?
   □ Yes
   □ No

7. Do students receive academic credit for taking the cultural competency course?
   □ Yes
   □ No

8. Is there a plan to offer a course in cultural competency within the next year?
   □ Yes
   □ No

9. What is the official title of the course where the topic of cultural competency is addressed?
   __________________________________________________________

10. In what year of the dental curriculum is the cultural competency course offered?
    □ Dent 1
    □ Dent 2
    □ Dent 3
    □ Dent 4

11. Is a textbook or published teaching materials used for this course?
    □ Yes
    □ No
12. If yes, please give name of book or materials.

____________________________________________________________________________________

13. What academic department/section is primarily responsible for teaching the cultural competency course?

Cultural Competency Course

14. Is the cultural competency course required for all dental students?
   □ Yes
   □ No

15. If you answered “No” to the question above, is cultural competency required of any dental students?
   □ Yes
   □ No

16. Do students take a pre- and post-test of attitudes as part of an assessment?
   □ Yes
   □ No

17. If students do take some form of pre- and post-test, which of the following types of instruments is used for assessment or evaluation? Check all that apply.
   □ Self-created
   □ Standard instrument
   □ Name________________________________
   □ Other, please specify______________________

18. Is your cultural competency course taught by: (Check all that apply.)
   □ Single instructor
   □ Team-taught
   □ Guest speakers
   □ Patients
   □ Other, please specify____________________

19. What method of instruction do you primarily use in your course? (Check all that apply.)
   □ Lecture
   □ Small group discussion
   □ Case studies
   □ Problem-based learning
   □ Videotapes (vignettes)
   □ Patient observations

20. Which of the following issues are explored in your cultural competency course?
   □ Ageism
   □ Gender issues
   □ Disabilities
   □ Access to care
   □ Black/African American culture
   □ Hispanic/Latino/Latino culture
   □ Asian/Pacific Islander culture
   □ Native American culture
   □ White/Caucasian culture
   □ Linguistic barriers
   □ Cultural barriers
   □ Focus on change in attitudes
   □ Other, please specify____________________
Instructor Background

21. What is the gender of the person responsible for teaching/directing the cultural competency course?
   - Female
   - Male

22. What is the racial/ethnic background of the person responsible for teaching cultural competency?
   - African American/Black
   - Asian American
   - Hispanic/Latino
   - Native American
   - White/Caucasian

23. Does the person responsible for teaching the cultural competency course have a background or specific training in?
   - Multiculturalism studies
   - Ethnic studies
   - Social and behavioral science
   - Dentistry
   - Public health dentistry
   - Other, please specify: ________________________

24. Is the person responsible for most of the instruction in the course a dentist?
   - Yes
   - No

25. Why was your cultural competency course created?
   ____________________________________________________________
   ____________________________________________________________
   ____________________________________________________________

26. Is your course an interdisciplinary course with other campus colleges?
   - Medicine
   - Nursing
   - Pharmacy
   - Other: ______________________________
   - No

Perception of Students’ Reactions

27. What has been the reaction of students to your cultural competency course?
   ____________________________________________________________
   ____________________________________________________________
   ____________________________________________________________

28. Are faculty required to take the cultural competency course?
   - Yes
   - No

29. Are faculty required to take diversity training?
   - Yes
   - No

30. If you answered “Yes” to question 29, what is the frequency of the diversity training?
   - One time only
   - Annually
   - Biannually
   - Other: ______________________________