Diversity, Cultural Sensitivity, Unequal Treatment, and Sexual Harassment in a School of Dental Hygiene

Donna P Warren, Harold A Henson, Stewart D Turner and Paula N O'Neill

Donna P. Warren, RDH, MEd, is associate professor, and Harold A. Henson, RDH, MEd, is assistant professor in the School of Dental Hygiene. Stewart D. Turner, PhD, is associate professor in the Department of Neurobiology and Anatomy, and Paula N. O'Neill, EdD, is professor in the Department of Diagnostic Sciences and associate dean for educational research and professional development. All are at the University of Texas Health Science Center at Houston.

Purpose. The purpose of this study was to assess the cultural environment in the School of Dental Hygiene at the University of Texas Dental Branch (UTDB) at Houston.

Methods. A 36-item questionnaire was developed and administered to first- (DH1; n=34) and second-year (DH2, n=33) dental hygiene students. Questions explored satisfaction with diversity and interactions with faculty, staff, patients, and other students relative to gender, ethnicity/race, age, and sexual orientation. Data were analyzed using 2x3 and 2x5 contingency tables to calculate the chi square test statistic.

Results. Ninety-one percent of the 67 DH students responded. While the majority of students reported satisfaction with the cultural diversity and their interactions at UTDB at Houston, 76% of the DH2 students and 62% of the DH1 students reported that the curriculum did not prepare them to work with patients whose primary language is not English. Eighty-two percent of DH1 students and 59% of DH2 students reported that the curriculum did not prepare them to work with patients with different sexual orientations and religious backgrounds. The DH2 students reported unequal treatment by faculty of another gender (24%) and ethnicity (21%), and sexual harassment by other students (6%). DH1 reported 6%, 12%, and 0%, respectively.

Conclusion. Data indicate that dental hygiene students in the UTDB at Houston dental hygiene program experienced unequal treatment and sexual harassment by either faculty, staff, patients, or other students. To create a more culturally sensitive environment, the students, faculty, and staff could benefit from training on diversity, cross-cultural competence and awareness, and sexual harassment prevention and management. The dental hygiene curriculum should be reviewed for the inclusion of topics related to diversity, cultural competence, and sexual harassment.

Keywords: Diversity, cultural competence, inclusion, unequal treatment, sexual harassment

Introduction

As racial and ethnic composition changes in the United States, dental and dental hygiene academic institutions must also make changes to graduate culturally competent oral health care practitioners. Cultural competence has been defined as "a process that requires individuals and systems to develop and expand their ability to know about, be sensitive to, and to have respect for cultural diversity." Cultural groups are individuals who share a common background, ethnic origin, and
"style of living with shared history and experience." Culturally competent practitioners have a racial and cultural understanding of their patients’ belief systems, compliance issues, family structures, cultural biases, and ethnic practices.

The U.S. population is becoming more diverse, and minority populations are projected to comprise more than 48% of the total population by 2050. As the Surgeon General stated in a 2000 report on oral health in America, more diverse, culturally competent dental practitioners are important to increase access to care for minorities and to reduce cultural and socioeconomic disparities. Dental and dental hygiene schools must address issues of cultural competence and diversity in order for these needs to be addressed by future oral health care professionals.

The University of Texas Dental Branch (UTDB) at Houston has a culturally diverse population of students and faculty who provide oral health care to an equally diverse public population. According to the University of Texas Health Science Center at Houston Fact Book 2004, ethnic representation of the UTDB faculty is 71% Caucasian, 14% Asian, 10% Hispanic, and 4% African American. Of the 146 faculty members, 67% are male and 33% are female.

The ethnic composition of the UTDB dental hygiene student population is 18% Asian, 17% Hispanic, 1% African American, and 1% American Indian, as reported by the associate dean of student affairs. Ninety-eight percent of the dental hygiene students are female and 2% are male. UTDB at Houston employees are 49% ethnically diverse, and 40% are male and 51% are female.

With this diverse population in mind, the former dean formed the Ad Hoc Committee on Cultural Diversity in the late fall of 1999. The committee was composed of diverse members and was charged by the dean and the faculty senate to assess the current environment as it related to diversity issues, make recommendations for change and, ultimately, implement strategies to facilitate any needed changes. The committee's tasks were to review the literature, interview focus groups, and develop survey instruments to assess faculty, staff, and students. The University of Michigan School of Dentistry gave permission to broadly adapt a survey it had used to assess the culture at its institution. The committee worked in collaboration with the Office of Professional Development (OPD) at UTDB at Houston, which had established as one of its strategic goals the promotion of sensitivity among UTDB at Houston administration, faculty, and staff to cultural and gender differences.

This report focuses primarily on the survey of first- and second-year dental hygiene students enrolled in a certificate/baccalaureate degree program. The survey assessed the current cultural environment in an effort to determine the current status of the environment, make recommendations for change where necessary, and implement strategies for improvement.

**Review of the Literature**

The medical and nursing professions have been striving to enhance cultural competence and incorporate transcultural care education into their respective curricula in recent years. A review of the dental literature yielded few reports, however, on multiculturalism or diversity in dental education, and even fewer in dental hygiene education. Kalkwarf pointed out the challenge that dental schools face in developing practitioners capable of functioning within a multicultural community. He stressed that, to promote multiculturalism, social responsibility rested upon faculty, students, staff, alumni, and dental practitioners. When directed at dental faculty, students, and practitioners, workshops and educational programs that promote a better understanding of different ethnic cultures and values can help develop an environment that fosters respect and acceptance of all individuals.

Cavazos recommended that dentistry use programs directed by the Association of American Medical Colleges (AAMC) as models for restructuring dental curricula. The AAMC report and other studies have reported that underrepresented minority (URM) physicians tend to practice medicine in areas where there are many minorities. The AAMC report also stated that URM students are more likely than non-minority students to recognize that minority populations have access to care problems. Cavazos suggested that dentists would most likely tend to do the same. The trends in dentistry...
have been rather dismal in terms of minority enrollment and faculty representation. According to the American Dental Education Association (ADEA), URM enrollment in dental schools has declined from a mere 12.7% in 1997 to only 10.5% in 1999. While dental school minority faculty increased from 6.9% in 1990 to 9.1% in 1998, the percentage does not mirror the diversity of the country's population. Dental schools must recognize that a problem exists and adopt strategies to decrease these disparities.\(^{29}\)

Rosella et al. point out that minority students possess a different set of cultural values, social attitudes, and environmental influences than non-minority students.\(^{6}\) Students, faculty, and patients of different backgrounds may have difficulty relating to one another in the academic environment. These differences need to be addressed in professional development workshops that include instructional methods such as role playing, guided discussion, and focus groups to help develop cultural competency among faculty, staff, and students. Sensitivity training should also include underrepresented and underserved socioeconomic groups, people with physical or mental illness or disabilities, children and adolescents, women, older adults, people at the end of life, people with different sexual orientations, and people affected by domestic violence, homelessness, and organ donation.\(^{9}\)

The American Nurses Association urges nurses to include individual value systems and lifestyles in their plans for rendering healthcare. Leiniger, a registered nurse, coined the phrase "cultural imposition," means to impose one's own beliefs and values upon patients.\(^{10}\) Many nursing studies have found that patient responsiveness to treatment is enhanced when health care professionals incorporate knowledge of cultural beliefs and lifestyles in healthcare practices and professional recommendations.\(^{11-22}\)

A study to determine if dental hygienists age, education, or amount of professional experience had an effect on their knowledge of the values, beliefs, lifestyles, or health practices of four different minority groups reported that dental hygienists tended to possess a low level of multicultural knowledge and that none of the factors studied increased this knowledge significantly.\(^{30}\) The authors urged dental hygiene educators to collaborate with colleagues in nursing, psychology, sociology, and anthropology to plan curricula from a "transcultural perspective."\(^{30}\)

Many forms of discrimination and harassment exist, involving gender, age, race, and disability. Gender discrimination, defined as behaviors that affect women as a result of unequal treatment, disparate treatment, disparate impact, or creation of a hostile environment, has been illegal in the workplace since Congress passed the Civil Rights Act in 1964.\(^{37}\)

Sexual harassment, a form of gender discrimination, contributes negatively to the culture of any workplace and is defined as "unwelcome advances, requests for sexual favors, and other verbal or physical conduct of a sexual nature."\(^{38}\) Title IX of the Educational Act of 1972 prohibits any academic institution that receives federal funds from discrimination on the basis of sex. These institutions are required to have a formal mechanism in place and an individual responsible for coordinating activities related to investigating and resolving complaints.\(^{29}\)

A survey of graduating dental students revealed that 34% of the respondents had experienced at least one episode of sexual harassment, most often by clinical faculty.\(^{40}\) A survey by Webster et al. reported that faculty were the most frequent harassers of dental students, and that female students were seven times more likely to be harassed than males.\(^{41}\) Their study confirmed what other studies had previously reported—that gender and number of years in dental education are predictors of sexual harassment of students.\(^{41-47}\)

Chicodo et al. looked at patient harassment of practicing dentists and dental hygienists and found that female dental hygienists reported twice (44%) as many experiences as did dentists (23%). While the mostly male dentists (91%) ranked the problem as insignificant, the all-female dental hygienists ranked it extremely important.\(^{47}\) The authors suggest this is, in part, attributed to the fact that most dental hygienists practice in rooms where they are alone with patients. Interestingly, written comments on the returned questionnaires revealed that the harassment of dental hygienists more frequently involved a dentist than a patient.
As noted by the authors of a study that determined the effects of a sexual harassment workshop given to dental students, the workshop helped students to recognize harassment and the importance of stating boundaries to harassers, to understand that harassment can occur between students, and to understand that ignoring the problem is not an effective solution. In the pre- and post-questionnaires, female responses assessing the incidence of sexual harassment changed more dramatically after the workshops than did those of the males. This indicates that many students are unaware of what constitutes sexual harassment.48

With these issues in mind, the UTDB at Houston launched an investigation of the cultural environment of the dental school.

Materials and Methods

A 36-item survey was administered separately to both first- (n=34) and second-year dental hygiene students (n=33) during class meetings in the spring of 2001 by the associate dean of professional development, who was also chair of the Ad Hoc Committee on Cultural Diversity. Questions explored satisfaction with diversity and interactions with faculty, staff, patients, and other students relative to gender, ethnicity/race, age, unequal treatment, and sexual orientation. The survey instruments developed were based upon one developed and validated by the University of Michigan School of Dentistry, which gave permission to use and/or modify its survey. The revised survey was reviewed by a group of content experts, including dental hygiene faculty, to establish face validity. Since the revisions made were not substantive, the instrument was not pilot tested. The proposed study and instruments were approved by the Committee for the Protection of Human Subjects at the University of Texas Health Science Center at Houston.

Although the assessment included all faculty, staff, and dental and dental hygiene students in the UTDB at Houston, this report focuses only on the assessment of the dental hygiene students. The survey was divided into seven sections in which respondents were queried about their opinions regarding the university's and dental branch's interest in and concern for diversity on the campus; ability to address cultural and social differences appropriately; personal experiences with unequal treatment from faculty, administrators, staff, or patients; beliefs that the curriculum does or does not prepare students to work with people with cultural and diversity differences; thoughts on and experiences with diversity; suggestions or recommendations to assist the UTDB at Houston in addressing diversity issues; and demographic information.

Sample items of the questionnaire are shown in Tables I, Ib and II. Items that were statistically significant are shown in Table I and Ib; no other item has statistical significance. Data were analyzed using 2x3 and 2x5 contingency tables to calculate the chi square test statistic.
Table I: Questions Showing Notable, but Not Significantly Different, Results

I believe that most faculty, staff, and students are satisfied with the current state of diversity at the Dental Branch.

<table>
<thead>
<tr>
<th></th>
<th>Strongly Agree</th>
<th>Agree</th>
<th>Neutral</th>
<th>Disagree</th>
<th>Strongly Disagree</th>
<th>No Response</th>
</tr>
</thead>
<tbody>
<tr>
<td>DH1**</td>
<td>20.6% (7)</td>
<td>35.3% (12)</td>
<td>29.4% (10)</td>
<td>5.9% (2)</td>
<td>2.9% (1)</td>
<td>9.7% (3)</td>
</tr>
<tr>
<td>DH2***</td>
<td>21.2% (7)</td>
<td>39.4% (13)</td>
<td>27.3% (9)</td>
<td>6.1% (2)</td>
<td>3.0% (1)</td>
<td>3.0% (1)</td>
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</table>

Faculty equally encourages students to pursue career development independent of their gender or ethnic background.

<table>
<thead>
<tr>
<th></th>
<th>Strongly Agree</th>
<th>Agree</th>
<th>Neutral</th>
<th>Disagree</th>
<th>Strongly Disagree</th>
<th>No Response</th>
</tr>
</thead>
<tbody>
<tr>
<td>DH1**</td>
<td>29.4% (10)</td>
<td>38.2% (13)</td>
<td>23.5% (8)</td>
<td>2.9% (1)</td>
<td>2.9% (1)</td>
<td>2.9% (1)</td>
</tr>
<tr>
<td>DH2***</td>
<td>33.3% (11)</td>
<td>27.3% (9)</td>
<td>21.2% (7)</td>
<td>9.1% (3)</td>
<td>9.1% (3)</td>
<td>0.0%</td>
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Faculty encouraged students to pursue career development independent of their sexual orientation.

<table>
<thead>
<tr>
<th></th>
<th>Strongly Agree</th>
<th>Agree</th>
<th>Neutral</th>
<th>Disagree</th>
<th>Strongly Disagree</th>
<th>No Response</th>
</tr>
</thead>
<tbody>
<tr>
<td>DH1**</td>
<td>29.4% (10)</td>
<td>38.2% (13)</td>
<td>26.5% (9)</td>
<td>0.0%</td>
<td>2.9% (1)</td>
<td>2.9% (1)</td>
</tr>
<tr>
<td>DH2***</td>
<td>33.3% (11)</td>
<td>33.3% (11)</td>
<td>27.3% (9)</td>
<td>0.0%</td>
<td>3.0% (1)</td>
<td>3.0% (1)</td>
</tr>
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</table>

My academic advisor is able to address cultural and social differences appropriately:

<table>
<thead>
<tr>
<th></th>
<th>Strongly Agree</th>
<th>Agree</th>
<th>Neutral</th>
<th>Disagree</th>
<th>Strongly Disagree</th>
<th>No Response</th>
</tr>
</thead>
<tbody>
<tr>
<td>DH1**</td>
<td>26.5% (9)</td>
<td>17.7% (6)</td>
<td>23.5% (8)</td>
<td>0.0%</td>
<td>0.0%</td>
<td>32.4% (17)</td>
</tr>
<tr>
<td>DH2***</td>
<td>30.3% (10)</td>
<td>39.4% (13)</td>
<td>30.3% (10)</td>
<td>0.0%</td>
<td>0.0%</td>
<td>0.0%</td>
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</table>

** n=34, *** n = 33
Table I: (continued)

The curriculum prepared us to work with patients of different ethnic/racial groups.

<table>
<thead>
<tr>
<th></th>
<th>Always</th>
<th>Often</th>
<th>Sometimes</th>
<th>Rarely</th>
<th>Never</th>
<th>Response</th>
</tr>
</thead>
<tbody>
<tr>
<td>DH1**</td>
<td>35.3% (12)</td>
<td>23.5% (8)</td>
<td>17.7% (6)</td>
<td>8.8% (3)</td>
<td>5.5% (2)</td>
<td>8.8% (3)</td>
</tr>
<tr>
<td>DH2***</td>
<td>45.5% (15)</td>
<td>18.2% (6)</td>
<td>15.2% (6)</td>
<td>6.1% (2)</td>
<td>0.0%</td>
<td>15.2% (6)</td>
</tr>
</tbody>
</table>

The curriculum had not prepared us to work with patients whose primary language is not English.

<table>
<thead>
<tr>
<th></th>
<th>Always</th>
<th>Often</th>
<th>Sometimes</th>
<th>Rarely</th>
<th>Never</th>
<th>No Response</th>
</tr>
</thead>
<tbody>
<tr>
<td>DH1**</td>
<td>17.7% (6)</td>
<td>26.5% (9)</td>
<td>17.7% (6)</td>
<td>14.7% (5)</td>
<td>14.7% (5)</td>
<td>8.8% (3)</td>
</tr>
<tr>
<td>DH2***</td>
<td>33.3% (11)</td>
<td>21.2% (7)</td>
<td>21.2% (7)</td>
<td>15.2% (6)</td>
<td>9.1% (3)</td>
<td>0.0%</td>
</tr>
</tbody>
</table>

The curriculum had not prepared us to work with patients of a different sexual orientation.

<table>
<thead>
<tr>
<th></th>
<th>Always</th>
<th>Often</th>
<th>Sometimes</th>
<th>Rarely</th>
<th>Never</th>
<th>No Response</th>
</tr>
</thead>
<tbody>
<tr>
<td>DH1**</td>
<td>23.5% (6)</td>
<td>17.7% (6)</td>
<td>20.6% (7)</td>
<td>5.9% (2)</td>
<td>14.7% (5)</td>
<td>17.7% (6)</td>
</tr>
<tr>
<td>DH2***</td>
<td>39.4% (13)</td>
<td>33.3% (11)</td>
<td>9.1% (3)</td>
<td>9.1% (3)</td>
<td>6.1% (2)</td>
<td>3.0% (1)</td>
</tr>
</tbody>
</table>

The curriculum had not prepared us to work with patients from different religious backgrounds.

<table>
<thead>
<tr>
<th></th>
<th>Always</th>
<th>Often</th>
<th>Sometimes</th>
<th>Rarely</th>
<th>Never</th>
<th>No Response</th>
</tr>
</thead>
<tbody>
<tr>
<td>DH1**</td>
<td>0.0%</td>
<td>0.0%</td>
<td>0.0%</td>
<td>2.9% (1)</td>
<td>88.2% (30)</td>
<td>8.8% (3)</td>
</tr>
<tr>
<td>DH2***</td>
<td>0.0%</td>
<td>0.0%</td>
<td>3.0% (1)</td>
<td>9.1% (3)</td>
<td>90.9% (30)</td>
<td>0.0%</td>
</tr>
</tbody>
</table>

** n=34, *** n = 33
Results

A total of 67 (34 DH1 and 33 DH2) out of 74, or 91%, of the dental hygiene students responded to the survey. Of those respondents, 87% were female, 3% were male, and 10% did not indicate gender. Sixty-one percent were Caucasian, 19% were Hispanic, 3% Pacific Islander/Asians, 1% Middle Eastern, 3% other, and the remaining 12% did not indicate ethnicity. Data were analyzed using 2x3 and 2x5 contingency tables to calculate the chi square test statistic. The 2x3 tables were used when the subject was asked to rate between "strongly disagree" and "strongly agree." The strongly disagree and disagree responses were grouped into one category, the "neutral" responses comprised the second category, and the combination of "strongly agree" and "agree" were grouped into the third category. For those questions where the subject was asked to respond "never," "rarely," "sometimes," "often," or "always," a 2x5 contingency table was used. These categories were not combined for analysis.

Regarding diversity in the academic environment, significantly more DH2 (81%) students than DH1 (71%) students strongly agreed or agreed that the UTDB at Houston had an honest interest in and concern for diversity (p=0.001). Additionally, DH2 students were more likely to believe that the UTDB at Houston clinical environment was sensitive for
patients from different socioeconomic backgrounds (p=0.04). While no significant differences (Table I, Ib) were found between the classes, the majority of DH1 and DH2 students were satisfied with the current state of diversity of the UTDB at Houston and reported that faculty equally encouraged students to pursue career development regardless of their gender, ethnic background, or sexual orientation. While DH2 students reported more often that their academic advisors were able to address cultural and social differences appropriately, both groups reported that the curriculum prepared them to work with patients of different ethnic/racial groups. DH1 students reported more frequently that the curriculum had not prepared them to work with patients whose primary language is not English, or who have different sexual orientations or religious backgrounds.

DH2 students reported significantly greater experience with unequal treatment by faculty, patients, and other students than did DH1 students (See Table II). One DH1 student reported sexual harassment by a patient, and two DH2 students reported sexual harassment by other students. Responses as to whether the sexual harassment had been resolved were not clear since more responded "yes" to resolution than had reported that harassment had occurred in the first place.

Discussion

On a very positive note, the students reported satisfaction with the diversity at UTDB at Houston. As mentioned previously in this article, the student body and faculty represent many different countries, religions, ethnic/racial groups, and cultures. Seven main languages are spoken in Houston, the most common of which are English, Spanish, and Vietnamese. Several student groups have developed, such as the Hispanic dental, Asian dental, and Christian dental societies. In fact, one Caucasian student noted that she did not "fit" into any of the sub-groups. However, students also expressed concern about their abilities to work with patients of a different sexual orientation or ethnicity, as well as with those patients whose first language is not English.

Overall, the findings of this study indicate that the majority of the dental hygiene students were satisfied with the cultural diversity of and their interactions at the UTDB at Houston. This satisfaction may be due to the fact that the student body is very diverse, enabling the students to informally exchange and share information of cultural differences.

The results of this assessment are similar to those reported in other studies that suggest that sexual harassment incidence increases over time as one remains in the academic environment.42-47 This may explain why second-year students reported a greater incidence than did first-year students. Additionally, there may have been an underreporting by DH1 students of harassment because the responses to the follow-up question regarding resolution of the harassment indicated that more cases had been resolved than had been originally reported. However, the discrepancy may simply indicate that the students were confused by the questionnaire or, perhaps, as evidenced in one study, they did not have a clear understanding of what constitutes sexual harassment.

To address these problems, the follow-up question regarding whether or not the harassment had been resolved could be re-worded to answer only if the student indicated previously that harassment had occurred in the first place. Additionally, the students could be given examples of sexual harassment. Lillich et al. reported that students often do not even realize that harassment can occur between or among students.48

Chicodo et al. had surmised that the prevalence of sexual harassment was probably related to dental hygienists often working alone with, or in close proximity to, patients in the academic setting for extended time periods.47 The students tend to be very concerned with the comfort of their patients, which may be misconstrued by patients as a personal interest. As recommended by others, students and faculty could be better prepared for dealing with these situations through role playing and guided discussion.8 In UTDB at Houston clinics, there are 12 students and at least two faculty in each treatment area. This may explain why only one of the three reported sexual harassment incidents was by a patient of another gender.

The other two sexual harassment incidents were by male students toward female students. Webster reported that sexual harassment is more likely to be directed at females.41 Additionally, in open-ended comments from the questionnaires, three students noted that there were problems with disrespect from dental faculty and dental students toward dental hygiene
students. This topic could be covered in sensitivity training as well to promote respect for one another's role in the oral health care setting.

**Recommendations**

Based on concerns reported by students, the ad hoc committee made several preliminary recommendations:

1) Compare the outcomes of the dental hygiene student surveys with the dental student, faculty and staff surveys to investigate general areas of concern among all who work or study at UTDB at Houston.

2) Develop workshops and seminars to enhance faculty, staff, and student cultural awareness.

3) Determine integration points for teaching topics related to cultural competency within the dental hygiene curriculum.

4) Devise a strategy to facilitate the communication needs of patients who do not speak English, but who interact with English-speaking students and faculty.

**Conclusions**

Sexual harassment and unequal treatment did occur in the UTDB at Houston dental hygiene program. Students, faculty, and staff could benefit from workshops on diversity, unequal treatment, sexual harassment, and cultural competence and awareness. Additionally, the dental hygiene curriculum should be revised to include these topics as well.

**Acknowledgements**

**Notes**

Correspondence to: Donna P. Warren at Donna.p.warren@uth.tmc.edu

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