Milieu in Dental School and Practice

Attitudes of Dental Hygiene Students Toward Individuals with AIDS


Abstract: This study was undertaken to gain a better understanding of dental hygiene students' attitudes toward AIDS and homosexuals. Each respondent received a 500-word patient case vignette and two scales for recording impressions of the person described in the vignette. There were four vignettes, identical except that the portrayed individual’s illness was identified as either AIDS or leukemia, and sexual preference as either homosexual or heterosexual. No differences in overall ratings on either scale were noted based on the patient’s disease status or sexual preference or the interaction between sexual preferences with disease type. Similarly, neither scale displayed significant differences on any of the individual items based on the patient’s sexual preference. There were, however, significant differences for several individual items on both scales based on the patient’s disease type; students responded more negatively to individuals with AIDS. It appears, therefore, that the hygiene students displayed no bias toward homosexuals and only very minimal bias toward individuals with AIDS.

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Key words: dental hygiene students, attitudes toward AIDS, attitudes toward homosexuals

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Methods

Study methods were identical to an earlier study that investigated whether dental students negatively stigmatize patients with AIDS and/or homosexual lifestyles.16 Dental hygiene students at a northeastern dental school were surveyed. The sample included twenty-two juniors, twenty-two seniors, and nine degree completion students.

Anonymous questionnaires were administered during class. Each respondent received a 500-word patient case vignette and two scales for recording impressions of the person described in the vignette. There were four vignettes, identical except that the portrayed individual’s illness was identified as either AIDS or leukemia, and sexual preference as either homosexual or heterosexual. A complete description of the vignettes has been reported previously.17 The particular vignette received by each student was determined randomly. After reading the patient vignette, students completed two scales designed to elicit their attitudes. The items on each of the scales...
were rated on a five-point Likert scale. The Prejudi-
cial Evaluation Scale (PES) consisted of twelve items
developed by Kelly et al.\textsuperscript{17} that were adopted from
prior studies examining interpersonal judgments of
victims,\textsuperscript{18} in addition to anecdotal reports from pa-
tients with AIDS that described negative attitudes
they had faced. The PES was intended to assess preju-
dicial attitudes toward the portrayed patient. The So-
cial Interaction Scale (SIS), also developed by Kelly
et al.,\textsuperscript{17} contained seven routine social/conversational
interactions that might occur with the individual de-
scribed in the vignette and measured the respondent’s
willingness to interact with him or her.

Responses to both scales were subjected to two-
way analyses of variance that examined differences
associated with the patient’s disease status (AIDS
versus leukemia), sexual preference (heterosexual
versus homosexual), and the interaction of sexual
preference with disease status. Individual item dif-
ferences were explored with \( t \) tests. In addition, \( t \) tests
were used to examine differences based on the
respondent’s number of years of clinical-related ex-
periences other than their formal dental hygiene train-
ing. Chi-square was used to analyze the response rates
to the different vignettes. A \( p \leq 0.05 \) was considered
significant.

**Results**

A total of forty-two usable questionnaires were
returned for a response rate of 79.2 percent (42/53).
Respondents included forty-one female and one male
students. Due to the small number of male students,
the responses from the male student were excluded
from the analysis. There were no significant differ-
ences in response rates for the different vignettes
(sexual preference: Chi-square .381, \( p>0.05 \); disease
status: Chi-square .095, \( p>0.05 \)). Table 1 presents
results of the ANOVA tests and the means and stan-
dard deviations for both scales based on the patient’s
disease status and sexual preference. No differences
in the respondents’ ratings on the PES or SIS as a
total scale were noted based on the patient’s disease
status or sexual preference or the interaction between
sexual preferences with disease type.

Similarly, neither the PES nor the SIS displayed
significant differences on any of the individual
items based on the patient’s sexual preference. There
were, however, significant differences for several
individual items on both the PES (Table 2) and the
SIS (Table 3) based on the patient’s disease type. On
both scales, students responded more negatively to
individuals with AIDS as compared to those with
leukemia. It is important to note, however, that dif-
ferences were found in only a few of the individual
scale items. Students believed AIDS patients to be
more responsible for their illness and to be more
dangerous to other people (Table 2). In addition, stu-
dents reported that they were less likely to attend a
party where the patient with AIDS was preparing food
and also were less likely to allow their children to
visit the home of an individual with AIDS than if the
individual had leukemia (Table 3).

The dental hygiene students’ scale scores also
were examined for possible association with the num-
ber of years of clinical-related experiences students
had other than their current dental hygiene educa-
tion. No significant differences in ratings on the PES
or SIS according to number of years in practice were
found.

<table>
<thead>
<tr>
<th>Group</th>
<th>Prejudicial Evaluation Scale*</th>
<th>Social Interaction Scale**</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>( N )</td>
<td>Mean (SD)</td>
</tr>
<tr>
<td>AIDS</td>
<td>21</td>
<td>4.45 (.38)</td>
</tr>
<tr>
<td>Leukemia</td>
<td>20</td>
<td>4.44 (.28)</td>
</tr>
<tr>
<td>Homosexual</td>
<td>19</td>
<td>4.42 (.39)</td>
</tr>
<tr>
<td>Heterosexual</td>
<td>22</td>
<td>4.46 (.28)</td>
</tr>
<tr>
<td>Disease x Sexual Preference</td>
<td>0.19</td>
<td>.66</td>
</tr>
</tbody>
</table>

*Lower means indicate greater bias.
**Higher means indicate greater willingness to interact socially.
Discussion

The findings of this study should be interpreted with caution. Students at only one dental hygiene baccalaureate program were surveyed; therefore, the generalizability of the findings to other hygiene programs may not be valid. These dental hygiene students also have had at least two years of formal education in anatomy, physiology, psychology, and other behavior science courses either at a community college or university prior to completing this survey. Not all dental hygiene programs require these courses prior to entry into their programs. Furthermore, the findings are based on written responses to patient vignettes that may reflect politically correct, socially desirable outcomes on the part of the respondents. The findings concerning attitudes toward homosexuals are consistent with other reports that have found that dental hygiene students did not display a bias toward homosexuals.5,12 In our study, neither the overall scale scores nor any individual items displayed any bias toward homosexuals.

The attitudes of the hygiene students toward individuals with AIDS were slightly more mixed. Although no bias toward individuals with AIDS was reflected in either overall scale score, several individual items did reflect negative attitudes. This finding is consistent with an earlier report that found that dental hygiene students displayed an overt bias toward individuals with AIDS but not toward homosexuals.12 It differs somewhat, however, from a more recent report that found that dental hygiene students did not display an overt bias toward individuals with AIDS or toward homosexuals.3 The two studies, however, used different instruments, so the reports are not directly comparable. The findings from our study describing hygiene student attitudes are generally consistent with a prior report from the same institution that found that dental students exhibited no evidence of homophobia but did display some evidence of bias against individuals with AIDS.16 The difference noted between the findings from the dental school located in Michigan5 and our study may be attributable to the greater prevalence of AIDS in Maryland19 and, hence, a higher perceived risk of exposure on the part of respondents.

As would be expected, dental hygiene programs have long embraced the responsibility to prepare their students to deal with the AIDS epidemic.20 As is the case with some dentists, practicing dental hygienists have exhibited fears surrounding the treatment of AIDS patients.21,22 Nevertheless, it is encouraging that, overall, oral health care providers’ concerns about treating patients with AIDS appear to be diminishing23 although still linger in some individuals as demonstrated by the results.

Table 2. Mean prejudicial evaluation scale scores

<table>
<thead>
<tr>
<th>Variables</th>
<th>AIDS n=22</th>
<th>Leukemia n=20</th>
<th>t</th>
<th>p</th>
</tr>
</thead>
<tbody>
<tr>
<td>Responsible for illness</td>
<td>2.8</td>
<td>4.7</td>
<td>-5.3</td>
<td>0.0001</td>
</tr>
<tr>
<td>Deserves sympathy and understanding</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Deserves what has happened</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Illness has been traumatic</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Has a lot of pain and suffering</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Dangerous to other people</td>
<td>3.9</td>
<td>4.9</td>
<td>-4.3</td>
<td>0.0001</td>
</tr>
<tr>
<td>Deserves best medical care possible</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Deserves to die</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>World would be better off without him</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Suicide might be best solution</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Should be quarantined</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Deserves to lose job</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
</tbody>
</table>

Means are shown for items with significant differences. Answers were given on a scale ranging from “agree” (1) to “disagree” (5).

Table 3. Mean social interaction scale scores

<table>
<thead>
<tr>
<th>Variables</th>
<th>AIDS n=22</th>
<th>Leukemia n=20</th>
<th>t</th>
<th>p</th>
</tr>
</thead>
<tbody>
<tr>
<td>Willing to engage in conversation</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Willing to attend party</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Willing to attend party where preparing food</td>
<td>3.6</td>
<td>4.6</td>
<td>-3.2</td>
<td>0.002</td>
</tr>
<tr>
<td>Willing to work in same office</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Willing to continue friendship</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Willing to renew lease</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Willing to allow children to visit</td>
<td>3.6</td>
<td>4.6</td>
<td>-2.6</td>
<td>0.013</td>
</tr>
</tbody>
</table>

Means are shown for items with significant differences. Answers were given on a scale measuring willingness to interact socially ranging from “not at all” (1) to “very much” (5).
reported here. The dental hygienist is often seen as a first line of defense in the fight against periodontitis and other oral diseases. Hygienists perform oral cancer screenings and gingival assessments, measure periodontal pockets, and inform the dentist of possible findings. Dental hygienists form personal bonds with their patients that can facilitate the disclosure of sensitive information and assist in building trust between a clinician and patient. Therefore, it is critical that dental hygiene students, as future health care providers, develop not only the necessary technical skills but also attitudes that will prepare them to care compassionately for individuals with HIV/AIDS.

REFERENCES