Association Between Dentists’ Participation in Charitable Care and Community-Based Dental Education


Abstract: The Institute of Medicine and the Commission on Dental Accreditation (CODA) have recommended that dental schools incorporate community-based dental education (CBDE) programs into their curricula. The expectation is that CBDE participation will help dental students gain the skills and motivation to treat vulnerable populations after graduation. The purpose of this study was to determine whether dentists’ involvement with charitable dental care is associated with participation in CBDE as dental students. A questionnaire was mailed to private practice Iowa dentists (N=1,312); the response rate was 41.2 percent (n=541). Logistic regression analyses, controlling for age, gender, number of hours worked per week, graduation year, and alma mater, were conducted. A majority of the respondents provided charitable care: 85 percent in their offices, and 70 percent in the community. Seventy-nine percent had participated in CBDE as dental students. Respondents who reported being very satisfied/satisfied with their charitable care experiences were more likely to provide charitable care in their offices and the community than respondents who were not satisfied with their experiences. Respondents who participated in CBDE as dental students were more likely to provide charitable care in the community than respondents who did not participate in CBDE. The type of sites where dentists completed their CBDE experiences was associated with where they provide charitable care. This study suggests that participation in CBDE may be associated with dental students’ providing charitable dental care after graduation.

Keywords: community-based dental education, dental education, dental curriculum, oral health care for the underserved, professional behavior, charitable care, volunteer

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According to the Institute of Medicine (IOM) report Improving Access to Oral Health Care for Vulnerable and Underserved Populations, only 46 percent of the U.S. population received dental care in 2004, and 5.5 percent were unable to acquire dental care in 2007.1 Lack of dental care is especially prevalent among low-income, Medicaid, and other vulnerable populations. This is partially due to financial barriers and a paucity of dentists who have received adequate training in treating underserved populations.1 Consequently, this IOM report recommended that dental schools incorporate community-based dental education (CBDE) within their training programs to provide dental students with opportunities to improve their skills in treating vulnerable populations.1 Additionally, the Commission on Dental Accreditation (CODA) has an accreditation standard that “dental education programs must make available opportunities and encourage students to engage in service-learning experiences and/or community-based learning experiences” in order to instill in graduates a “lifelong appreciation for the value of community service.”2 While the American Dental Association acknowledges that charitable care and community service will not address the needs of all underserved populations,3 it does help minimize some of the financial barriers faced by underserved populations. In 2007, dentists provided an estimated $2.16 billion in free or discounted dental services.3 CBDE provides dental students with the opportunity to “provide patient care in community-based clinics or private practices.”2 Although CBDE has a long-standing history in dental curricula,4 its presence as a substantial component of dental education was not widespread until the 2000s. The Robert Wood Johnson Pipeline, Profession,
and Practice: Community-Based Dental Education program provided funding for selected U.S. dental schools to expand community-based experiences for their students, while newer dental schools, such as the Arizona School of Dentistry and Oral Health, have incorporated CBDE as a substantial portion of their curricula from their inception. In 2008, 60 percent of graduating seniors reported that they had participated in four or more weeks of CBDE during their dental education.

The University of Iowa has been a leader in this area because it has included CBDE in its dental curriculum since 1968. The CBDE program, called the “extramural program,” initially began with all dental students participating in private preceptorships, mainly in rural Iowa, between their third and fourth years of dental school. By the early-1970s, the program had added experiences treating uninsured, underserved populations at a safety net hospital in Des Moines, IA, thus increasing the duration of the extramural experience. Since the early 1980s, all fourth-year dental students have participated in two consecutive five-week rotations, for a total of ten weeks’ experience, at a variety of facilities including community health centers, hospital-based dental clinics, nursing homes, private preceptorships, Indian Health Service clinics, and international programs in dental schools (e.g., Queen Mary School of Medicine and Dentistry, London) and the community (e.g., Saragur, India). As such, students have the opportunity to become fully immersed in providing clinical care at two community-based facilities that treat traditionally underserved populations.

Besides clinical services, the students participate in dental-based service-learning experiences in the community where the CBDE clinic is located. Examples of service-learning programs include screenings at homeless centers; sealants and other dental treatment for elementary school children on a mobile dental RV; and oral health education presentations at juvenile detention centers. The purpose of these activities is to expose students to opportunities in which they can “give back” to the community, utilizing their expertise as dentists. The idea of intentional learning goals that utilize one’s skills to benefit the community is consistent with the pedagogy of service-learning.

Many studies have been conducted to assess the short-term outcomes of CBDE. For example, a University of Kentucky study examined which procedures students completed in CBDE settings and the corresponding value of the students’ production (i.e., the monetary value of the procedures based on Kentucky’s Medicaid rates and Relative Value Units, a scale used to standardize the value of dental procedures). Other studies have compared CBDE settings to dental school clinics and found that students treat more patients and complete more procedures in CBDE settings than dental school settings in comparable time periods. Mashabi and Mascarenhas found that students were more productive in the clinic post-CBDE than pre-CBDE. In addition, studies have examined students’ comfort with and confidence in treating underserved populations before and after participating in CBDE experiences, and the themes found in critical incident papers and reflective papers have been analyzed to assess what students learned from their community experiences.

In contrast, fewer studies have been conducted to assess the longer term outcomes of participating in CBDE. One study of University of Iowa alumni found that dentists who perceived their community experiences as valuable were more likely to feel comfortable treating selected underserved populations (e.g., low income, incarcerated) compared to dentists who did not perceive their experiences as valuable. Another study found evidence to suggest that the location of the CBDE was associated with dentists’ likelihood to treat some populations (e.g., other ethnic groups, frail elderly) in their primary practice setting. In another study, DeCastro et al. surveyed alumni to assess whether differences existed between those who participated in CBDE and those who participated in traditional curricula. While their study did not find a statistically significant difference between the two groups’ attitudes towards community service, this was attributed to alumni in both groups ranking community service favorably.

As more dental schools continue to either expand their existing CBDE experiences or add CBDE to their curricula, it is important to examine the longer term outcomes of these programs. Because it is anticipated that CBDE is associated with a “lifelong appreciation for the value of community service,” the aim of our study was to determine whether dentists’ participation in charitable dental care in the dental office and the community is associated with participation in CBDE as dental students.

**Methods**

A twenty-four-item questionnaire was developed and mailed to all Iowa dentists in private practice (N=1,312) to assess their involvement with
charitable care during the previous year (2006) and their participation in CBDE as dental students. Iowa dentists were selected for this study since nearly 80 percent of them graduated from the University of Iowa College of Dentistry.20 Thus, a large number of potential subjects would have had the opportunity to participate in CBDE as dental students.

The questionnaire was mailed in May 2007 with a follow-up questionnaire sent to nonrespondents in June 2007. The mailing included a cover letter that explained the study and included elements of consent, the questionnaire, and a postage-paid addressed envelope. Subjects did not receive compensation for participation. University of Iowa Institutional Review Board approval was obtained prior to distribution.

The names, addresses, and demographic information of all private dental practitioners in Iowa were obtained from the Iowa Dentist Tracking System (IDTS) database.20 The University of Iowa College of Medicine tracks all dentists, physicians, pharmacists, physician assistants, and nurse practitioners in Iowa to follow workforce trends of health professionals in the state. The datasets are updated semiannually and record such information about the professionals as gender, age, number of hours worked per week, year and location of graduation from professional program, specialty status, and type and location of practice. Identification codes were placed on the questionnaires in order to match the questionnaires to the IDTS. By matching the questionnaires to the IDTS, two goals were accomplished. First, the questionnaire had fewer questions since demographic information could be obtained from the IDTS. Second, it was possible to compare nonrespondents to respondents using data in the IDTS.

The main question of interest on the questionnaire was the following: “During the past year (2006), did you: a) provide charitable dental care services within your office, or b) participate in dental community service?” Respondents were asked to answer “yes” or “no” for each part of the question. Respondents were then asked to report on their activities in the IDTS. The following potential predictor variables were selected based on the literature21-29 and their potential to influence whether dentists provide charitable care. These variables were: years since graduation; number of hours worked per week; found in the IDTS, were also dichotomized (≤10 years vs. >10 years) and part-time versus full-time dentists (≤32 hours vs. >32 hours). In order
to assess face and content validity, the survey was distributed to five private practice dentists and five University of Iowa College of Dentistry faculty members prior to conducting the study.

Finally, two tables were included to assess why dentists do or do not provide charitable care. Respondents were instructed to answer only one of the two tables based on whether or not they provided charitable care. The instructions indicated that respondents should answer “yes” or “no” for each statement listed on the appropriate table. Respondents who provided charitable care in the office or the community were asked to identify why they provided care based on a list of twenty-three options. Similarly, respondents who did not provide charitable care were asked to identify why they did not based on a list of sixteen options.

Data were double entered into a database and analyzed using SAS 9.1. Descriptive means and frequencies were obtained. Separate bivariate and logistic regression analyses were conducted for each dependent variable: 1) provides charitable services in the office, and 2) participates in dental community service. Bivariate statistics were calculated using chi-square and Fisher’s exact tests. Generalized logistic regression analyses, controlling for age, gender, number of hours worked per week, graduation year, and alma mater, were conducted using stepwise procedures and verified using forward and backward procedures. Variables that met statistical significance (p<0.05) in the bivariate analyses were entered into the regression models. A separate regression analysis was performed with the subset of respondents who indicated they participated in CBDE to determine if there was an association between the type of experience (e.g., private practice, community health center) and the likelihood to provide charitable care after graduation. Interactions between significant variables in each regression model were tested for significance in the corresponding final regression models (e.g., satisfaction * participation in CBDE).

Results

Of the 1,312 dentists contacted, 541 returned useable questionnaires for a response rate of 41.2 percent. Seventeen percent of the respondents were female, and 24 percent had graduated ≤10 years ago. Eighty-four percent of the respondents graduated from the University of Iowa College of Dentistry. Eighty-eight percent were general dentists. Sixty-two percent were sole owners of their practice, while the remaining respondents were partners (25 percent), associates (12 percent), or independent contractors (1 percent).

There were a few differences between respondents and nonrespondents. Respondents were more likely than nonrespondents to have graduated ≤10 years ago (24 percent vs. 19 percent; p=0.03), and respondents were more likely to have graduated from the University of Iowa College of Dentistry (84 percent vs. 72 percent; p=0.001). Respondents were more likely to work ≥32 hours per week (92 percent vs. 87 percent; p=0.006). There were no differences between respondents and nonrespondents by gender or practice type (sole owner vs. other).

Eighty-five percent of the respondents reported providing charitable care in their offices, while 70 percent provided charitable care in the community. Sixty-seven percent said they provided charitable care in both the office and the community. The following results represent respondents’ activities during 2006. In general, the respondents were likely to provide free care to a median number of ten patients in the dental office (range: 0-500), which amounted to fifteen hours of free care worth $3,000. Similarly, the respondents provided discounted care to a median number of forty patients (range=0-1500), which amounted to forty hours of discounted care worth $8,000. In general, the respondents discounted care by 50 percent. The respondents were most likely to participate in the following charitable care activities in the community: make presentations to children or teenagers (57 percent) or nursing home staff (34 percent), supervise at dental hygiene or dental assistant training programs (33 percent), provide discounted or free care in nursing homes (31 percent), and provide oral health/cancer screenings (27 percent). Fifty-five percent of the respondents who provided charitable care reported they were somewhat satisfied with their experiences, and 30 percent reported they were very satisfied. Only 1 percent reported being very dissatisfied with their experiences. Sixty-three percent of the respondents reported providing charitable care on an intermittent basis, and 72 percent indicated they had been involved with charitable dental care for more than five years. Ninety-two percent of the respondents said they planned to provide charitable care in the future. (See Table 1 for a list of the top reasons respondents gave for whether or not they participated in charitable care.)

Seventy-nine percent of the respondents had participated in CBDE as dental students. Among those who participated in CBDE, 71 percent spent ≥4
weeks in their rotations. The respondents completed rotations in the following settings: hospital-based clinics 75 percent; long-term care facilities 57 percent; private practice 46 percent; community health clinics 27 percent; Department of Veterans Affairs clinics 21 percent; Indian Health Service clinics 10 percent; and exchanges with international dental schools 5 percent. Thirty percent indicated they participated in CBDE at sites other than the aforementioned locations (totals do not equal 100 percent since respondents may have participated in more than one setting). Fifty-five percent of the respondents had participated in community-based activities outside of their primary clinical assignment (e.g., screenings at homeless shelters, traveling with visiting nurses to homebound patients, participating in school-based sealant programs). Prior to commencing dental school, 66 percent (n=352) of the respondents said they had participated in volunteer activities, whereas only 34 percent (n=182) participated in volunteer activities during dental school. Although 87 percent (n=158) of the respondents who participated in volunteer activities during dental school had also participated in volunteer activities prior to dental school, only 45 percent (158/352) of the respondents who participated in volunteer activities prior to dental school continued to participate in volunteer activities during dental school.

Bivariate analyses revealed that several variables were significantly associated with providing charitable care in the office and the community (Table 2). The significance varied based on whether the charitable care was provided in the office or the community. For example, 86 percent of respondents who participated in CBDE provided charitable care in the office, whereas 77 percent who did not participate in CBDE provided charitable care in the office (p=0.02). Similarly, respondents who participated in CBDE were more likely to provide charitable care in the community compared to respondents who did not participate in CBDE (75 percent vs. 53 percent; p<0.001). While participation in CBDE was statistically significantly associated with providing both office and community charitable care, the setting of the CBDE varied in its association with providing charitable care. For example, participation in a private practice CBDE was associated with providing charitable dental care in the office, but not the community. In contrast, participating in CBDE at a community health center, Indian Health Service clinic, or international site was associated with providing charitable care in the community, but not the dental office.

Practice type and busyness of the practice were also significantly associated with providing care (data not included on Table 2). Partners were the most likely to provide charitable care in the office (93 percent), followed by solo practitioners (84 percent), associates (73 percent), and independent contractors (71 percent; p=0.001). There was not a statistically significant difference among practitioners providing charitable care in the community. In contrast, perceived busyness was statistically significantly associated with providing charitable care in the community, but not the office. Eighty-one percent of respondents who indicated they were “too busy” in the office reported providing charitable care in the community, followed by 74 percent of respondents who stated they were “not busy enough.” Sixty-eight

Table 1. Top reasons why Iowa dentists in study reported they do or do not participate in charitable dental care, by percentage of respondents choosing that survey option

<table>
<thead>
<tr>
<th>Reasons to Participate (n=438)</th>
<th>Reasons Not to Participate (n=59)</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Concern for the welfare of others (97%)</td>
<td>• Family responsibilities (55%)</td>
</tr>
<tr>
<td>• Opportunity to help those in need (97%)</td>
<td>• Too busy (50%)</td>
</tr>
<tr>
<td>• Civic duty (78%)</td>
<td>• Frustrating to work in an inefficient, unfamiliar, and/or underfinanced environment (49%)</td>
</tr>
<tr>
<td>• I enjoy it (71%)</td>
<td>• No financial incentives (49%)</td>
</tr>
<tr>
<td>• The community needs my help (67%)</td>
<td>• Participate in non-dental volunteer activities (47%)</td>
</tr>
<tr>
<td>• Concern for the group the dentist is treating (63%)</td>
<td>• Too complicated to initiate care (42%)</td>
</tr>
<tr>
<td>• Spiritual beliefs (62%)</td>
<td>• It is not my responsibility (34%)</td>
</tr>
<tr>
<td>• To become active within the community (59%)</td>
<td>• Too much debt (32%)</td>
</tr>
<tr>
<td>• If I don’t, who will? (56%)</td>
<td>• Personal growth (55%)</td>
</tr>
</tbody>
</table>

Note: Reasons to participate represent only the opinions of respondents who provided charitable care. Reasons not to participate represent only the opinions of respondents who did not provide charitable care. Respondents could choose all options that applied.
percent of respondents who reported they “have an adequate patient load” reported providing charitable care in the community (p=0.03).

The following predictor variables were not statistically significantly related to providing charitable care: the duration of the CBDE, graduation year (≤10 years vs. >10 years), gender, hours worked per week (≤32 hours vs. >32 hours), dental school alma mater, general dentist vs. specialist, satisfaction with income, and satisfaction with occupation. Although “too much debt” was listed as an option for respondents to indicate why they did not provide charitable care in the previous calendar year, this option was only available to respondents who did not provide charitable care; thus, it could not be included in the bivariate analyses.

Logistic regression results revealed that three variables were significantly associated with providing charitable care: satisfaction with charitable care, participation in CBDE, and participation in noncurricular dental volunteer activities as a dental student (Table 3). Analysis of all respondents revealed that satisfaction with participation in charitable care was the strongest predictor variable associated with providing charitable care in both the office and the community. Participation in CBDE was associated with providing care in a community setting only. Analysis of the subset of respondents who participated in CBDE revealed slightly different results. Similar to the model utilizing all of the respondents, satisfaction was significantly associated with providing charitable care. However, in this subset of respondents, participation in noncurricular dental volunteer activities as a dental student was also significantly associated with providing charitable care. No interactions were noted in either model.

### Discussion

The results of this study indicate that a majority of the respondents participated in charitable care in the office and the community. While satisfaction with participation in charitable care was the strongest predictor for determining who is likely to provide charitable care in the dental office or the community, participation in CBDE as a dental student was associated with dentists providing charitable dental care in the community. This suggests that participation in...
CBDE may be associated with long-term outcomes after graduation. Interestingly, the duration of the CBDE was not significantly associated with providing charitable care. Because the majority of the respondents graduated from the University of Iowa, the duration of the experience (i.e., five to eight weeks or >8 weeks) was similar for most of the respondents, which may have reduced the power to detect differences in providing charitable care.

Dentists’ willingness to provide charitable dental care may be associated with their self-perceived comfort and competence in treating underserved populations. Cunningham et al. found that students who participated in four weeks of CBDE in long-term care facilities were more likely to feel competent treating nursing home residents compared to students who only participated for two weeks. Similarly, Piskorowski et al. found that students who spent more time in CBDE (eight weeks vs. three to five weeks) were more likely to indicate they were willing to work in a community health center after graduation. By providing students with the opportunity to work with underserved populations for a substantial amount of time, dental students have the potential to gain the skills and confidence that will enable them to provide charitable care to underserved populations after they graduate. Future studies should compare alumni from dental schools with various lengths of CBDE to further assess the association between the duration of CBDE and one’s likelihood to provide charitable care.

The inclusion of a community component outside of the main CBDE setting was only weakly associated with providing charitable care (p=0.05). This may be due to the limited nature of these experiences in the University of Iowa CBDE program. In many instances, dental students only participate in one or two experiences in each five-week experience. Although students are active participants in the activities (e.g., place sealants on children while participating with a mobile van school-based sealant program), their overall involvement with the activities is limited. More extensive involvement, as described in service-learning pedagogy, may be associated with more dentists providing charitable care in the community after graduation. For example, dental students could work with their CBDE site to identify a community partner, meet with the partner to learn about the organization, and then work simultaneously with the CBDE site and the partner to develop, implement, and evaluate an oral health project. By becoming more active participants in the set-up and evaluation stage, dental students would gain the necessary skills and confidence to establish community-based dental activities after they graduate.

In the bivariate analyses, the clinical setting of the CBDE was significant. Respondents who participated in private practice CBDE were more likely to provide charitable care in their dental offices than respondents who participated in public setting CBDE. Conversely, respondents who participated in public setting CBDE were more likely to provide community-based charitable care than respondents who participated in private practice CBDE. If possible, dental schools should provide students with the opportunity to participate in CBDE in both private offices and public settings, so that students have the opportunity to learn how underserved populations

<table>
<thead>
<tr>
<th>Predictor Variable</th>
<th>Odds Ratio</th>
<th>95% CI</th>
<th>p-value</th>
<th>Odds Ratio</th>
<th>95% CI</th>
<th>p-value</th>
</tr>
</thead>
<tbody>
<tr>
<td>All respondents</td>
<td>Office (n=471)</td>
<td>Community (n=470)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Very satisfied or satisfied with charitable care</td>
<td>4.3</td>
<td>1.9-9.6</td>
<td>&lt;0.001</td>
<td>4.7</td>
<td>2.3-9.1</td>
<td>&lt;0.001</td>
</tr>
<tr>
<td>experiences: yes vs. no*</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Participated in CBDE: yes vs. no*</td>
<td>–</td>
<td>–</td>
<td>–</td>
<td>2.0</td>
<td>1.2-3.4</td>
<td>0.007</td>
</tr>
<tr>
<td>Respondents who participated in CBDE</td>
<td>Office (n=275)</td>
<td>Community (n=233)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Very satisfied or satisfied with charitable care</td>
<td>7.5</td>
<td>2.4-23.5</td>
<td>&lt;0.001</td>
<td>4.0</td>
<td>1.5-10.2</td>
<td>0.005</td>
</tr>
<tr>
<td>experiences: yes vs. no*</td>
<td></td>
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<tr>
<td>Participated in noncurricular dental volunteer activities: yes vs. no*</td>
<td>7.0</td>
<td>1.5-32.3</td>
<td>0.01</td>
<td>2.5</td>
<td>1.2-5.1</td>
<td>0.01</td>
</tr>
</tbody>
</table>

*Reference group
can be treated in both the community and private practice settings.

Overall, satisfaction with providing charitable care was the strongest predictor associated with providing charitable care in the office and the community. This is similar to studies in psychology that have found associations between participation in volunteer activities and satisfaction with the activity. It has been suggested that because satisfaction with volunteering in an organization is associated with continued volunteer participation, organizations should provide incentives and positive environmental settings to increase volunteer satisfaction. Organizations that rely on volunteer dentists should continually assess the satisfaction of their volunteers to help ensure the continuity of the relationships between the dentists and the organizations. This is important for small entities in communities, such as free dental clinics, as well as larger organizations, such as Mission of Mercy events that rely on many dentists to provide free dental care to hundreds or thousands of patients over a two- or three-day time period in a large setting.

This study was unable to assess whether current or previous debt is associated with providing charitable dental care. Among the respondents who stated they did not provide charitable care, 32 percent indicated that was because they had too much debt. Anecdotally, many University of Iowa dental students report that while they will not be able to provide charitable care immediately after graduation, they plan to become more involved with charitable care after paying off their student loans. Similarly, many respondents wrote on their surveys that they plan to participate in charitable care once they pay off their debt or put their children through college. Future studies should assess the association between debt and charitable care, especially as the cost of attending dental school continues to rise.

There are some limitations with this study. Only 41 percent of potential subjects responded to the survey. It is unknown why nonrespondents did not participate. They may not have been interested in completing the survey due to its topic or length, or they may not have wanted to answer the survey since each survey included an identification code. Because this code could be linked to each subject’s name, anonymity was reduced. However, some respondents removed the identification code from their surveys, thus ensuring anonymity. Additionally, some dentists may not have completed the survey because they did not provide charitable care. In order to help minimize the latter bias, the cover letter explicitly stated that everyone should complete the survey, even if the dentist did not provide any charitable care in the previous year. Non-response bias testing indicated that there were some similarities between the respondents and nonrespondents, which improves the generalizability of the study among Iowa dentists.

Another limitation is that the respondents were asked to report their charitable care for the previous calendar year. The responses may be subject to recall bias as well as the desire to provide a favorable response, especially since identification codes were included on the survey. However, 15 percent of the respondents reported they did not provide charitable care in the office, and 30 percent reported they did not provide charitable care in the community, thus showing variation in answers. Although the percentage of respondents who reported providing charitable care in their offices is higher than a national study conducted by the American Dental Association (85 percent vs. >70 percent, respectively), the dollar amount of free or reduced care provided in the dental office was similar ($11,000 vs. $13,000 per dentist). Our study adds to the literature because it examined which variables are associated with providing charitable dental care in both the office and the community. Furthermore, it examined the association between CBDE and charitable care, which has previously not been studied.

Finally, contemporary large group charitable care activities, such as Give Kids a Smile, and Mission of Mercy, were not specifically identified on the survey due to their relative newness at the time of the study. Iowa’s Mission of Mercy did not begin until 2008, so Iowa dentists’ participation in a Mission of Mercy event would have been limited at the time of the mailing. Future studies should include these charitable activities.

Conclusion

The results of this study support the idea that participation in community-based dental education may increase the likelihood that dental students will provide charitable dental care after graduation. Dental schools should monitor their alumni to assess the long-term outcomes of participating in community-based experiences. When possible, dental schools with different types of experiences (e.g., duration of experience, participating in one experience vs. a variety of experiences) should collaborate on stud-
gies in the future to assess whether the differences in experiences are associated with different longitudinal outcomes.

Acknowledgments
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REFERENCES