

Educating Dental Students About Oral Health Care Access Disparities

Bruce S. Graham, D.D.S., M.S., M.Ed.

Abstract: Dental educators provide learning experiences for dental students that help them develop the belief that universal access to oral health care is a social justice imperative that will compel them to provide care to underserved patients after they graduate. To accomplish these learning outcomes, dental schools first recruit underrepresented minority students and students with previous volunteerism experiences. Dental educators then expose dental students to learning experiences in the classroom and in the community, dental school-based clinics, and community health clinics, to help them to develop the requisite knowledge, values, and competencies for serving underserved populations. The long-term, educational outcomes of these learning experiences have not been assessed to date. Systematic surveys should be conducted of dentists who have had these educational experiences to measure the number who actually care for the underserved in private dental offices, community health “safety net” clinics, and the Indian and Public Health Services.

Dr. Graham is Dean, College of Dentistry, University of Illinois at Chicago. Direct correspondence and requests for reprints to him at University of Illinois at Chicago College of Dentistry, 801 S. Paulina, M/C 621, Chicago, IL 60612; 312-996-1040 phone; 312-996-1022 fax; bgraham@uic.edu.

Key words: oral health care access, oral health disparities, dental student values education, community-based education, reflection learning

I have been asked to discuss how dental educators currently educate dental students about oral health care access disparities and their ethical implications. The learning outcome that dental educators are seeking for our students is the development of personal and professional values about the social justice imperative of universal access to oral health care. Moreover, we seek to have our students adopt these values at a commitment level that results in acting on their belief in oral health care access for all citizens by providing care to the underserved as dentists. I feel compelled to note that the beliefs that dental educators themselves hold about oral health care access vary widely across the entire spectrum—from belief in a free market for oral health care to a deep conviction that universal access is the only morally defensible option. In most dental schools, this lack of consensus among dental educators is a source of ambivalence about student learning experiences with underserved populations.

We must recognize that professional values are, to a great extent, reflective of societal values. That fact creates a challenge for dental educators because the majority of Americans do not believe that health care is a universal right of citizenship. American society does not currently embrace universal access to oral health care as a matter of public concern worthy of action. Is it any wonder that the American dental profession is ambivalent about this subject? In the context of these societal and professional values, dental educators are “swimming against the

current” when we aspire to help our students commit their future actions to furthering universal oral health care access. Moreover, in the current professional environment that richly rewards elective cosmetic dentistry treatment, we are asking our students to accept significant fiscal sacrifice to embrace the value of service to the underserved. American dentistry is founded on the free market concept, and the private practice of dentistry follows a small business model that delivers oral health care as a service. There is no widely held professional obligation norm that compels dentists to provide care for patients who cannot afford to pay. In fact, I have heard dentists criticize an American dental school that had the temerity to ask applicants to their predoctoral program, during admissions interviews, whether oral health care is a right or a privilege.

Dental education has itself created a daunting barrier to the acquisition of public service values by dental students through recent dramatic increases in student tuition at state-supported dental schools. We know that escalating student educational debt impacts the career decisions of our students. If our recent graduates are reluctant to pursue careers as dental educators because of an average of \$122,263 in educational debt in 2004, they will also find it difficult to serve the underserved in the face of these debts.¹

Now that I have established some of the challenges, I will turn to a description of the current best practices employed by American dental schools in educating dental students about their professional

obligation to improve access to oral health care for underserved populations. The most recent survey on the topic, conducted in 1998, reported that 91 percent of U.S. dental schools offer at least one course in dental ethics.² The same survey found that 56 percent of responding dental schools taught ethics in the first year of the curriculum, 21 percent taught it in the second year, 35 percent in the third year, and 47 percent in the fourth year. In another article, Zarkowski and Graham described a curriculum in professional ethics and dental law that was taught in all four years of the curriculum.³

Selection for Admission

Dental schools try to admit students from traditionally underrepresented minority population groups in the hope that, after graduation, they will serve these groups who are disproportionately underserved with respect to oral health care. One published study documented that African American dentists in Texas practice in lower socioeconomic, predominantly African American residential areas.⁴ Osborne and Haubenreich reported that the number of University of Kentucky dental students recruited from the Appalachian Region of Eastern Kentucky who returned to the region to practice after graduation had declined precipitously during the third decade of their thirty-year study period. They postulated that rising tuitions and resultant higher levels of student debt were factors in this observed decline.⁵

Some dental schools also seek to select applicants for admission who have demonstrated a commitment to public service and volunteerism. These dental schools believe that demonstrated volunteerism predicts future commitment to serving the underserved. I am not aware of a published study that validates this assumption, but it seems intuitively promising.

Educational Methods

In the best case scenario, dental schools take a “classroom to clinic” comprehensive approach, across all four years of the curriculum, in educating dental students about this issue. Following the lessons of adult learning research published by Gagne,⁶ dental educators attempt to make professional values learning relevant to clinical dental practice and to repeat the values learning experiences in each year of the

curriculum. The learning experiences typically begin with classroom learning, progress to health education “field experiences” and then to dental school-based clinical learning, and culminate in community-based clinical experience. This design is usually not exclusively linear, but rather is more cyclical, as clinical experiences are reinforced and enhanced by reflection learning and group discussion.

Lectures. Lectures are typically employed in introductory courses entitled “Dental Public Health,” “Community Dentistry,” “Pediatric Dentistry,” “Health Services Delivery,” “Population Oral Health,” or other similar titles. Lectures are probably not particularly effective in helping students develop values about oral health care access, but they are helpful in providing the factual basis for raising the consciousness of students about the issue. Lectures in “Dental Ethics” further explore the social justice and moral implications of oral health care access disparities. Most dental ethics courses also use small group discussion of patient care ethical dilemmas as an educational method to develop student values about oral health care access. However, some dental schools provide ethics learning experiences earlier in the curriculum. Bertolami has advocated an even earlier prematriculation ethics course for newly admitted dental students.⁷

Small Group Discussions. Ozar has stated that “objectivity (and the move away from subjectivity) in ethical judgments is increasingly achieved as one’s ethical judgments are grounded in a broader and broader base of human experience—both one’s own experience and the experience of other humans, shared in dialogue.”⁸ That assertion is the probable rationale for the widespread use of small student group discussions, moderated by a faculty member, to help students to adopt professional values. This learning environment is intended to facilitate the exploration of the student’s personal beliefs in comparison to societal and professional values, by allowing for peer feedback and “cross-validation” interactions, particularly when the dialogue revolves around a real-world patient care scenario. The social justice implications of oral health care access disparities are typically explored in several of these patient care scenarios.⁹

Community-Based Health Education. Dental schools often engage dental students in providing health education to a population in a community setting. An example of this type of learning experience is the delivery of oral health promotion and prevention to elementary school children in their classrooms.

Reflection Learning. In 1987, Schön introduced reflection as a professional education methodology.¹⁰ Dental schools employ reflection learning methodology to help students consciously reflect on lessons learned during community-based health education and/or clinical experiences. The reflections may be in writing and/or explored in a peer student dialogue group setting. This method seems to be effective in helping students embrace professional values, such as oral health care access universality.¹¹

Dental School-Based Clinics. The dental student's introductory experience in providing oral health care to underserved patients usually occurs in dental school clinics. Most dental school clinics serve as "safety net" sites for patients who cannot access oral health care in the private dental practice environment, typically because they lack the financial resources or dental insurance coverage to pay usual and customary dental practice fees for service. The dental student provides care to adult and child patients who suffer from long-standing oral diseases and their sequelae, as a result of their limited access to oral health care. The dental school-based clinic can be an effective motivational experience for embracing the value of service to the underserved, but only if clinical faculty role-model the clinical care of disadvantaged patients in a positive way. Unfortunately, faculty role-modeling is sometimes negative. Faculty may role-model a condescending attitude toward the patients, blaming them for their neglect of their oral health, and implying that they don't deserve oral health care. At other times, this faculty attitude is more subtle, as in the faculty comment that "These patients can't afford [or "wouldn't appreciate"] ideal dental treatment, so we have to provide compromise treatment procedures" or "These patients often don't show up for their appointments." Faculty attitudes can thus cause dental students to resent their underserved patients, instead of valuing the experience of providing care to them.

In contrast, clinical faculty who tell students that "There is no ideal treatment, just treatment that appropriately meets all of the patient's needs" and "Some treatment options are just longer-lasting than others" create an entirely different student attitude toward their financially disadvantaged patients. The faculty member who treats all clinic patients with dignity and respect and who says to students, "Isn't it satisfying to care for patients who really need your help?" is role-modeling socially committed patient care. This positive role-modeling behavior often doesn't come naturally to faculty who were educated

more than fifteen years ago, before oral health care access disparities were even publicly acknowledged by the dental profession, much less explored in the predoctoral dental curriculum.

Community-Based Clinics. Clinical experiences for dental students in sites outside of the dental school building are regarded by some schools to be "capstone" learning about possible solutions to oral health care access disparities, providing the most effective learning for a dental student about this issue. Students return from extramural clinical experiences with a new appreciation for the value of their professional contributions to a segment of society that is in dire need of their services. In these community-based clinics, they see dentists who role-model their own commitment to serving the underserved, whether as a paid provider or as a volunteer, and convey their personal and professional satisfaction that they feel in serving the underserved.¹¹

Community-based clinical education has demonstrated outcomes that seem to offer the promise that dental students who learn in these settings are more likely to serve underserved populations after graduation. Berg and Berkey reported this response from a survey of Colorado dentists who participated as dental students in the University of Colorado ACTS program.¹²

Continuing Education. The role of dental schools in encouraging practicing dentists to address oral health care access disparities is presently not clear. Certainly, dental schools are partnering with dental organizations in advocating for programs to address care access disparities. It remains to be seen whether continuing education courses related to the subject would be effective in stimulating dentists to serve underserved populations. Continuing education programs on professional ethics in dentistry have usually been met with limited participation by dentists. It is possible that a more practical approach, perhaps through cultural competency and language training courses, might be more successful with practicing dentists.

Educational Effectiveness

The second part of my assignment is to comment on the effectiveness of the education that we offer to dental students on oral health care access disparities. I am defining educational effectiveness as long-term learning outcomes. Simply put, education is optimally effective when the learner learns

and retains what he or she has learned over his or her entire lifetime. At the present time, we cannot say whether or not our educational efforts are effective in instilling in our students a commitment to action to redress oral health care access disparities. Long-term outcomes assessment of learning on this subject will require us to assess the behavior of dentists who have received education about oral health care access disparities and their ethical implications. We began educating dental students about this issue only fifteen years ago. Prior to that time, there were very few ethics courses in the dental school curriculum. So, we have a limited cohort of graduates whose learning outcomes we can assess.

I believe that we should assess whether or not these dentists act to improve access to oral health care for underserved populations. We could start by counting the number of our graduates who have provided patient care in clinical sites that serve the underserved during the past fifteen years. We could count the number of graduates who have served in the Indian Health Service and Public Health Service and other similar roles during the same time period. We could then use self-reporting surveys of our graduates, asking them about voluntary donated care to the underserved, legislative advocacy efforts on behalf of oral health access improvement, and participation in state dental Medicaid programs. These surveys will, of course, be limited in their accuracy by under- or overreporting tendencies and low response rates. Moreover, dental Medicaid participation may not even be an appropriate outcome measure, given the common tendency for many dentists to prefer to donate care instead of participating in low reimbursement and highly bureaucratic state dental Medicaid programs.

With respect to community-based clinical education, there are a number of specific outcomes measures questions that need to be answered to better understand the effectiveness of this educational method in influencing our graduates to pursue universal oral health access. These include, but are not limited to, the following:

1. What is the optimally effective duration of a community-based clinical experience?
2. What type of clinical setting is the most effective environment for positive learning outcomes?

3. Should the learning experience be an immersion for a sustained period of time, or is an “intermittent” rotation, interrupted by assignment to the dental school clinic, equally effective?
4. Should students select the type and geographic location of the extramural clinic experience for themselves, or is a number of assignments to diverse clinical settings more effective in values acquisition?

It is hoped that the outcomes of the Robert Wood Johnson Foundation Pipeline, Profession, and Practice Program might help to answer some of these questions.¹³

REFERENCES

1. Weaver RG, Chmar JE, Haden NK, Valachovic RW. Annual ADEA survey of dental school seniors: 2004 graduating class. *J Dent Educ* 2005;69(5):595-619.
2. Odom JG, Beemsterboer PL, Pate TD, Haden NK. Revisiting the status of dental ethics instruction. *J Dent Educ* 2000;64(11):772-4.
3. Zarkowski P, Graham B. A four-year curriculum in professional ethics and law for dental students. *J Am Coll Dent* 2001;68(2):22-6.
4. Solomon ES, Williams CR, Sinkford JC. Practice location characteristics of black dentists in Texas. *J Dent Educ* 2001;65(6):571-4.
5. Osborne PB, Haubenreich JE. Underserved region recruitment and return to practice: a thirty-year analysis. *J Dent Educ* 2003;67(5):505-8.
6. Gagne RM. *The conditions of learning and theory of instruction*. New York: Holt, Rinehart and Winston, 1995.
7. Bertolami CN. Why our ethics curricula don't work. *J Dent Educ* 2004;68(4):414-25.
8. Ozar DT. Unpublished lecture notes, 1989.
9. Ozar DT, Sokol DJ. *Dental ethics at chairside: professional principles and practical applications*. 2nd ed. Washington, DC: Georgetown University Press, 2002.
10. Schön DA. *Educating the reflective practitioners: towards a new design for teaching and learning in the professions*. San Francisco: Jossey-Bass, 1987.
11. Strauss R, Mofidi M, Sandler ES, Williamson R, McMurtry BA, Carl LS, Neal EM. Reflective learning in community-based dental education. *J Dent Educ* 2003;67(11):1234-42.
12. Berg R, Berkey DB. University of Colorado school of dentistry's advanced clinical training and service program. *J Dent Educ* 1999;63(12):938-43.
13. Andersen RM, Davidson PL, Atchison KA, Hewlett E, Freed JR, Friedman JA, et al. Pipeline, profession, and practice program: evaluating change in dental education. *J Dent Educ* 2005;69(2):239-48.