Community-Based Dental Education and the Importance of Faculty Development

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Abstract: Community-based dental education offers a variety of positive learning experiences for students while providing needed dental services for the underserved. More dental students are being instructed by a growing body of largely volunteer community-based faculty who practice in a wide range of community settings including community hospitals and clinics, nursing homes, and private practices. These geographically dispersed instructors may have little experience as educators. Their practice styles and their motivation to improve teaching effectiveness are likely to differ from the styles and motivation of school-based faculty members. Moreover, many dental schools have begun to emphasize practices that may be unfamiliar to community-based faculty such as evidence-based practice. Providing faculty development for them is challenging, yet crucial to the success of these programs and dental education in general. Fundamental elements that must be considered for effective community faculty development programming include fostering a culture of respect between school-based and community faculty members, basing programs on the actual needs of these educators, integrating principles of adult learning theory, and establishing ongoing institutional support. This article provides background on this movement, reviews the literature for faculty development programs geared specifically to community-based educators, makes recommendations for development programs for these dental educators, and includes suggestions for future research.

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Community-based dental education offers a variety of positive learning experiences for students while providing needed dental services for the underserved.1,2 Students exposed to a setting different from the school-based clinic experience a smoother transition to the life of a dental professional. Evaluations of these extramural programs indicate that participation improves students’ acquisition of clinical skills, facilitates integration of didactic course material, and fosters an appreciation of the social, ethical, and cultural aspects of community oral health.3-6

This educational approach has increased dramatically over the past ten years. In the American Dental Education Association (ADEA)’s 2008 survey of senior dental students, 60 percent of responding seniors reported spending four weeks or more at extramural sites. The percentage spending twelve or more weeks has risen from 12.5 percent in 2003 to 18.8 percent in 2007.7 More dental students are being instructed by a growing body of largely volunteer community-based instructors who practice in a wide range of community settings, including public and private clinics and practices in rural, suburban, and urban areas.3-6 These instructors may have little training or experience as educators and are geographically widespread. They provide care for their own patients while supervising one or two dental students.3-6 Providing calibration and faculty development for them is challenging, yet crucial to the success of these programs.

This article provides background on this movement, reviews the literature for faculty development programs geared specifically to community-based educators, makes recommendations for development programs for these dental educators, and includes suggestions for future research.
Community-Based Dental Education

In 1995, the Institute of Medicine report Dental Education at the Crossroads called for an increase in community-based experiences for dental students. In 1999, a feasibility study on community-based dental education programs known as the Macy Project found that there were few such programs, those that existed were at an early stage, and so there was little data about them. Among the recommendations from this study was a call for formal training of community-based dental educators.

In the ensuing ten years, there has been a dramatic increase in the number and scope of these programs due to changes in curriculum, philosophy, student interest, and financial support from three foundations: the Robert Wood Johnson Foundation, the W.K. Kellogg Foundation, and The California Endowment. These organizations have funded programs at fifteen dental schools since 2003 and are concerned with addressing access to care and recruitment of underrepresented minorities into the profession and, as a result, would like senior dental students to serve an average of sixty days in community clinics.

Community-based dental education supports the mission of several new dental schools, such as the Arizona School of Dentistry & Oral Health (AS-DOH) and East Carolina University (ECU) School of Dentistry. According to the ASDOH’s website, “the school was founded in July of 2003 with the fundamental aim of identifying applicants with a unique understanding of and desire to serve communities in need.” Among the recommendations from this study was a call for formal training of community-based dental educators.

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cally and mentally challenged individuals. Because teaching is not a role that many community-based educators actively sought, they may come to their teaching responsibilities with a different mind-set from that of school-based faculty. However, like their dental school colleagues, it is imperative that they acquire necessary teaching skills to successfully communicate their expertise.21 In addition, many dental schools have begun to emphasize practices that may be unfamiliar to community-based faculty such as evidence-based practice, a risk management approach to treating dental caries, the oral-systemic connection, smoking cessation, and other health promotional activities. It is important that community-based educators learn about these concepts in order to reinforce the school’s curriculum and make the experience more meaningful to their students.

According to the ADEA 2008 survey of dental school seniors, almost 75 percent rated their extramural clinic experience as positive or very positive. However, they rated the technical quality of the dentistry performed at the sites lower than that of the school-based clinics and reported that quality assurance activities, such as chart review, occurred less often in the community setting. They also indicated that prevention was more heavily emphasized at the school compared to the extramural clinic.7

The Need for Faculty Development for Community Dental Educators

Faculty development is critical for community-based dental educators who need not only knowledge of the school’s curriculum and philosophy about patient care, but also instruction in teaching skills. While many community-based faculty members have enthusiastically embraced their new roles as educators, they often have little time for school-based faculty development activities. Likewise, school-based faculty may not have the time or resources to develop and provide specialized training programs for these new educators. Costs associated with providing faculty development include transportation for both site and school-based faculty and creating web-based programs.

Community-based preceptorships are quite common in health care education and have been in existence for many years. Christensen conducted a meta-analysis of research on the educational support needs of general practitioners who teach medical students that indicated the necessity for teaching resources, in particular the provision of professional development activities to enhance quality teaching.22 Features of faculty development programs for preceptors in medicine include instruction in core teaching principles such as creating a respectful learning climate, setting expectations, giving effective feedback, teaching and learning styles, reflective practice, dealing with the difficult learner, evaluation, etc.23-36 Effective programs include needs assessments based on both student evaluations and self-identified preceptor needs.23,27,30,37,38

Site visits by university faculty are recommended to individualize the approach in order to facilitate the transfer of new teaching skills, to foster collegiality, and to evaluate the educational program.31,32,39 Flexible formats that include workshops, online programming, discussion forums, and newsletters are valued by these busy community practitioners.30,37,39 Lengths of programs varied, with some being as short as a half-day workshop to year-long fellowship programs.30,34,40 Wilkes et al. used multiple data sources to evaluate their program including the use of standardized students, site visits, and preceptor evaluations.23 In 1999, six major internal medicine professional organizations held a national conference to collaborate and disseminate skills for outpatient teaching in internal medicine and to facilitate the development of local faculty development projects.41 Unfortunately, I could find little in the dental literature detailing faculty development programming for community faculty. DeCastro et al. have reported “intensive calibration,” but did not elaborate on the length or scope of this training at the University of Medicine and Dentistry of New Jersey-New Jersey Dental School.13,42 However, more recent information indicates there is significant collaboration between this dental school and its community sites. All preceptors are employees of the school. The directors of the individual sites go to the school once a month for meetings and calibration, and the school’s faculty visit the site on a regular basis. Courses for both students and faculty are teleconferenced.43 The report of a symposium on dental outreach teaching conducted at the 2004 annual meeting of the International Association for Dental Research acknowledged the need
to develop methods to train and monitor faculty at community sites. The evaluators of the Pipeline program recommend annual orientation and training programs for community educators with calibration done by the full-time, school-based faculty.

Components of Effective Programs

Fundamental elements that must be considered for effective community faculty development programming include creating a culture of respect between school-based and community faculty, basing programs on the actual needs of these educators, integrating principles of adult learning theory, and establishing ongoing institutional support. Mutual respect may be fostered by inviting both school-based and community-based faculty to the same development programs so they can interact, share best practices, and collaborate on clinical and student issues.

The tenets of adult learning theory should be incorporated into the planning and implementation of these programs. Instruction should focus on the learner, build on the learner’s experience, be relevant, and be applied soon after the program. Formal didactic instruction should be kept to a minimum, roleplays and discussions should be used, and the program’s design should be flexible enough to adapt to emerging learner needs.

Community faculty must be sufficiently motivated to learn and willing to participate in faculty development. Therefore, a careful selection and credentialing process should occur at the outset and be comparable to the recruitment and hiring practices at the dental school. The Commission on Dental Accreditation (CODA) stipulates that all people supervising dental students in the provision of dental care hold a dental school faculty appointment. Recently, Hryhorczuk et al. recommend using the faculty credentialing system of the Joint Commission on Accreditation of Healthcare Organizations. Formicola et al. recommend that community-based education be specifically regulated through CODA guidelines.

Recommendations

Needs assessments should be conducted to determine calibration and faculty development needs for community-based educators. These could include surveying students and community faculty to determine content areas needing development.

These collaborations offer opportunities for research that include collecting and analyzing demographic and other background information about the community faculty. In order to ascertain the features of successful partnerships, the programs’ credentialing, training, oversight, and quality control mechanisms should be studied.

Faculty development programs that employ the principles of adult learning by using active, experiential, case-based activities should be created. Regional programming and online resources that are organized, succinct, practical, and easy to access could reach geographically dispersed educators. Incentives for faculty at community sites to take part in faculty development and participate in academic presentations and research could include recognition with teaching awards and opportunities for promotion and career advancement.

Greater monitoring of community sites would help to ensure adequate supervision and quality assurance especially in the initial stages of these collaborations. (It is important to note that CODA must accredit sites that provide 20 percent or more of a student’s clinical instruction.)

Dental schools should assess the short- and long-term impact of these programs on their students and recent graduates to see if participation encouraged students to practice in underserved areas and perform community service.

Conclusion

Based on the overall success and growing acceptance of these programs, the long-term sustainability of community-based dental education looks promising. Many schools are committed to this instructional modality and have added the costs to their budgets and these externships to their curricula. Developing the academic skills of community dental educators is increasingly important in order to provide students with the best possible educational experience and to encourage fruitful collaborations among these teachers, the community, and the academic centers. Tailoring programming to the specific needs of community educators will help them become the effective role models and successful teachers that dental education requires.
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