The Dental Hygiene Faculty Shortage: Causes, Solutions and Recruitment Tactics

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Abstract

Purpose: Peer-reviewed professional publications were examined for pertinent information associated with faculty shortages in the dental professions. The review found 6 suggested causes, including inadequate compensation, lack of diversity amongst faculty, inadequate mentoring for new faculty, lack of modeling to prospective dental hygiene educators, little awareness of faculty shortages and lack of institutional support for dental hygiene faculty. The causes and solutions for faculty shortages and recruitment tactics employed by parallel professions were evaluated to determine their applicability to the dental hygiene faculty shortage. There remains a scarcity of information regarding dental hygiene faculty shortages and how dental hygiene programs and institutions should address such shortages.

Keywords: dental hygiene, faculty shortage, education, mentoring, diversity, compensation

This study supports the NDHRA priority area, Professional Education and Development: Evaluate the extent to which current dental hygiene curricula prepare dental hygienists to meet the increasingly complex oral health needs of the public.

Introduction

Perceived causes and suggested solutions for the dental hygiene faculty shortage play a role in America's access to care problem. The ability of an individual to obtain dental care is known as access to care.[1] The lack of access to dental care gained national prominence in May of 2000 when the U.S. Department of Health and Human Services published the United States Surgeon General's National Call to Action to Promote Oral Health.[2] The American Dental Education Association (ADEA) believes dental educators should promote and ensure access to effective oral health care,[3] and as debates regarding solutions are ongoing, the general consensus is that reversing the trend of faculty shortages would create more dental care providers, and thus alleviate the access to care problem.[1-3] This literature review focuses on the dental hygiene faculty shortage. Current peer-reviewed publications were examined for pertinent information associated with faculty shortages in the dental professions.

Review of the Literature

Faculty shortages affect both students and patients.[4] Some of the reasons faculty positions remain open are too few applicants, more faculty members leaving academia than entering and faculty members moving into private practice.[5,6] Information assessing dental hygiene educators reveals almost half of full-time faculty members are approaching retirement age, which is expected to create vacancies within the next 10 years.[5-8]

Shortages may stem from dental hygienists lacking the education needed to become effective educators.[8,9] According to the Commission on Dental Accreditation, dental hygiene educators should possess a minimum of a baccalaureate degree.[10] Many educational settings require full-time faculty to hold at least a master's degree.[8] Careers in academia require skills and knowledge that are not included in entry-level dental hygiene programs, which establishes the necessity for more baccalaureate and masters level dental hygiene programs.[8,9] The conversion of existing associate degree dental hygiene programs to baccalaureate degree is also needed to address the dental hygiene educator shortage.[8]

Compensation

Compensation differences between private practice and dental hygiene educators may be a reason for the dental hygiene faculty shortage.[8] Some educational settings offer salaries lower than what practicing dental hygienists earn, which may result in fewer dental hygiene graduates pursuing careers in education.[9] New graduates prefer clinical practice over academia because the remuneration in education is inadequate to cover their outstanding debt loads.[6] Disclosures of benefits not available to practicing dental hygienists, such as predictable

and stable income, extended time off, retirement and paid medical and dental insurance, should be offered to prospective educators.[6] Academia offers a stimulating intellectual environment, satisfaction from teaching, textbook writing, lecturing, patentable research, continued education and faculty practice opportunities.[4,6] Undergraduate dental hygiene students should be supplied with information about how graduate education can lead to faculty positions and potential paid memberships to ADEA and the American Dental Hygienists' Association, continuing education, uniform allowances and malpractice and licensure fees.[8,9,11]

Diversity

The lack of diversity among faculty may contribute to the lack of diversity among dental hygienists. Ninety-four percent of full-time baccalaureate dental hygiene faculty members are Caucasian, and 96% are female.[8] Eighty-nine percent of dental hygiene program directors (n=203) reported 0 to 5% of the student population were male, and 21% were minorities.[5] Suggestions to recruit minorities include using television, radio and print media to recruit diverse ethnic, racial and gender groups.[8]

ADEA formed the Center for Equity and Diversity and the Section on Minority Affairs to advance diversity in dental professions, develop comprehensive strategies to increase minorities in dental professions and invite various presidents of organized dentistry and dental hygiene to define and discuss minority issues.[12] Organizations such as the National Dental Association and the National Dental Hygienists' Association represent African American dental professionals and serve as a recruitment tool for minorities in the dental professions.[13,14]

Mentoring

Health care professions have defined a mentor as a person who guides another by being a teacher, role model, advisor, counselor and coach.[15-18] Advancement of the less experienced individual's personal and professional life is a recurring premise of mentoring.[15-20] Thorpe and Kalischuk developed the Collegial Mentoring Model for nursing, described as a friendship-based, collegial relationship promoting honest and open communication over an extended period of time.[18] A case-based analysis by Glickman et al discusses mentoring as 1 of 3 human relations fundamentals, along with motivating people and performance counseling.[21] Mentors must possess special qualities such as experience, commitment to the role as mentor, acceptance, guidance and nurture of the protégé, being approachable, good interpersonal skills, a sense of self-confidence, faculty camaraderie, generosity, competence and a commitment to the mentor/protégé relationship.[16,20,22]

Reviewing the literature revealed that the nursing profession utilizes mentoring in several different venues, from mentoring the neophyte faculty member, utilizing the College Mentoring Model for peer mentoring, to mentoring interested undergraduate students towards a career in academia.[16,19,23,24] Dental educators use mentoring in the same manner as nurses.[21,25-27]

Although research demonstrates the benefits of mentoring and the continued need for formal or informal mentoring of faculty members, the existing dental hygiene publications related to mentoring focus on faculty development of academic careers or research, and not faculty recruitment and retention.[15,16,19,21,28-31] Blanchard and Blanchard indicated 26% of dental hygiene programs were actively pursuing student mentorship to facilitate student transitions into clinical practice or other career fields.[32]

Obstacles dental hygiene faculty encountered were lack of formal structure and evaluation of the mentoring experience, variable mentor quality, lack of resources and inadequate support.[32] Dental hygiene faculty are receptive to mentoring their undergraduates, but reported inadequate time in the existing curriculum, lack of faculty to administer the program, lack of mentor volunteers, no perceived need for implementation and heavy workload as reasons for not implementing a formal mentoring program.[31,32] Results from one survey revealed divisions in opinion regarding the addition of formal mentoring programs, with 43% (n=43) in favor and 54.4% either opposed (n=36) or answering "maybe" (n=20).[32] Interestingly, a similar survey of dental hygiene program directors indicated a positive correlation between length of mentoring experiences of the director and job satisfaction.[31]

The importance of influencing undergraduate students towards an academic career is a recurring theme in the literature when considering mentoring as a solution to the dental hygiene faculty shortage.[16,20,22,27,28,32-36] Barnes noted that recognizing and mentoring undergraduate students and promoting the pursuit of a career in academia should be used as a recruitment tactic for new faculty.[33] A survey of Canadian dental hygiene faculty regarding suggestions and topics for attracting new faculty included responses such as peer teaching, role modeling, mentoring, providing information about higher education, advertisement of higher education dental hygiene programs, courses discussing career options and encouragement of students toward pursuing academic careers.[29]

Role Modeling

Since students' perceptions about dental hygiene faculty becomes their beliefs, incidental learning about faculty life must be provided in a positive light, hopefully inviting students towards an academic career.[23,28,34] Rosenfield notes modeling is a double-edged process, not entirely in the control of the faculty member. A difference in practicing dental hygienists and dental hygiene faculty may influence the perception of students. Dental hygiene students might perceive themselves as resembling dental hygienists in private practice instead of dental hygiene faculty.[28]

Another reason students feel they

don't resemble dental hygiene faculty is the difference in age between dental hygiene faculty and students. Bertolami et al makes the point that a mentor/role model loses effectiveness if they are significantly older than their protégé.[34]

The educators affecting dental hygiene students may be projecting the message that dental hygiene education is not interesting, important or fun. The effects frustrated faculty have on students are noted in Trotman's study of dental students (n=30).[35] The student interviews revealed few examples of full-time faculty that made academic careers look attractive. Students perceived there was no incentive for teaching, and full-time faculty were pulled in too many directions while part-time faculty were viewed more as role models.[35]

A survey evaluating the emerging workforce of nurses' (early to late 20s) preferences for faculty compared to responses from the entrenched nursing workforce (between ages 40 and 68) suggests a divide in faculty perception of students' preferences for faculty behavior. The top 3 answers of the well-established nursing workforce were clinical competence, approachability and a caring attitude, while emerging nurses listed approachability, good communications skills and professional attitude, respectively.[36]

Awareness

A potential cause of the current dental hygiene faculty shortage may be a lack of awareness of the problem, as well as a lack of perceived opportunities, especially among students enrolled in undergraduate dental hygiene programs.[11,37] To create awareness of this issue, students should have the opportunity to explore career opportunities outside of the traditional curriculum, which typically directs students towards private practice.[11] With most dental hygiene programs, there is evidence of a lack of emphasis on encouraging careers in academia, and students only have an abstract concept of teaching and research.[11] When dental educators ask dental students to consider academic career aspirations, they are encouraging them to make a career decision completely different from their initial career plan of clinical practice.[34]

Imprinting students early with the idea of becoming an educator and assisting in financing their education can enhance recruitment of future educators. In addition, educators should try to attract individuals who are interested in teaching as a moral vocation, with the goal of encouraging a career that may not be as lucrative, but more satisfying on a personal level.[34]

Students do not choose academic paths for various reasons. Financial compensation, the lack of interest in academia from the educational culture and students inability to make long term career decisions are all contributing factors.[38] Students do not possess the knowledge or information necessary to make an informed decision to pursue a career in education.[39]

Evidence suggests the dental profession as a whole does a good job of promoting the benefits of private practice, but this message is not conveyed regarding an academic career.[38] Solutions exist to help address the lack of encouragement to pursue a career in academia. One solution would be to implement programs promoting both research and academic careers. Elective courses allowing students to experience teaching, including developing their own "micro course," gives students exposure to a career in academia. An elective course, "Hands on Experience of Future Dental Educators," was offered as an apprentice teaching experience at the UCLA School of Dentistry in 2000. Based on the feedback of student teachers (n=21) who participated in the elective course, the majority indicated it was a positive and rewarding experience. All but 1 of the student teachers indicated they would like to incorporate teaching into their future plans. This study suggests the positive impact of the student teaching experience and could be incorporated into dental hygiene curricula.[37]

The ADEA task force on the Status of Allied Dental Faculty argued dental hygiene faculty shortages, as well as demands for researchers, can be attributed to the small number of master's programs in dental hygiene.[39-41] The recommendations from the task force included the use of technology to maximize faculty resources, loan forgiveness incentives and alternate ways of rewarding faculty.[39]

Institutional Support

Lack of institutional support through faculty development is another problem contributing to dental hygiene faculty shortages. Faculty development is crucial in promoting academic excellence.[41-46] Due to competing research and clinical priorities, medical and allied health education does not get the attention needed to improve teaching or encourage scholarships for education.[43] One approach utilized in several medical universities includes the implementation of formal faculty development programs.[41] These have been referred to as grass roots programs,[47] Medical Education Scholars Programs[42] and Academies.[48] Goals of these programs were to enhance teaching methods, promote the scholarship of teaching, enhance curriculum development, enhance assessments development, promote advising and mentoring and promote executive leadership skills.[41-43,47,48]

One such program used to address improving teaching and encouraging scholarship of education in the health sciences was conducted at West Virginia University.[43] Led by university administrators and a committee of teachers from the preclinical and clinical faculty programs from the schools of dentistry, medicine, nursing and pharmacy, a "cross-discipline Health Sciences Teaching Scholars Program" was developed.[43] Beginning as a weekly face-to-face program, this evolved into a combination online web course with 1 hour weekly face-to–face meetings. Results of the program indicated the online discussions encouraged thinking about the subject manner beyond the

classroom hours. Due to the availability of online access, learning was reinforced, and for the presenters of the online modules, web development skills were enhanced. As the program evolved, participation increased due to wide access of the internet, allowing greater flexibility for clinical faculty.

Other methods cited for faculty development include a 7-tier hierarchy developed by Ullian and Stritter, which includes individual activities such as self-assessment, observation of "exemplary practice" videotapes, shadowing experienced or exemplary teachers, being videotaped while teaching and receiving feedback, journal clubs, lunch-and-learn discussion groups, rewarding teaching effectiveness for new and junior faculty and tuition support for faculty to participate in graduate programs in education.[45]

The outcomes of these faculty development programs revealed an increase in enthusiasm for teaching, educational research, publications of educational abstracts, editorials, chapters and books and an increase in presentations about education at professional association meetings.[46] Although these faculty development programs have been successful, they have not been encouraged in health sciences.[48] Inclusion of faculty development programs may ultimately result in improved teaching performance and better outcomes for students.[49]

Conclusion

Methods to address the dental hygiene faculty shortage are multifaceted. A combination of a situational approach using the suggestions discussed in this paper may provide successful alleviation of the problem at individual institutions. Experimental programs addressing the recruitment of diverse faculty members are also needed. Information regarding dental hygiene students and mentoring is not readily available. Research is needed to assess current dental hygiene programs and their use of formal or informal mentoring programs, their implementation of the programs and their rate of success or failure. By creating awareness of the dental hygiene faculty shortage problem, identifying new approaches may become easier. Another step towards addressing the faculty shortage is to gain the acceptance and enthusiasm of entities willing to make the changes needed to alleviate the shortage. Although these approaches may be beneficial, the need for additional research relating to the dental hygiene faculty shortage is necessary. It is critical for current faculty members to address the dental hygiene faculty shortage and encourage curriculum reform to aid the movement for faculty development and recruitment both within their dental hygiene programs and through their local dental hygiene associations. With increased knowledge of the approaches available to address the issue and action on the part of dental hygiene professionals, educators and institutions throughout the country, the dental hygiene faculty shortage may be alleviated in the future.

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