SHORT REPORT

Interprofessional education: the inclusion of dental hygiene in health care within the United States – a call to action

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Abstract: There is a lack of access to oral health care in the United States for rural, underserved, uninsured, and low-income populations. There are widely recognized problems with the US health care system, including rapidly increasing costs and access to oral health. During the last decade, there has been a huge influx and push toward interprofessional education programs; however, these programs conveniently leave out dental hygiene. Interprofessional education can bring forth the collaboration, communication, and teamwork necessary to provide a comprehensive health care plan to treat oral health care needs in patients. As the advanced practice for dental hygiene emerges, it is imperative that the educational qualifications of dental hygienists are sufficient to enable them to safely provide the scope of services and care encompassed in these new expanded roles and to effectively participate as an interprofessional team member. **Keywords:** interprofessional education, dental hygiene programs, dental hygiene education,

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Report

More than 47 million people in the United States are currently living in places where it is difficult to access dental care.¹ Low-income adults are highly unlikely to have dental checkups,² and poor dental health increases the risk for diabetes, premature birth, and negative birth outcomes.³ In addition, associations have been documented between periodontal disease and diabetes,⁴ cardiovascular disease,⁵ and gastrointestinal disorders.⁶ There is a lack of access to oral health care in the United States for rural, underserved, uninsured, and low-income populations. In 2001, the first-ever US Surgeon General's report on oral health provided evidence that the nation's structure for oral health care delivery is particularly insufficient to meet the needs of disadvantaged ethnic, racial, and socioeconomic populations. Therefore, a number of efforts have been made to address this problem. A major initiative/approach is to increase the oral health care workforce through new models of midlevel providers. This article is a call to action for health care professionals in the United States to ensure better outcomes for patients.

In the United States, health care professionals are overwhelmingly trained in uniprofessional settings independent of interprofessional education (IPE) and collaboration, leading to challenges in practice.⁷ In contrast, members of the Canadian health care professional system are continuously trained in interprofessional collaboration, including dental hygienists. However, in the United States, most dental hygiene programs are alienated from any form of interprofessional teamwork or collaboration. More than a decade ago, the US Surgeon General publicly challenged the nation to

© 2013 Yanderbilt et al. This work is published by Dove Medical Press Limited, and Licensed under Greative Commons Attribution – Non Commercial (unported, v3.0) permission from Dove Medical Press Limited, provided the work is properly attributed. Permissions beyond the scope of the License are administered by Dove Medical Press Limited, provided the work are permitted without any further how to request permission may be found at: http://www.dovepress.com/permissions.php realize the importance of oral health and its relationship to general health and well-being, yet oral health disparities continue to plague the US health care system.⁸ There are widely recognized problems with the US health care system, including rapidly increasing costs and access to oral health.⁸ Interprofessional collaboration in the provision of health care has been advocated by health professionals and others for decades. Since 1978, the World Health Organization⁹ has promoted collaboration from multiple disciplines that could lead to accessible and affordable health care.

IPE is the foundation needed for health professionals to support patient needs. IPE is defined as students from two or more professions learning about, from, and with each other to enable effective collaboration and improve health outcomes; and multiple health workers from different professional backgrounds working together with patients, families, and communities to deliver the highest quality of care.9 During the last decade, there has been a huge influx and push toward IPE and teamwork; however, IPE programs conveniently leave out dental hygiene. With an increased focus on IPE, it is necessary to incorporate dental hygiene professionals as part of the team, especially because the dental hygiene community is committed to collaborative interprofessional patient/ client-centered practice.¹⁰ IPE can bring forth the collaboration, communication, and teamwork necessary to provide a comprehensive health care plan to treat oral health care needs in patients.8 In addition, IPE can lead to an improvement for public health and address social determinants of health, using a multidimensional approach to health care.8

As of April 2011, 34 states permit dental hygienists direct access to patients in a model that allows patients to access preventive services provided by dental hygienists, without a prior visit to, or authorization from, a dentist. Direct access has come mostly through the expansion of dental hygiene practice in limited public health settings. As many as 15 states also may be considering or have implemented or piloted new oral health workforce models. The American Dental Hygienists' Association, the American Dental Association, and the federal government have all supported new forms of oral health professional workforce models. Such models include the advanced dental hygiene practitioner, the community dental health coordinator, dental health aide therapists, and a range of dental therapist models similar to those in New Zealand, Canada, Great Britain, and most recently, Minnesota.

As advanced practice for dental hygiene emerges, it is imperative that the educational qualifications of dental hygienists are sufficient to enable them to safely provide the scope of services and care encompassed in these new expanded roles and to effectively participate as an interprofessional team member. This focus on interprofessional teamwork within an oral health care setting, community clinic, or private practice has the potential to lead to better preventive models for patients. Furthermore, it is essential to the health care community that the activities and experiences of dental hygiene professionals be incorporated into IPE and disseminated throughout the health care system¹¹ in the United States. For the development of IPE and inclusion of dental hygiene in the United States, it is imperative that we incorporate dental hygiene students and professionals within our IPE models, thus providing them with a foundation and exposure to IPE before they enter the workforce. This will ensure their successful transition into oral health care settings. The inclusion of dental hygiene programs has the potential to increase positive outcomes for patients, students, and faculty; furthermore, this process could lead to a comprehensive health care system in the United States. The purpose of this article is to generate a call to action among health care professionals in the United States, targeting schools of nursing, pharmacy, dentistry, medicine, allied health, and social work. Going forward, health professional schools in the United States should address the inclusion of dental hygiene students to further promote oral health care and, potentially, provide better patient outcomes.

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References

- Health Resources and Services Administration. Shortage Designation: Health Professional Shortage Areas and Medically Underserved Areas/ Populations. Available at: http://www.hrsa.gov/shortage/. Accessed May 18, 2013.
- Haley J, Kenney G, Pelletier J. Access to Affordable Dental Care: Gaps for Low-Income Adults. Menlo Park, CA: The Kaiser Commission on Medicaid and the Uninsured; 2008.
- Interprofessional Education Collaborative. Core Competencies for Interprofessional Collaborative Practice. Report of an Expert Panel. Washington, DC: Interprofessional Education Collaborative. 2011.
- Mealey BL. Periodontal disease and diabetes. A two-way street. J Am Dent Assoc. 2006;137 Suppl:26S–31S.
- Demmer RT, Desvarieux M. Periodontal infections and cardiovascular disease: the heart of the matter. J Am Dent Assoc. 2006; 137 Suppl:14S–20S.
- Barnett ML. The oral-systemic disease connection. An update for the practicing dentist. JAm Dent Assoc. 2006;137 Suppl:5S–6S.
- Institute of Medicine. Crossing the Quality Chasm: A New Health System for the 21st Century. Washington, DC: National Academies Press; 2001.
- Vanderbilt AA, Isringhausen KT, VanderWielen LM, Wright MS, Slashcheva LD, Madden MA. Health disparities among highly vulnerable populations in the United States: a call to action for medical and oral health care. *Med Educ Online*. 2013;18:1–3.

- 9. World Health Organization. *Framework for Action on Interprofessional Education and Collaborative Practice*. Geneva: World Health Organization; 2010. Available from: http://whqlibdoc.who.int/hq/2010/WHO_HRH_HPN_10.3_eng.pdf. Accessed April 11, 2011.
- Gurenlian JR. Summary of the International Federation of Dental Hygienists house of delegates workshop. *Int J Dent Hyg.* 2010;8(4): 313–316.
- 11. MacDonald L. Interprofessional collaboration, a community of practice and research capacity building: just how and where to begin for the dental hygienist involved in interprofessional practice. *Can J Dental Hygiene*. 2011. Available from: http://www.thefreelibrary.com/ Interprofessional+collaboration%2c+a+community+of+practice+and+ research...-a0266750843. Accessed May 18, 2013.

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