A summary of the 2010 Dunning Symposium: the practice of dentistry for the 21st century

Ira B. Lamster, DDS, MMSc; Allan Formicola, DDS, MS

College of Dental Medicine, Columbia University, New York, NY

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Correspondence
Dr. Allan Formicola, College of Dental Medicine, Columbia University, 630 W. 168th Street, Box 100, New York City, NY 10032. Tel.: 212-304-5214; Fax: 212-305-7134; e-mail: ajf3@columbia.edu. Ira B. Lamster and Allan Formicola are with the College of Dental Medicine, Columbia University.

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Abstract

The 15th Dunning Symposium was held on November 29 and 30, 2010 in conjunction with the Greater New York Dental meeting in New York City. Since the first symposium in 1981, the symposia have addressed major issues in the field of dentistry that impact on the oral health of the public. The theme for this symposium dealt with how the practice of dentistry would emerge given healthcare reform legislation, opportunities for dentists to become more engaged in the primary care of patients, trends in dental education, and the addition of a mid-level practitioner. The audience, consisting of dental school deans and leaders in state and national dental associations, completed a pre-symposium questionnaire to gauge their opinions on key issues and then, after the presentations, participated in breakout sessions that discussed the implications of the presentations. This paper is a summary of the Dunning Symposium.

Introduction

The Dunning Symposium is named for Dr. James Dunning, a 1930 graduate of Columbia University College of Dental Medicine, who served as Dean of the Harvard School of Dental Medicine and became prominent in founding the field of public health dentistry. This symposium, the 15th in a series that began in 1981, was held in November 2010 to explore how the practice of dentistry could evolve to allow dental professionals to assume a more prominent role in health care and to reach a greater proportion of the underserved population through the use of emerging mid-level practitioners. The symposium was funded by grants from the W.K. Kellogg Foundation provided by the American Association of Public Health Dentistry and from the Robert Wood Johnson Foundation. The symposium was held in conjunction with the 2010 Greater New York Dental Meeting.

The symposium raised issues that have been the focus of attention of national and state dental associations as well as community groups, healthcare foundations, and state governments. The invited audience included 9 dental school deans and 10 representatives of state dental associations principally from the northeast; 8 representatives of national dental associations (the American Dental Association, the American Dental Education Association, the American Dental Hygiene Association, and the American Academy of Pediatric Dentistry); and 2 representatives from the Health Resources Service Administration (HRSA). The remainder of the audience was staff from community/health centers, staff from the Kellogg and Robert Wood Johnson Foundations, and faculty from the College of Dental Medicine, Columbia University. In total there were 46 attendees.

The format for the symposium included six presentations, each followed by a discussion period and two breakout sessions exploring questions raised by the presenters. The two overall goals for the symposium were to view a) how dental practice and dental education are responding to public health challenges and the passage of healthcare reform; and b) how emerging mid-level providers function and how the profession views them. The symposium also discussed linkages of these two drivers of change.

Synopsis of the presentations

Michael Sparer, Chairman of the Department of Health Policy and Management at the Columbia University Mailman School of Public Health, provided an overview of the Patient

Protection and Affordable Care Act (PPACA), the new healthcare overhaul bill, that was signed into law in March 2010. His presentation indicated that the reform law had several goals: to provide health insurance coverage for most of the approximately 50 million persons currently without insurance; to do so without adding to the nation's budget deficit; to stem the rising cost of health care more generally; and to reorganize and improve the quality of the health delivery system. Sparer then summarized the insurance expansion provisions (including an effort to add approximately 16 million more individuals to Medicaid) and a program to enable another 16 million to buy private coverage through newly created state insurance exchanges. He also summarized systems changes that are designed to promote integrated delivery of care, the medical home, primary care, and chronic disease management.

Regarding oral health care, Sparer noted that PPACA will require insurance companies to provide basic dental coverage for children and that it directs Medicaid and the State Children's Health Insurance Program (SCHIP) to look at the reimbursement levels for dental care. Pilot projects to include mid-level providers in the oral health workforce also are encouraged by the PPACA. Sparer also observed that dentists could "scope up" as primary care practitioners and assist the nation in combating major chronic public health problems, such as screening for diabetes, while delegating or "scoping down" some of the more routine dental procedures to mid-level providers to help cover the uninsured.

Edward O'Neil, Director of the Center for the Health Professions at the University of California San Francisco, concurred with Sparer's view of the need to reshape the delivery system but qualified how this should impact on oral health care. His view was that the current private practice system that evolved in the United States was serving about 75 percent of Americans well and should be left to operate as it currently does, but that 25 percent of the population is suffering from poor oral health and has limited to no access to dental care. He urged the profession to seek changes in regulations that serve as barriers to develop and demonstrate new practice models different than the current private practice dental delivery system that could reach the underserved. O'Neil estimated that between 10 and 15 percent of dental graduates would be needed and could be successful in community settings, providing care to those currently left behind.

Ira Lamster, Dean of the Columbia University College of Dental Medicine, presented his view of the 21st-century practitioner who would have the capacity to utilize more of the comprehensive education provided in the nation's university-based system of dental education. He envisions dentists becoming more integrated in the primary care system by undertaking a greater role in assessment of diseases and disorders that affect oral health and a patient's ability to tolerate dental treatment. A more comprehensive patient evaluation could aid in the detection of early symptoms of disease. Further, dentists would concentrate their direct practice efforts to treat the more complex restorative cases or more medically complex patients. Lamster indicated that dentists could "scope up" because they have the education to do so and could find the time in their busy practice day to do so by utilizing mid-level providers. He sees the latter as practice "extenders" that dentists could supervise in community settings developed to treat the underserved.

Peter Polverini, Dean of the University of Michigan School of Dentistry, reported that an extensive strategic planning process at that school developed a curriculum that would allow students to select specific educational tracks. These tracks will allow students to select a clinical, research, or leadership with a public health/healthcare policy focus. The focus would be on evidence-based dentistry, the profession's need for managing the care of the growing elderly as the baby boomers age, and the expectation that the profession will provide the necessary leadership to formulate healthcare policy to improve the oral health on a local, regional, and global basis. The plan also includes using multidisciplinary training opportunities so that students in medicine, dentistry, pharmacy, and nursing could better work in a team practice environment. The graduates would more fully understand and appreciate the roles of other health providers.

The views of Lamster and Polverini are compatible and consistent with the intent of the new healthcare law as expressed both by Sparer and O'Neil. All agreed that future dental graduates will be required to manage the care of a growing number of medically complex patients with significant oral health care problems, and the profession will require better trained individuals in public policy to assist it deal with problems of the underserved. Their presentations recognize that mid-level providers, physicians, and nurses may be needed to augment the dental workforce "reflecting a growing awareness of an unmet need that is accelerating at an unsustainable pace."* The symposium, therefore, turned its attention to a formal analysis of mid-level providers, specifically how the Alaska Tribal Health Consortium's Dental Therapist program is operating. This was followed by a discussion of the challenges associated with wider introduction of these providers into the dental delivery system.

In the fall of 2010, Research Triangle Institute International (RTI) reported a 2-year study they completed on the evaluation of the dental therapist model in remote areas of Alaska (1). The study examined how five therapists performed routine dental procedures such as basic restorative care, simple extractions, and preventive care, and whether their practice was safe. The methods of the study included direct intraoral examinations of the quality of restorations provided

* A quote from Peter Polverini's presentation at the Dunning Symposium on November 29, 2010.

by therapists and dentists, clinical preparations of teeth on patients to receive restorative materials performed by therapists, direct observations of therapists managing patients, record reviews, and reviews of the practice environment including consultations with supervising dentists. The technical quality of restorations provided by therapists was comparable with that provided by dentists, no untoward complications were found regarding the care they provided, and patients readily accepted therapists as providers in their communities. The study concluded that the therapists were performing well and operating safely and appropriately within their defined scope of work in this unique setting, e.g., mainly in remote locations where Alaska Natives live and under the Alaska Tribal Health Consortium's system of health care. These findings were presented by Caswell Evans, the Chairman of the National Advisory Committee for the RTI study and Associate Dean, Prevention and Public Health Science, University of Illinois at Chicago College of Dentistry.

Burton Edelstein, Chair of the Section of Social and Behavioral Sciences at Columbia University College of Dental Medicine and President of the Children's Dental Health Project, addressed the challenge of prognosticating the access and financial feasibility implications of incorporating dental therapists into the workforce. Approaching the topic as an observer and researcher, he reported on the perception of dental therapists by various profession groups and government, and detailed the implications of those differing perceptions. He noted that proponents of therapists believe that they will increase access to care in financially feasible ways, whereas opponents cite the same evidence to conclude that they will not. Referencing public and policy statements of various associations posted on the Web, he substantiated opposing views and catalogued areas of agreement and disagreement.

His analysis determined that all agree that there is a disparity problem, that oral disease is largely preventable, and that the dental delivery system should engage a team of providers with the dentist in the lead. He distinguished access from utilization and noted substantial disagreement regarding the source of the disparity problem – whether it lays within the profession's lack of attention to the underserved or the underserved populations' lack of attention to dental care. He concluded by citing critical issues that need to be addressed if there is to be a viable future for incorporating dental therapists into the workforce in ways that address access disparities and are financially feasible. Among these are issues of "scope of practice" designation, supervision determinations, and allowable locations for dental therapists as determined by state practice acts; practitioner and public acceptance; and practitioner capacity to manage complex delivery systems.

Taken together, the six presentations indicate that the current environment in the United States is focused on provision of health care to all Americans and that the dental profession must endorse a similar philosophy. Healthcare reform will offer additional dental benefits to children, but not adults. The dental profession must offer creative solutions to the access to care problem. Further, the focus on management of chronic diseases offers new opportunities for dentists to become involved in improving the general health and oral health of dental patients. Dentistry can play a stronger role in managing chronic disease, treating more complex oral health needs of the growing number of elderly, and demonstrating its commitment to finding ways to treat the growing dentally underserved population in part through augmenting the dentist workforce with mid-level providers and the assistance of other health practitioners such as physicians and nurses. This will allow dentists to treat more medically complex patients who have more demanding oral healthcare needs.

Views of the audience and discussion breakout sessions

A pre-symposium survey was conducted to obtain the opinions of the audience, which included leaders in dental education and national and state dental organizations. A 10-question 5-point Liker scale questionnaire was answered by 46 of the participants (100 percent return). In summary, relevant to the theme of the Dunning Symposium, attendees agreed that the mandate that all children must receive dental coverage will impact on dental education (37 strongly agreed/agreed); that over the next 10 years, dentists will assume a larger role in providing primary health care (31 strongly agreed/agreed); and that the delivery system should be reshaped to better serve a larger portion of the public (39 strongly agreed/agreed). Regarding whether integrating mid-level practitioners into the delivery system would improve access to care, the participants were almost evenly divided between those who agreed (20 strongly agreed/agreed) and those who were neutral in their opinion (19 were neutral). There was less agreement on whether the RTI International study showed that the dental therapist program currently implemented by the Alaska Tribal Health Consortium could be utilized in other US locations (26 strongly agreed/agreed, 13 disagreed/strongly disagreed, and 5 neutral).

Two breakout sessions discussed questions arising from the six presentations. The groups were asked to consider the questions in the context of strengths, weaknesses, opportunities, and threats (SWOT analysis). Some of the most important points raised will be reported in this summary.

In relation to the healthcare legislation passed in March of 2010, the fact that all children will be required to be covered in all healthcare plans was viewed as strength by the first discussion group. However, there was concern that the current system of care could not meet the demand of covering all children. Including all children was seen as an opportunity to

educate a different kind of dental provider, but combining dental insurance with medical insurance for children could become a problem because medical insurers may not have the interest or knowledge to include an appropriate dental benefit package.

Expanding the range of dental practice into primary health care was seen as a benefit that could lead to early identification of chronic diseases, but many dentists may have a lack of interest in utilizing the full range of their education to include these activities. Cross-training of dental students with other health science students and permitting dental students to follow unique tracks in such fields as public health will lead to a more coordinated system of oral and general health care. It was felt, however, that it might prove difficult to prepare faculty to teach in such an environment.

Regarding the RTI International study, the second discussion group viewed the study's strengths to be that dental therapists can practice safely, patients are satisfied with their treatment, and that it expands the workforce to help correct disparities in oral health care. However, the model has not focused sufficiently on prevention, and its unique setting in remote Alaska Native villages does not permit extrapolating the results to the rest of the nation. While not addressed directly by the study, the group discussed the opportunities and challenges to including dental therapists in the workforce. This paradigm shift will expand the traditional workforce, with a dental therapist who can provide some basic dental procedures traditionally provided only by the dentist. However, rather than creating an entirely new type of mid-level provider, expanding dental hygiene, an already established member of the dental workforce, to include dental therapist skills may be a better way to provide care to the underserved.

The addition of a mid-level provider also raises an opportunity to explore financial models to expand dental coverage to the uninsured and underinsured. Restrictive practice acts and the ability of dentists to manage and utilize a model of care including dental therapists are two challenges.

The presentations, the breakout sessions, and the questionnaire led to the following conclusions and suggestions for the future:

- The dental profession cannot be a bystander but must actively assist state and federal efforts to reshape the delivery system for those with limited economic means who cannot gain access to care.
- Healthcare reform, including provisions for oral health, should encourage dentists to become more involved in the health of the patients, including screening and management of chronic health conditions that affect general and oral health.
- Dental education will need to educate students with enhanced skills to become more integrated into the primary healthcare system.
- Mid-level providers such as dental therapists have been shown to provide comparable care in a narrow scope of dental procedures and are able to practice safely under the general supervision of dentists; however, their acceptance by the profession is at issue.
- Mid-level providers can be viewed as dentist extenders who will allow the dentist to treat the more complex orally and medically compromised patients.

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Conflict of interest

Dr. Allan Formicola served as a paid consultant to the W. K. Kellogg Foundation for the Research Triangle Institute International study, the results of which were presented at the symposium and summarized in this article. Dr. Ira Lamster declares no conflict of interest.

Reference

1. Wetterhall S, Bader J, Burrus B, Lee J, Shugars D. Evaluation of the dental health aide therapist workforce model in Alaska. 2010 [cited 2011 Jan 18]. Available from: http://www.wkkf.org/knowledge-center/resources/2010/10/Alaska-Dental-Therapist-Program-RTI-Evaluation-Report.aspx.