

What Can Be Learned from Oral Health Care Professionals' Efforts to Address Other Systemic Health Issues

Session II: What We Can Do

Barbara Greenberg, M.Sc., Ph.D.

Co-authors: Michael Glick, D.M.D.

Mary Tavares, D.M.D., M.P.H.

November 3, 2016

Washington, DC



Disclosure and Presentation Support

The authors have no financial or other conflict of interest to report

This presentation was supported by a grant from the Robert Wood Johnson Foundation

Authors

- * **Barbara L. Greenberg, M.Sc., Ph.D.**
Chair and Professor, Department of Epidemiology and Community Health, School of Health Science and Practice, New York Medical College
- * **Michael Glick, D.M.D.**
Professor and William M. Feagans Chair, School of Dental Medicine, State University of New York at Buffalo
- * **Mary Tavares D.M.D., M.P.H.**
Senior Clinical Investigator, The Forsyth Institute, Program Director for the Advanced Graduate Program in Dental Public Health at Harvard School of Dental Medicine

Methods

- * Literature was searched back (no time limited applied)
- * Databases searched: Pubmed, Embase, Cochrane, Grey Literature and CINAHL
- * 45 unduplicated articles found
- * 29 included & categorized based on relationship to question
 - * 14 on screening for medical conditions in the dental setting including diabetes, heart disease and high blood pressure
 - * 3 on tobacco screening in the dental setting
 - * 4 directly related to obesity screening by OHCPs

Challenge to Oral Health Community

In 2009 Glick challenged the oral health community to ask themselves whether direct participation in efforts to impact the growing obesity epidemic is a challenge they should consider, not only because obesity could have consequences for patients' oral health status, but because of a "desire to have a stronger impact on patients' general health."

Screening for Medical Conditions in the Dental Setting

- * Chairside medical screening for diabetes and heart disease can effectively identify adult patients at increased risk yet unaware of their disease risk
 - * 23-41% at increased risk of diabetes (abnormal A1c values)
 - * 17% at increased risk of a severe coronary heart disease event within 10 years
 - * 28% had high blood pressure
 - * 29% were overweight/obese

Attitude Surveys on Medical Screening in the Dental Setting

- * Attitude surveys (Greenberg et al) among dentists, hygienists and patients on chairside medical screening in the dental setting
 - * Majority OHCPs willing to screen for specific medical conditions (hypertension, DM, CHD, HIV, HCV)
 - * Majority willing to collect necessary data/samples; 57% of dentists willing to collect height and weight
- * Attitude surveys on chairside medical screening in the dental setting show a positive attitude among dental patients
 - * 73% willing to participate, 72% willing to discuss results during visit; 71% willing to be referred to a physician
 - * Majority willing to provide necessary samples/data; 79% of patients willing to provide height and weight

Tobacco Screening in the Dental Setting

- * Tobacco-screening attitude surveys (Albert et al) reported <10% OHCPs received training on tobacco cessation and counseling
- * Few had prior training, few asked about tobacco use or provided counseling about nicotine-replacement therapy
- * Those more confident about their knowledge of smoking cessation advised their patients more frequently
- * An intervention study on smokeless tobacco cessation implemented by hygienists reported a significantly greater sustained 12 month quit rate (12 months) with intervention

Attitudes Surveys on Obesity Screening

- * Curran, et al., found that the majority of dentists did not provide obesity screening/counseling
- * They did recognize their value and would be willing to provide them but did not feel qualified.
 - * Pediatric dentists more confident to conduct and interpret results of obesity screening
- * Major barriers to providing these services:
 - * lack of trained personnel
 - * fear of appearing judgmental
 - * fear of patient rejection
- * Majority of dentists (82%) would be more willing to offer counseling if evidence indicated obesity were directly related to oral disease

Obesity Screening Initiative in a Dental Setting

- * Tavares and Chomitz pilot tested a preventive “healthy weight intervention” in pediatric dental patients
- * Dental hygienist collected information on physical activity, “screen time” and eating habits, measured height, weight, and calculated age-specific body mass index (BMI)
- * “Healthy Kids Report” developed for each child that included recommendations for behavior modifications
- * Referral made to physician for patient with BMI > 85%

Obesity Screening Initiatives by Hygienists

Findings

- * 139 children 6-13 years of age
- * Considered activity important
- * Felt it did not take too much time
- * Well-received by parents and children
- * Parents felt dental office was a good place to receive obesity screening; 32% parents felt it would add too much time to dental visit
- * 96% of caregivers reported making better food choices

Conclusions

- * Screening for medical conditions in the dental setting shown to be effective at identifying patients at increased risk yet unaware of their increased risk
- * Chairside medical screening is effective and accepted by providers and patients alike
- * Healthy weight intervention program by dental hygienists in pediatric dental patients is well received and successful
- * One of the findings to incorporating obesity screening in the dental setting is the need for more training

Next Steps

- * Training needed on:
 - * Relationship of obesity and oral health and the role of oral health professionals in overall patient health and well-being
 - * How to conduct and interpret obesity screening
- * Larger studies needed that build on preliminary efficacy studies of childhood obesity screening by OCHPs
- * Studies needed that explore mechanisms to improve communication and patient referral mechanism between physician and dentists

Questions to Consider

- * What is the optimal approach to incorporate medical screening for obesity into the dental visit?
- * What curriculum changes are recommended for dental school education and for continuing dental education?
- * What can be done to facilitate communication among dentists/physicians and other health care providers to their patients and across disciplines regarding patients' well-being?
- * What can be done to facilitate patient referral between dentists, physicians and other health care providers?

References

- * Glick M. 2009. Expanding the Dentist's Role in Health Care Delivery. Is it Time to Discard the Procrustean Bed? *J Am Dent Assoc* 140(11):1340-2.
- * Greenberg BL, Glick M, Goodchild J, Duda PW, Conte NR, Conte M. 2007. Screening for cardiovascular risk factors in a dental setting. *J Am Dent Assoc* 138: 798-804.
- * Genco RJ, Schifferle RE, Dunford RG, Falkner KL, Hsu WC, Balukjian J. 2014. Screening for diabetes mellitus in a dental practices. A field trial. *J Am Dent Assoc* 145:57-64.
- * Greenberg BL, Glick M, Frantsve-Hawley J, Kantor ML. 2010. Dentists' attitudes toward chairside screening for medical conditions. *J Am Dent Assoc* 141:52-62.
- * Greenberg BL, Kantor ML, Bednarsh H. 2016. American dental hygienists' attitudes towards chairside medical screening in a dental setting. *Int J Dent Hyg*. DOI: 10.1111/idh.12217 [Epub ahead of print].

References

- * Greenberg BL, Kantor ML, Jiang SS, Glick M. 2012. Patients' attitudes toward screening for medical conditions in a dental setting. *J Public Health Dent* 72(1):28-35.
- * Albert D, Ward A, Ahluwalia K, Sadowsky D. 2002. Addressing tobacco managed care: a survey of dentists' knowledge, attitudes and behaviors. *Am J Public Health* 92(6):997-1001.
- * Ebbert JO, Carr AB, Patten CA, Morris RA, Schroeder DR. 2007. Tobacco use quitlines enrollment through dental practices. A pilot study. *J Am Dent Assoc* 138(5):595-601.
- * Curran AE, Caplan DJ, Lee JY, Paynter L, Gizlice Z, Chamoagne C, Ammerman AS, Agans R. 2012. Dentists' attitudes about their role in addressing obesity in patients. A national survey. *J Am Dent Assoc* 14(11);1307-1316.
- * Tavares M, Chomitz V. 2009. Healthy Weight Intervention for Children in a Dental Setting. *J Am Dent Assoc* 140(3):313-316.