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A National Survey of Oral Health Education in U.S. Allopathic and Osteopathic Schools

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Study Objectives

• To survey U.S. allopathic and osteopathic schools to determine how many schools have an oral health curriculum

• To analyze relationships between oral health awareness in schools and proximity to dental schools/residencies, school location, and school size

• To determine awareness of AAMC Report IX: Oral Health Education for Medical and Dental Students - Recommendations for Oral Health Curriculum

• To determine awareness of developed oral health curricula such as STFM’s Smiles for Life

• To determine desire to institute oral health curriculum and/or desire to use developed curricula
Background

• Oral health is an important component of overall health.
• Caries are the most common disease of early childhood.
• Many systemic diseases, such as diabetes and heart disease, can be made worse by periodontitis.
• 2003, the *National Call to Action to Promote Oral Health* called for revamping health professions education to include oral health to reduce disparities.
Background

• 2008, Association of American Medical Colleges’ (AAMC) Medical Schools Objectives Project (MSOP) on Oral Education for Medical Students Report – Challenges medical schools to have a comprehensive oral health curriculum based on IOM reports.

• A few institutions have published articles on oral health curricula; however, it is unclear to what extent these types of programs are being implemented in the U.S.

• Meanwhile, one study of primary care physicians reveals that 90% believe that oral health is important, yet only 50% had any training in the subject (mostly in residency)
Methods

• A survey was developed in SurveyMonkey.
• The Deans of Education at 126 allopathic and 28 osteopathic schools were e-mailed initially about survey.
• One week later an e-mail containing a link to the survey was sent out.
• Reminder e-mails with the survey link were sent out for a total of 3 reminders.
• Each non-responding Dean was contacted a final time, by phone, and the survey was re-sent.
• The survey data was analyzed using SPSS.
• Frequency and percentile distributions of all variables were examined and associations with demographics (e.g., school size and location) were analyzed.
A total of 88 schools responded (57.1% response rate).

(72 of 126 Allopathic schools, 13 of 28 Osteopathic schools and 3 were unidentified.)

- 29.5% of schools reported having a **Dental School**
- 37.5% of schools reported having a **Dental Residency**
Results: Hours of Oral Health

- Number of hours of OH curriculum (< 5 vs >= 5) were not significantly related to having a dental school or dental residency (p=.271) nor the location of the medical school (p=.728).
- Schools with > 150 students were significantly more likely to offer 5+ hours of OH curriculum compared to small or mid-sized schools. (p=.022)
37.5% of those who do evaluate students reported using an OSCE
43.5% of those who do evaluate students reported using clinical observation
There was no statistically significant relationship between awareness of the AAMC’s Contemporary Issues in Oral Health or USMLE oral health topics and number of oral health curriculum hours (p=.176 for AAMC; p=.099 for USMLE).
Results: Awareness of Established OH Curriculum

- 17.5% of respondents who were aware of Smiles for Life are using it.
- 50.0% of respondents who were aware of AAP curriculum are using it.
- 43.8% of respondents would definitely or likely use an established curriculum such as Smiles for Life or AAP Child Oral Health Curriculum.
Results

Topics Covered in Oral Health Curriculum

- Oral Cancer
- Oral Anatomy
- Oral Health & Overall Health
- Adult Benign Lesions
- Urgent/Emergent
- Adult Oral Screening
- Pediatric Caries/Risks
- Fluoride
- Pediatric Caries Prevention
- Periodontal Disease
- Pediatric Oral Screening
- Pregnancy & Oral Health
- Adult Caries
- Oral Health Disparities
- Oral Health Elective
- Hands On Training
Discussion

• It appears that small to medium sized medical schools need the most targeting for development and implementation of an oral health curriculum.

• Need to investigate further why schools that are aware of the AAMC oral health guidelines are not implementing a more robust oral health curriculum.

• Developing questions for the AAMC’s Graduate Questionnaire may help validate our study by gauging students’ perspectives on their oral health curriculum.
Discussion

• Next steps should include:
  – Contacting schools that are interested in creating or expanding their oral health curriculum
  – Creating a listserv of oral health educator champions at schools to share ideas and motivate each other
  – Promoting to all schools: the AAMC report, the fact that the USMLE board exam has oral health topics, and the Smiles for Life and AAP materials
  – Sharing the results of our survey with oral health educators in states where schools are not providing oral health education to encourage collaboration
Conclusions

• Nearly three-quarters of schools have 4 hours or less of oral health curriculum; 10% have none.
• Location of the school and presence of a dental school or residency were not associated with the number of hours of OH curriculum.
• Matriculating class size was significant, showing that larger schools (>150 students) were more likely to have >=5 hours of curriculum.
• More than 50% of the schools were aware of USMLE oral health topics and the AAMC’s oral health guidelines; however, being aware of these was not associated with having more hours of OH curriculum.
Conclusions

• Only 30% of schools are evaluating students on OH curriculum; within these schools, evaluation of skills and attitudes need improvement.

• One-third of schools were aware of established oral health curriculum such as Smiles for Life and 50% for the AAP’s Oral Health Curriculum; however, only 7 schools are using Smiles for Life and 12 schools are using AAP materials.

• Schools reported being interested in using established curriculum rather than designing their own.
Acknowledgements

• Heather-Lyn Haley for assistance with creating the survey on SurveyMonkey
• Robin Garabedian for assistance with data collection
• The UMMS Senior Scholars Program