

American Academy of Pediatric Dentistry Research Agenda

Adopted

2005

Reaffirmed

2007

Revised

2009, 2010

The American Academy of Pediatric Dentistry (AAPD) recognizes that the clinical practice of pediatric dentistry has to be driven by science and evidence-based dentistry (EBD). Where possible, our clinical practice guidelines in pediatric dentistry should be supported by the best available evidence. No longer is it acceptable for our clinical practice guidelines to be based on expert opinions. Where the evidence or science is lacking, research needs to be conducted to answer the relevant questions that arise in our clinical practice.

The AAPD Research Agenda is a strategic list of scientific and clinical questions and topics that are specific to the clinical practice of pediatric dentistry. These questions will benefit from scientific review and set the agenda for Healthy Smiles, Health Children: the Foundation of the AAPD's research grants. The AAPD Council on Scientific Affairs (CSA) is charged with proposing a mechanism by which the AAPD Research Agenda is to be developed and maintained.

Other dental organizations have embraced evidence based research. The National Institute of Dental and Craniofacial Research (NIDCR) has a Strategic Plan that outlines research opportunities to support its mission to improve oral, dental and craniofacial health through research, research training, and the dissemination of health information by performing and supporting basic and clinical research. While interested in supporting clinical research, the NIDCR supports research that offers the most significant scientific promise. The American Dental Association (ADA) is committed to bringing EBD concepts and practices to the dental profession. The ADA Research Agenda was developed to promote research in areas of dental practice and to designate priorities for conducting and funding evidence-based studies. The ADA Research Agenda reflects important clinical questions that are relevant to the entire profession of dentistry.

Methodology

The 14 members of the 2004-05 CSA submitted 41 research topics/questions/issues that were thought to be the most pertinent to pediatric dentistry. These topics were evaluated for duplication, consolidated, and returned to the CSA members for

ranking in terms of importance. After 2 rounds of elimination, the CSA members identified the research topics that were deemed to be the most important for Pediatric Dentistry and would benefit the most from scientific review. Similar methodology was undertaken in 2009 for the revision of the AAPD Research Agenda. In 2010, the CSA decided that due to ever evolving nature of scientific inquiry, the AAPD Research Agenda would be examined and revised or reaffirmed annually. As to be expected from a group of individuals who practice in different regions of the United States and who possess a wide array of scientific expertise and interests, CSA members did not share a consensus in terms of how the research topics ought to be ranked. Nevertheless, the "top 10" topics received composite ranking scores that were significantly higher than the rest and they were ranked more frequently.

2010-11 AAPD Research Agenda

These topics are listed in descending order of priority:

1. Transmission, etiology, risk assessment, early detection, prevention and management of caries using antimicrobials, fluorides, and remineralizing agents.
2. Disparities and barriers to accessing dental care including evaluation of different oral health care delivery systems.
3. Efficacy and effectiveness of infant oral health promotion (ie, first dental visit by 12 months) including examining the interface between dentistry and medicine.
4. Salivary diagnostics, genetics and proteomics.
5. Examination of pulp treatment and restorative materials including: pulp biology, efficacy and biocompatibility of pulp treatment and restorative materials.
6. Non-pharmacologic behavior management approaches.
7. Safe and effective sedative and analgesic agents for pain and anxiety control.
8. Specific (immunity, genetics) and non-specific host factors in the etiology and prevention of oral diseases.
9. Prevention, diagnosis and management of dental trauma in children.
10. Etiology, detection, prevention and management of localized or generalized aggressive periodontitis.