

# Critical Issues in Dental Hygiene

## Utilization of the ADHA National Dental Hygiene Research Agenda

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In this issue of the *Journal of Dental Hygiene*, we are pleased to share with you research findings from our study entitled, "A Delphi Study to Update the American Dental Hygienists' National Dental Hygiene Research Agenda." This is the second time that the Delphi technique has been used to gain consensus on those topics deemed priorities for dental hygiene research, which will allow the purposeful building of the knowledge base needed to support education and practice. The following is an excerpt taken from our report submitted to the 2006-2007 ADHA Board of Trustees, in which we encouraged them to adopt this revised agenda as the 2007 ADHA National Dental Hygiene Research Agenda. The Board of Trustees accepted our recommendation, and this document is now available for use by the dental hygiene and global health care communities, by accessing <http://www.adha.org/research/nra.htm>. Here we propose a number of strategies for how our Association and the general dental hygiene community can use the Agenda to guide the work efforts of the profession. We welcome your comments and thoughts about these strategies, and on the revised National Dental Hygiene Research Agenda.

This update to the ADHA National Dental Hygiene Research Agenda (NDHRA) utilized the Delphi study technique, a structured, scientific approach used to gain consensus on those research topics deemed most critical by a sample of dental hygiene experts. We feel that the content is reflective of current national health issues, and is well-

aligned with research agendas from other dental and health care professions. Further, the research priorities identified in this study closely parallel those of the initial Delphi study conducted in 1995.<sup>1</sup>

Identifying priorities with the Agenda is only the first step in the process of building our body of knowledge. Long-range planning is needed to guide research efforts and to promote the development of a unique body of knowledge for the profession.<sup>2</sup> A long-range plan must be broad enough in scope to address the multiple needs of the dental hygiene community, and serve as a means for securing the data necessary for accomplishing the goals of the ADHA Strategic Plan. To this end, dental hygienists must work together to gather information and research data in a logical and structured manner in order to have the database capability to answer important questions related to the profession.

Perhaps the most important aspect of having a national research agenda is its utilization as a working document. However, monitoring utilization is a difficult and cumbersome task, and requires significant dedication on the part of its users. How then does a profession monitor its progress in meeting national research objectives? There are several significant issues that must be addressed by the ADHA and other dental hygiene organizations in order for our profession to accomplish this task.

First, the professional community must commit to using the agenda to guide its research and other professional efforts. All dental hygienists, regardless of their practice settings

and professional interests, must internalize the Agenda as their own. Achieving national health objectives should be an inherent part of their professional activities, both inside and outside of the research arena. This is especially important for practitioners, who provide the greatest representation of our profession to the public. The decisions that they make everyday must be firmly grounded in knowledge that is obtained from research and clinical experience, to improve their professional judgment and ultimately, to improve the quality of services provided.

Second, a consistent and reliable system must be in place to "track" and monitor the progress and outcomes of our research efforts, in training hygienists to conduct research, and in publishing research findings. We must develop a comprehensive database for information management that is utilized uniformly across the profession, by hygienists conducting research in academic institutions, private industry, public health organizations and clinical practice settings. In addition to individual hygienists, it is critical to include those organizations that are directly involved with conducting studies, publishing research findings and training dental hygiene researchers. These organizations include academic institutions, corporations, the National Center for Dental Hygiene Research, dental hygiene professional organizations, and publishing houses that create and distribute dental hygiene journals. It could be argued that this is unrealistic, as these groups will most likely have their own unique

agendas to be met as well. However, the ADHA NDHRA is broad enough to encompass the interests of these dental hygienists and organizations; thus, the development and utilization of a common tracking process should be advantageous to members of all of these subgroups. Further, this process will enable the profession to coordinate its research efforts given limited resources, foster collaboration and promote information sharing.

Third, it is not enough to simply identify the topics of ongoing and published research studies in the literature. The extent of the problem studied, as well as the scope and quality of the work also needs to be evaluated. The process of evaluating the merit and the utility of the research is the underlying premise of evidence-based decision making (EBDM) and is one of the first steps identified in the EBDM Model for Dental Hygiene.<sup>3</sup>

We encourage the global dental hygiene to use this revised agenda prior to making any changes or modifications. Utilization of the agenda is a critical component of building a strong research infrastructure. A research infrastructure:

- fosters the development and advancement of long-term research programs;
- enables discussion and dissemination of research findings; and
- supports the systematic building of a scientific knowledge base that informs practice.

There are 5 elements of a research infrastructure:

- A critical mass of researchers/scientists
- Research priorities that produce clinically relevant knowledge
- Funding mechanisms to support research
- Communication systems that promote linkages among researchers and increase access to research findings

- Demonstrated value for research and its relationship to practice<sup>2</sup>

In a future issue of the *Journal of Dental Hygiene*, we will more closely examine these 5 elements of a research infrastructure specifically as they relate to our profession.

Collaboration is also a critical component for successful utilization of the ADHA NDHRA. To this end, we propose several strategies to promote the use of the Agenda as a guide to our future association activities.

## Role of the ADHA Councils

The fundamental purpose of having an agenda is to use it as a tool for guiding our work. If the agenda is not visible or incorporated into our professional activities, it is of limited value. It is counterproductive to undertake major work efforts or projects and then look back upon their completion to see where they can best “fit” into the agenda. If we commit to using the agenda as it is intended, then the agenda should be the driving force behind the work efforts of all ADHA Councils to ensure that all work of the Association is directed at meeting our stated objectives.

As each of the Councils is comprised of a panel of experts, the Council members should identify research needs, goals and objectives related to their specific areas of interest from the agenda. Given this structure, each Council could then identify internal and external resources to support the goals and objectives, design and implement related action plans, and then monitor the work undertaken towards meeting these goals and objectives. For example, the Council on Research (COR) could identify association, government, and potential corporate sponsors for a grant writing workshop to be held each year at the ADHA Annual Session. In

conjunction with the ADHA Institute for Oral Health Research Grant Review Committee (RGRC), the COR can help to monitor the progress of funded studies targeted to address specific priorities identified by the Association.

The ADHA Strategic Plan sets forth the direction of the long-range plan for the Association, and includes action plans developed by each Council for accomplishing the stated goals and objectives. Using the Councils to systematically work with ADHA staff to manage the research conducted under their auspices adds an important accountability piece to the tracking process. Annual reports generated by the Councils should include a discussion about research progress pertaining to the NDHRA. Further, we recommend that each Council Chair or designee be present at Annual Session to present a report to the general membership about the status of their goals and objectives, work efforts, accomplishments, and recommendations for goals and objectives for the following year. A forum for discussion educates the membership about the significance of research projects deemed important by each Council, and lends accountability, continuity and consistency of thoughts and ideas to future Council members and to the Association. Further, the Council reports would provide an important check-and-balance system to help ensure that our knowledge database is being developed.

## Role of Educators

Educators continue to assume an integral role in socializing students to the research process; and therefore, we must encourage educators to use the agenda throughout the dental hygiene curriculum. Educators should teach in a manner that reinforces the importance of research, so that research becomes

part of the inherent value system of our students. Undergraduate educational programs assume the responsibility for training and developing basic skills required by all dental hygiene students, and graduate programs can be used to further develop and refine these skills.

Graduate dental hygiene programs could also be used as “centers” for investigation, similar to those established in dental schools, with concentrated research efforts focused on a particular field of study. Using the agenda as a guide, these schools could serve as regional sites for multi-center research studies to conduct large scale investigations that add to our body of knowledge. Graduate students from across the country could work on the same project investigating regional differences in a given problem. This would encourage graduate students to work in a collaborative model, and teach them to network and communicate with their future research colleagues. Graduate students are also the logical choice for developing and testing the reliability and validity of new/existing measures, and for validating existing bodies of work. These are all examples of projects that could be funded through ADHA or the ADHA Institute for Oral Health. The ADHA COR is actively working in collaboration with the graduate program directors to explore these research initiatives.

## Role of Clinicians

The agenda is also a critical guide to dental hygiene practice. This is

especially important for practitioners, who provide the greatest representation of our profession to the public. The decisions that they make every day must be firmly grounded in knowledge that is obtained from research and clinical experience, to improve their professional judgment and ultimately, to improve the quality of services provided. Further, the agenda is a tool that supports ADHA’s evidence-based practice philosophy. Research supports clinical practice by:

- advancing knowledge and technology for improved patient care;
- providing a framework for evidence-based decision making;
- establishing criteria for competency and continued competency;
- dictating public policy; and
- influences the regulations that govern dental hygiene practice.

## Summary

Promoting and utilizing the ADHA NDHRA helps to position the profession in alignment with other major health professional organizations. This document also contributes to the credibility of the profession, by providing visibility and support to dental hygienists engaged in research. Further, sharing our scientific goals with the broader community will enable the profession to capture research data from other disciplines that supports our research objectives as well.

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