Research as a Career Option for Dental Hygienists

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In 1987, the American Dental Hygienists’ Association (ADHA) recognized six roles in dental hygiene. Researcher was one of the roles identified, although at that time there were few opportunities and fewer hygienists interested in research as a career option! Now, times have changed, and pursuing a career in research as a dental hygienist is currently considered a viable option for many in our profession. If you are interested in research and wish to become involved in this exciting field, we will offer you some guidelines and tips for students and experienced clinical practitioners. This article provides an informative overview of some of the different career opportunities, roles and professional requirements for research careers.

One of the most valued assets for a dental hygienist considering a career in research is the experience gained in clinical practice. Your knowledge of the clinical and behavioral aspects of patient management will prove invaluable in your research career.
What Is Research?

Before considering research as a career option, let’s define what it means. Research is an organized and systematic way of finding answers to questions.

Systematic means there is a definite set of procedures and steps that you will follow. Certain steps in the research process are always taken to get the most accurate and reliable results.

Organized refers to the fact that there is a structure or distinctive methodology in conducting research. It is a planned process, not a spontaneous one. It is focused and limited to a specific scope.

Finding answers is the outcome of research. Whether you are seeking proof of a hypothesis or just have a simple question, research is successful when it finds answers. When an answer is “no,” it may lead to different methods to study the same question.

Questions are central to research; if there is no well-defined question at the outset, then the answer is of no use. Research is focused on relevant, useful and important questions. Without a question, research has no focus, drive or purpose.
Areas of Research

When deciding to pursue a career in research, there are a variety of areas to consider, such as clinical research, market research, basic and applied research and quantitative and qualitative research. All of these areas adhere to the definition of research presented above.

Dental hygiene research has been identified by ADHA as a strategic initiative to strengthen our profession. The mission of ADHA’s Division of Research’s is to:

1) Broaden ADHA’s involvement in a variety of oral health research initiatives
2) Support internal association-related endeavors that rely on research or statistical expertise.

For more information on dental hygiene research, please refer to the ADHA Web site (www.adha.org/research/index.html).

Research Career Opportunities

Research career opportunities and settings are diverse and include public health or epidemiological research, dental hygiene profession-based research, practice-based research, university research programs and corporate research including basic clinical and product evaluation.
As examples, the National Institutes of Health (NIH) and specifically the National Institutes for Dental Craniofacial Research (NIDCR) are government agencies that fund research both within and outside their own system, thereby allowing and offering dental hygienists opportunities to explore the research field. Career opportunities can also be found in other government and public areas such as the United States Public Health Service or Indian Health Service working at state or local levels, and the Veteran’s Administration Hospital Network.

**Corporate Career Settings**

Career opportunities in the corporate setting can include industry, for example, consumer health care companies, dental materials, instrument and equipment companies (which can be explored further by visiting the variety of companies at the exhibit hall at your next major professional meeting). Other nontraditional corporate options may be in insurance companies, independent investigator sites and contract research organizations (CROs). Job profiles would include roles such as clinical research managers, clinical monitoring and market research.

Corporate clinical research opportunities include responsibilities such as developing and managing clinical research programs to support new products, line extensions and new claims for oral health products; reviewing advertising and providing expertise in support of
overall dental/oral care and professional programs; and managing others. Outside of the
dental area lie research opportunities in many pharmaceutical companies. Dental hygienists
can fill the need for individuals with health science degrees who can function as clinical
monitors for medical clinical trials supporting the development of new drugs.

Opportunities are available at independent clinical research organizations (e.g., CROs) or
independent dental investigator sites where dental hygienists can take on the roles of
clinicians, examiners, study coordinators or managers. As a study manager, you manage a
clinical study team that performs a clinical trial. You could be involved in the clinical site
preparation, subject screening and recruitment, subject enrollment, maintaining and
dispensing drug supplies, completing and ensuring the quality of case report forms,
maintaining source documents and ensuring overall site quality.

Other corporate opportunities, although not primarily research, in the marketing area include
representing the company at dental meetings in a professional relations capacity, becoming
recognized as an expert in the field, supporting projects by developing marketing strategies
specifically for dental professionals and building brand awareness and equity. Positions for
hygienists interested in sales may include account managers who detail products to
professional offices, provide balanced educational lectures to dental and hygiene schools and
provide exhibit booth support at professional meetings.
University-Based Career Settings

Additionally, academic/institutional settings offer many opportunities to get involved in research. Universities, hospitals, public health facilities and community clinics are often at the forefront of exciting research projects. Studies conducted at these types of facilities are usually supported with grants from corporations, government and/or other nonprofit funding sources. A major funding source for oral health research comes from NIDCR (www.nidcr.nih.gov/). In 2005, NIDCR awarded three 7-year grants to establish practice-based research networks (PBRNs) (see page xxx) that investigate with greater scientific rigor everyday issues in the delivery of oral health care. These awards or funding are based on the need to address the lack of research data necessary to guide treatment decisions applicable in the dental office. They also aim to enhance the clinical decision-making process so that clinical experience alone is not the only tool used to make decisions. The practice-based research networks bring the opportunity to conduct relevant clinical research directly to the practitioner.

Your Role and Responsibilities

The dental hygienist in a research career must consider several roles and responsibilities. Most important is to first find your passion and then consider the role(s) you would like to play. Asking initial questions such as, “How do I want to be involved in the research process? In a hands-on clinical capacity, or as a manager in a leadership role?” will help in
clarifying your professional goals. If you have strong managerial skills and aspire to make a
difference in connecting research to the field, then perhaps a leadership role is the one for
you. Here is where your expertise in clinical practice shows up as an important factor in your
ability to perform certain roles in research.

Clinical research roles to be considered include therapist, examiner, sponsor and/or principal
investigator or coordinator/manager of the research project. On the other hand, other roles
could be experiencing research from the perspective of a subject or volunteer, or in the
regulatory audit or quality assurance function. Once the research data are collected,
responsibilities remaining include statistical analysis, interpretation of results and report
writing. The tasks and roles are many, and hygienists are uniquely prepared through their
educational process and experience to handle them.

Exciting roles in developing and evaluating products; analyzing outcomes (e.g., therapeutic,
social or behavioral); determining health policy and programs; and investigating aspects of
the educational process, the profession, and economical issues in dental hygiene are just a
few research areas one can consider.

**Approaches to a Career in Research**

Approaches to a career in research can be conventional or unconventional; however, simply
stated, ask, volunteer or search out mentoring or research programs. For professionals
looking to expand their training, specific programs exist that support careers in research.
There are degree-granting and certificate programs at universities, such as the University of Seattle Clinical Research Method six-week program, and hospital-based learning programs. There are even programs such as the one at the University of Bridgeport, for obtaining your bachelor of science degree online. Most research opportunities require higher educational levels such as bachelors’ and/or masters’ degrees in public health, statistics or allied health sciences, or advanced degrees in dental hygiene.

Professional organizations have grown as the research industry has expanded. The purpose of the Association of Clinical Research Professionals (ACRP, www.acrpnet.org/) is to provide global leadership to promote integrity and excellence for the clinical research profession. This association provides certification and training for careers in all phases of clinical research, as well as networking within the industry for career opportunities.

Conventional approaches include responding to job opportunities through newspaper and professional journal classified advertisements, company Web sites, and by networking. Unconventional approaches might be on-the-job training such as finding a mentor and working at a clinical research site under the immediate direction of a principal investigator to learn more about Good Clinical Practice (GCP) guidelines. If in school, one can apply for work as a summer intern in the research areas at some of the consumer health care companies. Get involved with local public health services such as smoking cessation programs and oral health screenings. Also, participating in a research study as a volunteer or research subject gives an entirely different perspective on research.
Networking is an important component of finding research work. Take the opportunity to speak with the hygienists you see at the professional conventions who are corporate representatives and exhibitors. This can help in establishing your first research contact. Ask them who, what, where and how. By attending as many professional meetings as possible and by networking, you can create professional bridges that could result in the chance to explore different career opportunities.

**How Do You Get Started?**

Students are encouraged to take any courses offered in research methodology, medical terminology and statistics. Get involved with student associations such as SADHA, where you may have the opportunity to present programs and research projects at regional/national meetings. Consult with your faculty: most dental hygiene programs encourage faculty to get involved in research to fulfill publication requirements to become a mentor for developing research opportunities for the students. Volunteer to be a research subject or to assist in a clinical trial at your university. Seek out research projects that are ongoing in your community, at your school or at local hospitals or CROs, and get involved as a first approach to the research field.

As a practicing professional, utilize your alma mater and seek out faculty and research projects to facilitate an introduction to research. Look for internship opportunities, read the literature and learn how to get involved. Consider taking some additional related coursework.
or go for the advanced degree in dental hygiene or in allied health. Take the opportunity to advance your knowledge with degrees/certificates in the research field as provided by ACRP. Research has been a wonderful career choice for us as corporate research dental hygienists and has provided many opportunities to for us to incorporate the professional roles identified by ADHA and participate in our changing profession. We have become leaders and authors, and have had the opportunity to be team players and work with wonderful people within our respective companies, at external CROs and independent investigator sites, and in ADHA and other professional organizations, as well as with internationally known oral health scientists.

We hope this article will provide you with useful information as you consider a potential career in research.

(Sidebar)

Are you interested in a dental hygiene career in research? Why or why not?

Access contacted SADHA members nationwide and asked them about their plans for a career in research. Over and over, we learned that students who are not committed to a research career are still interested and want to learn more, but aren’t sure where to get more information.

Here are just a few of their answers.
No I am not. It may be stereotypical, but I picture research as a desk job! I realize there would be some hands-on work in conducting the clinical research, but all the time writing and researching is just not my type of thing. I am more of a hands-on person who enjoys patient-clinician interaction and instruction. I do, however, believe that research is vital to the profession of dental hygiene, so whoever has the clout to pursue a career in dental hygiene research—more power to them! It's just not for me.

Mary Christoph

Harrisburg Area Community College Dental Hygiene Program

I am very interested in roles such as lab work and research environments. It is my understanding that these usually require a bachelor's degree, but I wonder if the BS must be in hygiene (not offered in my city) or if it can be in chemistry, nutrition or general biology. As someone who is entering the profession in my thirties, I am very interested in career options for later in life—if my hands or eyes eventually prevent me from practicing hygiene. This would certainly include research or education!

Diane Causey

Austin Community College
I am not really interested in a career in research, mainly just because I am much more of a hands-on person and enjoy the clinical aspect of hygiene much more.

Amy J. Wilson

Ozarks Technical Community College

Yes, in fact I am looking into my options of continuing my education, after a bachelor's degree, in microbiology or pathology. I believe it is extremely important for future research to continue for possible prevention or cures to be found for periodontal disease. In addition, the research now available is bringing the oral-systemic link to the forefront of the dental community. Future research can lead this topic into the medical community worldwide, therefore furthering the field of dental hygiene.

Connie Myers

Cuyahoga Community College

Research is very necessary, but a lot of hard work. It is not something that fits my personality very well. I do it when necessary but don't thoroughly enjoy it. Therefore I don't think it would be enjoyable to me as a career.

Lina Mills

Chattanooga State Technical Community College
I am interested in a dental hygiene career in research because this would give me an opportunity to do both clinical work, and work on new products and innovations for hygiene, which is a great step in keeping our profession alive. I believe that research is the best thing to improve and continue success in hygiene.

*Lucia Flores*

*Taft College*

I want to keep all options open of what my degree has to offer. After I've practiced for a few years, I may want a change of scenery and research could be a great place to do this. Thinking about all the progress and knowledge that has been added to our career through research, it's hard to not want to be a part of it.

*Liz Kaupppila, RDH, BS*

*University of Minnesota*

I think that I will always seek ways to advance the profession of dental hygiene. Therefore, I think a career in research would be interesting. I would not want to work in a lab that I would lose touch with working with people face to face. I would enjoy the glory of feeling that I have had a part in history discovering or advancing something that would help millions.

*Mary Giannoccaro*

*Monroe Community College*
Right now, I, personally, am not interested . . . but I feel it is very important to have the research ongoing for our professional outlook. I support it and who knows what my future will take me? I might find myself someday into the research arena. I never like to close any doors that lead to a better future for the hygiene profession. I attended the annual session in Orlando. I learned a lot and enjoyed everything.

_Angela Carter_

_Phoenix College_

Yes, I am interested in a career in research. My favorite part of writing any research paper has always been in the gathering and reading of the materials necessary to put the paper together. So often you start off in one direction and end up with so many more leads. I saw my first case of “meth mouth” last week in clinic and started researching it on the Internet almost right away. I wanted to find out the causes and what we can do as health care providers. After learning about the causes and presentation I ended up intrigued by the link between meth use among gay men, unprotected sex and transmission of the HIV and Hep. C viruses, and the higher rates of mental illness among users when compared to the general population.

_Becky Collins_

_West Los Angeles College_
I am not interested in a dental hygiene career in research. I understand the importance of research, but I am meant to be a clinician. I need to be working with people and for people, and I plan to do that during my entire career. It would be great to achieve ADHP status, but if I am an RDH for the rest of my life, I would be completely satisfied! It seems so simple, but I thoroughly working with patients and cleaning teeth (so far . . . I am just a student!).

Laura Hufnagel

Lansing Community College

Yes, I am interested in a dental hygiene career in research. As a student, it is more difficult to narrow down the exact career I want because my knowledge is limited. This is especially true as a beginner in this profession because there is such a vast world of oral care and dentistry and everything that goes on behind the scenes.

Janaye Clark

Kingwood College

I have always been interested in research and there is no better field to perform it in. As a child, I found myself asking how and why things happen. What can we do to make something better? What happens if…? There is no doubt in my mind that I would like to be involved in dental hygiene research. After all, if you can do something you love while helping others, then you can live a much happier life.

Kris Adkins