

Dental hygiene research in Canada: Expanding knowledge and seizing new opportunities

CANADIAN FOUNDATION FOR
DENTALHYGIENE
RESEARCH AND EDUCATION

Dental hygienists in Canada continue to blaze new trails as researchers, and to build knowledge to enhance clinical practice, dental hygiene education, and oral health outcomes.

They are doing so with the support of the Canadian Foundation of Dental Hygiene Research and Education (CFDHRE), which, since 2005, has provided approximately \$88,000 to dental hygienists for innovative research projects. And a new partnership between the CFDHRE and the Canadian Institutes of Health Research (CIHR) is creating even more opportunities for the future.

Canada now has its first ever Doctoral Research Award in dental hygiene. Partnered with CIHR, the CFDHRE will award funding of up to \$66,000 for up to 3 years, for a dental hygiene research project developed by a registered dental hygienist pursuing a doctoral degree. Applications opened in the fall of 2009 with funding available for research in one of four priority areas: biomedical, clinical, health services, and social, cultural, environmental and population health research.

"This new award at the doctoral level is another significant advancement in the role of dental hygienists in oral health research," says Susan Ziebarth, Executive Director of CFDHRE. "It builds on the breakthrough achieved by our partnership with CIHR in 2008, through the Master's Award—the first CIHR supported grant specifically for dental hygiene research."

The inaugural Master's Award in dental hygiene research has been awarded. Carole J. Charbonneau—a community dental hygienist in West Vancouver who is pursuing an M.A. in Adult Education in the Faculty of Education at the University of British Columbia—will research options for including cultural competency courses in dental hygiene education programs.

The impetus is the growing evidence that ethnic minorities and First Nations people have poorer oral health and general health outcomes than the general population. There are a range of barriers contributing to these disparities, including cultural, and it is recognized that increased cultural competency in health education may help address the problem.

Cultural competency is not currently included in dental hygiene education, explains Ms. Charbonneau. "This is a relatively new concept and I hope that my project will not only bring awareness around the importance of providing culturally competent care to improve oral health outcomes in marginalized populations, but will also provide information for the development of dental hygiene curricula," she says.

Ms. Charbonneau says she is very grateful for the award, and is excited about the prospects for future research projects in dental hygiene. "Receiving this award has made me feel supported by the dental hygiene community. I also think that this award will encourage other dental hygien-

ists to pursue a master's degree and conduct research on a topic that they feel is important to the profession of dental hygiene."

Meanwhile, the dental hygiene community continues to reap the benefits of valuable knowledge created by CFDHRE's annual peer reviewed grants. Research associated with the 2008 grant is almost complete.

2008 PEER REVIEWED GRANT: PAULINE IMAI

As every dental hygienist knows, dental floss is considered the gold standard for disrupting the oral biofilm that contributes to gingivitis but the challenge is persuading clients to make flossing a daily routine.

That challenge was addressed in research funded by the CFDHRE's 2008 peer reviewed grant, led by Pauline Imai, Clinical Assistant Professor in the Dental Hygiene Degree Program of the UBC Faculty of Dentistry and her co-investigator, Penny Hatzimanolakis. Their 12-week clinical trial sought to determine whether an interdental brush is an effective, easy to use alternative to dental floss for reducing plaque and bleeding in people with gingivitis.

It is estimated that only 10 to 30 per cent of people floss daily. According to Ms. Imai, "Flossing may be the gold standard but unless clients use it, it is not going to be effective. The compliance rate is low due to a combination of lack of ability—a lot of people find it difficult to do—and lack of motivation."

The study followed thirty adults with gingivitis, who flossed on half the mouth and brushed interdentially on the other half. The results of the study are to be presented in two papers, one of which is to be published in the *Canadian Journal of Dental Hygiene*.

"We looked at two areas: efficacy of the two products, and the subjects' perceptions about use," says Ms. Imai. "On the motivation side of the equation, the subjects agreed that ease of use played a big role in their willingness to continue with an interdental aid. Most preferred the interdental brush and found it easier to use." (The efficacy results are yet to be released.)

These findings will assist dental hygienists in their practices, she adds. "It's very important for dental hygienists to understand the behavioural aspects of care. Every day we see people with gingivitis who don't want to floss. We need to understand how we can motivate the person sitting in our chair by asking, 'Is there an effective alternative they are more likely to use?'"

2009 PEER REVIEWED GRANT: SANDRA COBBAN

Numerous studies over the past twenty years have documented the comparatively poor oral health of elderly residents of long term care, but solutions for reducing this disparity are not as clear. With the support of the CFDHRE, Sandra Cobban plans to help fill that information gap.

Ms. Cobban, Associate Professor with the Dental

Hygiene Program in the University of Alberta's Faculty of Medicine and Dentistry, has received the foundation's peer reviewed grant for 2009. She is also a PhD student in the university's Faculty of Nursing. Ms. Cobban will undertake a systematic review of studies on interventions to improve the oral health of the elderly in long term care—synthesizing the findings and assessing where the best evidence lies. The review will focus on interventions that improve daily mouth care or can be provided by health care aides.

The need to find effective oral health interventions for residents of long term care is becoming more acute, she adds. Today, residents are more likely to be older, more functionally dependent and cognitively impaired, and to have their natural teeth.

"A few decades ago more people in residential care had dentures but a lot of them were cognitively intact and still providing their own care," says Ms. Cobban. "Today, residents have much heavier oral care needs. Care providers are encountering quite a few challenges, particularly in providing mouth care for individuals with dementia."

Ms. Cobban believes that systematic reviews are a good fit for dental hygienist researchers. "These research methods are well suited to dental hygienists. Most of them are highly organized, pay attention to detail and have an intense curiosity. And these kinds of investigations can be done without a large capital investment."

This type of research is of great value to dental hygienists, other care providers, and managers seeking evidence based practices and policies, she says. "There is so much research being published but practitioners and managers in long term care don't have time to search for and appraise every individual study. A systematic review identifies and assesses the quality of the studies, and allows us to see what the combination of these results is telling us."

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Dear Colleagues,



As far as big steps forward go, this is a huge one... You can call it a giant leap for dental hygiene research and education in Canada.

As a dental hygiene professional, you understand that advances in oral health research are vital in improving the well being of Canadians. And that's why now is the time to invest in the research carried out by your dental hygiene colleagues.

In partnership with the Canadian Institutes of Health Research (CIHR), we now offer the prestigious Master's and Doctoral Research Awards. These awards are only possible because of people like you. When CFDHRE raises \$8,750 for the Master's Award, CIHR matches that for a total of \$17,500 for a one-year period. Similarly, the Doctoral Award offers up to \$66,000 for a period of up to 3 years.

You are now able to be a part of doubling the amount of funding we give toward research. Doubled research. Doubled results. Doubled progress. But we need your help to make this happen.

With your gift, you are helping to fuel important and innovative research within the dental hygiene community. You are helping to provide awards your colleagues can apply for without competing with researchers in other disciplines. And making your tax deductible donation today is one more way you can help improve the oral health of Canadians.

As a researcher, I know how competitive it is to obtain funding for oral health research.

CFDHRE is the only charity in Canada dedicated solely to dental hygiene research and education. Your foundation is led by dental hygienists... for dental hygienists.

Stand together with your fellow dental hygiene professionals to benefit your clients and your profession. With your donation at www.cfdhre.ca, together we can achieve our goals! Click the purple "Donate Now" button.

Sincerely,
Laura Dempster BScD(DH), MSc, PhD
President

