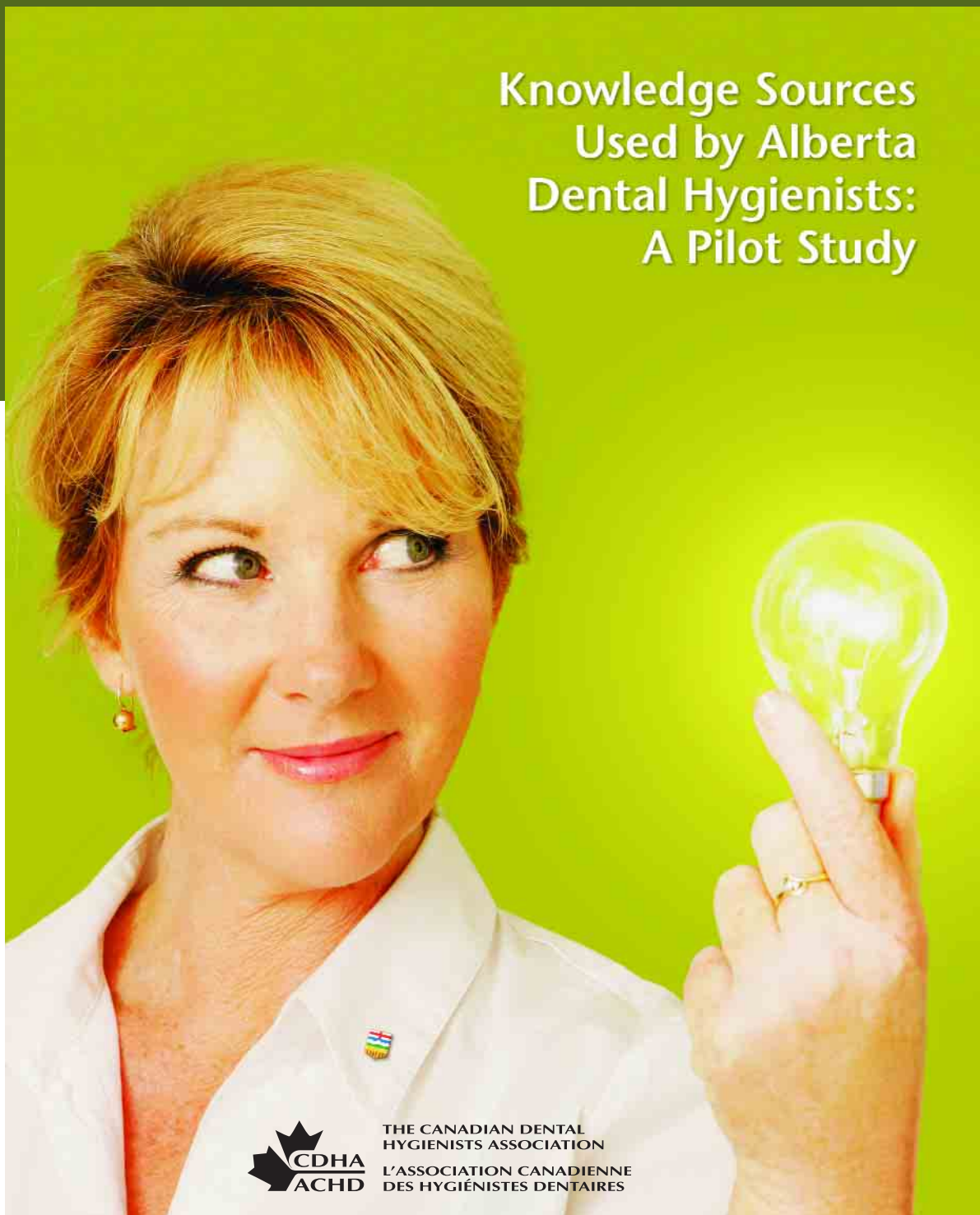


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Knowledge Sources Used by Alberta Dental Hygienists: A Pilot Study



THE CANADIAN DENTAL
HYGIENISTS ASSOCIATION
L'ASSOCIATION CANADIENNE
DES HYGIÉNISTES DENTAIRE

THE OFFICIAL JOURNAL OF THE CANADIAN DENTAL HYGIENISTS ASSOCIATION

Achieving Balance

By Bonnie Blank, AASc, BSc(DH), MA

*Be aware of wonder. Live a balanced life
—learn some and think some and draw
and paint and sing and dance and play
and work every day some.*
– Robert Fulghum



ACHIEVING BALANCE IN ONE'S LIFE IS AN ONGOING challenge. As professionals we juggle personal, family and work life. Often, we strive to satisfy all the demands placed upon us, while perhaps neglecting our own needs. How can we be productive and remain healthy at the same time?

Achieving balance in our profession is, quite literally, an ongoing challenge. It is well supported in literature that repetitive-strain injuries are common among dental hygienists.

*Achieving balance in our
profession is, quite literally,
an ongoing challenge.*

As Susanne Sunell and Linda Maschak observed in Volume 30, 1996 of *Probe*: "The occupational elements which appear to be influential include excessive use of small muscles, repetitive motions, excessive tight grip on the instrument, fixed working positions, limited movement, and long-term static load on muscles of the neck and shoulder area."

Preventing back, neck and shoulder pain is a goal we all share. It would reduce the difficulty dental hygienists may face in accessing disability insurance because of the large number of claims due to workplace injuries. It also would enhance quality of work life. As Peggy McCann, an expert in the field of ergonomics, wrote in Volume 37, 2003 of *Probe*: "Bad backs, sore necks, pain and chronic fatigue are common complaints heard in the dental community. These problems impact productivity, accuracy, consistency, job satisfaction and morale. They are also the reasons given by many professionals as they leave the field completely or reduce their days/hours of work to fewer that they would prefer."

Through the years, I have taken many courses on ergonomics. I have had the opportunity to use a wide variety of equipment in many different practice settings. And I have taught ergonomics to dental hygiene students for many years. Yet with all this experience, I still find it extremely challenging to maintain a position that is both

Achieving Balance ...continued on page 187

Atteindre l'équilibre

Par Bonnie Blank, AASc, BSc(DH), MA

*Sachons reconnaître le merveilleux. Vivons une
vie équilibrée – chaque jour qui nous est donné,
apprenons quelque chose, pensons à quelque chose,
dessinons, peignons, chantons, dansons et
travaillons. [Traduction]*
– Robert Fulghum

ATTEINDRE L'ÉQUILIBRE DANS SA VIE EST UN DÉFI continu. En tant que professionnels et professionnelles, nous nous efforçons de répondre à toutes les demandes qui nous sont adressées, alors que, peut-être, nous négligeons nos propres besoins. Comment pouvons-nous demeurer à la fois productifs/productives et en santé?

Atteindre l'équilibre dans notre profession est, pratiquement littéralement, un défi continu. Il est bien établi dans la littérature que les microtraumatismes répétitifs sont communs chez les hygiénistes dentaires. Comme Susanne Sunell et Linda Maschak le faisaient remarquer dans le volume 30, du *Probe* de 1996 : « Les facteurs professionnels qui semblent jouer un rôle influent incluent l'utilisation excessive des petits muscles, les mouvements répétés, la prise serrée excessive sur l'instrument, les positions de travail fixes, la limitation de mouvement et la charge statique de longue durée sur les muscles du cou et des épaules ».

*Atteindre l'équilibre dans notre
profession est, pratiquement
littéralement, un défi continu.*

Prévenir les lancinantes douleurs au dos, au cou et aux épaules est un objectif que nous partageons toutes. L'atteinte de cet objectif pourrait réduire les contraintes d'accès à l'assurance invalidité auxquelles font face les hygiénistes dentaires à cause du grand nombre de réclamations dues aux blessures professionnelles. Cela pourrait également améliorer notre qualité de vie professionnelle. Comme Peggy McCann, une experte en ergonomie, l'écrivait dans le volume 37, du *Probe* de 2003 : « Les lancinantes douleurs au dos et au cou ainsi que les douleurs et la fatigue chroniques sont des plaintes souvent entendues dans la communauté dentaire. Ces problèmes ont des répercussions sur la productivité, la précision, l'assiduité, la satisfaction professionnelle et le moral. Ce sont également les raisons données par plusieurs professionnels et professionnelles lorsqu'ils ou elles

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Earning and Keeping Your Trust is Our Priority

By Susan Ziebarth, BSc, MHA, CHE



Mériter et garder votre confiance est notre priorité

Par Susan Ziebarth, BSc, MHA, CHE

Trust is the currency of associations
– Stephen M.R. Covey (Invitational Forum on Leadership and Management, June 7, 2007, Toronto)

RECENTLY, I HAD THE OPPORTUNITY TO ATTEND AN invitational leadership forum and hear Stephen M.R. Covey discuss the role of trust in associations. Covey believes the ability to establish, grow, extend and restore trust with all stakeholders—members, board members, partners, volunteers and staff—is the critical leadership competency in today's global economy. Yet, trust in institutions is at an all-time low and Covey says that only 39 percent of Canadians believe other people can be trusted. He suggests organizations ask themselves three questions: 1) Are you credible? 2) Do you promote integrity? and 3) Is your intent to help genuine?

We speak on behalf of more than 12,000 dental hygienists.

With respect to credibility, CDHA works diligently to develop positions that are grounded in evidence-based research and produce equitable policy. We speak on behalf of more than 12,000 dental hygienists, a responsibility the board and staff take seriously. With creativity and persistence, they work hard on your behalf. Their wish to serve you, members of CDHA, is genuine.

This intent is recognized by CDHA's peer organizations. For example, our Health Policy Communications Specialist, Judy Lux, was nominated by her colleagues to attend the Canadian Health Professionals, Health Organizations and Tobacco Control Symposium on September 29 and 30 in Edmonton, Alberta. The workshop will provide a unique opportunity for dialogue and networking with diverse Canadian health professionals involved in tobacco control. Group work will lead to effective and viable national strategies to influence how tobacco use is addressed within the context of health care. Judy was nominated to participate by the symposium planning team: Dr. Joan Brewster, Dr. Sharon Compton, Ms. Karen Fisher, Dr. Kathryn Hyndman, Ms. Bonnie Quinlan, Dr. Annette Schultz and Dr. Michele Tremblay.

Earning and Keeping Your Trust is Our Priority
...continued on page 187

La confiance est la monnaie des associations [Traduction]
– Stephen M.R. Covey
(Forum sur invitation sur le leadership et la gestion, 7 juin 2007, Toronto)

RÉCEMMENT, J'AI EU L'OCCASION D'ASSISTER À UN forum sur invitation sur le leadership et d'entendre Stephen M.R. Covey débattre du rôle de la confiance au sein des associations. Covey croit que la capacité d'établir, de cultiver, d'étendre et de restaurer la confiance auprès des parties prenantes – membres, membres du conseil, partenaires, bénévoles et personnel – est la compétence critique en leadership dans le contexte de l'économie mondiale actuel. Ainsi, la confiance dans les institutions est à son plus bas niveau historique et Covey déclare que seulement 39 % des Canadiens et Canadiennes croient qu'ils peuvent faire confiance aux autres personnes. Il suggère que les organisations se posent trois questions : 1) tes-vous crédibles? 2) Prônez-vous l'intégrité? 3) Est-ce que votre intention d'aider est authentique?

Nous parlons au nom de plus de 12 000 hygiénistes dentaires.

En matière de crédibilité, l'ACHD s'efforce avec diligence de développer des positions qui sont liées à la recherche fondée sur des données probantes et d'élaborer des politiques équitables. Nous parlons au nom de plus de 12 000 hygiénistes dentaires, une responsabilité que le conseil d'administration et le personnel prend au sérieux. Avec créativité et persistance, ils travaillent fort en votre nom. Leur désir de vous servir – vous, les membres de l'ACHD – est authentique.

Cette intention est reconnue par les organisations pairs de l'ACHD. Par exemple, notre spécialiste en politiques de la santé et communications, Judy Lux, a été choisie par ses collègues pour participer au *Canadian Health Professionals, Health Organizations and Tobacco Control Symposium* les 29 et 30 septembre à Edmonton en Alberta. L'atelier offrira une opportunité unique de dialogue et de réseautage avec divers professionnels canadiens de la santé engagés dans la lutte contre le tabagisme. Le groupe de travail développera

Mériter et garder votre confiance est notre priorité
...suite à la page 198

Knowledge Sources Used by Alberta Dental Hygienists: A Pilot Study

By Sandra J. Cobban, RDH, MDE,* and Joanne Profetto-McGrath, PhD**

ABSTRACT

Dental hygiene, as an emerging profession, faces challenges in developing a culture of evidence-based practice. Little is known about knowledge sources used by dental hygienists to inform their practice, and more work needs to be done to develop a better understanding of this subject. Pilot studies can make significant contributions to the literature by revealing methodological strengths and limitations of research designs. This pilot study was conducted to test the application in a dental hygiene setting of a study design previously used by nurse researchers to describe research utilization in nursing practice. A cross-sectional survey using paper-based questionnaires was conducted with a random sample of practising dental hygienists in the Province of Alberta, Canada. The subsequent report on knowledge sources was part of a larger pilot study of research utilization and critical-thinking dispositions (reported elsewhere). The report's conclusions were based on 161 responses, or a response rate of 25.2 percent. The highest-ranking knowledge sources were information from the client, personal experience, in-services/conferences, dental hygiene programs, and articles published in dental hygiene journals. Cronbach's alpha was high at 0.85, demonstrating internal consistency reliability. The low response rate suggested the need to modify one or more of the study instruments to improve unit response. The survey responses for the sources of knowledge were somewhat different from what has been reported in the literature, which suggested there was value in using this research instrument for the main study. The pilot study supported inclusion of the knowledge-sources research instrument in the main study.

BACKGROUND

DENTAL HYGIENE IS CONSIDERED BY SOME A DEVELOPING or emerging profession^{1,2} and it has been suggested that dental hygienists are well placed to play a role as primary health-care providers in an evolving health care system.^{3,4} Health professionals in general have been moving toward a culture of evidence-based practice and using research to support practice decisions, which is increasingly important for primary health-care providers.

The Policy Framework for Dental Hygiene Education of the Canadian Dental Hygienists Association (CDHA) acknowledges the need to respond to the expanding body of dental hygiene literature, changing patterns of disease among people receiving dental hygiene care, and an increased need for quality oral-health services.⁵ This policy specifies graduate outcomes, including the ability to "manage and use large volumes of scientific, technological and client information" (p. 106) as an essential element of an evidence-based approach to practice. As a result, many in the dental hygiene community urge a greater use of research.^{6,7}

Despite support for this approach to practice, as outlined by the CHDA, there is limited understanding of how dental hygienists access research or other forms of knowledge to inform their practice decisions, and even less understanding of clinical decision-making by hygienists. It has been suggested that critical-thinking dispositions may

be associated with research utilization in nursing practice.⁸ A dental hygienist researcher worked with nurse researchers to determine whether studying research utilization and critical-thinking dispositions in dental hygiene would uncover similar results. However, before applying in a dental hygiene setting the research instruments designed for a nursing setting, they were tested first for their suitability to the new context. The purpose of this pilot study was to test the research instruments and study design for their applicability to dental hygiene.

Few published studies in the dental hygiene literature are specifically identified as pilot studies. Also, a limitation of these studies is that they focus more on the research outcomes than the potential contribution to our knowledge of the implementation of a study design. Pilot studies make an important contribution to the development of a body of knowledge on research methods within a discipline.

A key characteristic of pilot studies is that they are intentional⁹ and, from the outset, planned to test a research design. This is done in anticipation that what is learned about the process can inform the design and implementation of the larger study to follow.¹⁰ A small, convenience sample used to solicit feedback on the time needed to complete a questionnaire should be considered a pre-test of the instrument, as it does not test the study design itself. As well, when the sample size obtained for research is inadequate, a researcher cannot in retrospect label it a pilot study.⁹

Perry has recommended that authors identify a study as a pilot study in the abstract, introductory paragraph and,

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RÉSUMÉ

Comme profession émergente, l'hygiène dentaire doit relever le défi de développer une culture de pratique fondée sur les faits. On en sait bien peu sur les sources de connaissances utilisées par les hygiénistes dentaires pour se maintenir à jour dans l'exercice de leur profession et beaucoup de travail est à faire pour développer une meilleure compréhension de ce sujet. Des études pilotes peuvent apporter des contributions significatives à la littérature en révélant les forces et les limitations méthodologiques des modèles de recherche. Cette étude pilote a été menée pour évaluer l'application, dans un environnement d'hygiène dentaire, d'un modèle d'étude utilisé précédemment pour les infirmières et infirmiers chercheurs pour décrire l'utilisation de la recherche dans la pratique des soins infirmiers. Une enquête ponctuelle, utilisant des questionnaires sur papier, a été menée avec un échantillon aléatoire d'hygiénistes dentaires praticiennes dans la province de l'Alberta au Canada. Le rapport subséquent sur les sources de connaissances faisait partie d'une plus grande étude pilote de l'utilisation de la recherche et des modèles de pensée critique (rapportée ailleurs). Les conclusions du rapport étaient fondées sur 161 réponses, soit un taux de réponse de 25,2 %. Les sources de connaissances les mieux classées étaient les informations reçues des clients, l'expérience personnelle, la formation interne et les conférences, les programmes d'hygiène dentaire et les articles publiés dans les revues d'hygiène dentaire. Le coefficient alpha de Cronbach était élevé – à 0.85 – montrant la fiabilité de la cohérence interne. Le faible taux de réponse suggérait le besoin de modifier un ou plusieurs des instruments d'étude afin d'améliorer le taux de réponse. Les réponses au sondage sur les sources de connaissances étaient quelque peu différentes de ce qui a été relaté dans la littérature, ce qui donnait à penser que l'utilisation de cet instrument de recherche avait une valeur pour l'étude principale. L'étude pilote appuyait l'inclusion de l'instrument de recherche sur les sources de connaissance dans l'étude principale.

if appropriate, in the title.⁹ Our understanding of research design is enhanced when researchers report the success or failure of changes made to address design problems encountered in pilot studies.^{11,12} Van Tiejlingen et al¹² suggested that “researchers have an ethical obligation to make the best use of their research experience by reporting issues arising from all parts of a study, including the pilot phase” (p. 293).

Findings from a pilot study can offer researchers valuable information about the reliability and validity of research instruments, and the appropriateness of their use in the desired context. By collecting preliminary data, pilot studies enable an assessment of data-analysis techniques prior to designing the main study. Pilot studies also provide valuable information on variability of the sample and the population, which is important for power calculations and sample-size determination for the main study. The pilot also can identify other issues that may arise, such as participant recruitment and retention, adequacy of the sampling frame and technique, survey-item and survey-unit response, and the training required for research assistants and data collectors.¹² The findings from pilot studies typically should not be used to make generalizations, which are part of the main study.⁹

A pilot study can be useful to support applications submitted to external funding agencies. Pilot work indicates to the funding body that the research team has the skills to successfully implement the main study.¹¹ It can demonstrate the significance and feasibility of the proposed main study⁹ and help convince the funding agency and other stakeholders that the proposed study is worth funding.¹²

Process findings from pilot studies have not been widely reported in the dental hygiene literature. Dental hygienist researchers are encouraged to publish their pilot studies to advance the knowledge base in our science. This paper contributes to that knowledge by reporting on a pilot study developed to test in a dental hygiene setting the

application of a research design that was originally used in nursing science. The pilot study used Research Utilization (RU) and Critical Thinking Dispositions (CTD) questionnaires. This article reports on the subset of the RU questionnaire dealing with sources of knowledge for practice. The process and findings of the balance of the study are reported elsewhere.¹³ In addition, the article reports some of the lessons learned from implementing this pilot study in one province, and how this informed the design of the subsequent national study. Although not normally reported in a pilot study, preliminary findings about the knowledge sources themselves are included to make clear the nature of their contribution to knowledge, as they expand considerably our understanding of the subject based on the existing literature.

KNOWLEDGE SOURCES FOR EVIDENCE-BASED DENTAL HYGIENE PRACTICE

Information and instructions to become an evidence-based practitioner are readily available in the literature.^{6,7,14,15} The information is often reported by researchers or experts, who have ready access to extensive resources, and tends to be somewhat prescriptive in nature. It does not always represent the experience of practitioners, which is why this portion of the study is an attempt to describe the experiences of dental hygienists in their practices.

Understanding the knowledge sources used most frequently by dental hygienists is important for the profession to better understand which mechanisms are most effective in communicating new findings from research related to practice. Dental hygiene practitioners aspire to providing the highest quality of care that will predictably lead to improvements in public health. Unfortunately, recent studies have shown variation in clinical approaches at the individual level in dental hygiene practice.¹⁶⁻¹⁹ Either dental hygienists are not receiving the most-current

quality information for use in their practice, or they experience yet-to-be identified barriers to implementing this information in practice. Either way, this needs to be studied and addressed to ensure clients receive the best care that leads to the most effective outcomes.

Few published articles exist that identify the sources of knowledge used in practice beyond those found in three studies of information-seeking behaviours of dental hygienists. In an early study, Gravois and her colleagues found that the main sources of information for practice were discussions with colleagues and "browsing journals, books, and newsletters" (p. 448), while conducting or having someone else conduct a database search were infrequent sources.^{20,21} Covington and Craig similarly found the most frequently used information sources to be discussions with colleagues, journal articles, mailings from professional associations and the licensing body, textbooks and continuing education (CE) courses.²² They also found low use of computerized information sources, but these were still relatively early days in terms of computer use by the general population.

More recently, Finley-Zarse and colleagues found an increase in the use of computer-based information sources among dental hygienists, including the Internet and electronic databases,²³ possibly consistent with the increase of computer use by the general population in North America. Finley-Zarse examined information sources used by dental hygiene educators and practitioners and found that practitioners most frequently used, in descending order, CE courses, journals, asking a dentist, newsletters and asking a dental hygiene colleague. Ohn, Olsson and Wallin studied research utilization among dental hygienists in Sweden and found that reading research articles in professional journals was the most frequently reported research-related activity, followed by sharing research findings with colleagues.²⁴

Given that evidence-based practice is important to the development of the dental hygiene profession and to clients, and given that it is not well understood how dental hygienists prefer to obtain their evidence for practice, it is important to pursue research that will help understand the preferred sources of knowledge used by dental hygienists in their practice decisions.

METHODS

A pilot study of a random sample of practising dental hygienists was conducted in the Province of Alberta, Canada, using a cross-sectional design and paper-based survey questionnaires. A formula, recommended for use by graduate students and grant applications in the United Kingdom,²⁵ was used for sample-size calculation as follows: $n = 15.4 * p * (1-p) / W^2$ where n = the required sample size, p = the expected proportion, and W = width of confidence interval.²¹ The sample-size calculation used 50 percent for p as the proportion falling into the various categories that was not known in advance, and used .10 for W for a 95 percent confidence interval, which resulted in a sample size of 385. Previous studies with this population included response rates of approximately

60 percent. This led the researchers to over-sample, which resulted in a final sample size of 642. The study was approved by the Health Research Ethics Board Panel B at the University of Alberta.

A survey questionnaire previously developed to study research utilization (RU) in nursing was modified for use in a dental hygiene practice.^{26,27} Authors of both studies gave permission to revise their questionnaires for use in dental hygiene. The research instruments used in this pilot study were a Research Utilization (RU) questionnaire, which included a subset of questions on knowledge sources; the California Critical Thinking Dispositions Inventory (CCTDI); and a demographic questionnaire, for a total survey of 15 pages. Both the RU and CCTDI questionnaires contained Likert-type-scale items related to frequency of use of particular approaches, research use or perceived extent of support for research use in the workplace, frequency of use of various knowledge sources, and extent of agreement with statements related to critical thinking. The list of knowledge sources used by nurses was modified to reflect dental hygiene practice and specific Canadian dental hygiene publications. Because the list of sources used by nurses was broader in scope than the previous information-seeking questionnaires in dental hygiene, especially related to experiential knowledge, we chose to use and modify the version used for nurses rather than the one used previously for dental hygienist, in order to extend our understanding. The questionnaire was pretested with a convenience sample of clinical instructors in dental hygiene. They provided feedback related to question clarity and ease of questionnaire completion, which led to slight modifications prior to implementation.

The provincial regulatory body did not have the capacity to generate random mailing labels, but the national dental hygiene association had a computer program specifically designed to generate random samples of mailing labels. Given that national membership is a requirement of provincial licensure in Alberta, we assumed their lists would be substantially similar. As investigators, we received two sets of mailing labels. Two potential participants were removed from the list because they had participated in the pretest. The questionnaires were mailed to the random sample of 640 dental hygienists registered in Alberta. A follow-up mailing was sent to non-respondents four weeks later to increase response.²⁸

Data was entered into SPSS for subsequent analysis. Demographic characteristics of respondents were compared to the total population of actively practising dental hygienists (obtained through personal communication with the regulatory body for a prior study).²⁹

Cronbach's alpha is a statistic used to determine if the items or questions in a scale or list are correlated³⁰ and alpha statistics range from zero to one. It is a measure of internal consistency reliability to determine whether the scale or list reliably measures one overall concept.³¹ A result greater than .7 is generally considered to be an indication of reliability.^{32,33} Cronbach's alpha was used to determine if the list of knowledge sources was reliable in measuring a single concept.

Frequency distributions were used to rank preferred knowledge sources, to compare these to findings of previous studies and to help establish content and construct validity. Standard deviations (SD) were used to identify variability in the frequencies reported. A low standard deviation indicates less variation in the responses, whereas a higher standard deviation indicates greater variation in the responses.³² A lower standard deviation suggests greater consistency in the use by dental hygienists of a particular knowledge source.

RESULTS

The study received 161 responses (n=161), a response rate of 25.2 percent. The mean age of respondents was 40.4 years. The majority of respondents (69.8 percent) were university diploma graduates and had practised an average of 14.2 years. The greatest majority (91.7 percent) were employed in private dental practices. Respondents to this survey tended to be somewhat older than the general age distribution of members of the Alberta Dental Hygienists Association (ADHA), as illustrated in Table 1.

The total number for respondents' age differs from the total number of participants due to item non-response, with 146 responding to the question on age.

Age Range	Respondents N=146	ADHA* Members
≤24	0	5.8%
25–29	10.3%	18.6%
30–34	17.8%	19.3%
35–39	19.9%	17.5%
40–44	19.9%	14.8%
45–49	17.8%	13.9%
50–54	8.9%	5.9%
55–59	5.5%	2.9%

* Alberta Dental Hygienists Association

Table 1. Frequency Distribution of Respondent Age Compared to Age of Population

Rank	Knowledge that I use in my dental hygiene practice is based on:	Mean	S.D.
1	information that I learn about each patient/client as an individual	4.14	.789
2	my personal experience of dental hygiene patients/clients over time	4.11	.638
3	information I get from attending in-services/conferences	3.95	.619
4	information I learned in my dental hygiene program of studies	3.92	.787
5	articles published in dental hygiene journals	3.64	.763
6	my intuitions about what seems to be "right" for the patient/client	3.56	.888
7	what has worked for me for years	3.52	.819
8	information my fellow dental hygienists share	3.29	.747
9	information from provincial association newsletters or publications	3.27	.816
10	what dentists discuss with me	3.21	.824
11	articles published in dentistry or dental hygiene research journals	3.00	.986
12	from product representatives in my office and at conferences	2.93	.696
13	the ways that I have always done it	2.92	.826
14	articles published in dentistry journals	2.91	.989
15	new therapies/products that I learn about after dentists order them	2.79	.878
16	instructions, prescriptions, orders from the dentist	2.65	.867
17	information in textbooks	2.60	.929
18	information I get from the popular media (e.g., magazines, television)	2.48	.874
19	information contained in abstracts (e.g., PHD, etc.)	2.45	.987
20	information I get from dental hygiene websites (e.g., CDHA, ADHA)	2.43	1.107
21	information I get from the Internet (professional sources)	2.31	1.039
22	information I get from policy and procedure manuals in our office	2.27	1.070
23	information obtained by contacting my professional association	2.24	.946
24	information from dental assistants	2.19	.739
25	information I get from the Internet (general sources)	1.99	.930
26	information I get by searching PubMed	1.59	.928

Table 2. Most Frequently Used Knowledge Sources

The questionnaire on sources of knowledge included 26 items, modified from an instrument used in research with nurses. A Likert-type scale was used with response choices related to frequency of use: 1=never; 2=seldom; 3=sometimes; 4=frequently; and 5=always. Table 2 includes the reported frequencies of knowledge sources used by practising dental hygienists in this study. Mean scores and standard deviations for responses were calculated in order to rank knowledge sources by reported frequency of use. The top-five knowledge sources reported, in descending order, were information about the patient/client, personal experience, in-services/conferences, information from dental hygiene programs, and articles from dental hygiene journals.

Cronbach's alpha for this set of items was high at .85, demonstrating good internal consistency reliability. Table 3 presents the list of items and the Cronbach alpha statistics for the questionnaire if the individual item were to be removed. Statistics for three items (information about the patient/client, what has worked for me for years, and the ways that I have always done it) suggested that the alpha

for the total questionnaire would be marginally improved by their removal. Even with the inclusion of these three items, the alpha statistic demonstrated a reliable set of questions for this purpose.

DISCUSSION

In moving to a culture of evidence-based practice, little is known about sources of knowledge used by practising dental hygienists beyond studies of information-seeking behaviours. These studies have examined sources somewhat more external in nature and have not investigated experiential types of knowledge. This pilot study sought to determine if a questionnaire used by nurse researchers could reliably and validly examine a broader scope of knowledge sources than the questionnaire previously used with dental hygienists. This proved to be a sound choice.

The instrument performed reliably, with a Cronbach alpha of .85.^{30,33} Statistics for three items, "information about the patient/client" (.85), "what has worked for me for years" (.86), and "the ways that I have always done it"

Knowledge that I use in my dental hygiene practice is based on:	Cronbach's Alpha if Item Removed
information that I learn about each patient/client as an individual	.853
my personal experience of dental hygiene patients/clients over time	.848
information I get from attending in-services/conferences	.847
information I learned in my dental hygiene program of studies	.849
articles published in dental hygiene journals	.844
my intuitions about what seems to be "right" for the patient/client	.851
what has worked for me for years	.856
information my fellow dental hygienists share	.848
information from provincial association newsletters or publications	.845
what dentists discuss with me	.844
articles published in dentistry or dental hygiene research journals	.846
from product representatives in my office and at conferences	.846
the ways that I have always done it	.855
articles published in dentistry journals	.845
new therapies/products that I learn about after dentists order them	.848
instructions, prescriptions, orders from the dentist	.847
information in textbooks	.844
information I get from the popular media (e.g., magazines, television)	.845
information contained in abstracts (e.g., PHD, etc.)	.847
information I get from dental hygiene websites (e.g., CDHA, ADHA)	.844
information I get from the Internet (professional sources)	.842
information I get from policy and procedure manuals in our office	.843
information obtained by contacting my professional association	.839
information from dental assistants	.850
information I get from the Internet (general sources)	.842
information I get by searching PubMed	.851

Table 3. Knowledge Sources Item—Total Statistics

(.86), suggest that the scale would be marginally improved by their removal. However, because we were interested to know how the items would perform in the larger study, and because the questionnaire was sufficiently statistically strong with these items included, they were retained.

Frequency data for the knowledge sources were also compared to previous dental hygiene literature as a means of determining content and construct validity.³⁴ When the new items (information about patient/client, personal experience, intuition, and what has worked for years) were removed from the top portion of the list in Table 2, the remaining top sources were consistent with findings from previous literature, such as in-services/conferences,^{22,23} dental hygiene program of studies, dental hygiene journals,²⁰⁻²⁴ information from dental hygiene colleagues²⁰⁻²⁴ and provincial newsletters or publications.²⁰⁻²³ This data provides support for the construct validity of the instrument.³⁵ The addition of the new items related to practice and experience was useful, as many performed well statistically, and some ranked highly in their frequency of use adding new knowledge to our understanding of this subject. With reliability and validity established, there is support to include this set of questions on knowledge sources in the main study.

We encountered a number of challenges during the pilot study's implementation. First, the response rate was low at only 25.2 percent. We suspect some coincidences may have influenced this outcome. One day after mailing the 15-page questionnaires to the random sample of 640 dental hygienists, the provincial regulatory body also mailed a 22-page competency review to all members. Faced with two large questionnaires, some members may have chosen to complete one or the other if they did not have the time or willingness to complete both. A report about the provincial review indicated that approximately 16 percent responded,³⁶ suggesting that our response rate for the pilot study was higher at 25.2 percent, which was encouraging in light of the disappointing return.

Based on demographic characteristics of respondents, participants were older than the average dental hygienist in Alberta. Some possible reasons include that older hygienists perhaps have fewer family responsibilities than younger hygienists, who may have young children at home, and consequently may have had more time to complete lengthy questionnaires. Also, research utilization is a relatively unfamiliar concept in the dental hygiene literature and there is some suggestion that survey response is influenced by participants' familiarity with and their perception of the salience of the subject under investigation.^{37,38}

Krosnick has suggested that cumulative cognitive load, or the amount and difficulty of cognitive effort required to answer a series of questions, may influence non-response in survey research.³⁹ The response scales in the original nursing questionnaires referred to numbers of shifts during which different research utilization behaviours had occurred in the previous year, support in the work environment for different forms of research utilization behaviours, frequency of use of knowledge sources, and a

questionnaire with 75 items related to critical-thinking dispositions. Although terms were modified to reflect dental hygiene practice, the response structures remained more or less intact, which included use of different measurement scales in different locations, particularly in the RU questionnaire. The response rates for these questionnaires and this study protocol were considerably higher in studies with nurses. Because research utilization is a relatively unfamiliar phenomenon in the dental hygiene literature, the inconsistent and unfamiliar measurement scales may have combined to increase the cognitive load and subsequently negatively influenced responses. As a result, changes were made to the questionnaires for use in the main study. These included modifying measurement scales to use consistent terminology and consistent units of measurement¹³ in an effort to reduce cognitive load.

Because this was a pilot study, there was no intent to generalize the findings to the larger population. From this perspective, the low response rate is less of a concern. If the low-response pattern continues in the main study, it may limit inference to the larger population despite the random sampling approach.

CONCLUSIONS

Pilot studies serve to test research instruments and designs prior to conducting a main study. They are useful in providing data to support reliability and validity of available instruments, and an understanding of the challenges to implementation, so as to make changes to improve chances of success in a subsequent main study.

The data obtained in this pilot study supported the reliability and validity of the knowledge sources questionnaire for a subsequent main study. The data also showed that previously unused questions about personal experience and patient-centred care ranked highly as knowledge sources, providing rationale for their inclusion in the main study so as to extend our understanding of this subject. A low response rate and skewed demographic characteristics of respondents identified potential problems in the design. Changes were necessary to other sections of the main study (reported elsewhere) to improve the potential for generalization of the findings.

In a growing culture of evidence-based practice, it is important to understand knowledge sources that are most frequently used, so as to make use of mechanisms that most effectively communicate research findings for practice. It is also ethically important to understand how best to support practitioners in their steps toward evidence-based practice. This pilot study provided useful information about the validity and reliability of the knowledge sources instrument and implementation challenges in the research design, which strengthened and improved the conducting of the main study.

ACKNOWLEDGEMENTS

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Achieving Balance (continued from page 171)

neutral and effective in delivering care. The unique needs of each client and time constraints in the workplace remain contributing factors to repetitive-strain injuries in our profession.


Frequently checking our posture and positioning during care delivery is essential. Developing a repertoire of stretches that can be performed chair-side between clients is good practice. Seeking the advice and care of professionals who help maintain proper posture and alignment is useful. And establishing a well-planned exercise routine is indispensable in maintaining our long-term health as dental hygienists.

But are we indeed applying the principles that ensure personal safety and well-being in the workplace? Do we

take the time to ensure our equipment is placed to support maximum access during care delivery?

Another consideration in creating workplace safety may be that the technology we use in providing better care to clients could also enhance our own health. As Susanne Sunell and Lance Rucker reported in the Volume 39, 2005 issue of *CJDH*: "The use of surgical magnification has the potential to increase the quality of dental hygiene clinical care and to support the musculoskeletal health of dental hygienists."

And last but not least, we need to ensure that our lives outside of dental hygiene support our physical, mental and emotional well-being. As much as possible, take time to do something you really enjoy.


You can reach Bonnie Blank at president@cdha.ca. 

Earning and Keeping Your Trust is Our Priority (continued from page 175)

Developing a culture of integrity is an important factor in establishing organizational trust. Listening, respecting diverse points of view, sharing information and open communication, being honest and having confidence in the organization's abilities are all factors that support the development of trust. Good governance means making a commitment to trust, which creates the positive environment and energy people require to lead and serve an organization. It is a necessary foundation for board members, staff and volunteers to trust themselves to make the right choices for an organization.

Articulating an organization's core ideology is central to developing integrity. Publicly stating and enforcing core values conveys an organization's commitment to a standard against which choice-making and performance can be evaluated, and motivates people to adhere to them. These core values help an organization reach the best decisions based on certain factors described by Gandossy and Sonnenfeld (2004)¹. *Transcendent dedication* describes your directors' unselfish allegiance to the organizations goals. *Vigilant attention* is the decision-makers' commitment to be fully present and analytical in making choices, and *decisive realization* is a board's commitment to ensuring its decisions are executed.

It is incumbent upon a board to establish policies to maintain its own integrity. If a board simply articulates what an association's staff desire, it is not acting as *your* (members) representative. A board's policies also need to provide the latitude as well as the boundaries for executive decision-making. This gives an executive director the necessary room to make decisions based on integrity and trust, and prevents a board from becoming the *de facto* decision-maker for those difficult decisions the executive director wishes to avoid.

Everyone has a role to play in earning and keeping your trust. Covey clearly articulated what has been at the core of CDHA's mission and values. CDHA is the voice and vision of your profession. We want to lead the profession with integrity, credibility and genuine care with the objective that you, as an individual, are proud to call yourself a member of your national professional association. 

¹ Gandossy R, Sonnenfeld J. Leadership and Governance from the Inside Out. 2004

Abstracts from the 85th General Session of the IADR

March 21–24, 2007, New Orleans, Louisiana

These abstracts were among those presented at the 85th General Session of the International Association for Dental Research in New Orleans from March 21–24, 2007. The IADR has given us permission to publish a selection of abstracts in the *Canadian Journal of Dental Hygiene*.

CLINICAL MICROBIOLOGY

1127 DIVERSE AND NOVEL ORAL BACTERIA IN BLOOD FOLLOWING DENTAL PROCEDURES

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It has been estimated that over 700 bacterial species colonize the human oral cavity. Some of these bacteria are associated with periodontal disease and dental caries, and some gain entrance to the circulation and are associated with systemic disease. **Objectives:** The purpose of this study was to identify oral bacteria in the blood of patients undergoing either a single tooth extraction, with or without antibiotic prophylaxis, or tooth brushing. **Methods:** Blood samples were taken at timed intervals before, during and following these two procedures and cultured in BACTEC media. Positive cultures were sub-cultured on differential media for isolation of both aerobic and anaerobic bacteria. Bacterial identification was based on sequence analysis of 16S rRNA genes. Genomic DNA was isolated and 16S rRNA genes were amplified by PCR. The sequences of the amplified genes were determined and compared with known sequences. **Results:** In the analysis of 410 isolates from 149 subjects, 119 different bacterial species belonging to 33 different genera were recovered including many known species of *Streptococcus*, *Peptostreptococcus*, *Neisseria*, and *Prevotella*. Species not often detected in the oral cavity were also isolated including *Haemophilus aphrophilus*, *Solobacterium moorei*, *Shuttleworthia satelles* and *Acinetobacter* sp. Of interest, 48 of the isolates were representing 24 novel species of *Prevotella*, *Fusobacterium*, *Streptococcus*, *Actinomyces*, *Capnocytophaga* and *Veillonella*. **Conclusions:** By using conventional culture techniques and 16S sequence analysis, a diverse bacterial population including novel species can be isolated from bacteremia following routine or invasive dental procedures. This work was supported by NIDCR grant R01-DE13559-01 A2.

2285 MOLECULAR ANALYSIS OF MICROBIAL DIVERSITY IN CARIES AND HEALTH

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The microbiology of dental caries has been described as an ecological disruption and loss of biodiversity that consists of overgrowth of a small number of pathogenic species and elimination of protective species. Clear, quantitative microbiologic data that demonstrate this shift are needed. **Objective:** To measure the diversity of microbial communities in childhood caries and health by quantitative rDNA 16S cloning and sequencing. **Methods:** Plaque from children with incipient caries in the primary dentition (n=21), rampant caries of the primary dentition (n=16), severe caries in the permanent dentition (n=12) and age-matched healthy controls (n=50) was sampled. Samples were collected from healthy enamel, whitespots, cavitated lesions and dentinal caries. DNA was isolated and amplified by PCR with universal bacterial 16S rDNA primers, and amplicons were cloned and sequenced for bacterial identification. **Results:** Plaque from

healthy children contained an average of 18.2 species, and plaque from children with caries from healthy enamel, whitespots, cavitated lesions and dentin contained an average of 14.7, 13.4, 11.7 and 12.9 species respectively. Differences between healthy subjects and all types of samples from subjects with caries were significant (P<0.0001), all paired post hoc tests significant). The Shannon-Weiner diversity index was calculated, and differences were highly significant as well (healthy children 2.4, children with caries intact enamel 2.1, whitespots 2.0, cavitated lesions 1.8 and dentin 1.8, P<0.0001). These relationships were similar in incipient and established caries of the primary dentition and in caries of the young permanent dentition. **Conclusions:** Microbial biofilm community diversity is greater in healthy children than in children with caries by quantitative 16S cloning and sequencing, supporting the concept that dental caries is an ecological disruption and a loss of microbial community biodiversity. Supported by NIH DE16125.

INFECTION CONTROL

1139 EFFECT OF LUBRICATION ON STERILIZATION OF DENTAL HANDPIECES

P. KANG, **K. VOGT**, **K. ARAVAMUDHAN**, **S.E. GRUNINGER**, **J. KUEHNE**, **C. SIEW**, and **D. MEYER**, American Dental Association, Chicago, IL, USA

Many of the devices sterilized in health care facilities contain lumens and other areas that are difficult to penetrate by sterilization processes. It is generally accepted that in steam sterilization, the dental handpiece provides the most difficult challenge to sterilant penetration (ANSI/AAMI ST55:2003 5.5.5.1 Handpiece selection). However, current standard methods do not specify a standard handpiece for testing nor a requirement to lubricate the handpiece turbine prior to steam sterilization. **Objectives:** In this study we evaluated the efficacy of the steam sterilization of dental high speed handpieces in the presence or absence of handpiece lubricant as specified by the handpiece manufacturer. **Methods:** Three different brands of handpieces were used. Sterilization tests for handpieces were performed by inoculating lubricated or non-lubricated turbines with spore suspension in blood containing 1.0×10^6 *Geobacillus stearothermophilus*. After steam sterilization of handpieces, turbines were aseptically transferred and incubated in tryptic soy broth (TSB) for 7 days at 55°C. **Results:** According to ANSI/AAMI ST55:2003 4.5 Biological performance of sterilizers, biological indicators processed in half cycles shall show no growth of the test spores. In this study, no live spore growth was observed from lubricated handpiece turbines sterilized by three commercially available tabletop steam sterilizers. Spore germination occurred in all non-sterilized positive controls, and no growth was detected in negative controls (sterile TSB). However, 18.5 ± 7.4 (SEM) % of non-lubricated handpiece turbines demonstrated spore growth. **Conclusions:** This study demonstrates that the lubrication of handpiece turbines with the manufacturer's recommended lubricant enhances the sterilization efficacy. Specification of handpiece turbine lubrication should be considered for any standard method used for testing the efficacy of steam sterilizers used in dentistry. More research is needed to identify the cause or causes of this lubricating effect. This study was funded by ADA.

1142 EVALUATION OF HAND HYGIENE AGENTS IN DENTISTRY FOR ANTIMICROBIAL EFFECTIVENESS

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As waterless hand hygiene products began to be widespread accepted within the medical community in recent years, introducing and evaluating an alcohol-based waterless agent using in dentistry was considered to be a worthwhile undertaking. The waterless agent could shorten times and the number of steps while maintaining appropriate antiseptics. The importance of efficacy in choosing right hand hygiene product is recommended in new CDC guideline 2002 on hand hygiene. **Objective:** To evaluate the effectiveness of traditional hand soap and others antiseptics agents used in dentistry comparing with no hand hygiene (control). **Materials and Method:** The study was conducted among 90 healthy volunteers from dental students, dental hygiene students and faculties at University of Detroit Mercy, School of dentistry. The standard test method for evaluation of the effectiveness of health care professional handwash formulations was used. Subjects were divided to 3 groups, using various hand hygiene products (Nonantiseptics Soap, Parachlorometaxyleneol-PCMX, and Waterless Alcohol-Based Spray) at wash times of 30 seconds. (No hand hygiene procedure as control in every group) The samples were collected from middle of palm, between fingers and fingertips. They were cultured in blood agar at 37 °C for 24 hours, 48 hours and 72 hours respectively. **Result:** The use of liquid preparations-PCMX and waterless alcohol based spray reduced and eliminated bacterial contamination. There was no difference in bacterial activity between PCMX and Waterless Alcohol-Based spray at any culture time, while there was bacterial activity found at 48 and 72 hours for nonantiseptics soap. **Conclusion:** According to this study, hand washing with traditional soap and water can reduce some transient bacterial contamination but not eliminate. The Waterless Alcohol-Based Spray can be used as reliable antiseptic agent in dental clinics, owing to its favorable antiseptic effect and convenience.

PERIODONTOLOGY

2321 RISK OF EARLY ATHEROSCLEROSIS IN WOMEN AND MEN WITH PERIODONTITIS

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Objectives: Periodontal disease has been implicated as a proatherogenic risk factor and the present study addresses the issue of possible gender differences in this association. **Methods:** In randomly chosen patients with periodontitis (46 women and 47 men), and 41 age-matched periodontally healthy subjects (21 women and 20 men) that underwent dental examination in 1985, carotid ultrasonography was performed during reexamination 16 years later. Common carotid artery intima-media thickness (IMT) and lumen diameter were measured, and intima-media area (cIMA) was calculated. The relationship between IMT and cIMA, and periodontal disease, age, body mass index, heredity for atherosclerosis, diabetes mellitus, hypertension, plasma cholesterol, smoking, and education was evaluated in a multiple logistic regression model in both gender groups. **Results:** While the mean values of left-sided IMT and cIMA was significantly greater in patients than in controls in both gender groups, the female patients presented also significantly greater right-sided cIMA. When the means of the bilateral IMT and cIMA values were tested in both gender groups, multiple logistic regression analysis identified periodontitis as an independent predictor of increased IMT (odds ratio [OR]=3.39, p=0.038 in women, and OR=4.15, p=0.023 in men), and cIMA (OR=5.41, p=0.0280 in women, and OR=3.88, p=0.028 in men). In addition, IMT and cIMA values related strongly to BMI in men, and to age and heredity in women. **Conclusion:** Periodontal disease appears to be a risk factor for the development of early carotid atherosclerosis colluding together with BMI in men, and with age and heredity in women.

CANADA'S ORAL HEALTH Report Card



THE CANADIAN DENTAL
HYGIENISTS ASSOCIATION
L'ASSOCIATION CANADIENNE
DES HYGIÉNISTES DENTAIRES

The Canadian Dental Hygienists Association (CDHA) issued its official Gingivitis Call-to-Action during Listerine Gingivitis Week in June 2006. This unprecedented research-based statement cemented the CDHA's official recommended oral hygiene routine for the reduction of gingivitis—inflammation of the gums caused by dental plaque build-up in the mouth:

1. **Brushing:** Removes surface dental plaque.
2. **Flossing:** Reaches between teeth to remove dental plaque.
3. **Rinsing with an essential oil antiseptic mouthrinse:** Reduces and prevents dental plaque and gingivitis more than brushing and flossing can alone.
4. **Regular dental hygiene visits**

As motivation for improving oral hygiene, the Call-to-Action outlined links between oral disease such as periodontitis and overall health; including poor blood sugar control in diabetics, a variety of heart diseases and stroke, pre-term low birth weight babies, and lung disease.

How does Canadian knowledge and action measure up, one year after the CDHA's compelling Call-to-Action? This first-ever Canadian Oral Health Report Card¹ reveals a startling state of the nation:

Canada's Oral Health Report Card

F	Gingivitis Self-Awareness
D+	Oral-Overall Health Links Awareness
F	Oral Hygiene Routines— Knowledge & Action
C	Flossing
C-	Tooth Brushing
F	Rinsing

Subject: **Gingivitis Self-Awareness**

State of the Nation: 64% of Canadians believe there is less than a 1 in 10 chance they have gingivitis.

The Facts: It is estimated that at least half of Canadians have gingivitis.ⁱⁱ Yet only 11% of Canadians are aware of this startling statistic.

Grade: **F**

Subject: **Oral-Overall Health Links Awareness**

State of the Nation: 90% of Canadians are aware oral health is linked to overall health.

- Alberta and Atlantic provinces earn highest marks: 97% awareness.
- Only 79% of Quebecers are aware, leaving them at the bottom of the nation's classroom.

BUT when it comes to identifying the conditions linked to oral health, Canadians earn a failing grade.

- 41% were unable to make the connection to specific health conditions.
- Most aware of oral health links to heart disease and diabetes, least aware of links to pre-term low birth weight babies.

Gingivitis

IS BOTH PREVENTABLE AND REVERSIBLE.

Brush, floss and rinse your way to optimal health.

- Awareness levels:
 - Heart disease: 34% (39% of females vs. 29% of males)
 - Diabetes: 29% (low: Quebec – 22 % / high: Ontario – 34%)
 - Respiratory diseases: 26% (low: ages 55+ – 23% / high: ages 18-24 – 33%)
 - Pre-term low birth weight babies: 13% (low: Quebec – 7% / high: Alberta – 18%)

The Facts: Research shows oral health and oral disease such as periodontitis are linked to overall health. Specific conditions include diabetes, heart diseases and stroke, pre-term low birth weight babies, and lung disease.^{iii,iv}

Average Grade: D+

Subject: Oral Hygiene Routines—Knowledge & Action

State of the Nation: 89% of Canadians rate their current oral hygiene routines ‘good’ or better.

- Excellent: 26%, Very Good: 38%, Good: 25%.

40% are aware the CDHA’s recommended gold standard oral hygiene routine is brushing, flossing and rinsing with an essential oil antiseptic mouthrinse.

- 39% incorrectly believe the gold standard routine to be brushing and flossing alone.

Yet, less than one-quarter of Canadians (21%) perform this gold standard oral hygiene routine.

- Rankings:
 1. British Columbia – 28%
 2. Atlantic Canada – 26%
 3. Quebec & Ontario (tie) – 20%
 4. Alberta – 19%
 5. Manitoba/Saskatchewan – 16%

The Facts: More than three-quarters of Canadians are not following the CDHA’s official recommended routine of brushing, flossing, and rinsing with an essential oil antiseptic mouthrinse. This routine has been clinically shown to reduce and prevent plaque and gingivitis more than brushing and flossing can alone.^v

Grade: F

Subject: Flossing

State of the Nation: Two-thirds of Canadians are aware it is acceptable and effective to use tools such as floss holders, automatic flossers, interdental brushes, picks, and irrigators, to help make flossing easier.

The Fact: Research shows that all the above tools help floss reach the areas between the teeth to remove dental plaque.^{vi}

Grade: C

Subject: Tooth Brushing

State of the Nation: Slightly more than half of Canadians are aware a power toothbrush is better at removing dental plaque and reducing gingivitis than a manual toothbrush.

High: Alberta – 64%

Low: Quebec – 43%

The Facts: A power toothbrush with rotation-oscillation action is better at removing dental plaque and reducing gingivitis than manual toothbrushes.^{vii}

Grade: C-

Subject: Rinsing

State of the Nation: Canadians are divided, with less than one-half aware that rinsing with an essential oil antiseptic mouthrinse like Listerine reduces and prevents plaque and gingivitis more than brushing and flossing alone.

- Males more aware than females (52% vs. 46%)

The Facts: Canadians may think they are making the oral health grade, yet only one-fifth (21%) are actually doing the optimal oral hygiene routine of brushing, flossing and rinsing with an essential oil antiseptic mouthrinse. It’s no wonder that 50% of Canadians have gingivitis.

Grade: F

i 2007 Oral Health Report Card, Decima Research (Mar. 2007).

ii Brown LJ, Brunelle JA, Kingman A. Periodontal status in the United States, 1998-1991: prevalence, extent and demographic variation. *J Dent Res.* 1996;75(Spec Iss): 672-83.

iii Lux, J. Review of the Oral Disease-Systemic Link. Part II: Preterm Low Birth Weight Babies, Respiratory Disease, *Canadian Journal of Dental Hygiene.* 2007 January-February;41(1):8-21.

iv Lux, J. Review of the Oral Disease-Systemic Link. Part I: Heart Disease, Diabetes, *Canadian Journal of Dental Hygiene.* 2006 November-December;40(6):288-342.

v Asadoorian, J. Oral Rinsing: CDHA Position Paper on Commercially Available Over-the-Counter Oral Rinsing Products. *Canadian Journal of Dental Hygiene.* 2006 July-August;40(4):168-83.

vi Asadoorian, J. Flossing: CDHA Position Paper. *Canadian Journal of Dental Hygiene.* 2006 May-June;40(3):112-25.

vii Asadoorian, J. CDHA Position Paper on Tooth Brushing. *Canadian Journal of Dental Hygiene.* 2006 September-October;40(5):232-48.



THE CANADIAN DENTAL
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Bulletin

SUR LA SANTÉ BUCCODENTAIRE
AU CANADA



THE CANADIAN DENTAL
HYGIENISTS ASSOCIATION
L'ASSOCIATION CANADIENNE
DES HYGIÉNISTES DENTAIRES

L'Association canadienne des hygiénistes dentaires (ACHD) a lancé son premier appel à l'action contre la gingivite lors de la Semaine de la gingivite Listerine, en juin 2006.

Cet énoncé sans précédent, fondé sur la recherche, a accru l'importance des recommandations officielles de l'ACHD en matière d'hygiène buccodentaire pour la réduction de la gingivite – une inflammation des gencives causée par l'accumulation de la plaque dentaire :

1. **Brosse à dents** : Déloge la plaque dentaire à la surface des dents.
2. **Soie dentaire** : Nettoie entre les dents pour y déloger la plaque dentaire.
3. **Rince-bouche à base d'huiles essentielles** : Réduit et prévient la plaque et la gingivite plus que le brossage et la soie dentaire seuls.
4. **Visites régulières chez l'hygiéniste dentaire.**

En vue de motiver les Canadiens à adopter une meilleure hygiène buccodentaire, l'appel à l'action a souligné le lien entre l'état de santé général et l'inflammation des gencives et la parodontite, notamment : mauvaise maîtrise de la glycémie chez les diabétiques, maladies du cœur, accidents vasculaires cérébraux, naissances de bébés prématurés de faible poids et maladies pulmonaires.

Un an après cet appel à l'action convaincant de l'ACHD, où en sont les Canadiens sur le plan des connaissances et du passage à l'action? Ce premier rapport national sur la santé buccodentaireⁱ s'avère pour le moins surprenant :

Sujet : **La gingivite**

Évaluation : 64 % des Canadiens pensent que leur risque d'être atteint de gingivite n'est que de 1 sur 10.

Les faits : On estime qu'au moins 50 % des Canadiens souffrent de gingiviteⁱⁱ. Et pourtant, seulement 11 % d'entre eux sont au courant de ces surprenantes statistiques.

Note : **F**

Sujet : **Le lien avec la santé générale**

Évaluation : 90 % des Canadiens savent que la santé buccodentaire affecte la santé générale.

- L'Alberta et les provinces Maritimes ont obtenu la note la plus élevée, soit 97 %.
- Seulement 79 % des Québécois sont au courant de ce fait, se retrouvant ainsi au dernier rang. MAIS lorsqu'on leur a demandé de nommer les affections liées à l'état de santé buccodentaire, les Canadiens ont échoué le test.

- 41 % n'ont pas pu établir de lien avec des affections spécifiques.

- Le lien avec la maladie cardiaque et le diabète a été le plus souvent identifié, tandis que le lien avec les

Bulletin sur la santé buccodentaire au Canada

F La gingivite

D+ Le lien avec la santé générale

F Routine d'hygiène buccodentaire – Connaissances et action

C Soie dentaire

C- Brossage des dents

F Rince-bouche

La gingivite

PEUT ÊTRE PRÉVENUE ET EST RÉVERSIBLE.

Brosse à dents, soie dentaire et rince-bouche : la voie à suivre pour une santé optimale.

naissances de bébés prématurés et de faible poids l'a été le moins souvent.

- Taux de sensibilisation :
 - Maladies cardiaques : 34 % (39 % des femmes vs 29 % des hommes)
 - Diabète : 29 % (faible : Québec – 22 % / élevé : Ontario – 34 %)
 - Maladies respiratoires : 26 % (faible : âges 55+ - 23 % / élevé : âges 18-24 – 33%)
 - Naissances de bébés prématurés et de faible poids : 13 % (faible : Québec – 7 % / élevé : Alberta – 18 %)

Les faits : Les études indiquent que la santé buccodentaire et l'inflammation des gencives (la parodontite) affectent l'état de santé général. Une mauvaise santé buccodentaire peut entraîner les affections spécifiques suivantes : diabète, maladies cardiaques et accidents vasculaires cérébraux, naissances de bébés prématurés et de faible poids, maladies pulmonaires^{iii,iv}.

Note : **D+**

Sujet : Routine d'hygiène buccodentaire – Connaissances et action

Évaluation : 89 % des Canadiens décrivent leurs soins d'hygiène buccale comme étant au moins « bons ».

- Excellents : 26 %; Très bons : 38 %; Bons : 25 %

40 % savent que l'ACHD recommande comme routine idéale d'hygiène buccodentaire la brosse à dents, la soie dentaire et un rince-bouche antiseptique.

- 39 % croient, à tort, que la routine idéale inclut la brosse à dents et la soie dentaire uniquement.

Moins du quart des Canadiens (21 %) ont adopté cette routine idéale.

- Classement :
 1. Colombie-Britannique – 28 %
 2. Provinces Maritimes – 26 %
 3. Québec et Ontario (ex æquo) – 20 %
 4. Alberta – 19 %
 5. Manitoba/Saskatchewan – 16 %

Les faits : Plus des trois quarts des Canadiens ne suivent pas les recommandations officielles : brosse à dents, soie dentaire et rince-bouche aux huiles essentielles. Il a été cliniquement démontré que cette routine réduit et prévient la plaque et la gingivite mieux que le brossage et la soie dentaire seuls^v.

Note : **F**

Sujet : Soie dentaire

Évaluation : Deux tiers des Canadiens savent qu'il est acceptable et efficace d'utiliser des outils tels que les porte-soie dentaire, les hydropropulseurs, les brosses interdentaires, les cure-dents et les irrigateurs pour nettoyer entre les dents.

Les faits : Des études indiquent que les outils ci-dessus facilitent l'accès aux espaces interdentaires pour déloger la plaque^{vi}.

Note : **C**

Sujet : Brossage des dents

Évaluation : Un peu plus de la moitié des Canadiens savent qu'une brosse à dents électrique enlève la plaque et réduit l'inflammation des gencives mieux qu'une brosse à dents manuelle.

Élevé : Alberta – 64 %

Faible : Québec – 43 %

Les faits : Une brosse à dents électrique oscillo-rotative enlève la plaque et réduit l'inflammation des gencives mieux qu'une brosse à dents manuelle^{vii}.

Note : **C-**

Sujet : Rince-bouche

Évaluation : Les Canadiens sont divisés à ce sujet, et moins de la moitié d'entre eux savent que l'utilisation d'un rince-bouche antiseptique aux huiles essentielles tel que Listerine réduit la plaque et prévient l'évolution de la gingivite mieux que le brossage et l'utilisation de la soie dentaire seuls.

- Davantage d'hommes que de femmes sont au courant (52 % vs 46 %)

Les faits : Les Canadiens pensent avoir de bonnes connaissances en matière de santé buccodentaire et pourtant, seulement un cinquième d'entre eux (21 %) ont adopté la routine idéale : brosse à dents, soie dentaire et rince-bouche antiseptique. Pas étonnant que 50 % des Canadiens souffrent de gingivite!

Note : **F**

i 2007 Oral Health Report Card, Decima Research (Mar. 2007).

ii Brown LJ, Brunelle JA, Kingman A. Periodontal status in the United States, 1998-1991: prevalence, extent and demographic variation. *J Dent Res*. 1996;75(Spec Iss): 672-83.

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vi Asadoorian, J. Flossing: CDHA Position Paper. *Canadian Journal of Dental Hygiene*. 2006 May-June;40(3):112-25.

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Understanding Your Professional Risk

Why relying on employer-provided liability coverage is risky business

By Brian Gomes

THE IMPORTANCE OF HEALTH CARE PROFESSIONALS, such as dental hygienists, protecting themselves individually against liability, rather than relying on employer-provided insurance, has never been greater. Patients today have high expectations of health-care services as technology, education and training continue to improve.

A liability claim can be devastating financially without adequate insurance to obtain legal counsel. Even a frivolous allegation can result in crippling defense costs. But an inability to afford legal counsel to defend a professional reputation or accreditation could lead to a loss in employment.

A liability claim can be devastating financially without adequate insurance to obtain legal counsel.

Health-care professionals who arrange liability insurance through their professional association receive coverage that best protects them. This type of insurance often shields assets and covers legal expenses to defend not only against claims and allegations, but also against complaints to the professional's regulatory body.

Employer-provided liability insurance, on the other hand, is designed to protect the best interest of the employer and the clinic or office. Professional staff are protected only to the extent that the employer is satisfied that the operation as a whole is adequately covered. This type of insurance usually does not include legal defense reimbursement for complaints to a regulatory or disciplinary body, or for criminal allegations when a professional is found not guilty.

Liability coverage negotiated and provided through professional membership protects individual professionals regardless of the location they work in, subject to the specific policy and scope of practice covered. Another invaluable aspect is that these liability policies usually cover professionals on a "claims made" basis, which means that the coverage in place when a claim is made will apply regardless of when the incident actually occurred. To offer this kind of protection, an employer would have to purchase a retroactive policy date to cover incidents that took place while an employee was working somewhere else, which is often prohibitively expensive.

Health-care professionals who purchase liability coverage through professional organizations, such as the Canadian Dental Hygienists Association, are fully covered against claims made in Canada, regardless of the date or location of the incident.

Brian Gomes is an account executive at Aon Reed Stenhouse.



©iStockphoto.com/James Steidl

This is the first of a three-part series to understand your professional liability as a dental hygienist and to develop your own risk-management program.

Mériter et garder votre confiance est notre priorité (suite de la page 175)


des stratégies nationales efficaces et viables pour influencer sur la façon dont l'usage du tabac doit être traité dans un contexte de soins de santé. Judy a été sélectionnée pour participer par l'équipe de planification du symposium composée des personnes suivantes : Dre Joan Brewster, Dre Sharon Compton, Mme Karen Fisher, Dre Kathryn Hyndman, Mme Bonnie Quinlan, Dre Annette Schultz et Dre Michèle Tremblay.

Le développement d'une culture d'intégrité est un facteur important pour l'établissement d'une confiance organisationnelle. Écouter, respecter les différents points de vue, partager l'information et ouvrir la communication, être honnête et avoir confiance dans les capacités de l'organisation sont tous des facteurs qui contribuent au développement de la confiance. Une bonne gouvernance signifie un engagement à faire confiance, ce qui crée l'énergie et l'environnement positifs dont les gens ont besoin pour diriger et servir une organisation. C'est la base nécessaire pour que les membres du conseil d'administration, le personnel et les bénévoles puissent se faire confiance et faire les bons choix pour une organisation.

L'articulation d'une idéologie organisationnelle fondamentale est le noyau du développement de l'intégrité. Les déclarations publiques et le respect de valeurs fondamentales suscitent l'engagement d'une organisation à adopter une norme en vertu de laquelle les choix et la performance peuvent être évalués et motivent les gens à y adhérer. Ces valeurs fondamentales aident une organisation à prendre

les meilleures décisions en vertu de certains facteurs décrits par Gandossy et Sonnenfeld (2004)¹. Le *dévouement transcendant* décrit l'allégeance altruiste de votre directeur envers les buts de l'organisation. L'*attention vigilante* représente l'engagement des décideurs d'être entièrement présents et analytiques lorsqu'ils font des choix et la *réalisation décisive* est un engagement du conseil d'administration d'assurer que ses décisions sont respectées.

Il incombe à un conseil d'administration d'établir des politiques pour maintenir sa propre intégrité. Si un conseil d'administration exprime simplement ce que le personnel d'une association désire, il n'agit pas comme *votre* représentant (celui des membres). Les politiques d'un conseil d'administration doivent également offrir la latitude et les limites nécessaires à la prise de décision exécutive. Elles donnent à une directrice ou directeur exécutif le cadre nécessaire pour prendre des décisions fondées sur l'intégrité et la confiance et évitent qu'un conseil d'administration devienne *de facto* le décideur pour des décisions difficiles que la directrice ou le directeur exécutif désire éviter de prendre.

Chacun et chacune a un rôle à jouer pour mériter et garder votre confiance en tant que membres. Covey exprime clairement ce qui a été à la base de la mission et des valeurs de l'ACHD. L'ACHD est la voix et la vision de votre profession. Nous voulons soutenir la profession avec intégrité, crédibilité et véritable diligence en ayant comme objectif que vous, en tant qu'individu, soyez fier et fière de vous identifier comme membre de votre association professionnelle nationale. 

¹ R. Gandossy et J. Sonnenfeld, *Leadership and Governance from the Inside Out*. 2004

Atteindre l'équilibre (suite de la page 171)

quittent complètement leur champ de pratique ou réduisent le nombre de jours ou d'heures travaillés pour un horaire qui leur convient mieux ».

Au fil des ans, j'ai suivi plusieurs cours en ergonomie. J'ai eu l'occasion d'utiliser une grande variété d'équipements en différents milieux de pratique. J'ai également enseigné l'ergonomie aux étudiants et étudiantes en hygiène dentaire pendant plusieurs années. Et, même avec toute cette expérience, je trouve toujours extrêmement difficile de garder une position qui est à la fois neutre et efficace en prodiguant des soins. Les besoins uniques de chaque client ou cliente et les contraintes de temps en milieu de travail demeurent des facteurs contributifs aux microtraumatismes répétitifs dans notre profession, ce qui compromet notre santé.


Il est essentiel de vérifier fréquemment notre posture et de se repositionner lorsque nous prodiguons des soins. Élaborer un répertoire d'étirements à exécuter près du fauteuil, entre les clients ou clientes, est également une bonne chose à faire. Demander les conseils et les soins de professionnels pour nous aider à maintenir une bonne posture et un bon alignement est également utile. Et pour finir, la mise en place d'une routine d'exercices bien

planifiée est indispensable au maintien de notre santé à long terme, en tant qu'hygiénistes dentaires.

Mais, appliquons-nous vraiment les principes qui assurent notre sécurité et notre bien-être personnels en milieu de travail? Prenons-nous le temps de nous assurer que notre équipement est placé de façon à y avoir un accès maximal lorsque nous prodiguons des soins?

Une autre chose à prendre en considération lors de la création d'un environnement professionnel sécuritaire, c'est peut-être que la technologie utilisée pour offrir de meilleurs soins aux clients et clientes pourrait également améliorer notre propre santé. Comme Susanne Sunnell et Lance Rucker le mentionnaient dans le volume 39, de l'édition 2005 du *JCHD* : « L'utilisation de lentilles chirurgicales offre la possibilité d'augmenter la qualité des soins cliniques en hygiène dentaire tout en favorisant la santé musculosquelettique des hygiénistes dentaires ».

Et pour conclure, mais non de moindre importance, nous devons nous assurer que notre vie, à l'extérieur du milieu professionnel de l'hygiène dentaire, favorise notre mieux-être physique, mental et émotionnel. Autant que possible, prenons le temps de faire quelque chose que nous aimons réellement.

Vous pouvez rejoindre la présidente à president@cdha.ca. 

Volunteers Needed

Brighten the smiles of women at the YWCA

LAST YEAR DURING YWCA WEEK WITHOUT VIOLENCE,TM CDHA and YWCA Canada joined forces to boost women's oral health. Riding on the success of last year's event, we invite you to participate again this year, Sunday, October 14 to Saturday, October 21, 2007. The week will involve the collaboration of the CDHA and YWCA Canada to promote self-care and wellness to women and their children who have experienced violence and are currently living in YWCA housing.

Consider donating your time to help improve the oral health of women who call YWCA their home.

You can volunteer to

- facilitate oral health workshops or presentations with women or girls on topics such as tobacco cessation, nutrition or dental hygiene (These are given at various YWCA locations or at a group event, such as the *Power of Being a Girl* conference.);
- provide appropriate clinical services to women in the form of oral cleaning; or
- invite YWCA participants into your office/clinic for a cleaning.



Promote self-care and wellness to women and their children who have experienced violence and are currently living in YWCA housing.

The options are endless. Your gift of time, clinical knowledge and skills will have a significant and positive impact. Last year's events led to many other exciting opportunities between the participants and the dental hygienists who volunteered. These women have high oral health needs and you can provide them with valuable oral health information and assistance. Many women who have fled violence face multiple financial obstacles, are unable to access proper oral health care and do not have access to simple oral health aids such as new toothbrushes. In response, CDHA will provide free Oral-B toothbrushes for you to distribute to the women and children.

The 11th annual YWCA Week Without ViolenceTM is a worldwide effort led by YWCAs in over 90 countries. YWCA Canada builds on the leadership of women and girls to promote community and artistic responses to all forms of violence—from the social and exclusionary to the direct and physical. There are numerous activities uniting people in identifying realistic and sustainable alternatives to violence through events, activities and workshops. For more information on the YWCA Week Without ViolenceTM please visit www.weekwithoutviolence.ca or www.cdha.ca/members/index.asp.

Your participation will brighten the smiles of the women at the YWCA.

To participate in this special opportunity or to arrange to pick up your free toothbrushes to distribute to the women at the YWCA, please contact **Lillia Dahmani, National Programs Coordinator, YWCA Canada, A Turning Point for Women** Tel.: 416-962-8881, ext 225 Fax: 416-962-8084, www.ywca.ca.



We've got you covered.

With an active professional membership in the Canadian Dental Hygienists Association, you don't have to worry about liability insurance because we've got you covered.

And here is the best news of all: *it's included as part of your Active membership!*

To learn more about the CDHA insurance plan and the other benefits of membership in your professional association, visit us online at **www.cdha.ca**.

Because while you may need the insurance, you don't need the high cost of purchasing it.



THE CANADIAN DENTAL
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L'ASSOCIATION CANADIENNE
DES HYGIÉNISTES DENTAIRES

Summer is here and we can't wait to get back to the office! (Really!)

So, what are your plans this summer? Are you taking some time off to hit the beach, maybe do a little cycling or sitting by the campfire while roasting marshmallows at the cottage? How about a cross-country tour with the family to visit relatives? Well, here at the offices of the Canadian Dental Hygienists Association, we have different plans. *Much* different plans.

And they all revolve around *you*.

Without a doubt, the early summer months are among the most exciting times of the year around here. That's when we put down some of our other work and head full steam into preparing our fall membership drive. So yes, summer is a great time to be at the office!

We take great pride in our member benefits and great pleasure in serving our members. And this year is among the most exciting ever!

What follows is just a peek at the membership benefits you will be hearing about this fall. Read on and be amazed...

The insurance coverage you need – Every dental hygienist needs liability insurance to practice. With up to \$3 million in coverage, you will not find a better plan anywhere. And you will not find a better price as it is *included* in your Active Membership. That's right. No extra charge!

Networking opportunities – Whether you're getting together with colleagues at special events that are tailored to the needs of our members or being honoured with an award, grant or prize, you'll be treated like one of the family.

Stay on top of your profession – Attend workshops and get access to exceptional continuing-education courses, receive members-only publications such as the *Canadian Journal of Dental Hygiene* (a \$135 value that, again, is *included* in your Active Membership) and take advantage of the CDHA Resource Centre. It's all there for you to enjoy as a member of CDHA.

(Psst... A new online course will be available to CDHA members between December 1, 2007, and September 15, 2008, *at no cost*. Stay tuned for details.)

As a member, you also have access to resources such as the *Dental Hygiene Labour Survey*, a job board, career tools and our Find-A-Member database.

Influence the direction of your profession – Your support enables the CDHA to advocate on your behalf. We are the only national association of dental hygienists. With us, you have a voice on issues such as self-regulation, patient care, employment conditions and scope of practice. We are protecting your interests!

Enjoy our member-discount programs – Discover the special discounts available through our participating partners. Did you know you can get a MasterCard that supports the dental-hygiene profession every time you use it? And that's just the start. How about preferred rates on everything from cellular telephones, hotels and dental-hygiene instruments to car rentals, uniforms and fitness programs? In fact, as a CDHA member you can enjoy a Good Life membership at *half the regular cost!*

Is there more? You bet! How about saving money on your mortgage through the CDHA Group Mortgage Discount program? Looking to invest? Earn excellent returns through the CDHA Group RRSP Program. Or how about discounted train tickets from Via Rail? It's all designed to help CDHA members save a bundle!

CDHA Boutique – The CDHA Boutique is an online shopping experience developed specifically for CDHA members. Participating retailers offer CDHA members quality, career-related and personal lifestyle products at discounted rates. In addition, some vendors are offering unique products designed exclusively for CDHA members. (Visit the Boutique often so you don't miss out on special offers and new products. CDHA is constantly adding new retailers and products.)

Product Directory – Looking for information about a new dental-hygiene product? Do you want to compare products or find out more information about a particular product? This is the place to do it! The Product Directory contains accurate and up-to-date information that will help you do a better job and assist you in making decisions when ordering supplies.

As any one of our thousands of members across the country will tell you: there are lots of benefits to being an Active Member of Canada's *only* national dental hygienists association.

Keep an eye on your mailbox this coming fall. And don't forget to send in your renewal form when it arrives—you don't want to miss a thing!

We've got you covered!

The best value in liability insurance anywhere just got a whole lot better as coverage limits are *increasing* with the 2007 membership renewal:

	2006	2007
Legal expenses	\$10,000	\$50,000
Criminal-defence expenses	\$25,000	\$100,000
Loss-of-earnings	\$150 per day	\$500 per day

What hasn't increased is the cost to you.

As always, this coverage is *included* as part of your Active Membership. PLUS... You now have an *option to increase your per-claim liability coverage* to up to \$4 million with just a small increase in cost. Call us NOW to find out more!

Health Literacy

Why should dental hygienists be concerned about literacy?

By CDHA Staff

Literacy means more than knowing how to read, write or calculate. It involves understanding and being able to use information to function effectively.
—Literacy Skills for the Knowledge Society.¹

THE IALS REPORT EXPLAINS THAT LITERACY IS NOT AN either-or situation, but rather a continuum of different skill levels. Few people are unable to read or write at all, but in Canada nearly half of adults have literacy skills that are limited enough to affect their ability to function in society.

LITERACY LEVELS

ABC Canada Literacy Foundation (www.abc-canada.org) defines literacy levels as follows:

- Level 1** People who have difficulty with printed materials and identify themselves as unable to read.
- Level 2** People who can use printed materials for limited purposes such as finding a familiar word in a simple text.
- Level 3** People who can use reading material in a variety of situations so long as it is simple, clearly laid out and the tasks involved are not too complex.
- Level 4/5** People who demonstrate a command of higher-order information-processing skills.

People who do not achieve level three are deemed to have low-literacy skills.

The report identified that 22 percent of adult Canadians fall into the lowest literacy category and a further 26 percent are at level two (see sidebar on Literacy Levels). This means that nearly half of Canadians have difficulty with reading materials encountered in everyday life. For example, they may be unable to determine correct dosage and instructions from a medication label or to complete a

health history form. For adults over age 65, just one in five have the skills considered necessary to function fully. Fewer than 10 percent of Canadians with low literacy have ever enrolled in an upgrading program.

How does literacy affect health?

The Public Health Agency of Canada in *How does Literacy Affect the Health of Canadians* (www.phac-aspc.gc.ca/ph-sp/phdd/literacy/literacy2.html) identifies a number of ways that low literacy can affect health and cause practical health challenges in everyday life. Two important examples are incorrect use of medications and failure to understand and follow medical directions.

Canadians with low literacy may have higher rates of chronic disease and an earlier death than those with higher literacy skills. Evidence exists that literacy is closely related to healthy lifestyle choices, and that people with low literacy are more likely to have a wide range of unhealthy practices—such as smoking, poor nutrition, infrequent physical activity—and are less likely ever to have had their blood pressure checked. Also, coping with low literacy skills is related to increased stress, which itself is recognized as a serious health problem.

What can dental hygienists do?

Health care providers need to be sensitive to the role of literacy in comprehension and understand that low literacy may be a barrier to health.

The Canadian Health Network (www.canadian-health-network.ca) says that low literacy may be suspected if someone routinely misses scheduled appointments or arrives late, fails to complete forms, brings family members to appointments, claims to have vision problems to avoid reading, ignores or misunderstands advice, and asks a lot of questions or none at all.

In particular, what may be considered a lack of compliance with written health recommendations could in fact be a lack of understanding, which could have far-reaching consequences. For example, a court decision in British Columbia ruled that a written consent form, presented in technical language, did not meet the requirements for informed consent [Carpenter v. Finch. 1993].

The Public Health Agency of Canada in *How does Literacy Affect the Health of Canadians* (www.phac-aspc.gc.ca/ph-sp/phdd/literacy/literacy2.html) advises that written information be used secondary to clear verbal communication and that personal contact is the best way to ensure understanding.



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¹ The International Adult Literacy Survey (IALS) is a multi-country and multi-language assessment of adult literacy. The survey is managed by Statistics Canada in co-operation with the Organization for Economic Cooperation and Development (OECD). In Canada, the IALS is sponsored mainly by the National Literacy Secretariat and the Applied Research Branch, both at Human Resources and Social Development Canada.

Health Literacy ...continued on page 206

The Canadian Cochrane Network and Centre

Evidence-based oral health-care information at your fingertips

DENTAL HYGIENISTS RECOGNIZE THAT A KEY COMPONENT in providing quality care is being up-to-date with the latest research, prevention and treatment options in oral health. Fortunately, a reputable source of information is readily available with the click of a mouse. Working in partnership with the Canadian Dental Hygienists Association, the Canadian Cochrane Network and Centre encourages dental hygienists to get access to the Cochrane Library for evidence-based oral health-care information.

The Canadian Cochrane Network and Centre is part of the Cochrane Collaboration, an independent, international not-for-profit organization that provides systematic reviews of current health-care treatments. Cochrane review groups are responsible for preparing and maintaining these reviews, while ensuring that they are based on rigorous and transparent methodology. The groups include teams of volunteer researchers, health-care professionals, consumers and anyone else interested in the health field. The reviews are published quarterly in the Cochrane Library and serve as a reliable resource for any knowledge-based health-care practice.

Dental hygienists will be interested in the Oral Health Group and the Tobacco Addictions Group, which focus on systematic reviews and protocols on oral health.

The Oral Health Group has produced systematic reviews of randomized controlled trials since 1994. These reviews deal with the prevention, treatment and rehabilitation of oral, dental and craniofacial diseases and disorders. Previous titles include *Combinations of Topical Fluoride Versus Single Topical Fluoride for Preventing Dental Caries in Children and Adolescents*, *Manual versus Powered Toothbrushing*, *Ceramic Inlays for Restoring Posterior Teeth* and *Home-Based Chemically-Induced Whitening of Teeth in Adults*. Dental hygienists can find evidence about prevention and treatment options for dental caries, effective treatments for oral candidiasis and a wide range of other topics important in today's practice.

The Tobacco Addictions group produces reviews on interventions in assisting with cessation, preventing uptake and changing public policy on tobacco advertising, price and regulation. Review subjects range from the effects of hypnotherapy to the implementation of counselling programs in high schools.

Members of the Cochrane Network and Centre are available to provide an orientation to the Cochrane Library and to train in completing and utilizing systematic reviews. Please e-mail cochrane@uottawa.ca for more information.

You can get access to the Cochrane Library—a reliable evidence resource—without ever having to leave the office! Check out oral-health review abstracts by visiting the Oral Health Group's website at www.ohg.cochrane.org/ and the Tobacco Addiction Group's website at www.dphpc.ox.ac.uk/cochrane_tobacco/.



Interested in Opening Your Own Successful

Independent Dental Hygiene Practice...

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Tools for an Independent Practice Workshop

Saturday, September 15, 2007
8:30 a.m. to 5:00 p.m.
MacEwan Ballroom, MacEwan
Conference & Event Centre,
University of Calgary
Calgary, Alberta

Only
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Lunch Included

Program

Time	Schedule
8 a.m. – 9 a.m.	Registration
9 a.m. – 9:15 a.m.	Welcome
9:15 a.m. – 10 a.m.	What is Your Vision of Independent Practice?
10 a.m. – 10:30 a.m.	Independent Practice & Dental Hygiene Regulation
10:30 a.m. – 10:45 a.m.	Nutritional Break
10:45 a.m. – 11:45 a.m.	Risk Management & Professional Liability
11:45 a.m. – 12 p.m.	Wrap-up of the Morning
12 p.m. – 1:30 p.m.	Networking Lunch
1:30 p.m. – 2:45 p.m.	Panel Presentation of Three Independent Practice Dental Hygienists
2:45 p.m. – 3 p.m.	Nutritional Break
3 p.m. – 4:15 p.m.	Is Independent Practice for You?
4:15 p.m. – 4:30 p.m.	Wrap-up of the Day

*program subject to change with out prior notice

For more information and to register visit
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Early Registration Deadline Ends September 10, 2007.
After September 10, 2007 fees increase to \$119.00 + GST.

Register today as space is very limited!



THE CANADIAN DENTAL
HYGIENISTS ASSOCIATION
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Infection Control

INFECTION CONTROL IS A TOPIC OF GREAT INTEREST THESE days among hospital administrators across the country. So it should be, as well, for those who are involved in the profession of dental hygiene.

This month, we explore a few websites that address infection control and how you, the practicing dental hygienist, can ensure a safe environment for both you and your patients.

University of Manitoba—School of Dental Hygiene Infection

www.umanitoba.ca/dentistry/infectionControl/

According to the introduction, the purpose of the school's online version of its *Infection Control Manual* is three-fold:

- Identify those infectious diseases which may be acquired in the dental health care setting, either as a patient or as a health care provider;
- Provide an overview of the mode of transmission of these infections, and the ways to prevent and treat them; and
- Identify attitudes, and skills, both behavioral and technical, that significantly reduce but do not eliminate the risk of exposure to, and transmission of, infectious agents during dental treatment.

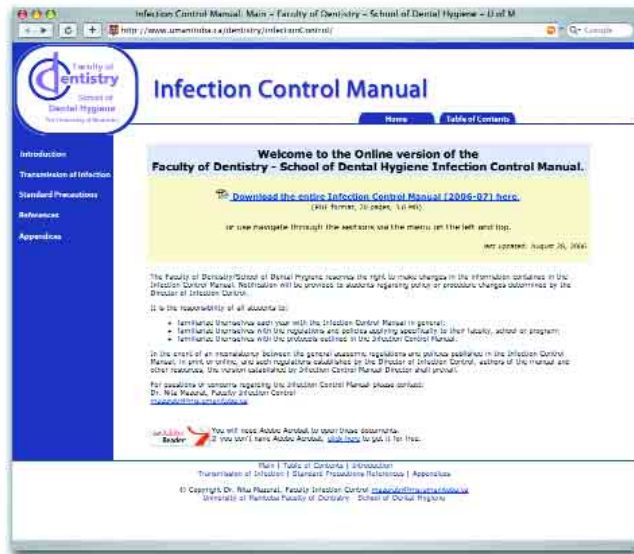
The manual is very thorough and is based on the national standards for infection control in dentistry that were published originally in the *Journal of the American Dental Association* in 1978. The manual is also in harmony with North American standards and the Canadian Dental Association Guidelines.

CHICA (Canada)

www.chica.org/

According to its website, the Community and Hospital Infection Control Association (Canada) is a "national, multidisciplinary voluntary association of professionals... committed to improving the health of Canadians by promoting excellence in the practice of infection prevention and control by employing evidence based practice and application of epidemiological principles."

As well as offering a host of resources and web links, the association also offers a number of issue-related Infection Control Audit Toolkits including a dental audit kit. See www.chica.org/inside_products.html for more information. The association also has an extensive list of links on its "Emerging Infections" web page at www.chica.org/links_emerging_infect.html.



Stop infection in its tracks
 The Severe Acute Respiratory Syndrome (SARS) outbreak in 2003 brought home the importance of infection control, especially through simple procedures such as hand-washing. It's easy to do and can make a profound difference. As dental hygienists, it's also one method we can all easily promote within our own practice setting.

Infection control around the world

Australia

Interested in what our friends down under are doing about infection control? Visit Australia's Infection Control Information Centre at <http://members.ozemail.com.au/~ccdcent/home.html#SECA> to find numerous resources on infection control in the dental setting.

United States

In the US, the American Dental Association has a list of frequently asked questions at www.ada.org/public/topics/infection_control_faq.asp. At www.ada.org/prof/resources/topics/cdc/index.asp#guidelines, you can also download the Centers for Disease Control and Prevention's *Guidelines for Infection Control in Dental Health Care Settings*.

Global

The World Health Organization (WHO) offers a variety of resources, as well. At www.who.int/entity/injection_safety/AM_InfectionControl_Final.pdf you can get an infection-control checklist. You can also download a WHO special report called *Clean Care is Safer Care: The First Global Challenge of the WHO World Alliance for Patient Safety* at www.who.int/entity/patientsafety/information_centre/ICHE_Nov_05_CleanCare_1.pdf

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Health Literacy (continued from page 202)

Pfizer Inc. Public Policy/Researchers (www.pfizerhealthliteracy.com/public-policy-researchers/tips-for-providers.html) offer a number of useful techniques for health care providers to help improve communication:

- **Teach back.** Ask your clients to repeat *in their own words* what they need to understand and do. This method will allow you to assess how well your explanations were understood and determine the need to rephrase information.
- **Avoid acronyms and use idioms carefully.** Say or write the complete phrase the first time you use it and explain the meaning. For example, explain BP as blood pressure and describe the importance of these readings.
- **Provide a health context for numbers.** Instead of just telling clients their blood pressure readings or

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SASKATCHEWAN

UNITY Modern, general practice in rural Saskatchewan requires dental hygienist. Very friendly, safe, peaceful little town. Team-orientated practice, relaxed atmosphere, excellent working conditions, great fringe benefits, everything negotiable. Just come and feel appreciated. Qualifications: Licensed or eligible for licensure in Saskatchewan. Deadline for application: Sept. 1, 2007. Contact Dr. Daniel Azuelos, Box 970, Unity, SK S0K 4L0. Telephone: (306) 228-2967; fax: (306) 228-4589; e-mail: d.l.azuelos@sasktel.net.

CDHA CLASSIFIED ADS

Classified ads are listed primarily on CDHA's website (www.cdha.ca) in the Career Centre of the Members-only section. Online advertisers can list their advertising in the *Canadian Journal of Dental Hygiene* for an additional fee. The cost of advertising in the journal only, and not online, is the same as advertising online. For pricing, visit the CDHA website.

CDHA classified advertising reaches more than 11,000 members across Canada, ensuring that your message gets to a target audience of dental hygienists in a prompt and effective manner. Contact CDHA at info@cdha.ca or (613) 224-5515 for more information.

periodontal probing depths, give them the parameters of "normal."

- **Pause/address quizzical looks.** Health care instructions can be complex. It is important to slow down and allow time for clarification. If your client looks confused or does not seem to be paying attention, rephrase your instructions with simpler words and draw pictures to promote understanding.

For more information

Canada is recognized internationally for extensive research in health and literacy. Two excellent resources to learn about literacy and health are the ABC Canada Literacy Foundation (www.abc-canada.org/) and the National Adult Literacy database (www.nald.ca), which has 300 references related to literacy and health. 