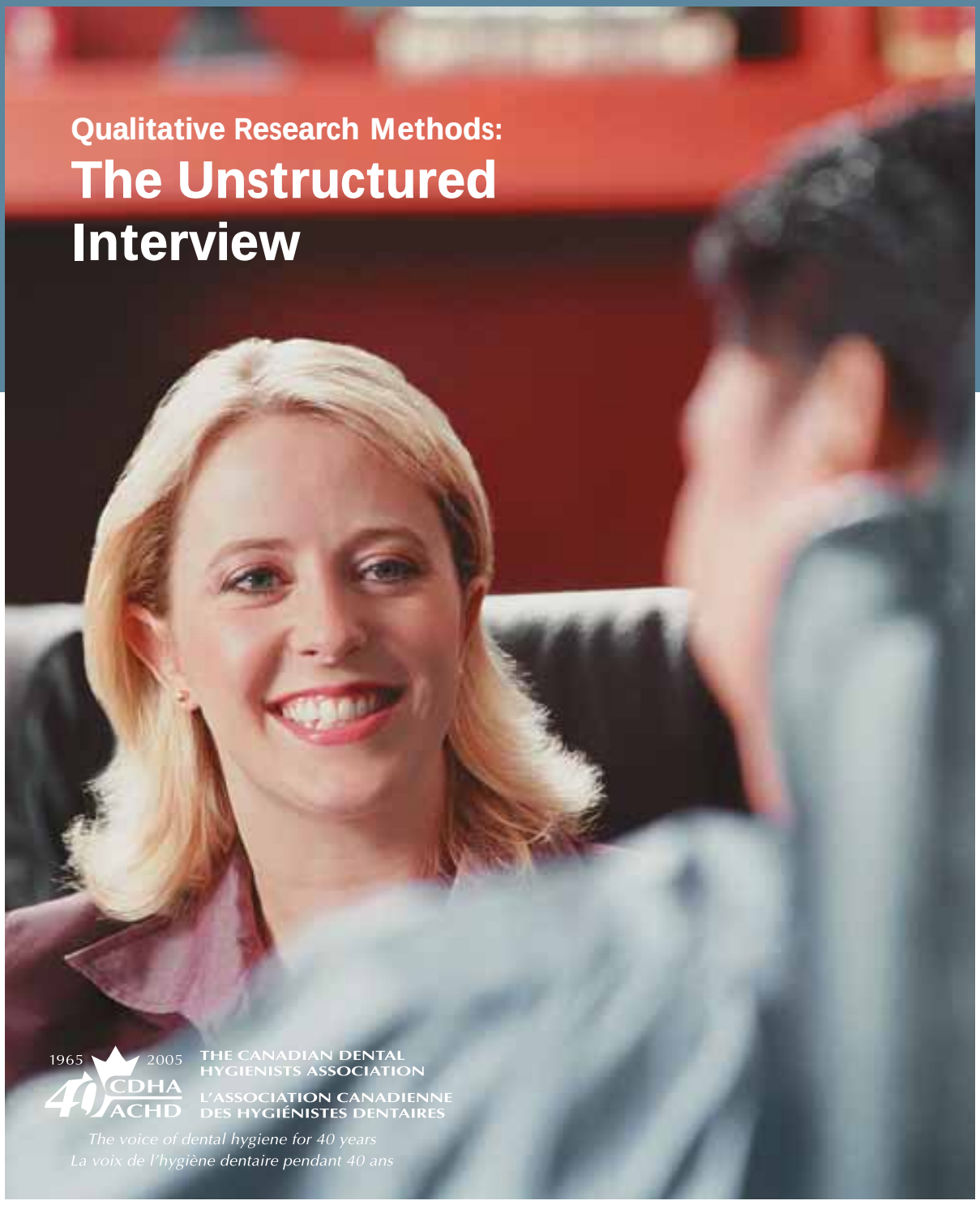
CANADIAN JOURNAL OF DENTAL HYGIENE · JOURNAL CANADIEN DE L'HYGIÈNE DENTAIRE

CJDH JCHD

1965 2005 40 CDHA ACHD

JANUARY – FEBRUARY 2005, VOL. 39, NO. 1



Qualitative Research Methods:
The Unstructured Interview

THE OFFICIAL JOURNAL OF THE CANADIAN DENTAL HYGIENISTS ASSOCIATION

Looking Back... and Forward

by Patty Wickstrom

THE ANNUAL CYCLE CONTINUES WITH the year 2004 now history and a new year beginning. Quite often—or is it nearly always?—we are so caught up in the hectic pace of our lives that we fail to keep track of what occurred during the previous year. In this first journal issue of 2005, I would like to reflect on a few of the impressive activities of the Canadian Dental Hygienists Association during 2004.

We started the year by inviting various stakeholders, including the presidents of the provincial associations, to a consultation meeting in Calgary, Alberta, to discuss the current bylaws. In this workshop, we gathered significant information that helped to draft new bylaws that are more appropriate for today's dental hygienists. Members were consulted on the draft document and it was then approved at a Special General Meeting last June in St. John's, Newfoundland, in conjunction with our Annual Conference.

I would like to reflect on a few of the impressive activities of the Canadian Dental Hygienists Association during 2004

In April, Susan Ziebarth and I were invited, along with other allied dental professions, to present at and participate in the Canadian Dental Association Strategic Planning session on third-party insurance plans. Discussions centred on what makes a good insurance plan, how it benefits employees, and how to ensure that employers understand the importance of such a plan. Following this session, we met with the CDA Executive Committee for our annual meeting.

In May, we met in Ottawa with the American Dental Hygienists' Association to discuss the activities that our countries are involved in. The problems as well as the progress we are making in solving them are strikingly similar on both sides of the border.

In the same month, CDHA was pleased to sponsor and participate in the Access to Care Symposium, "Towards a National Oral Health Care Strategy," that was hosted by the University of Toronto, George Brown College, and the Toronto Oral Health Coalition. This brought professionals from all fields to discuss ways to address the access-to-care

Looking Back...and Forward *...continued on page 9*

Regard rétrospectif... et prospectif

par Patty Wickstrom

LE CYCLE ANNUEL CONTINUE : L'ANNÉE 2004 EST maintenant chose du passé et voilà qu'une nouvelle année commence. Bien souvent – ou presque toujours? – nous sommes tellement pris par le rythme effréné de la vie que nous oublions de noter ce qui s'est produit au cours de l'année écoulée. Dans ce premier numéro du journal pour 2005, j'aimerais donc réfléchir à quelques activités frappantes de l'Association canadienne des hygiénistes dentaires survenues en 2004.

J'aimerais donc réfléchir à quelques activités frappantes de l'Association canadienne des hygiénistes dentaires survenues en 2004

Pour commencer, nous avons invité divers intervenants, dont les présidents des associations provinciales, à une réunion de consultation à Calgary (Alberta), pour discuter des règlements actuels. Lors de cet atelier, nous avons recueilli de l'information substantielle qui nous a aidés à rédiger de nouveaux règlements, mieux adaptés aux hygiénistes dentaires d'aujourd'hui. Les membres ont été consultés à propos de la version préliminaire du document; celui-ci a ensuite été approuvé à l'assemblée générale spéciale qui a eu lieu en juin dernier, à St. John's (Terre-Neuve), à l'occasion de notre conférence annuelle.

En avril, Susan Ziebarth et moi avons été invitées, avec d'autres professions dentaires alliées, à participer à la séance de planification stratégique de l'Association dentaire canadienne sur les régimes d'assurance responsabilité civile, où nous avons fait une présentation. Les discussions ont porté sur ce qui fait la qualité d'un régime d'assurance, la façon dont ils profitent aux employés et la manière de faire en sorte que les employeurs comprennent l'importance d'un régime de ce genre. À la suite de cette séance, nous avons rencontré le comité de direction de l'ADC pour notre réunion annuelle.

En mai, nous avons eu une rencontre avec l'American Dental Hygienists' Association, à Ottawa, afin de discuter des activités dans lesquelles nos pays sont engagés. Les problèmes ainsi que les progrès que nous faisons pour les résoudre ont une ressemblance frappante de part et d'autre de la frontière.

Regard rétrospectif... et prospectif *...suite page 8*

Published six times a year, January/February, March/April, May/June, July/August, September/October, November/December, by the Canadian Dental Hygienists Association, 96 Centrepointe Drive, Ottawa, ON K2G 6B1. Tel: (613) 224-5515

Canada Post #40063062.

CANADIAN POSTMASTER
Notice of change of address and undeliverables should be sent to:
Canadian Dental Hygienists Association
96 Centrepointe Drive, Ottawa, ON K2G 6B1

ADVERTISING
Keith Health Care Inc.
1599 Hurontario Street, Suite 104
Mississauga, ON L5G 4S1
(905) 278-6700 1 800 661-5004

SUBSCRIPTIONS
$85 plus GST in Canada, $140 Cdn for U.S., and $145 Cdn elsewhere. Fifty cents per issue is allocated from membership fees for journal production. All statements are those of the authors and do not necessarily represent the CDHA, its Board, or its staff.

CDHA 2005
6176 CN ISSN 1712-171X *(Print)*
ISSN 1712-1728 *(Online)*
GST Registration No. R106845233

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The Canadian Dental Hygienists Association's Journal, *Canadian Journal of Dental Hygiene*, is the official publication of the CDHA. The CDHA invites submissions of original research, discussion papers, and statements of opinions pertinent to the dental hygiene profession. All manuscripts are refereed anonymously. Contributions to the journal do not necessarily represent the views of the CDHA, nor can the CDHA guarantee the authenticity of the reported research.

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La voix de l'hygiène dentaire pendant 40 ans

EVIDENCE FOR PRACTICE

DEPARTMENTS

"Keeping the Thing Going While Things Are Stirring"*

by Susan Ziebarth, BSc, MHA, CHE

So I am for keeping the thing going while things are stirring; because if we wait till it is still, it will take a great while to get it going again.

– Sojourner Truth, speech delivered in 1867*

THIS PAST FALL, I HAD THE OPPORTUNITY TO SPEND A week with a team of people I had never met before, working on common goals. This intensive week was an exhilarating journey that saw us, previously strangers, develop into a cohesive team with a clear mission and identity that spoke to the heart of our sojourn together. Seeking inspiration, we looked to Sojourner Truth (1797–1883), an example of an individual who embodied the spirit of lifelong learning and sharing of knowledge. Sojourner Truth was born into slavery in New York as

One of my team members attests to the dental hygienists' pursuit of lifelong learning and demonstrates that knowledge is valuable when shared

Isabella Bromfree and became an American abolitionist and advocate of women's rights. She ran away from her master in 1826 and gained her freedom in 1827 when New York abolished slavery. She was illiterate all of her life but had a passion to learn and share that knowledge. She became a popular evangelist, speaker, and teacher. She embodied for us the sense that knowledge is not useful unless it is shared.

This sentiment is one that resonates with those who have chosen the profession of dental hygiene. One of my team members was a dental hygienist from Twin Falls, Idaho, who embodied this spirit. She attests to the dental hygienists' pursuit of lifelong learning and demonstrates that knowledge is valuable when shared. Dental hygienists

"Keeping the Thing Going While Things Are Stirring"
…continued on page 22

* Sojourner Truth. Keeping the thing going while things are stirring. A speech delivered by Sojourner Truth in 1867 [on-line]. [Cited Nov 29, 2004.] Available from: www.pacifict.com/ron/Sojourner.html.

« Maintenir le cap pendant que la situation évolue* »

par Susan Ziebarth, B.Sc., M.H.A., C.H.E.

Alors, j'opterais pour maintenir le cap pendant que la situation évolue; parce que si j'attends que le calme soit revenu, il faudra attendre longtemps pour remettre les choses en marche.

– Sojourner Truth, discours prononcé en 1867*

CET AUTOMNE, J'AI EU L'OCCASION DE PASSER UNE semaine à travailler à des objectifs communs en compagnie d'un groupe de personnes que je n'avais jamais rencontrées auparavant. Cette semaine intensive a été un parcours passionnant au cours duquel nous, qui étions jusque-là de parfaits étrangers, sommes parvenus à former une équipe soudée, pourvue d'une mission et d'une identité claires qui constituaient la raison de notre séjour ensemble. En quête d'inspiration, nous nous sommes tournés vers Sojourner Truth (1797-1883), un exemple de personne qui a incarné l'esprit de l'apprentissage continu et du partage des connaissances. Sojourner Truth est née dans l'esclavage à New York, sous le nom d'Isabella Bromfree; devenue abolitionniste, cette Américaine a pris

Une hygiéniste dentaire témoigne de la recherche de l'apprentissage continu chez l'hygiéniste dentaire et montre que le savoir est précieux s'il est communiqué

fait et cause pour les droits des femmes. Après s'être enfuie de chez son maître en 1826, elle a obtenu sa liberté en 1827 par suite de l'abolition de l'esclavage à New York. Toute sa vie elle a été illettrée, mais elle nourrissait une passion d'apprendre et de communiquer son savoir. Aussi est-elle devenue une évangéliste, une oratrice et une enseignante populaire. À nos yeux, elle incarnait le sentiment que le savoir est inutile à moins d'être partagé.

« Maintenir le cap pendant que la situation évolue* »
…suite page 11

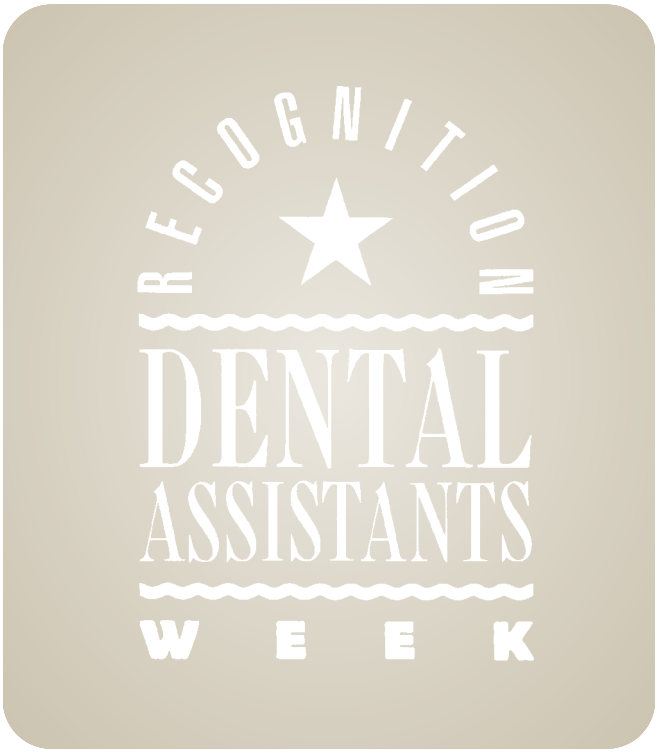
* Sojourner Truth, « Keeping the thing going while things are stirring », discours prononcé par Sojourner Truth en 1867 [en ligne]. [Cité le 29 novembre 2004.] Voir : www.pacifict.com/ron/Sojourner.html.

Regard rétrospectif... et prospectif
(suite de la page 3)

Le même mois, l'ACHD avait le plaisir de participer au colloque sur l'accès aux soins et de commanditer cet événement organisé par l'Université de Toronto, le Collège George Brown et la Toronto Oral Health Coalition. Sous le thème « Vers une stratégie nationale de santé bucco-dentaire », ce colloque a rassemblé des professionnels de tous les domaines; ceux-ci y ont discuté des moyens de s'attaquer aux problèmes d'accès aux soins qui tracassent une partie substantielle du public canadien. Conscients du fait qu'il ne s'agit pas d'un dossier qui peut se régler du jour au lendemain, les participants se sont montrés déterminés à continuer de travailler sur la question de l'accès et ils ont l'intention de se réunir de nouveau à l'avenir. Lors de ce colloque, également, M^me^ Carolyn Bennett, ministre d'État à la Santé publique, a annoncé l'intention du gouvernement fédéral de créer un poste d'administrateur en chef de la santé bucco-dentaire.

Le Comité consultatif sur la recherche de l'ACHD a été mis sur pied et il a tenu sa première réunion par téléconférence en mai 2004. Ce comité aide à orienter davantage le journal de l'ACHD vers la recherche et la pratique fondée sur des preuves et à en rehausser l'image professionnelle. Par ailleurs, la revue *Probe* a fait peau neuve et le premier numéro du nouveau *Journal canadien de l'hygiène dentaire* qui lui succède a paru en septembre 2004.

La 15^e^ Conférence professionnelle annuelle de l'ACHD, qui s'est déroulée à St. John's (Terre-Neuve) en juin, a été un grand succès; c'était la première fois que Terre-Neuve-et-Labrador avait l'occasion d'organiser cette activité. La Fondation canadienne pour la recherche et l'éducation en matière d'hygiène dentaire a été lancée officiellement au cours de la conférence. Elle a aussi organisé sa première activité de financement – un encan de vive voix et un encan silencieux –, ce qui a été très amusant et qui a suscité de nombreux dons. L'attribution du prix de l'ACHD pour service méritoire exceptionnel à Susanne Sunell, une récipiendaire qui le méritait vraiment, a été un autre moment mémorable.



De concert avec Pfizer Canada, l'ACHD a été fière d'annoncer le partenariat pour la Semaine de la gingivite qui s'est déroulée du 7 au 13 juin 2004, la première à avoir jamais eu lieu. Cette semaine avait pour but de sensibiliser à la gingivite; de combler le fossé entre les personnes qui savent qu'elles ont de la gingivite et celles qui ne le savent pas, et de stimuler le dialogue entre les clients et leurs hygiénistes dentaires. Le site Web <www.gingivitis.ca> a été lancé au cours de cette campagne; celui-ci vise à offrir aux Canadiennes et aux Canadiens tout ce qu'ils ont besoin de savoir à ce sujet.

Au cours de l'année écoulée, l'ACHD a publié deux déclarations de principe; bien documentées, celles-ci sont arrivées à point nommé. La première, rendue publique au printemps, est l'œuvre de Salme Lavigne et du personnel de l'ACHD et s'intitule « Votre bouche, porte d'entrée de votre corps ». La deuxième, publiée dans le numéro de novembre de ce journal, a pour titre « Le rôle de l'hygiéniste dentaire en matière de désaccoutumance au tabac ».

En octobre a eu lieu la Semaine nationale annuelle des hygiénistes dentaires; à cette occasion, Oral-B a lancé sa campagne « Dix questions à poser à votre hygiéniste dentaire ». Comme d'habitude, les hygiénistes dentaires du Canada ont créé de nombreux moyens novateurs de promouvoir l'hygiène dentaire et la santé bucco-dentaire dans tout le pays.

Cette liste ne fait qu'effleurer certains des événements qui se sont produits au cours de l'année dernière. De nombreux prix ont été décernés; des étudiants ont été reconnus; il y a eu des réunions, des présentations ou des discussions. Nous avons aussi pleuré la perte de quelques hygiénistes dentaires qui ont accompli énormément pour la profession d'hygiéniste dentaire.

L'ACHD se réjouit à la perspective des célébrations du 40^e^ anniversaire qui se poursuivront dans les mois à venir, surtout des plans stimulants faits pour la 16^e^ Conférence professionnelle annuelle qui se tiendra à Ottawa (Ontario), en juin 2005. Tenez-vous au courant pour obtenir plus de précisions.

Merci à tous ceux et celles qui ont fait de 2004 un grand succès comme celui-là. Je souhaite que tous et toutes vous trouviez de la force dans vos joies comme dans vos peines au cours de l'année qui vient.

Bonne année tout le monde!

On peut communiquer avec Patty Wickstrom à l'adresse < president@cdha.ca >.

Looking Back...and Forward *(continued from page 3)*

issues that plague a substantial portion of the Canadian public. Realizing the problem is not one that can be solved overnight, the participants were determined to continue working on the access issue and intend to have more meetings in the future. Also at this symposium, the Honourable Carolyn Bennett, Minister of State (Public Health), announced the federal government's intent to create a Chief Oral Health Officer position.

The CDHA Research Advisory Committee was formed and had its first meeting via teleconference in May 2004. This Committee is helping to focus the CDHA journal more on research and evidence-based practice and to raise its professional image. The journal *Probe* was transformed into the new *Canadian Journal of Dental Hygiene*, with the first issue released in September 2004.

The CDHA 15th Annual Professional Conference, held in June in St. John's, Newfoundland, was a great success and marked the first opportunity for Newfoundland/ Labrador to host this event. The Canadian Foundation for Dental Hygiene Research and Education had its launch during the conference. It also had its first fundraising event—both live and silent auctions—that was a lot of fun and generated many donations. Another memorable moment was Susanne Sunell's being presented with the CDHA Distinguished Service Award—a most deserving recipient.

Along with Pfizer Canada, CDHA was proud to announce the partnership for the first-ever Gingivitis Week, June 7–13, 2004. The week's goals were to raise awareness of gingivitis; to close the gap between those who know they have gingivitis and those who don't know; and to stimulate a dialogue between clients and their dental hygienists. The <www.gingivitis.ca> website was launched during this campaign to provide Canadians with "everything that they need to know about gingivitis."

During the past year, CDHA published two timely and well-researched position papers. The first one, released in the spring, was entitled "Your Mouth – Portal to Your Body" and written by Salme Lavigne together with CDHA staff. The second paper, published in the November 2004 issue of this journal, was "Tobacco Use Cessation Services and the Role of the Dental Hygienist."

October saw the annual National Dental Hygienists Week at which time Oral-B launched their "10 Questions to Ask Your Dental Hygienist" campaign. As usual, Canadian dental hygienists created many innovative ways to promote dental hygiene and oral health through the country.

This listing touches on just some of the events occurring during the past year. There were many awards granted, graduating students recognized, meetings attended, presentations made, and discussions held. We also mourn the loss of some dental hygienists who have done so much for the dental hygiene profession.

CDHA looks forward to the 40th birthday celebration continuing in the upcoming months, especially the exciting plans made for the 16th Annual Professional Conference to take place in Ottawa in June 2005. Look for more details in the journal and on-line.

Thank-you to everyone who made 2004 such a great success. May you all find strength in both your joys and sorrows in this coming year.

Happy New Year to you all!

Patty Wickstrom can be reached at <president@cdha.ca>.

For our 40th Birthday, "dental hygienists" deserve an....Extreme Name Makeover!

*by Lorraine J. Assmus, RDH**

THE CANADIAN DENTAL HYGIENISTS ASSOCIATION turns 40 this year and I believe it's time to shake it up and find a new name for our profession. "Dental hygienist" is just not working for us any more and we are in desperate need of an Extreme Name Makeover! Recently our professional journal, *Probe,* changed its name after 20 years because the name was no longer reflecting the scientific focus of the journal. "Dental hygienist" was created more that 90 years ago—isn't it time we also had a name change? To quote the late Rodney Dangerfield, with a name like "dental hygienist," it is no surprise we "get no respect."

> ***"Dental hygienist" was created more that 90 years ago—isn't it time we also had a name change?***

Many, many years ago, the words "hygiene" or "hygienist" conveyed a healthy, respected, positive image. But hygiene, which means cleanliness and sanitization, is now a demeaning word that falsely gives the public and other professionals a negative, limiting profile of the multi-task professionals we have grown to be. Our profession is making fantastic strides to prepare for the future. Shouldn't we also have a progressive name that encompasses ALL that our profession is and expects to be for the next century?

For the first 5 years in practice, I puffed up with pride every time someone asked me what I did for a living. But that was 20 years ago. Although I am still profoundly passionate about my profession, unfortunately my mission to "spread the dental hygiene word" has been greatly deflated over the years. Why do we still have this silly, confusing name?

"A what?" they ask

"A dental hygienist."

"Oh," they answer. "What's that?"

"I care for patient's oral health."

"Oh, I see," they say, clearly confused.

"One of the things I do is to clean people's teeth," I explain further.

"Oh, I get it—you work with the dentist."

"Well, sort of," I say. "I work in my own room with my own patients and the dentist works with the dental assistant in another room."

"Oh," they say. "So you're a dental assistant."

Registered Dental Hygienist is often confused with similar names such as Registered Dental Assistant, Certified Dental Assistant, Industrial Hygienist, Chemical Hygiene, Safety Hygienist or the worst...Feminine Hygiene Products. Check out the "Personal Hygiene Products" section in your neighbourhood supermarket or drugstore and you will find feminine hygiene products or other hygiene items like baby diapers, incontinence undergarments, and prophylactics. The dental products are in the "Oral Care" section. People may look for a sign that *reads* "Hygiene" but they definitely do not want to say the word, especially in reference to their own mouths. Even within our profession, people hate to say the word hygiene...it just sounds, well, creepy! Instead, hygienists are often referred to as the girl that "cleans and buffs," "the one who cleans teeth," the "gum gardener," and of course the classic "prophy queen." In addition to all the name confusion, in today's dental offices there are dentists and dental assistants also scaling and polishing teeth. It is no wonder that Canadians remain at a complete loss as to who or what a dental hygienist really is.

But it is not because dental hygienists haven't tried. We have. Our founding father, Dr. Alfred C. Fones, referred to us originally as "prevention specialists." But by the time the first school of hygiene opened in 1913, the name had been changed to "dental hygienists." Since that time, there have been countless initiatives to educate the public about who we are but the name has never caught on and I am not sure it ever will. However, what *has* caught on is the legend: hygienists are auxiliaries and they are all "babes in pink uniforms." Will we ever dispel this myth? And will the name "dental hygienist" ever look strong enough to stand on its own; significant on a business card; marketable on a storefront window; or capable of conveying confidence and autonomy?

But despite all of our challenges, the practice of dental hygiene has advanced considerably over the years. We have evolved to become a profession where both women and men provide essential preventive dental health care services. **We are specialists in our field AND our professional future is just getting started. Isn't it time for a name that keeps pace with us?**

Perhaps we could look to other professions for inspiration. For example, denturists were originally named dental mechanics; today most Canadians know them as denture

* Lorraine graduated with her DipDH from Algonquin College, Ottawa. She has worked in clinical private practice, as the Western Canada Dental Hygiene Coordinator for Tridont Dental Centre, and most recently as the Dental Hygiene Services Manager for a practice management company that owns and operates seven dental practices in Alberta.

specialists. Periodontists also recognized it was time for a change and started using designations like "Certified Specialist in Gum Problems." Hygienists also need a memorable, likeable name that all Canadians can say and understand. A name that sets us apart from the pack! Names such as Oral Health Practitioner, Oral Health Therapist, Dental Hygiene Specialist, Oral Wellness Practitioner, Dental Health Practitioner, Oral Care Practitioner, and Preventive Oral Health Practitioner would help convey the correct image of the comprehensive dental health care professionals that we are. Or perhaps we could create an original, groundbreaking word, a word that defines us exclusively.

Of course, changing a name can be tricky. All the paper work. The cost. And the strange feeling of saying something different. But change is possible. Hygienists together with marketing professionals must first choose the perfect name. Perhaps all Canadian dental hygienists could put their collective heads together and brainstorm...we could have a contest! The process could start as a grassroots initiative with each and every hygienist re-introducing themselves to their patients, friends and family members. Then our provincial and federal associations would jump on board. The media could generate a buzz and create a countrywide awareness. Complicated? You bet! But, a name change has a very fast learning curve and the old name is quickly forgotten when replaced by a new and improved one—a name that is working for us!

The many countries, businesses, organizations, professions and scientific journals that have changed names know a name must evolve to keep pace with the world. **Names Matter!** So let's truly celebrate the CDHA's 40th birthday by finally retiring the name "dental hygienist." With a fresh and new influential name, I believe our profession will achieve a higher level of recognition, respect, and ultimately success…in legislative initiatives and in our individual professional settings. Isn't it time for a name that all Canadians can pronounce, identify, understand…and embrace. This birthday celebration would be the ideal occasion. **Because really, doesn't everyone deserve a makeover and a little more respect when they turn 40?**

Although this is written "tongue-in-cheek," I firmly believe that the name "dental hygienist" will hinder our profession's future. Your comments and opinions are welcome and encouraged. Send them to the Editor of the CJDH journal at peb@cdha.ca *or to CDHA's Executive Director at* saz@cdha.ca.

« Maintenir le cap pendant que la situation évolue* »
(suite de la page 7)

Ce sentiment a une résonance auprès des personnes qui ont choisi la profession d'hygiéniste dentaire. Une hygiéniste dentaire de Twin Falls, dans l'Idaho, qui faisait partie de mon équipe, incarnait cet esprit. Cette femme témoigne de la recherche de l'apprentissage continu chez l'hygiéniste dentaire et montre que le savoir est précieux s'il est communiqué. Les hygiénistes dentaires font part de leurs connaissances pour aider leurs clients à jouir de la meilleure santé bucco-dentaire et de la meilleure santé générale possibles.

La communication du savoir s'effectue aussi dans les groupes d'étude, les sociétés d'hygiène dentaire, les associations provinciales, à Dental Hygiene Educators Canada (DHEC) et, bien entendu, au sein de votre association nationale, l'ACHD : nous en avons la preuve. Dans le présent numéro du *Journal*, vous trouverez le mémoire présenté récemment par l'ACHD au Comité permanent des finances de la Chambre des communes. Ce mémoire met l'accent sur le rôle des hygiénistes dentaires dans l'amélioration de la santé des Canadiennes et des Canadiens grâce à la communication de leurs connaissances spécialisées, l'objectif étant de promouvoir la santé bucco-dentaire et de prévenir la maladie.

Deux autres articles portent sur le comportement d'apprentissage continu des hygiénistes dentaires. L'article intitulé « Qualitative Research Methods: The Unstructured Interview » [Méthodes de recherche qualitative : l'entretien non structuré] traite de l'utilisation de l'entretien en recherche qualitative et de la façon dont on peut s'en servir pour acquérir des connaissances. Le deuxième article est une auto-évaluation de la déontologie en hygiène dentaire, un outil essentiel pour les professionnels.

En plus de plaider ardemment en faveur de l'acquisition continue du savoir, Sojourner Truth était une fervente partisane de la justice. De part et d'autre de la frontière, bon nombre de dirigeants en hygiène dentaire œuvrent pour la justice à l'égard de la profession. Il est juste que les hygiénistes dentaires s'autoréglementent et soient en mesure de choisir le cadre dans lequel ils et elles pourront exercer toute la gamme de pratiques pour lesquelles on les a formés.

À l'aube de la nouvelle année, dans la froideur de l'hiver, l'expérience de croissance personnelle que j'ai vécue me tonifie et je continuerai d'en bénéficier grâce à ma participation à l'équipe des Sojourners. Je vous encourage tous et toutes à réchauffer vos cœurs avec l'esprit que Sojourner Truth a manifesté tout au long de sa vie. C'était une femme courageuse qui a souffert d'une double discrimination en raison de sa couleur et de son sexe. Pourtant, elle a continué de lutter pour ce en quoi elle croyait : la liberté pour les autres esclaves et les droits des femmes. Son combat pour la justice a été couronné de succès, même si elle a affronté ce qui me semble avoir été des obstacles insurmontables et des publics hostiles.

« J'ai plus de quatre-vingts ans; il est à peu près temps pour moi de partir. J'ai passé quarante ans dans l'esclavage et quarante ans en liberté, et je demeurerais ici quarante ans de plus pour obtenir des droits égaux pour tous. Je suppose que l'on me garde ici parce qu'il me reste quelque chose à faire; je suppose que je dois encore contribuer à briser la chaîne. »

■ FLUORIDE DENTIFRICE

Vancouver Island Health Authority – Central
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Nanaimo, BC V9S 5K7
October 6, 2004

Managing Editor
Canadian Journal of Dental Hygiene

Congratulations on a great new name and look for our professional journal. I am always pleased to receive my journal and to read the excellent articles.

I was aghast, though, when I turned to page 238 of the September-October 2004 issue. There was a full page advertisement for Orajel's non-fluoride toothpaste. I am very aware of the research around the use of a fluoride dentifrice, and the concern over fluorosis. However, the CDHA's position statement on fluoride states "Fluoride dentifrice should be used widely, at least twice a day. Children younger than six years of age should be supervised and use only a thin smear of fluoridated dentifrice." This advertisement does not support the CDHA's own policy on the use of fluoride dentifrice.

Living in a non-fluoridated area, and working in public health, we see rampant decay in children under age 3. The Association of Dental Surgeons of B.C.'s *Children's Dentistry Task Force Report* in 2001 estimated that each year almost 6000 children receive dental treatment under General Anaesthetic, at a cost of almost 11 million dollars. Most of these children were under the age of four. Rampant decay still exists!! Using a non-fluoridated toothpaste puts a child at high risk for early childhood caries.

I would encourage you to take a closer look at potential advertising in CDHA publications and ensure they are in line with the CDHA's policies.

I ask that this particular advertisement be discontinued immediately. I also look forward to hearing any comments you may have on this concern.

Sincerely,
Anita Vallée
Regional Dental Hygienist

■ EDITOR'S RESPONSE

October 20, 2004

Dear Ms. Vallée:

Thank you for your letter of October 6, 2004. I am pleased you like the new look and the professional focus.

However, the main part of your letter discussed one of our advertisements, the ad by Del Pharmaceuticals for their Orajel Training Toothpaste. This toothpaste, formulated specifically for teaching young children how to brush their teeth properly, does appear on the surface to be in conflict with the CDHA position statement on fluoride.

Thank you for bringing this to our attention. It is a matter we definitely take seriously as we vet the journal's advertisements in an attempt to avoid this type of conflict situation or even the perception of it. We have discussed your concern since receiving your letter.

The statement from the position paper—"Fluoride dentifrice should be used widely, at least twice a day. Children younger than six years of age should be supervised and use only a thin smear of fluoridated dentifrice"—describes the overarching policy. However, some studies mentioned in the position paper also express concern about the increasing rate of fluorosis. To quote from page 210 of the position paper: "In 1994, C. Clark conducted a literature review and found the prevalence of dental fluorosis is now between 35 and 60 per cent in fluoridated communities and between 20 and 45 per cent in non-fluoridated areas." Fluoride is ingested from many other sources than just toothpaste and water.

However, in a non-fluoridated area such as yours, very young children also suffer from early childhood caries. As you say in your letter, the number of admissions of children under the age of four for dental procedures is far too high, resulting in anxiety for parents and children and much higher costs for our health system.

So there is the danger of ECC on the one hand and of fluorosis on the other, depending on the area one lives in and the fluoridation policies of the provincial and municipal governments. Thus dental hygienists are in a very good position to assess the situation in their particular community and make the appropriate recommendation to the parents. If a parent in a fluoridated area wants to teach a child how to brush without running the risk of the child swallowing a considerable amount of fluoridated toothpaste, this Orajel toothpaste might be a good training tool. It can be discontinued as soon as the parent believes that the child can reliably brush his or her teeth without swallowing a lot of toothpaste.

The target audience for the CDHA journal is dental hygienists. The public can access the journal only if they go to specialized libraries or are shown the journal at the dental hygienists' or dental office. This ad for Orajel serves to acquaint dental hygienists with a tool they *might* recommend to a parent. Obviously in your area on Vancouver Island, dental hygienists would want to recommend a fluoride toothpaste to try to reduce the incidence of ECC.

I hope that this rather long letter explains our reasoning behind accepting the Orajel ad for the journal. Please do not hesitate to write again (or e-mail me at peb@cdha.ca) if there are further concerns.

Yours sincerely,

Patricia Buchanan
Managing Editor
Canadian Journal of Dental Hygiene

Introduction To Research Methodology

Research is a process of disciplined or systematic inquiry that attempts to answer questions arising in the real world of practice. The relationship between inquiry and practice is cyclical, with practice questions being answered through research and research attempting to provide the best evidence for practice. Research is conducted within a framework of beliefs and practices that define the direction and strategies to be used. It is the differences in beliefs about how humans can understand the world and acquire knowledge that ultimately directs the determination of theory and method in research. Typologies of research paradigms distinguish the objective, deductive, reliable, and generalizable characteristics of quantitative research from the subjective, inductive, valid, and insider attributes of qualitative research. Although there are fundamental differences between the qualitative and quantitative traditions in research, there are many similarities and opportunities for integrating the perspectives in the creation of functional partnerships.

The quantitative and qualitative subcultures of research each demonstrate considerable variation and have their more liberal and orthodox followers. At the methodological level of the quantitative-qualitative paradigms, there is clearly some overlap. Pragmatically, many combinations of methods may be applied to respond to real research questions. Effective strengthening of research outcomes can be achieved by using multiple methodologies, designs, or analyses in a triangulation—a bringing together—of data, investigators, theory, and methodologies. Blends of data, method, and theory are useful tools that help us to develop meaningful responses to purposeful research questions.

In this and subsequent issues of CJDH, articles demonstrating differing methodologies will provide a foundation for understanding how they are applied in research.

- Joanne Clovis, CDHA Research, Advisory Committee member

EVIDENCE FOR PRACTICE

Qualitative Research Methods: The Unstructured Interview

*by Sharon Compton, DipDH, BSc, MA(Ed), PhD**

ABSTRACT

This article explores the use of interviews in qualitative research. The author argues that interviews are an invaluable method for gaining insight into the day-to-day lived experiences of research participants, the meanings these experiences hold, and the context in which these realities develop and are resolved. Interviews provide researchers with a deeper understanding of the reasons, emotions, and thoughts that underlie everyday decisions, actions, and motivations. While the article differentiates among the structured, unstructured, and semi-structured interview, the main focus is on the use of the unstructured and semi-structured interview as a means of getting to the essence of the stories being told. Practical considerations for the selection of research participants and for the interview process itself are provided. Strategies for conducting effective interviews are explored; these strategies include, but are not limited to, engaging in active listening; registering verbal and non-verbal clues; and creating a safe environment and an atmosphere that welcomes the telling of stories. When told, the stories lend voice to research participants' evoking emotion and memories and highlighting the commonalities and differences between the researcher and researched. The influence of the interviewer on the interview process is discussed as is the negotiation of power within the interview context as it relates to gender, race, ethnicity, and class. The steps involved in the analysis and collection of data are discussed and recommendations provided. The need to maintain rigour within the research and interview process—in order to ensure credibility, transferability, dependability, and confirmability—is also examined.

INTRODUCTION

An assumption can be made that each person reading this article has been an interviewer, an interviewee, or both and that each person reading this understands the process of an interview. However, the various ways to use an interview for qualitative research—more specifically, the *process* for using such an interview—may be less understood. The purpose of this article is to describe the unstructured interview process as a qualitative research method.

However, before focusing on the unstructured interview, it might be helpful to look briefly at the *structured* interview process in order to understand how it differs from the unstructured and to appreciate where each is most appropriately used for research purposes. The struc-

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tured or standardized interview process seeks to keep the interview format as identical as possible from one interview to the next. The questions are always asked in exactly the same manner and in exactly the same sequence. The interviewer does not direct the responses in any way and does not probe into the respondent's answers unless this is prompted by the structured interview guide. In essence, the interviewer attempts not to influence the interview setting in any way. This rigidity has been criticized in that it "may create awkward interactions and answers may be inaccurate"[1] (p. 579). However, others support structured interview processes, saying that potential bias is decreased with this method.[1]

AIMS OF THE INTERVIEW PROCESS

A basic aim underlying qualitative research is to "better understand human behaviour and experience."[2-6] Dharamsi, Cobban, and Compton[7] stated that qualitative researchers use open-ended discussions and interviews to "study people's accounts of events and focus on the complexity, variance, detail, and context of their experiences" (p. 222). In essence, the qualitative researcher seeks to understand the "what," "how," and "why" of an experience,[7] and frequently, the interview is the method used for data collection.

Kvale described the process of the research interview as a guided conversation between the researcher/interviewer and the participant/interviewee.[5] He further described the research interview, as a qualitative research method, as a "uniquely sensitive and powerful method for capturing the experiences and lived meanings of the subjects' everyday world".[5] He proposed that "an interview is literally an *inter view,* or an inter change of views between two persons conversing about a theme of mutual interest"[5] (p. 2). Warren[8] noted that the participants are viewed as active contributors to the research process and not simply passive conduits through whom the researcher extracts answers.

Barone and Switzer[9] emphasized that the interviewing technique used by social science researchers attempts to learn about the participants by asking them about themselves and their experiences. Qualitative research interviews probe deeply into the individual's experience by interviewing a few people at great depth for the purpose of descriptive understanding.[9] For example, dental hygiene researchers may choose to interview a sample of senior residents in a long-term care facility to gain a better understanding of the residents' experiences with regard to their oral health care needs.

The qualitative interviewing process can have many purposes in research. As stated earlier, a researcher may use qualitative interviewing to gain further understanding of an issue. But qualitative research is also known for its ability to generate hypotheses. As the researcher conducts interviews to gather information about an issue, the data gathering may generate a research hypothesis that could form the basis of another research study. This is in contrast to quantitative research that begins with a hypothesis and sets out to test (accept or reject) the hypothesis.

A basic aim underlying qualitative research is to "better understand human behaviour and experience.

Unstructured interviews may be used to gather data about a particular issue in dental hygiene practice. After interviewing the participants, the data is analyzed for its thematic content and the themes are presented in the results. In another instance, individual or focus group interviews may be used to gain information to refine questions before a mailed survey to a larger population. In yet another instance, interviews are conducted in a research process known as grounded theory. During this process, multiple interviews can be conducted in order to develop "middle range" theories[10] (p. 254). Using the process of

RÉSUMÉ

Le présent article traite de l'utilisation de l'entretien en recherche qualitative. L'auteure soutient que les entretiens constituent une méthode précieuse qui permet de comprendre les expériences vécues au jour le jour par les participants à la recherche, le sens qui se dégage de ces expériences et le contexte dans lequel ces réalités prennent forme et se transforment. Les entretiens permettent aux chercheurs de mieux comprendre les raisons, les émotions et les réflexions qui sous-tendent les décisions, les gestes et les motivations de tous les jours. S'il établit une distinction entre l'entretien structuré, l'entretien non structuré et l'entretien semi-structuré, l'article porte principalement sur l'utilisation de l'entretien non structuré et de l'entretien semi-structuré comme moyens d'accéder à l'essentiel de ce qui est raconté. On y présente des considérations pratiques en ce qui a trait au choix des participants à la recherche et au processus d'entretien lui-même. On y examine des stratégies relatives à la réalisation d'entretiens efficaces; parmi celles-ci figurent entre autres l'écoute active, l'enregistrement des indices verbaux et non verbaux et la création d'un cadre et d'une atmosphère propices au récit d'expériences. Lors de leur narration, les histoires prêtent une voix à l'évocation d'émotions et de souvenirs par les participants eux-mêmes et à la mise en relief par ceux-ci des points communs et des différences entre le chercheur et les personnes qui font l'objet de sa recherche. L'auteure analyse l'influence de l'intervieweur sur le processus d'entretien; elle étudie aussi la négociation du pouvoir dans le contexte de l'entretien – par rapport au sexe, à la race, à l'origine ethnique et à la classe. Elle traite des étapes que comporte l'analyse et la collecte des données et formule des recommandations. Elle se penche enfin sur la nécessité de maintenir la rigueur dans le processus de recherche et d'entrevue pour garantir la crédibilité, la transférabilité, la fiabilité et la confirmabilité.

grounded theory research, which commonly employs an interviewing technique, "comprehensive explanations of phenomena that are grounded in reality" can be determined[10] (p. 255). In short, there are many different reasons for carrying out research interviews and many different types of interviews. However, only the unstructured or semi-structured interview process, as a qualitative research process, will be discussed in this article.

SELECTING THE INTERVIEW PARTICIPANTS

The researcher normally selects the participants in a non-random purposeful manner in order to establish a typical sample. The researcher searches for participants who have had the experience in which they are interested. The search process may include advertising. Then, based on carefully defined criteria, the research sample participants are selected. The researcher may also add to the sample by beginning the interviewing process with a few selected participants and then asking for referrals from the participants who may know others with similar experiences.

There are three main considerations when selecting the sample of participants: (1) Are the participants knowledgeable about the experience or situation being studied? (2) Are they willing to discuss the experience or situation? (3) If there are known differing perspectives and experiences, do the participants represent the range of differences?[11] For example, if a dental hygienist/researcher interviews a sample of residents in a long-term care facility, the researcher may begin by selecting residents who are willing to be interviewed. If only females volunteer, the researcher may want to actively recruit some male residents to determine if there is any difference in their stories or experiences. Thus the researcher begins with those who are knowledgeable about their oral health needs and are willing to talk. However, if they represent just one "group (i.e., women), the researcher may return to purposefully recruiting participants from another group, that is, men. As the interview research progresses, new participants may be selected depending on the direction the research has taken to date and the perspectives gathered.[11]

There are situations where the researcher will have to interview the same participant more than once. Sometimes a second or third interview may be needed to follow up and clarify the previous interview content. Repeat or multiple interviews can be necessary when a subsequent interview has yielded new information and the researcher decides to re-interview the other participants (interviewed before the acquisition of the new information) to determine if they have any insight or experience in this regard. Other occasions that warrant repeat interviews with the same participant may be very sensitive or complex situations or experiences. In these situations, the researcher may need more than one interview to build a trusting relationship with the participant and thus to be more certain that the full story is being told.

The number of participants needed for a qualitative interview study is determined when data saturation is reached. The saturation point in the data collection phase occurs when the researcher's interviews elicit little or no new information.[11-13]

UNSTRUCTURED AND SEMI-STRUCTURED INTERVIEWING

Interviewing may involve unstructured or semi-structured individual or group interviews. The group interview, also called a focus group, is not be covered in this paper. Unstructured interviews invite the participants to "tell their story." The researcher listens, interjecting spontaneously without following a list of questions. The researcher may interject a comment as needed to gently focus the interview process but does this non-intrusively so as not to interrupt the natural flow of the participant's conversation.

Unlike the unstructured interview, the semi-structured interview typically involves the use of an interview guide (a list of open-ended questions) to focus the interview conversation. It is accepted that open-ended questions should elicit descriptive responses, as the format allows participants to tell their stories in their own words.[9] When an interview guide is employed, the interviewer still has considerable latitude to pursue different aspects of topics and to offer the participant a chance to change the content of the interview depending on their own unique story or experience.[2] It is important that participants are allowed to tell their stories informally so that their detailing of the experience uncovers meaning.

Unstructured interviews invite the participants to "tell their story."

When approaching participants with open-ended questions, the qualitative researcher can expect the unexpected in the form of new discoveries.[9] Essentially, it is important for the researcher to be flexible during the interview and pursue different directions with probing questions as the opportunities arise.[2,11] Kvale[5] described the semi-structured interview as a conversational process where the researcher has a sequence of themes to be covered with suggested questions but remains open to changes when it is necessary to probe further into the participant's responses. The ability to explore unexpected directions, while gathering information, is one of the benefits of and reasons for conducting an interview study. Interviews can allow the researcher a flexibility to explore various avenues of a topic/issue or experience as is deemed appropriate or necessary.

In summary, an interview guide or list of questions is often used to begin the research interviews. However, the researcher is encouraged to let go of the guide as the interview unfolds, allowing flexibility in the interviewing process. The guide should not stagnate the interview process but should be used exactly as the name implies, as a guide. Many researchers commonly state that by the third or fourth interview, the interview guide is referred to less often and the interviews flow like normal conversations between two people.

CONSIDERATIONS FOR THE INTERVIEWING PROCESS

For the researcher to gain maximum insight from the participant's interview, Bogdan and Biklen[2] recommended that,

> "…the participant being interviewed should be treated as the expert,…[which] establishes the subject as the one who knows and the researcher as the one who has come to learn. It tells the interviewee that his or her ideas and opinions are respected. It is not enough for them to tell their stories but instead to encourage them to share their own ideas and observations" (p. 98).

Effective interviewing requires the researcher to be sensitive to the interview setting, and this includes the researcher's verbal and non-verbal responses during the interview. It has been emphasized that to build a welcoming and trusting environment, the researcher should show empathy by expressing appropriate feelings when participants express their feelings and emotions, by maintaining good eye contact, and by showing respect for the participant.[2] Deep listening is fundamental to interviewing and usually stimulates conversation, adding richness to the responses. It is essential during interview research that the participant feel "safe" to talk since the research process relies on this for data collection. For the interviewer/researcher to be effective, the interviewer must be perceptive and an accomplished observer. The interviewer must be sensitive to the participant's non-verbal messages, the effect of the interview setting, and to any nuances of the interaction between the interviewer and participant.[4-6,8,9,14]

Many qualitative researchers advocate audiotaping the interviews.

The researcher as the interviewer must be mindful of the role and the possible effect their physical presence may have on the interview situation. However, it is important for the researcher to develop an atmosphere with the participant that invites their conversation. The interviewer must therefore work strategically to develop a relationship with the participant to begin the interview and then adjust as necessary. This could mean talking more or less as the interview proceeds. It could also mean changing where the interview location to move from a potentially sterile environment to one where the participant feels more or most comfortable. The researcher must consider the environment from this perspective prior to beginning the interview.

As the interviewer, the researcher is active and visible in the data collection. Therefore, one must consider the effect on data collection of any similarities or differences between the participant and the researcher in terms of gender, culture, race, socio-economic status, and possible "power" positioning. It can be assumed that "access will be granted, meanings shared, and validity of findings increased"[15] (p. 406), when the researcher and participant share many of these attributes.

When researchers in the interview recognize their role and the potential influence they could have on the interview setting, researchers are able to be as non-influential as possible or desired. However, it cannot be ignored that even with a conscious effort and approach to remain non-influential in the interview setting, the researcher's presence may affect the interview process. It has been suggested that "we can no longer remain objective, faceless interviewers, but become human beings and must disclose ourselves, learning about ourselves as we try to learn about the other"[16] (p. 73).

MANAGING THE PARTICIPANT'S AND/OR RESEARCHER'S EMOTIONAL RESPONSE

The interview, as a process of self-disclosure, is capable of arousing varying degrees of emotion, depending on the research question or topic and the participant's experience. The potential for an intense emotional response may be minimal when interviewing participants about many oral health–related research topics. However, it is still necessary for the researcher/interviewer to be mindful of the emotional possibility and to be prepared to manage the participant's response. The researcher must also be aware that he or she too could respond emotionally to a participant's story. Researchers who conduct interviews involving emotional and sensitive content have found the experience to be emotional.[17-19] Therefore, prior to beginning any interview research, the researcher must consider the potential for an emotional response from both the participant and themselves.

CAPTURING THE INTERVIEW DIALOGUE

To capture the participant's descriptions or dialogue of their experiences, interviews can be audiotaped, videotaped, or written notes can be taken during and/or after the interview.[11] The least distracting method suggested to capture the interview dialogue has typically been audiotaping. Many qualitative researchers advocate audiotaping the interviews as this method allows close textual analysis following the interview,[9] captures the voice of the participant, and enables the researcher to report original quotations.[9,19,20]

ANALYZING AND INTERPRETING THE DATA

Qualitative data analysis can be, and was, done manually until the recent development of computer software programs that facilitate analysis of qualitative data sets. As the amount of data increases, the manual analysis of the data becomes more time intensive. Therefore, computer software programs have become popular for qualitative researchers as these programs allow more efficient coding and retrieval of the data. However, it is important to note that even though a software program may help with the analysis process, it is still the researcher who recognizes the significance of the data and does the coding.[3]

Two popular computer software programs available are NUD*IST (N4) or NVivo. In addition to these, analysis can be performed using Microsoft Word or WordPerfect wordprocessing programs.[21] (Information on the process of using either of these wordprocessing software programs is contained in the reference 21.)

Many researchers believe there are two stages of data analysis in qualitative research, including qualitative interviewing.[2,3,9,11,14] The common understanding is that data analysis during the interviews occurs while the data are being collected and after data collection is complete. Merriam[22] explained this: "Simultaneous analysis and data collection allows the researcher to direct the data collection phase more productively, as well as develop a data base that is both relevant and parsimonious" (p. 145). Data analysis requires working with the data, organizing it into manageable units, and searching for patterns while synthesizing it.[2] Researchers are cautioned, however, to keep in mind that, if they overlap the processes of data collection and data analysis, initial interpretations made *during* data collection may distort *later* additional data collection.[14]

Data analysis during data collection: Step 1

While conducting the interviews, in addition to audiotaping, it is suggested that the researcher maintain a journal or logbook that records descriptive details of what the researcher hears, observes, and experiences during the interview that would not be apparent from the typed transcript.[3] The journal entries should be written immediately following each interview in order to capture as much of the "real" situation as possible.

Coding is described as the process of identifying persistent words, phrases, themes, or concepts within the data.

Journalling can include immediate thoughts, questions, and perceptions based on the interview experience. These personal writings while in the field are meant to elicit critical thinking about what is seen and heard by recording the researcher's initial feelings and thinking.[2] Journal writings are typically more subjective in nature, describing emotions, personal reflections, mistakes, and successes.[23] It has similarly been suggested that it is beneficial for the researcher/interviewer to take time immediately following the interview to reflect and record the immediate learning and interpersonal interactions between the researcher and participant.[5] These immediate impressions and perceptions, based on the interviewee's body language, voice

intonation, and general interaction, will provide "richer access to the subjects' meanings than the transcribed texts will later"[5] (p. 129).

Ensuring trustworthiness of the data collected in individual interviews creates a challenge for the researcher.

In addition to journal writings right after the interviews, the researcher can also record thoughts, perceptions, and interpretations at any time during the research process. Data analysis is ongoing throughout the data collection phase of qualitative research. While in the field conducting the interviews, it is important for the researcher/interviewer to continue asking, "What is it that I do not yet know?"[2] After the initial interview or interviews, it may be apparent that the interview/question guide should be reframed, adding a specific prompt for more information that was not thought of initially. Researchers will also critically read through the beginning interview transcripts, questioning where different questions or prompts may have been added. From here, the researcher/interviewer may adjust the questions prior to proceeding with further interviews.

As a component of data analysis during the data collection phase, it has been suggested that the researcher write a summary after three or four interviews have been conducted. This can help the researcher see what is emerging in the data.[2] This interim summary writing provides a time for reflecting over a few cases, pondering issues that may have been raised, and pausing to relate back to the theoretical issues.

Summaries are prepared of the interview transcripts and returned to the participant for clarification of accuracy. Another component of data analysis involves the interpretation of the transcript being returned to the participant for review and verification.[2,5]

Data analysis *following* data collection: Step 2

Interview data will produce numerous pages of descriptive data. Data analysis following data collection starts with searching through the content of the data for regularities and patterns. This initial step has been referred to as "coding the data"[3] and allows the researcher to become familiar with the data. Coding is described as the process of identifying persistent words, phrases, themes, or concepts within the data so that the underlying patterns can be identified and analyzed.[3] Following coding of the data, the researcher begins searching for themes or categories. Categorization requires the researcher to re-read the data, highlighting sections and grouping themes into categories. Many researchers have suggested that it is helpful at this point to represent the data categorizations diagrammatically.[2,24,25] A tree diagram, concept map, or other visual representation can provide a different perspective through which to view the data representation.[25]

When the researcher is satisfied that the data are categorized accurately, summaries for each category and subcategory are written and assessed for internal homogeneity and external heterogeneity.[25] Internal homogeneity concerns "the extent to which the data that belong in a certain category hold together or 'dovetail' in a meaningful way."[25] External heterogeneity "concerns the extent to which differences among categories are bold and clear."[25]

The next phase of data analysis involves returning to the overall level of the data and asking the following questions: (a) How are the categories related? (b) What main patterns keep recurring in the data? (c) What conclusions can be drawn?[16,23] The intention is to "move to a higher level of analysis by discovering relationships among the categories, to find common threads or themes in the data"[23] (p. 24). In the interpretation of the data, the analysis moves from the descriptive and organizational to the interpretive.[24]

> "Interpretation means attaching significance to what was found, offering explanations, drawing conclusions, extrapolating lessons, making inferences, building linkages, attaching meanings, imposing order, and dealing with rival explanations, disconfirming cases, and data irregularities as part of testing the viability of an interpretation" (p. 423).

MAINTAINING RIGOUR IN QUALITATIVE RESEARCH: ESTABLISHING TRUSTWORTHINESS

Ensuring trustworthiness of the data collected in individual interviews creates a challenge for the researcher. There is the risk that participants will share what they think is desired by the interviewer rather than what is accurate. The problem is further compounded when participants are asked to recall past experiences. Four general criteria have been described to rigourously assess the trustworthiness of qualitative research. These are (1) credibility, (2) transferability, (3) dependability, and (4) confirmability.[26] The researcher's reflective journalling also enhances the trustworthiness of the data, over and above these criteria. The reflective journal can include information about the researcher him- or herself, the "research instrument," and a trail of methodological decision making can be made available to ensure the transparency of the research process.

Credibility

Sandelowski[27] explained that a "qualitative study may be deemed 'credible' when it presents such faithful descriptions or interpretations of a human experience that the people having that experience would immediately recognize it from those descriptions or interpretations as their own."[27] In other words, do the findings match the reality of the experience of the participants?

After the researcher has prepared the data summaries, credibility can be achieved by having the participants review and clarify the content within the summaries. This is also referred to as "member checks."[2,5,6,24] Following transcription of the interviews, the participants are given a summarized copy of the interview transcription and are able to add, delete, or change the content as deemed necessary.

Transferability

Transferability is the criterion used to determine whether the research findings can be applied in other contexts, situations, or with other groups.[3] Lincoln and Guba[26] contended that the researcher cannot possibly know the situational context for which data transferability might be desired by another researcher. Therefore, providing readers with sufficient descriptive data will enable them to determine the transferability of results.

Transferability, similar to generalizability, focuses on whether the study's findings have applicability in other contexts or with other subjects.

Dependability

Dependability, the third criterion used to evaluate trustworthiness, looks at whether the results would be consistent if another researcher replicated the study with the same participants or in a similar context. Most qualitative researchers discount this criterion, considering it inappropriate for qualitative research because the uniqueness of the human condition is celebrated in qualitative research and variation is expected. However, consistency could be considered from the viewpoint of the researcher making decisions explicit so, if another researcher attempted replication, adequate details would be available to guide a parallel study.

Dependability is enhanced by having the participants verify the accuracy of the content in the written summaries of the interview transcripts that were recorded originally. The participants are reminded to verify the direct quotations included in the content summary as these may be included in the final research report.

Research colleagues can also be enlisted to verify the process used to create the summary report for each transcribed interview. The colleagues would be given the full interview transcript, the theme/category guide, and the reproduced summary of the transcript. They would verify the accuracy of what the researcher is interpreting and subsequently placing within particular themes/categories.

Confirmability

Confirmability is the fourth criterion for establishing trustworthiness. It describes the process that the qualitative researcher maintains in order to establish that the findings are in fact representative of the participants and the phenomenon studied.[3] The researcher must be explicit in reporting the research so the reader is able to answer the question, "Are the data confirmable?"

The creation of an "audit trail" has become a common technique of the qualitative researcher seeking confirmability in his/her studies.[3,25,26] Verbatim transcriptions, field notes, summaries, and the researcher's journal provide evidence from the original data source through data analysis to final reporting. Morse and Field[3] emphasized the importance of the researcher's developing an audit trail that "clearly documents the researcher's decisions, choices, and insights" throughout the collection and analysis of the data and the reporting of the research.

CONCLUDING REMARKS

Much has been written on the intricacies of conducting interviews in research. This article aims at introducing the reader to the many aspects of interview research (using unstructured interviews) that should be considered prior to embarking on an interview study. As this is just an introduction, it is recommended that the dental hygiene researcher study in greater depth the components of interview research prior to beginning a study. Consulting any of the references listed below would assist the researcher in understanding more thoroughly the "inter view" as a qualitative research method.

ACKNOWLEDGEMENTS

I would like to acknowledge and thank Oral-B and CDHA for awarding me the Oral-B/CDHA Graduate Student Research Award in 2001 that supported my research. This article was written based on my experiences as a qualitative researcher who utilized semi-structured interviews for data collection during my doctoral research study of mentoring relationships in post-secondary institutions.

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"Keeping the Thing Going While Things Are Stirring"

(continued from page 7)

share knowledge to help their clients achieve optimum oral and overall physical health.

We also see evidence of this sharing of knowledge in study groups, dental hygiene societies, provincial associations, Dental Hygiene Educators Canada (DHEC), and of course your national association, CDHA. In this issue of the journal is the recent Brief to the House of Commons Standing Committee on Finance that was submitted by CDHA. This brief emphasizes the role of dental hygienists in improving the health of Canadians through sharing their expertise to promote oral health and prevent disease.

Two other articles speak to the lifelong learning behaviour of dental hygienists. The article "Qualitative Research Methods: The Unstructured Interview" explores the use of interviews in qualitative research and how they can be used to gain knowledge. The second article is a self- assessment on dental hygiene ethics, a key tool for the professional.

Sojourner Truth, in addition to being a devoted promoter of lifelong learning, was an active advocate for justice. Many dental hygiene leaders on both sides of the border are working for justice for the profession. It is just for dental hygienists to be self-regulated and to be able to choose the setting in which they can carry out the full scope of practice for which they are educated.

As we enter a new year in the cold of winter, I find warmth from the personal growth I experienced and will continue to benefit from as a result of being a member of the Sojourners team. I encourage you all to warm your hearts with the spirit that Sojourner Truth demonstrated throughout her life. She was a courageous woman who suffered double discrimination because of her colour and her gender. Yet she continued to fight for what she believed in—freedom for other slaves and for women's rights. Despite facing what to me would appear to be insurmountable odds and hostile audiences, she fought for justice and won.

"I am above eighty years old; it is about time for me to be going. I have been forty years a slave and forty years free and would be here forty years more to have equal rights for all. I suppose I am kept here because something remains for me to do; I suppose I am yet to help to break the chain."

CDHA Group RRSP, Savings, and Retirement Program

AS WE ENTER THE LAST FEW WEEKS of the 2004 RRSP contribution period, this is a good time to remember a CDHA member benefit—the Group RRSP, Savings, and Retirement Program. Administered by Canada Life, this program offers many investment advantages. First, the guaranteed investments are competitive with the banks but have no minimum requirements and can be cashed in at any time at market value. Second, with any of Canada Life's 76 segregated funds, there are no "load" fees associated with buying or selling these funds. Third, there are no annual fees associated with the program. Fourth, the management fees for the segregated accounts are lower than the retail fees for most mutual funds (0.26% on average).

The last few years have seen quite a bit of volatility in the markets and many of us have seen the results in capital losses. To bolster your confidence (and courage!) about investing in your RRSP for 2004, some straight talk about volatility and how consumers should react is reprinted below.

Stock Market Volatility* *by William Sterling*

To some, investing in a volatile stock market seems as pointless as an odometer in an elevator—lots of ups and downs with very little forward progress. However, with a few simple principles and a good financial adviser, most investors learn to withstand temporary volatility for significant long-term gains.

Investors worry about losing on an investment, especially after hearing tales of the crash of 1929 or having first-hand experience of the tumble of 1987. "Sure," you say, paraphrasing John Maynard Keynes, "stocks are good long-term investments, but in the long term, I'll be dead."

1929 and 1987 are severe examples of volatile stock prices. And, like earthquakes, there will probably be others sometime in the future. No market goes up and up forever. But you don't have to hold stocks, or stock mutual funds, for a lifetime to earn good returns.

One way to compare stock with bond investments is to examine the year-by-year total returns (including capital gains, dividends, and interest) of stock and bond indexes. In Canada, the TSX 300 index is a broadly based measure of stock performance while the Scotia Capital Markets long bond index tracks long-term bonds.

According to Scotia Capital Markets, in the 42 years from 1957 to 1998, the TSX 300 and the Scotia Capital Markets long bond index were each better than the other exactly 21 times. A tie. The simple average of annual returns in those years was 10.93% for the TSX 300, slightly better than 9.3% for the long bond index. In terms of annual risk, the TSX 300 index lost money in 12 of the years and the Scotia Capital Markets long bond index lost money in 8. So, in this time span, stocks appear to offer a slightly higher return with slightly higher risk.

Three attributes are required for investors to succeed in the stock market:

1. Patience
2. Discipline
3. Heeding good advice

Patience means holding your ground during price dips. Investors who stayed with their investments through the 1987 tumble found they recovered most of their losses within a year. During less severe corrections, the market may recover even more quickly.

Discipline means buying low and not engaging in the frenzy of buying high, which usually indicates a market top. One excellent way to avoid panic buying or selling is called "dollar cost averaging," investing a fixed amount every week or month. Disciplined investors may also set price targets, buying when the price goes down a certain amount and selling when it goes up.

The symbols and legends in the newspaper financial section may seem as clear as a Sanskrit spelling bee. Heeding good advice will help translate the vocabulary of investing. Unless you are prepared to drop your other commitments and spend the hours required each week to research and manage your investments, good advice comes from your financial adviser.

A stock mutual fund is probably the best choice for busy investors. Professionally managed funds can take most of the guesswork out of deciding which specific stocks are good investments. Once you and your financial adviser have worked out your investment goals and capacity for risk, you can choose from among many well-managed mutual funds. During the longer term, stock mutual funds are like individual stocks. Well-managed funds are good bets to outperform more conservative investment vehicles such as T-bills or guaranteed investment certificates.

As well, a stock fund creates diversification—spreading out your risk. This is similar to "not putting all your eggs in one basket." Even if some of the stocks held by the fund are volatile, it is unlikely they will all suddenly drop in value together. By holding different stocks in a fund, the stronger ones cushion the negative effects of a few potentially volatile choices. In times of booming markets, stock funds may not do as well as individual stocks but a fund is generally less risky when markets are dropping.

There is also a risk in not investing, called "purchasing power risk." This is the risk that your dollars will deteriorate relative to a price index. If your money is in your mattress, or a regular bank savings account, price increases may eat away at your purchasing power. You may find that your dollars are worth less than when you saved them. Purchasing power risk is the financial equivalent of moths.

Don't let the moths eat away at your savings. With patience, discipline, and good advice, you should be able to weather the temporary volatility of stocks and be on your way toward building a valuable investment portfolio.

Self-Assessment on Dental Hygiene Ethics

*by Evie Jesin, RRDH, BSc**

DENTAL HYGIENISTS UNDERTAKE ETHICAL DECISION-making and exhibit professional behaviour in all aspects of the dental hygiene practice setting. Each day dental hygienists face ethical issues or ethical dilemmas. The following self-assessment exercise encourages dental hygienists to reflect on their ethical duties to clients.

1. When a client presents with candidiasis, Kaposi's sarcoma, and hairy leukoplakia, the dental hygienist, who is three months pregnant, informs the dentist that she has a headache and is unable to work on the client. By refusing to treat the client, what should the dental hygienist understand?
   a. The dental hygienist has breached the dental hygiene core value of fidelity because she suspects the client has hepatitis C infection.
   b. The dental hygienist has breached the dental hygiene core value of justice because she suspects the client has HIV-1 infection.
   c. The ethical hierarchy of values permits the dental hygienist to protect her unborn fetus by refusing care.
   d. The ethical hierarchy of values permits the dental hygienist to select clients based on health status due to her pregnancy.

2. A dental hygienist observes that a staff member has entered the treatment room and commenced the clinical re-care examination without donning a new pair of gloves. Which one of the following ethical principles has been violated?
   a. Autonomy
   b. Beneficence
   c. Justice
   d. Fidelity

3. Dental hygienists have an obligation to ensure that the clinical practice is safe for all clients. Which one of the following clients must be treated in a latex-free environment?
   a. A client with spina bifida who is allergic to avocado, banana, and kiwi fruit.
   b. A client with genitourinary anomalies who is allergic to avocado, sesame seeds, and pineapple.
   c. A client who undergoes renal dialysis three times per week and who is allergic to avocado, cherries, and lemons.
   d. A client who undergoes a heart by-pass operation and who is allergic to avocado, apples, and pears.

4. A dental hygienist observes a dental staff member advancing the dial on the autoclave machine in order to leave early from work at the end of the day. Which ethical dental hygiene core value is being compromised by this situation?
   a. Veracity
   b. Confidentiality
   c. Autonomy
   d. Beneficence

5. A dental hygienist observes a persistent thick, white hyperkeratotic lesion on the right buccal mucosa. The client reports no discomfort from the lesion that has been present for about two weeks. The client has a history of tobacco and alcohol use as well as cheek biting. Which one of the following procedures is appropriate according to the CDHA Code of Ethics?
   a. Dental hygienists should refer all white lesions for biopsy.
   b. Dental hygienists should refer all white lesions for cytologic smear technique.
   c. Dental hygienists should refer any unusual lesion that has not shown evidence of healing in two weeks and that is accompanied by significant risk factors.
   d. Dental hygienists should document any lesions and accompanying risk factors and monitor suspicious lesions until the next re-care appointment.

6. A parent refuses to allow the dental hygienist to provide topical fluoride to a child with rampant caries. The dental hygienist has discussed the treatment recommendations, the potential risks, complications, and consequences of the proposed dental hygiene treatment plan. Which one of the following principles is the parent demonstrating?
   a. Implied consent
   b. Informed consent
   c. Informed refusal
   d. Contributory negligence

7. A dental practice has a policy to reuse disposable saliva ejectors and rubber polishing cups by soaking them in a cold disinfectant solution for one hour. The dental hygienist is concerned about the infection control procedures carried out in the office. What is the most appropriate action for the dental hygienist?

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a. The dental hygienist should purchase more saliva ejectors and rubber polishing cups for her/his operatory.
b. The dental hygienist should cold-soak the items for an additional 30 minutes.
c. The dental hygienist should cold-soak the items for an additional 2 hours.
d. The dental hygienist should report the incident to the regulatory body since all clients are at risk in this practice.

8. A dental hygienist breaks the tip of a 204S scaler in the gingival sulcus. Which one of the following is the best course of action for the dental hygienist?
a. Move the client's head so the dental hygienist can see the tip and retrieve it; do not inform the client but maintain the tip in the client's chart.
b. Use air/water syringe and suction to remove broken tip; do not inform the client and maintain the tip in the client's chart.
c. Examine the gingival sulcus with a curette applied gently with a spoon-like stroke, inform the client of the occurrence, and maintain the tip in the client's chart.
d. Dry the area, examine the tooth, and inform the client of the occurrence and document the incident in the chart.

9. Information acquired about a client during the course of dental hygiene treatment is considered privileged communication even in a court of law. Exceptions to this rule are made when clients exhibit signs or symptoms of
a. Alcoholism
b. Child abuse
c. Illegal drug use
d. Over-medication due to use of multiple drugs

10. A client requires a prophylactic antibiotic regimen due to a history of infective endocarditis. The client is allergic to penicillin and refuses to take any antibiotics prior to a scaling and root planing appointment but recently the client has been diagnosed with acute leukemia. What is the appropriate course of action for the dental hygienist?
a. Accept the client's right of autonomy, proceed with no antibiotic premedication, but record the information in the client chart.
b. Accept the client's right of autonomy and proceed with no antibiotic premedication providing the client signs a release form.
c. Discuss the importance of premedication, ensure that the client has taken Clindamycin 600 mg one hour before the procedure, or no treatment is provided since the dental hygienist's core value of beneficence exceeds the client's principle of autonomy.
d. Discuss the importance of premediation, ensure that the client has taken Cephalexin 200 mg one hour before the procedure or no treatment is provided since the dental hygienist's core value of beneficence exceeds the client's principle of autonomy.

ANSWERS

1b. The dental hygienist has breached the dental hygiene core value of justice that encompasses fair treatment for all clients because candidiasis, Kaposi's sarcoma, and hairy leukoplakia are highly correlated with advanced HIV-1 infection.
References: Wilkins, Esther M. *Clinical Practice of the Dental Hygienist*. 9th ed. Baltimore (MD): Lippincott, Williams and Wilkins; 2005; p. 16, 41. *Code of Ethics*. Ottawa: CDHA; 2002.

2b. Beneficence. This core value—performing services for the good of the client—has been violated.
Reference: Wilkins, p. 16, 60. CDHA *Code of Ethics*.

3a. Clients with multiple medical surgeries or treatments for spina bifida and documented food allergies to avocado, banana, kiwi fruit, chestnuts, and papaya have a high risk of latex sensitivity.
Reference: Wilkins, p. 60-61. CDHA *Code of Ethics*.

4d. Beneficence. This core value—performing services for the good of the client—includes proper universal precautions for all clients.
Reference: Wilkins, p. 16, 70. CDHA *Code of Ethics*.

5c. Any lesion that has not shown evidence of healing in two weeks should be considered malignant until proven otherwise. A persistent thick, white, hyperkeratotic lesion should be sent for biopsy.
Reference: Wilkins, p. 185. CDHA *Code of Ethics*.

6c. The client's right to autonomy in making decisions regarding oral treatment requires the dental hygienist to respect a client's decision to refuse treatment.
Reference: Wilkins, p. 370. CDHA *Code of Ethics*.

7d. Whistle-blowing involves reporting lack of infection control procedures to the regulatory body.
Reference: Wilkins, p. 581. CDHA *Code of Ethics*.

8c. The best course of action is to examine the gingival sulcus using a curette applied gently with a spoon-like stroke and inform the client of the occurrence. Dental hygienists have an obligation to inform the client of the occurrence, to take the appropriate action, and to maintain the tip in the client's chart.
References: Wilkins, p. 674. CDHA *Code of Ethics*.

9b. Child abuse and neglect requires mandatory reporting by dental hygienists.
Reference: Wilkins, p. 966. CDHA *Code of Ethics*.

10c. Clients allergic to Penicillin should take Clindamycin 600 mg. one hour before the procedure. A client with a history of acute leukemia has a reduced capacity to resist infection and must require antibiotic premedication.
References: Wilkins, p. 122-124, 1131. CDHA *Code of Ethics*.

Investing in Oral Health — The Missing Link in the Health System

Brief Submitted to the House of Commons Standing Committee on Finance, 2004 Pre-Budget Consultation, November 18, 2004

by the Canadian Dental Hygienists Association

EXECUTIVE SUMMARY

Oral health services are the missing link in the health system. They have traditionally been neglected since they are almost exclusively privately funded and the mouth has customarily been considered as separate from the body.

This brief calls for the mouth to be reconnected to the rest of the body, a call based on research showing a link between periodontal and systemic disease. To improve the general health of Canadians, oral health services must be integrated into general health services, and public oral health programs—which have been eroded over the last several years—must be re-built.

A considerable segment of the population, including low-income Canadians, seniors, and Aboriginal peoples, has limited access to oral health services. Low income, lack of dental insurance, and difficulty with transportation to the dental office are some of the causes. Significant disparity in oral health status results, between high- and low-income Canadians and between Aboriginal peoples and non-Aboriginal peoples. This access problem can be addressed by creating federal public oral health programs for all low-income Canadians, and by increasing the funding for the Non-Insured Health Benefits Program of the First Nations and Inuit Health Branch of Health Canada.

Dental hygienists' promotion of oral health and prevention of disease is linked to improved productivity and a competitive workforce. Two initiatives in oral disease prevention—water fluoridation and fissure sealants—are particularly cost-effective. But fewer than half of Canadians have access to public water fluoridation, and fissure sealant programs are greatly underutilized in public health programs. Federal initiatives on both of these fronts would produce positive oral health outcomes for the nation.

Public health in Canada may be at the dawn of a new era with the Public Health Agency of Canada taking a prominent role in public health matters. This Agency must have a strong role in three areas: oversight of the implementation of a Canadian Oral Health Strategy; surveillance of oral health status; and increased support for front-line local public oral health programs. Meeting these goals requires strong, stable funding for federal public health functions.

Human resources planning and research are both critical in ensuring that the Canadian public receives quality oral health services. The federal government can take a lead role in collecting accurate data on oral health human resources, in ensuring oral research is appropriately funded, and in developing a mechanism for systematic review of the evidence for effectiveness of public oral health interventions.

INTRODUCTION

The Canadian Dental Hygienists Association (CDHA), a national professional organization since 1964, represents the voice of Canada's 14,000 dental hygienists. CDHA's Board of Directors is appointed by the nine provincial dental hygienists' associations and also includes representatives of the Quebec members, from the Federation of Dental Hygiene Regulatory Authorities, and the Dental Hygiene Educators of Canada. Our mission is as follows:

> ***The Canadian Dental Hygienists Association is the collective voice and vision of dental hygienists in Canada advancing the profession, supporting its members and contributing to the oral health and general well-being of the public.***

CDHA's position is that oral health—a significant component of overall health—is the right of all Canadians. Lack of access to oral health care is a critical issue and dental hygienists are vital in solving this problem. The CDHA promotes access to oral health by working in cooperation with government, health agencies, public interest groups, and other health professions. The association also serves the public by developing national positions and standards related to dental hygiene practice, education, research, and regulation. The CDHA also provides services to its members, including continuing education, professional development, and representation on various external agencies. Through this work, the association is able to better prepare its members to provide the Canadian public with high-quality, accessible oral health care.

Dental hygienists are registered primary oral health care providers,[1] so in many cases they are the first contact with

the oral health system. They have provided accessible, affordable oral health care in Canada for more than 50 years. They are integral members of the oral health system, concentrating on preventive, educational, clinical, health promotion, and therapeutic services. The dental hygiene process of care includes assessment, treatment planning, treatment, and evaluation. Registered dental hygienists have a unique body of knowledge, distinct expertise, recognized standards of education and practice, and a code of ethics.

We would like to thank the House of Commons Standing Committee on Finance for the opportunity to contribute this brief to the discussion of health financing. We look forward to working collaboratively in constructive partnership with governments at all levels, with the public, and with other stakeholders to ensure effective, long-term change that will lead to positive oral health outcomes for all Canadians.

ORAL DISEASE PREVENTION AND HEALTH PROMOTION

The Canadian health system is well equipped to provide services for many diseases. However, as the Minister of State for Public Health, Carolyn Bennett, points out, we have a "health-care system where the mouth is not considered a part of the body."[2] Recent research showing a link between periodontal disease and systemic disease provides an impetus for reconnecting the mouth with the body. Periodontal disease is a serious gum infection that destroys attachment fibres and supporting bone that hold teeth in the mouth. Periodontal disease is linked with heart disease, preterm low birth weight babies, diabetes mellitus, and respiratory disease.[3,4,5]

Research on these links provides a persuasive argument for discarding the notion that oral health is a separate entity from general health:

- Diabetic subjects have a reduced need for insulin following periodontal treatment.[6,7]
- Diabetic subjects' blood glucose levels are easier to control after dental hygiene treatment for periodontitis. In fact, they can have as much as an 11 percent reduction in glycated hemoglobin, a measure of long-term blood sugar levels.
- Risk of respiratory infection in high-risk individuals is reduced by dental hygiene treatment of periodontal disease; in one study, it was reduced by about 50 percent.[8]
- Women with periodontal disease show a prevalence of 19.9 percent preterm births.[9]
- In one study on women with periodontitis, as much as an 84 percent reduction in spontaneous preterm births occurred when these women received dental hygiene treatment involving scaling and root planning.[10]
- Persons with periodontal disease have a 1.04 to 2.8 fold greater risk of incurring cardiovascular disease than persons without periodontal disease.
- Studies also show that loss of life and disability due to cardiovascular disease may be prevented with dental hygiene prevention and treatment of periodontal disease.

Dental hygienists are registered primary oral health care providers, so in many cases they are the first contact with the oral health system.

To appreciate the significance of these oral-systemic disease links, we need to put the risk factors and ratios into perspective. The risk of heart disease from poor oral health may not seem significant until we recognize that cardiovascular diseases comprise one of the major causes of

RÉSUMÉ

Les services d'hygiène bucco-dentaire constituent le chaînon manquant dans le système de santé. On les a toujours négligés, étant donné qu'ils sont financés presque exclusivement par des régimes privés et qu'on a l'habitude de dissocier la bouche du corps.

Le présent mémoire demande que la bouche soit rattachée de nouveau au reste du corps. Cette demande s'appuie sur des recherches selon lesquelles il existe un lien entre la maladie du périodonte et la maladie systémique. Si l'on veut améliorer la santé générale des Canadiens et des Canadiennes, il faudra intégrer les services de santé bucco-dentaire dans les services de santé généraux et reconstruire les programmes de santé bucco-dentaire, car ils se sont érodés ces dernières années.

Un segment considérable de la population a un accès limité aux services de santé bucco-dentaire – les Canadiennes et les Canadiens à faible revenu, les personnes âgées et les Autochtones, notamment. Cela s'explique entre autres par la faiblesse du revenu, l'absence d'assurance dentaire et la difficulté à se rendre au cabinet du dentiste. Ce phénomène engendre une importante disparité de situation sur le plan de la santé bucco-dentaire entre les Canadiens à revenu élevé et ceux à faible revenu ainsi qu'entre les Autochtones et les non-Autochtones. La création, par le gouvernement fédéral, de programmes publics de santé bucco-dentaire à l'intention de tous les Canadiens à faible revenu et l'accroissement du financement destiné au Programme des services de santé non assurés de la Direction générale de la santé des Premières nations et des Inuits de Santé Canada permettraient de régler ce problème d'accès.

La promotion, par les hygiénistes dentaires, de la santé bucco-dentaire et de la prévention de la maladie est liée à l'amélioration de la productivité et à la compétitivité de la main-d'œuvre. Deux mesures en matière de prévention de la maladie bucco-dentaire – la fluoration de l'eau et le ciment dentaire – sont particulièrement rentables. Mais moins de

death.[11] Preterm low birth weight (PLBW) babies create a significant public health cost, since preterm delivery plus low birth weight is a major cause of perinatal morbidity. This includes neurological abnormalities, mild learning disabilities, breathing problems, such as asthma and developmental problems.[12] One study calculated that the reduction in PLBW babies due to dental hygiene treatment would prevent 45,000 preterm births in the United States each year. This would save $1 billion in intensive care costs alone.[13]

As periodontal disease is a potentially modifiable risk factor for different systemic diseases, one can conclude from this research that dental hygienists' work in oral health promotion and disease prevention can help decrease the incidence and severity of these diseases. We need to stop viewing the teeth and mouth as second-class body parts and to see their health as an essential component of overall health. Oral health promotion and disease prevention services should be, not a luxury, but a way to improve overall health and reduce long-term health care costs.

A number of health experts confirm that health promotion and disease prevention programs are successful in reducing general health care costs. "Preventive health activities are estimated to be 6 to 45 times more effective than dealing with health problems after the fact."[14] Health policy experts declare that health promotion and disease prevention can generate substantial long-term benefits, both by reducing overall costs to the health care system and by improving quality of life.[15] There is also mounting evidence that workplace health promotion, when included in a broader, more integrated approach to employee health, can result in cost savings, higher levels of productivity, and enhanced worker engagement and retention. A recent report from the United States identifies the cost savings for workplace health promotion programs: for every US$1 spent on workplace health promotion programs, the organization saved US$1.50 to $2.50 on health care costs and absenteeism.[16]

An ounce of prevention equals a pound of cure. This old adage is still applicable today, particularly since oral diseases are for the most part preventable. Money spent on oral health promotion and disease prevention programs will help produce a better return on the health care dollar, a competitive workforce, and a robust economy for a number of reasons. Such an investment decreases the need for oral health care services. This is definitely less expensive than the alternative of treating oral disease after it occurs. It also helps to lower losses in productivity due to ill health. This in turn enables workers to contribute more to federal revenues through tax contributions.

la moitié de la population canadienne a accès à la fluoration de l'eau par les services publics; quant aux programmes de ciment dentaire, ils sont grandement sous-utilisés dans les programmes de santé publique. Des initiatives fédérales sur ces deux fronts produiraient des résultats positifs sur le plan de la santé bucco-dentaire dans tout le pays.

La santé publique au Canada est peut-être à l'aube d'une nouvelle ère : l'Agence de santé publique du Canada joue en effet un rôle de premier plan dans les questions de santé publique. Cette agence doit avoir un rôle clé dans trois domaines : la supervision de la mise en œuvre d'une Stratégie canadienne de santé bucco-dentaire; la surveillance de la situation en santé bucco-dentaire; enfin, un soutien accru pour les programmes publics locaux de première ligne en santé bucco-dentaire. Pour atteindre ces objectifs, il faudra financer de façon solide et stable les fonctions qu'exerce le gouvernement fédéral en santé publique.

La planification des ressources humaines et la recherche sont toutes deux essentielles pour que le public canadien reçoive des services de santé bucco-dentaire de qualité. Le gouvernement fédéral a la possibilité d'assumer un rôle de chef de file : il peut recueillir des données exactes sur les ressources humaines en santé bucco-dentaire, s'assurer que la recherche dans ce domaine est financée adéquatement et mettre au point un mécanisme pour examiner systématiquement les preuves de l'efficacité des interventions publiques en santé bucco-dentaire.

The following studies and reports provide graphic examples of how dental hygienists' health promotion and disease prevention activities can prevent costly health care expenses. The studies/reports also show how oral diseases, because of their link with systemic health diseases and illnesses, can increase health costs. In 1997, the British Columbia Provincial Health Officer's Annual Report concluded that dental procedures are the most common surgical procedures that children receive in hospitals.[17] In-hospital dental procedures, usually as day-surgeries, include tooth extractions, fillings, and other restorative dental work. All of these are carried out under general anesthesia. Many of these surgeries could be prevented if more children received oral health instruction and preventive services from dental hygienists. The overall financial savings due to reduced surgical costs for nurses, anesthetists, and dentists illustrate the cost-effectiveness of the care provided by dental hygienists.

Fissure sealants have been tested since 1979.[18] High-quality, level A research[19] consistently shows this preventive measure is highly effective in preventing pit and fissure decay. Economic benefits also result from fissure sealants, as shown by nine studies: one from Canada; five from Australia, New Zealand and Europe; and three from the United States.[20] This research has been overlooked for the most part, and as a result, fissure sealants are greatly underutilized in the public health system. We call on the federal government to implement a national public oral health sealant program that targets high-risk individuals.

The majority of public health prevention measures lack economic evaluations. However, water fluoridation has strong evidence to support its use. A May 2004 report describes the economic benefits of community water fluoridation.[21] Eight studies mentioned in this report indicated significant cost-saving results from community water fluoridation. Although water fluoridation has high initial costs and delayed benefits, the net benefits for the payer were as high as $5.3 million. Since Health Canada reports that only 40 percent[22] of Canadians have access to fluoridated water, there is a strong role for public health to play in this area.

Statistics from 1998 show that 1,022 Canadians died from oral cancers.[23] But this high mortality rate can be prevented and oral cancers can be successfully treated when diagnosed at an early stage—a fortunate situation. Dental hygienists are actively involved in screening for and preventing oral cancer by obtaining health history information, which may reveal possible risk factors for oral cancers; conducting oral cancer examinations; and tobacco cessation counselling.

Evidence also reveals that oral health promotion and disease prevention have a positive impact on the economy through increased productivity. A lack of productivity in the workforce is partly due to absenteeism because of poor health—individuals are either ill themselves or have to care for a child with health problems. Since periodontal disease and caries (tooth decay) are prevalent diseases, contribute to poor overall health, and directly impact on important aspects of life—including attendance and performance at work—they contribute to a lack of productivity in the Canadian economy. Data from a 2003 U.S. report[24] demonstrates the loss of productivity from oral diseases: adults lost more than 164 million work hours per year due to dental disease or dental visits. This is a sizeable loss of productivity for the population as a whole.

A shift to a health promotion and disease prevention model from the current disease treatment focus will mean a restructuring of oral health human resources. Such a shift in resources would reduce costs since the majority of professional costs would be for dental hygienists whose salaries are, on average, approximately 40 percent of dentists' earnings.

Money spent on oral health promotion and disease prevention programs will help produce a better return on the health care dollar.

CDHA asserts that dental hygienists' preventive work can contribute to a productive, competitive, healthy workforce. This in turn would enhance Canada's economic position by increasing the standard and quality of life enjoyed by Canadians. In addition, dental hygienists can help contain health care costs by reducing the costs associated with oral health and systemic problems linked to periodontal diseases. Unless our health care services and the way we deliver them are refocused on illness *prevention* rather than on just treatment, Canadians will be mired in a spiral of increasing public and private expenditures.

CDHA RECOMMENDS THAT:

- the federal government call on the provincial/territorial governments to earmark 10 percent of the increased resources provided in the First Ministers 2004 10-year plan for public health activities including,
  - oral health promotion and disease prevention programs, including programs in schools, community health centres, and long-term care facilities;
  - oral health programs integrated into pre-natal public health education, provided to individuals at high risk for respiratory infection in intensive care units and long-term care facilities, and to persons with diabetes;
  - water fluoridation and fissure sealant programs.

ACCESS TO CARE

In the existing health care system, where services are predominantly publicly funded, public oral health services are an anomaly. Virtually all oral health services are privately delivered and privately funded, mainly through employer-sponsored oral health benefits. Since oral health care is predominantly a private enterprise and very little is offered publicly, it comes as no surprise that the government takes far less responsibility for oral health care than

the individual citizen. What is surprising is that among OECD nations, Canada had the third highest per capita oral health expenditures, but the second lowest per capita *public* oral health expenditures.[25] We are falling far below other OECD nations in our responsibility to assist those in need of oral health care.

How does this lack of government financial responsibility impact Canadians? Although 63 percent of Canadians were able to access oral health services in 2003, 37 percent—a considerable part of the population—had no access to oral health services. Daily functioning and quality of life for these people continues to be profoundly affected by oral pain, abscesses, masticatory problems, infections, and missing teeth. Access to oral health services varies widely between the have and have-not provinces, from a low of 46 percent in Newfoundland and Labrador to highs of 70 percent in Ontario and 67 percent in British Columbia.[26] Currently in Canada, 60 to 80 percent of dental caries are in disadvantaged and remote populations, including Aboriginal peoples, the elderly, and people who are cognitively and/or physically disabled.[27]

"The cost of a dental visit is the same as a month's worth of groceries. What would you pick?"

Low-income Canadians and seniors

Dental insurance coverage is strongly associated with the level of household income, and both insurance coverage and income are related to oral health service use. At the highest income level, the rate of coverage was about triple that of the lowest level (70 percent vs. 23 percent).[28] In addition, over 70 percent of individuals with dental insurance visited the dentist in the past 12 months compared with 47 percent of those without insurance.[29] Between 20 and 51 percent of citizens with incomes below the national median said they needed oral health care but did not get it because of costs.[30]

This creates a significant disparity in oral health status between high- and low-income Canadians. Numerous studies have documented that individuals in lower socio-economic groups have inferior oral health compared with those in wealthier groups.[31,32,33,34] Regardless of the reasons for the differences in rates from one population to the next, it is clear that oral health care is an example of the inverse-care law: individuals with the greatest need for services tend to be those with the least ability to pay for services and therefore with the lowest level of access to services.

For lower socio-economic individuals and families, limited finances must first be spent on food, shelter, and clothing. Prevention and treatment of oral disease has to take a back seat. An unemployed mother of two children describes the stark choices she faces when managing the many demands on her limited finances: "The cost of a dental visit is the same as a month's worth of groceries. What would you pick?"[35]

Poor oral health has a range of consequences including systemic health outcomes (described in the section above), but it also negatively affects functional well-being. There are direct health effects including pain, difficulty eating, and the avoidance of certain foods, which can lead to wider health problems. There are also social and economic consequences, such as loss of self-esteem, impaired speech, restricted social and community participation. Overall, there is a negative impact on a person's health status and quality of life.

Children from low socio-economic status (LSS) families are particularly susceptible to oral health problems and severe tooth decay. They suffer twice as many dental caries as their more affluent peers.[36,37,38,39,40] These children are not only more susceptible to poor oral health, their general health is also compromised as healthy teeth contribute in a number of ways to a child's health, growth, and development. Children's teeth are involved in nutritional intake, development of proper speech, and normal jaw development. They also guide the permanent teeth into proper position and contribute to a child's appearance and healthy self-esteem. In addition, severe dental decay undermines the quality of life of young children through pain and sleeping, eating, and behavioural problems and can be a contributing factor in a "failure to thrive."[41]

Childhood caries does not get the attention it warrants. In 1997, B.C.'s Provincial Health officer reported that dental treatments were the most common hospital-based surgical procedure for children under the age of 14, at an estimated cost of about $2.9 million for hospitalization, excluding the cost of dental treatment.[42] This high cost of treating oral diseases, plus the cost of human suffering, could be avoided by improving public oral health programs. We must shift the focus from invasive tooth surgery to preventive public oral health programs for children. These programs could be offered in schools and community health centres and a simple application of fluoride varnish or fissure sealant applied by a dental hygienist could contribute significantly to shifting this focus.

Provincial governments provide a range of oral health programs; however, these are rife with administrative difficulties for the provider and program limitations for the client. For example, in Toronto, Ontario, and Victoria, British Columbia, between 20 and 23 percent of low-income clients were refused dental treatment by a dentist,[43,44] mainly because of the low reimbursement rate for oral health professionals.[45] The provincial ministry's fee guide is up to 50 percent below the dentists' fee schedule. A similar situation is reported in Belleville, Ontario, where public health officials reported that welfare recipients have trouble getting dental treatments partly due to the low fees paid by the province compared with market rates.[46]

Program flaws include limited coverage of certain oral health services. This means that individuals must pay for a number of expenses from their own pocket and in many instances, they cannot afford these services that are then denied.[47] For individuals with limited finances and skills to advocate for themselves, these system flaws have a profoundly negative effect on their oral health.

The current fee-for-service, private-practice delivery of oral health care does not ensure adequate service delivery for many seniors. In fact, the likelihood of having access to oral health services declines steadily with age, with only 46 percent of seniors accessing oral health services.[48] This lack of access shows in the high rates of oral disease that has become so prevalent that some health professionals refer to it as a "silent epidemic."[49] The following Canadian and American statistics reveal the extent and severity of seniors' oral disease:

- The root caries rate was more than three times greater for seniors over the age of 65 than for those under age 45.[50]
- For people aged 65 to 74, 31 percent had tooth surfaces decayed or filled, compared with 10 percent of people aged 18 to 24.[51]
- Cancers of the lip, tongue, mouth, gum, pharynx, and salivary glands increase with age.[52]
- Over half of adults aged 55 or more have periodontitis.[53,54]
- Of homebound seniors, 60 to 90 percent reported a need for dental services but only 26 percent reported visiting a dentist at least once every two years; 12 to 16 percent had not visited a dentist in over five years.[55,56,57]
- For seniors in institutions, 9 to 25 percent see a dentist once a year; 30 to 78 percent have not visited a dentist in over five years.[58,59,60]
- A summary of six studies indicates a high degree of dental disease and unacceptable levels of oral health in residents of nursing homes and long-term care facilities.[61,62,63, 64,65]

Despite this well-established high need, seniors—particularly those in long-term care facilities—have trouble accessing services for a number of reasons: poverty, restricted mobility, transportation difficulties, poor overall health, and long-term care facilities with a limited capacity to deliver oral health services. As well, retirement often means losing private dental insurance. In fact, Canada has a startling rate of 75 percent of senior men and 83 percent of senior women who do not have dental insurance.[66] This lack of coverage for women, who account for up to three-quarters of the institutionalized elderly,[67] indicates that the provision of oral health care services in long-term care facilities is an important women's issue.

Furthermore, a demographic and epidemiological study shows that seniors' oral health concerns have changed over time. Trends show lifespans increasing with fewer and/or less severe carious teeth but a much greater potential for gingivitis and mild forms of periodontitis.[68] Oral diseases and disorders are progressive and cumulative if untreated and thus become more complex over time. These factors will place greater demands on the oral health system and on the limited budgets of seniors. In addition, baby boomers' unprecedented retention of natural teeth will have enormous implications for oral health care delivery systems.[69] If current trends persist, millions of seniors will needlessly lose teeth and endure pain. Also, seniors' oral infections can contribute to worsened chronic or systemic diseases to which they may have less immunity, compromising their overall health and well-being. Oral health problems can also lead to further general health problems such as malnutrition and weight loss.

CDHA RECOMMENDS:

- creation of federal public oral health programs for all low-income Canadians, including those receiving social assistance and those working, seniors, and persons with disabilities; these programs should include basic oral health programs and services and necessary restoration, maintenance, prevention, and health promotion and should be offered in schools, community health centres, long-term care facilities, and in outreach programs for homebound seniors and persons with disabilities;
- government reimbursement schedules for oral health care providers that are based on average market rates.

Aboriginal peoples

The Canadian Dental Hygienists Association applauds the federal government's September 2004 announcement of $700 million for greater Aboriginal participation in the health professions, chronic diseases, and the Aboriginal Health Transition Fund to better adapt existing health care services to Aboriginal needs. It is possible that some of this money may filter down to oral health services for Aboriginal communities. However, this financial injection omits the grossly underfunded Health Canada, Non-Insured Health Benefits Program. This program desperately needs increased funding so that it can deliver necessary and effective oral health services.

Aboriginal peoples' oral health is a stain on Canada's reputation. A wide gap exists between the oral health status of Aboriginal children and non-Aboriginal children. In 2003, dental decay rates for Aboriginal children in Ontario were two to five times higher than rates among non-Aboriginal children.[70] In 2004 in Nunavut, about half of infants suffer from a chronic epidemic of baby bottle tooth decay and 25 percent need dental surgery with general anesthetic to have rotting teeth removed.[71] In addition, in 1999–2000, the dental decay rates for First Nations and Inuit people of all ages ranged from three to five times greater than the non-Aboriginal Canadian population.[72]

Although the Non-Insured Health Benefits (NIHB) program at Health Canada provides some oral health services to Aboriginal peoples, this program fails Aboriginal peoples for a number of reasons: underfunding, a lack of coordination of services, and difficulties with benefits administration. In addition, limited numbers of professionals work in rural and northern communities so services may be either non-existent or require lengthy travel.

There are a number of human resources, administrative, and cost inefficiencies that plague the program. The NIHB program reaches only 38 percent of the eligible population, since oral health providers are not located in all of the areas where Aboriginal peoples live.[73,74] Even the dentists who are providing services in Aboriginal communities are opting out of the NIHB program because of the lengthy administrative requirements.[75,76,77] In addition, clients find program coverage and services confusing with substantial administrative requirements.[78]

A dental hygienist from the Sandy Lake Reserve provides a clear example of program cost inefficiencies. She sees many children with cellulitis, an infection of the soft tissue, that is related to dental caries. These children must take a one-hour plane ride to the nearest hospital in Sioux Lookout. It is likely a similar situation occurs in a number of other northern communities. Although the NIHB program does not expect to have a breakdown of transportation costs for the dental program until 2004, an analysis of NIHB expenditures by benefit indicate that transportation costs are the second largest cost after pharmacy.[79] If the NIHB program for children made use of dental hygiene services, including the application of sealants and topical fluoride, children's pain and suffering and transportation costs would be reduced.

In June 2003, the House of Commons Standing Committee on Health made a number of important recommendations to the House of Commons on Health Canada changes to improve First Nations and Inuit oral health.[80] Highlights of these recommendations follow:

- Permit and facilitate a more independent role for dental hygienists, allowing them to bill directly up to a predetermined amount of $200 per client annually.
- Undertake a new approach to oral health based on a wellness model that gives priority to promotion and prevention strategies.
- Improve public education and awareness on oral health as a key element of overall well-being.

The federal government has a responsibility to expand the oral health safety net so all Canadians have equal access to oral health care. This call to action is in keeping with a new CIHI publication *Improving the Health of Canadians*,[81] which calls for the federal government to do a better job in addressing the inequalities in health in Canada. We must summon the political will to invest in oral health if we are to decrease the health disparities in Canada.

THE CDHA RECOMMENDS:

increased financial support for the NIHB program of the First Nations and Inuit Health Branch of Health Canada in order to

- undertake a new approach to oral health based on a wellness model that gives priority to promotion and prevention strategies;
- make better use of mobile dental hygienists to serve remote areas;
- permit and facilitate a more independent role for dental hygienists allowing them to bill directly up to a predetermined amount of $200 per client annually;
- streamline the NIHB program to reduce administrative requirements; improve public education and awareness on oral health as a key element of overall well-being.

PUBLIC HEALTH AGENCY OF CANADA FUNDING

Public health in Canada may be at the dawn of a new era with the Public Health Agency of Canada taking a prominent role in public health matters. The Canadian Dental Hygienists Association (CDHA) commends the government for establishing this new Agency and appointing the new Chief Public Health Officer. It is a significant step forward for Canadians to have an agency with the mandate to provide leadership and action on public health matters and address population health from a broad perspective. CDHA sees a strong role for the new Public Health Agency in three different areas: the oversight of the implementation of a Canadian Oral Health Strategy; surveillance of oral health status; and increased support for front-line regional/local public oral health programs.

We anticipate that the Agency will incorporate into its planning and development of a Canadian Public Health Strategy some recent work undertaken in the oral health field. In 2004, the Canadian Oral Health Strategy[82] was developed by the Federal/Provincial/ Territorial Dental Directors, in consultation with numerous oral health organizations including the Canadian Dental Hygienists Association. This Strategy highlights some practical goals and strategies for the improvement of the oral health of Canadians. There is an urgent need for the Public Health Agency of Canada to take a leadership role on the following activities:

- Creation of a Chief Oral Health Officer position located within the Public Health Agency, to oversee oral health policies at all levels of government, oversee oral health issues from a national perspective, oversee the recommendations in the Canadian Oral Health Strategy, and make centralized, integrated decision-making about oral health care delivery. Other than those administering and delivering the First Nations and Inuit Health Branch programs, there are currently no oral health personnel within Health Canada. Therefore, in order to create a higher priority for oral health in the federal government, there is a need to create a high-level position to oversee this area.
- Provide comprehensive public oral health awareness and education programs, including programs in schools, health units, community health centres, and long-term care facilities.
- Ensure that oral health issues are included in all chronic disease initiatives.

Surveillance information on oral health provides decision makers and clinical practitioners with data that are crucial to decision making about policy, practice, and programs. This information is also important for understanding the health status of a population; it allows the public to improve its own self-care and the oral health practitioner to provide evidence-based practice. In the long term, this information contributes to improved health outcomes for individuals and populations.

Health Canada is to be commended on the development of a national framework for health surveillance. For the most part, however, diabetes and breast cancer are the only chronic diseases with a national surveillance system. Despite the recently recognized connection between oral health and general health, national surveillance information on oral health diseases, risk determinants, and the impact of treatment on outcomes is nearly non-existent. A national oral health surveillance system that would provide information for a national report on Canada's oral health status can be a key driver for a public oral health system.

Health Canada is to be commended on the development of a national framework for health surveillance.

The Public Health Agency of Canada also needs to provide funding for front-line local and regional oral health programs. Front-line programs are suffering a severe blow from a reduction or discontinuation of public oral health programs. For example, in Vancouver, the Ministry of Children and Family Development discontinued a busing program that brought more than 330 children from the Lower Mainland to the University of British Columbia for free dental care each spring.[83] In September 2004, Prince Edward Island made significant changes to the children's dental care program. This program was once one of the most inclusive and extensive programs in Canada but now families earning over $30,000 must pay a $15 per child registration fee and 20 percent of the treatment services.[84] In September 2004, two dental health educator positions were abolished in the Province of Saskatchewan, with budget pressures cited as the justification.[85] In 2003, in Alberta, the province discontinued funding for a dental care program that helped more than 2,700 Calgary seniors in nursing homes.[86] These are just several examples of the decline of the public oral health system over the last several years.

CDHA RECOMMENDS:

- The federal government increase to $1.4 billion per year its core funding for federal public health functions, including a portion earmarked specifically for the operation of the Public Health Agency of Canada and front-line oral health programs and services.

HEALTH HUMAN RESOURCES AND RESEARCH

Human resources planning and research are both critical for ensuring the Canadian public receives quality oral health services. Oral health human resources are also a central issue in resolving the oral health disparities that exist across Canada. The Canadian Dental Hygienists Association has been involved with the Oral Health Sector Study, a study that is vital for conducting long-term planning for the delivery of oral health services. Unfortunately, this project has two significant drawbacks. First, there were some difficulties with data availability. Until a system is in place to appropriately gather accurate data on the oral

health sector, this project will grind to a halt. Second, this study along with the six other health human resources sector studies are all conducted in isolation. Conducting an integrated study is particularly timely, given the recent emphasis on collaborative patient-centred care and evidence that the provision of oral health services in an integrated setting with other health providers improves access to oral health care for Canadians.[87]

CDHA welcomes the government's 2004 announcement of $15 million to create seven Centres for Research Development, to be funded by CIHR's Institute of Population and Public Health. These Centres will contribute significantly to resolving the disparity between scientific achievements and the delivery of public health. Population health and the determinants of health are important in oral health research and practice, since there is evidence that levels of employment, income, dental insurance coverage, and education have an impact on oral health status.[88] However, overall, there is a dearth of Canadian research on oral health. There are no baseline data reflecting the oral health status of Canadians and no pan-Canadian standardized method for assessing oral health status. This makes it difficult to compare provincial/territorial studies. Furthermore, there is little research on the evidence for the effectiveness of preventive oral health measures. We look to these Centres to ensure that oral disease prevention and health promotion are an integral aspect of the research undertaken in at least one of the seven Centres.

CDHA welcomes the government's 2004 announcement of $15 million to create seven Centres for Research Development.

The development of a national oral health research agenda has been prominent on the agenda of several organizations. The Institute of Musculoskeletal Health and Arthritis recently laid the groundwork for a national oral health research strategy that includes both research priorities and training programs for oral health research.[89] The Canadian Dental Hygienists Association has developed a Dental Hygiene Research Agenda[90] that is consistent with the strategic initiatives of Canadian Institutes of Health Research's (CIHR) first corporate plan.[91] The seven values that guide CIHR are similar to the five guiding principles identified by CDHA. In addition, CIHR's research agenda, with attention to the prevention of illness and the promotion of health, fits well with dental hygienists' research priorities focusing on oral health promotion and disease prevention. The CIHR strategic initiatives also identify as a priority the strengthening of Canada's health research community. This is in keeping with the CDHA's recommendation for increasing dental hygiene research capacity. CDHA will look to CIHR for funding to implement many of the recommendations identified in our Dental Hygiene Research Agenda. The impact of dental hygiene research will be improved health for individuals and populations and affirmation of the health benefits of dental hygiene services.

CDHA RECOMMENDS:

- the federal government allocates sufficient funds through Human Resources and Skills Development Canada and Health Canada to:
  - collect accurate data on oral health human resources; and
  - conduct a multidisciplinary sectoral study of Canada's public health workforce.
- CIHR's Institute of Population and Public Health ensure that oral disease prevention and health promotion are integral aspects of the research they undertake, including research on the efficacy of oral health promotion and disease prevention.
- the Public Health Agency of Canada have a mechanism for systematic review of the evidence for effectiveness of public oral health interventions.

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CDHA will look to CIHR for funding to implement many of the recommendations identified in our Dental Hygiene Research Agenda.

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Probing the Net

by CDHA Staff

WE CONTINUE TO FIND INTERESTING AND INFORMative sites on the various types of research. The first group of sites introduces you to the various types of research and research techniques. The second group points out two search engines, one dedicated to oral concerns, the second a newly developed site by Google that searches publications. With the snow and freezing rain making Internet surfing very attractive (and warm), your checking out these sites will be richly rewarded.

An Introduction to Qualitative Research

www.uea.ac.uk/care/elu/Issues/Research/Res1Cont.html

This site is on the Enquiry Learning Unit (ELU) website of the Centre for Applied Research in Education, University of East Anglia, Norwich, England. "ELU was initially developed to respond to the increasing demands of professionals for learning to be founded upon real life professional practice." This particular guide "has been used as an introductory text…. It is not meant to be definitive. Its purpose is to begin the process of people thinking about doing their own research for their own purposes."

Using Interviews in Research

http://www.rider.edu/~suler/interviews.html

A concise website that gives good but succinct information about interviews, the unstructured versus the structured interview, content versus process of the interview, steps in conducting the interview, basic interview techniques, ending the interview, taking notes, and how to use the interview data in your paper.

Research Techniques: Guideposts to Value (Public Works and Government Services Canada)

www.communication.gc.ca/services/por_rop/rtr_toc.html

This on-line publication gives a good overview of various research techniques (as the name implies!). It looks at the two fundamental approaches to research (qualitative and quantitative), gives sample scenarios and explains why a certain approach would be better than another, discusses data collection methods in the section "Do I Need a Survey or Focus Groups," looks at emerging technologies (on-line research techniques), and has a glossary of key research terms.

Introduction to Interviewing Techniques

www.wpi.edu/Academics/Depts/IGSD/IQPHbook/ch11.html#11

This is from the book Handbook for IQP Advisors and Students, prepared for the Interdisciplinary and Global Studies Division, Worcester Polytechnic Institute, Worcester, Maine. This chapter concentrates on "in-depth qualitative interviews, focus groups, and standardized interviews."

The Qualitative Report

www.nova.edu/ssss/QR/index.html

This site, "An online journal dedicated to qualitative research since 1990," has the full text of its articles online as well as valuable links such as Qualitative Research Web Sites, Journals, Quality in Qualitative Research References. One feature is Practicing Qualitative Research. "This section of the journal includes shorter pieces in which the author(s) present exercises, activities, and techniques for qualitative researchers to try. The goal of this section is to provide practitioners and teachers of qualitative research with an array of practical, hands-on activities through which they or their students can hone their skills and improve their practice of and thinking about qualitative research."

EviDents Search Engine for Evidence-Based Dentistry

http://medinformatics.uthscsa.edu/EviDents/

A very specialized search engine with the ability to narrow searches to certain clinical areas such as Endodontics, Oral Medicine/Oral Pathology, Periodontics, Orthodontics, Prosthodontics, Implants, TMD. You can also further narrow the search to the areas of Diagnosis, Treatment, Prognosis, Etiology/Causation. You can search just for Systematic Reviews if you wish or exclude those studies that use only animal subjects. The site searches PubMed for appropriate results.

Google Scholar

http://scholar.google.com/

This site, launched with high expectations, is well worth exploring. From the section "About Google Scholar" is this description: "Google Scholar enables you to search specifically for scholarly literature, including peer-reviewed papers, theses, books, preprints, abstracts and technical reports from all broad areas of research. Use Google Scholar to find articles from a wide variety of academic publishers, professional societies, preprint repositories and universities, as well as scholarly articles available across the web." It is easy to use, fast, and quite impressive.

Until next time…

CDHA Board Meeting, October 16, 2004, in Ottawa —Highlights

The Board accepted the monitoring reports provided by the Executive Director for the policies of the organization. These reports showed progress on the Ends of the association as well as assurance that the Executive Limitations have not been violated. The Board reviewed the Ends items for decision and made no revisions to them.

The Board reviewed its compliance with its governing policies and made revisions to the policies as appropriate. The Board will provide CDHA members with a timely report on highlights of relevant information following each board meeting.

CDHA is honoured to have been chosen as the host country for this international symposium scheduled for July 2007. The decision followed a presentation at this year's symposium in Madrid, Spain, by the CDHA President, Patty Wickstrom. The theme for the Toronto meeting is "The Many Cultures of Dental Hygiene," a fitting subject this international federation.

As it is very important for the Board to be connected with the association's membership, various ways of engaging our 11,000 members were discussed and a plan was drafted. The Board will continue to hold town hall meetings at the annual conference and will conduct a state-of-the-community assessment survey in the coming months with a random sample of the membership. The aim of this survey is to capture a sense of the common needs and interests and to exchange ideas to allow the Board to develop its collective voice on issues of mutual concern.

Feedback is always welcomed. The report from the town hall meeting in June 2004 was discussed and it was decided to implement a simple e-mail address for Board members to receive communications from those they represent.

The next Board meeting is scheduled for March 17-19, 2005.

Call for Nominations

CDHA Distinguished Service Award and Life Membership

The **CDHA Distinguished Service Award** recognizes significant contributions for a minimum of four years by a dental hygienist or other person to the advancement of the dental hygiene profession or of CDHA at the national level.

The nominee's contribution may include, but is not limited to, work on a task force, committee, or innovative project. The service must have been national in focus, made a positive impact on the profession, and involved a substantial amount of personal commitment on behalf of the recipient.

CDHA Life Membership is awarded to an active member, in good standing, of the Canadian Dental Hygienists Association, who has made an outstanding contribution to both dental hygiene and the association at the national level.

Dental hygienists nominated for Life Membership shall fulfill the following qualifications:

1. They will have maintained continuous CDHA membership in the active category for a minimum of 15 years.
2. They will have been involved in dental hygiene at the national level and in an official capacity for a minimum of 10 years.
3. They will have made a significant contribution to the growth and achievement of the national association, compared with others involved for the same length of time and in similar capacities.

For nominations to be considered by CDHA, we require the written support of two CDHA members in good standing. Nominators may submit only one nomination for this award. Submissions must be accompanied by a detailed curriculum vitae of the individual being nominated, as well as an outline of accomplishments at the national level that the nominators consider worth of this award.

The Distinguished Service Award and Life Membership Award will be bestowed during CDHA's 16th Annual Professional Conference in Ottawa, Ontario, in June 2005. The Board of Directors will designate the Distinguished Service Award recipient and Life Member Award at the Board meeting in March 2005. It would therefore be appreciated if you would submit your recommendations no later than February 28, 2005. Submissions should be sent to the Canadian Dental Hygienists Association, 96 Centrepointe Drive, Ottawa, ON K2G 6B1.

Call for Nominations

Scientific Committee Chair, CDHA/IFDH 2007 Symposium Scientific Advisory Committee

CDHA is hosting the International Federation of Dental Hygiene (IFDH) International Symposium in Toronto, Ontario, in July 2007. A Scientific Committee will be established to assist in the development and implementation of the symposium's scientific program. The Scientific Committee Chair will head this committee.

The Scientific Committee Chair will assist CDHA with the selection of the committee members and will provide leadership and guidance to the committee. The Chair would also oversee the development of guidelines/themes for the call for abstracts for oral presentations, poster presentations, and table displays; oversee the development of evaluation criteria for abstracts; assist in the blind peer-review process of submitted abstracts; and assist CDHA with any other scientific program requirements as they arise.

The successful candidate will have a masters or doctoral degree, experience in research, and be a published author in a peer-reviewed journal. He or she must be a CDHA member in good standing and have demonstrated leadership qualities.

CDHA invites its members to submit nominations for the IFDH Symposium Scientific Committee Chair position. We also encourage and welcome self-nominations from interested individuals. The appointment will commence no later than May 1, 2005, and will end in August 2007, after the Symposium closes. The successful candidate will be expected to attend the Symposium in Toronto; CDHA will cover expenses related to his or her participation on the committee and in the Symposium.

The deadline for nominations is 12 midnight Eastern Time, Friday, March 18, 2005. Nominations may be submitted by e-mail to **abstracts@cdha.ca** or by fax to **613-224-7283.**

Invitations will be sent to candidates for the IFDH Symposium Scientific Committee after the Scientific Committee Chair has been selected. Further details will be posted on the CDHA website and in the *Canadian Journal of Dental Hygiene.*

NDHW Report from Saskatchewan

In the March/April 2004 issue of Probe, the winners of the Oral-B Health Promotion Awards were profiled. In the Clinic Teams Category, Saskatchewan's Sheila Petrollini and Veronica Hermiston triumphed. They were going for a Guinness World Record for "simultaneous dental flossing—using one continuous piece of floss"!

Well, they are now holders of the world record and want to show how they "strutted their stuff" in the local community parade in June 2004. In the parade are clients, colleagues, and family, some of whom are also record holders. In their matching uniforms, they tossed Satin Floss samples into the crowd. The wind made it a little difficult to hold the signs steady but we certainly had a lot of fun and enjoyed a good response from the community.

Keep flossing!

– Veronica Hermiston, Wynyard, Saskatchewan

Heather Brown with 4-year-old preschool children in Fredericton, New Brunswick

NDHW Report from New Brunswick

Dental hygienists in New Brunswick wanted to share with Canadians the important work that they do. This initiative encouraged all members to promote dental hygiene to the public and to increase awareness of both dental hygiene and dental hygienists.

Moncton: Several dental hygienists made visits to elementary schools in the area and handed out toothbrushes after a presentation that promoted good oral hygiene and the importance of visiting a dental hygienist regularly. Oral hygiene packages (toothbrushes, floss, stickers, etc.) were donated to the Albert County Food Bank to be included in food boxes. Mary Pelletier and Natalie Smith set up a kiosk in Champlain Place, providing information about dental hygiene and samples. Mary also presented on oral health at the monthly meeting of the Ileitis and Colitis Association.

Saint John: The dental hygienists' group here sponsored the Canadian Blood Services, providing the blood donors with toothbrushes and educational posters.

Fredericton: Local radio stations ran advertisements for six days on "Brushing" and "Flossing." Area dental hygienists travelled to preschools to speak to the children about the importance of our teeth and the role that the dental hygienist plays in keeping the teeth healthy.

Strutting our stuff in Saskatchewan!

Bilingual program

Together Ensemble

OTTAWA, JUNE 17-19 JUIN 2005

...celebrating the past, present and future!

1965 2005 40 CDHA ACHD

...célébrons le passé, présent et le futur!

Programme bilingue

Join us in Ottawa from June 17–19, 2005, for the CDHA 16th Annual Professional Conference. Come celebrate with your colleagues from across the country CDHA's 40 years of collaboration and community building in the dental hygiene profession in Canada!

The 16th annual professional conference will provide a bilingual scientific program that will appeal to dental hygienists in all practice settings—whether you are in private practice or community health, whether you are an educator or work for industry, the program will have something of interest for you. The Exhibit Hall will permit you to stay abreast of the opportunities emerging in the profession by learning about new trends and products in the industry. And the Saturday evening gala will provide everyone with the opportunity to celebrate the profession and the CDHA's 40th anniversary.

Mark your calendars and be sure to join us in Ottawa from June 17–19, 2005 for the CDHA 16th Annual Professional Conference. Stay tuned to your journal and the CDHA website for details as they become available.

Joignez-vous à nous du 17 au 19 juin 2005, à l'occasion de la 16e Conférence professionnelle annuelle de l'ACHD. Venez célébrer avec vos collègues des quatre coins du pays les 40 ans de l'ACHD, 40 ans de collaboration et de développement de la conscience communautaire au sein de la profession d'hygiéniste dentaire au Canada.

La 16e Conférence professionnelle annuelle offrira un programme scientifique bilingue qui plaira aux hygiénistes dentaires de tous les milieux de pratique. Que vous travailliez en pratique privée ou dans le domaine de la santé communautaire, dans l'enseignement ou dans l'industrie, le programme aura de quoi susciter votre intérêt. La salle des exposants vous permettra de vous tenir au courant des possibilités nouvelles qu'offre la profession : vous y trouverez des renseignements sur les nouvelles tendances et les nouveaux produits qu'offre l'industrie. Et le gala du samedi soir fournira à tous l'occasion de célébrer la profession et le 40e anniversaire de l'ACHD.

Inscrivez cet évènement à votre calendrier et ne manquez pas de vous joindre à nous à Ottawa, du 17 au 19 juin prochain, pour la 16e Conférence professionnelle annuelle de l'ACHD. Consultez votre journal ainsi que le site Web de l'ACHD pour obtenir des précisions dès qu'elles seront rendues publiques.

Parliament/Parlement

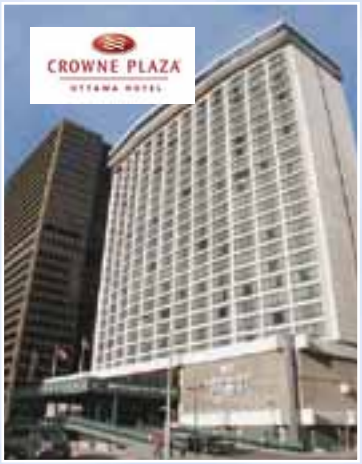
Musée des beaux-arts du Canada

Canal Rideau Canal

Market/m

Ottawa is best known as Canada's national capital. However, the city and the National Capital region are more than the seat of the federal government: the city and its surrounding area provide visitors with a unique combination of urban and rural experiences. For more information on all that Ottawa and the National Capital region have to offer, visit Ottawa Tourism's website at www.ottawatourism.ca.

Ottawa est surtout connue en tant que capitale du Canada. Toutefois, la ville et la région de la capitale nationale constituent plus que le siège du gouvernement fédéral : la ville et ses environs offrent aux visiteurs une combinaison sans pareille d'expériences urbaines et rurales. Pour de plus amples renseignements sur Ottawa et la région de la capital nationale, visitez le site de l'Office du tourisme d'Ottawa au www.ottawatourism.ca.



A downtown landmark since 1967, the Crowne Plaza Ottawa Hotel has taken its rightful place among business-class properties in the nation's capital. With a sophisticated art deco style and upgraded amenities throughout the hotel, all 411 guestrooms overlook the beautiful city of Ottawa and include a long list of amenities. For more information on the Crowne Plaza Ottawa, visit their website at <www.crowneplazaottawa.com>. To book your reservation, call the toll-free reservation line at 1.800.2CROWNE and ask for the CDHA conference rate!

Site bien connu du centre-ville depuis 1967, l'hôtel Crowne Plaza Ottawa assume de plein droit la place qui lui revient au sein des aménagements d'affaires de la capitale nationale. Aménagées dans un style sophistiqué art déco, et offrant un confort haut de gamme dans leur ensemble, les 411 chambres d'hôtes commandent une vue magnifique de la ville d'Ottawa et comprennent une longue liste de commodités. Pour de plus amples informations sur l'hôtel Crowne Plaza Ottawa, veuillez visiter leur site web au < www.crowneplaza ottawa.com/francais >. Pour faire votre réservation, communiquer au sans frais 1.800.2CROWNE et demander pour le tarrif du congrès de l'ACHD.

Join us/Joignez-vous à nous

Canal Rideau Canal

arché

Museums/musées

Preliminary Conference Schedule

	Thursday, June 16, 2005
4 p.m. to 7 p.m.	Conference registration opens
	Friday, June 17, 2005
7 a.m. to 8 a.m.	Conference registration and continental breakfast
8 a.m. to 9 a.m.	Opening ceremonies
9 a.m. to 10 a.m.	Nutrition break and Exhibit Hall
10 a.m. to 11:30 a.m.	Concurrent scientific sessions
11:30 a.m. to 1 p.m.	Lunch
1 p.m. to 2:30 p.m.	Concurrent scientific sessions
2:30 p.m. to 3:30 p.m.	Nutrition break and Exhibit Hall
3:30 p.m. to 5 p.m.	Concurrent scientific sessions
TBA	President's Welcome Reception
	Saturday, June 18, 2005
7 a.m. to 8:00 a.m.	Conference registration and continental breakfast
8 a.m. to 9:30 a.m.	Concurrent scientific sessions
9:30 a.m. to 10:30 a.m.	Nutrition break and Exhibit Hall
10:30 a.m. to 12 noon	Concurrent scientific sessions
12 noon to 1 p.m.	Lunch
1 p.m. to 2 p.m.	Exhibit fair, poster presentation, and table displays
2 p.m. to 3:30 p.m.	Concurrent scientific sessions
3:30 p.m. to 4 p.m.	Nutrition break and Exhibit Hall
4 p.m. to 5:30 p.m.	Concurrent scientific sessions
TBA	Saturday evening gala
	Sunday, June 19, 2005
8 a.m. to 11 a.m.	Breakfast, keynote address, and closing ceremonies

CLASSIFIED ADVERTISING

CDHA and *CJDH* take no responsibility for ads or their compliance with any federal or provincial/territorial legislation.

BRITISH COLUMBIA

INVERMERE F/T dental hygienist. Are you ready for adventure? Do you want to enjoy the outdoors and a healthy lifestyle? Are you are a friendly, energetic person with a zest for life? Come live in Invermere, B.C., and enjoy a fun-filled, stress-free work environment. Ski pass provided for local world-class mountain. Contact us at **drsmiley5@hotmail.com.**

ALBERTA

Hygienist required in a small mountain town of 4000 people, located two hours south of Grande Prairie. No evenings or weekends. Relocation assistance available. Salary is $55 per hour, and benefits include uniform and continuing education allowances. Holidays and hours are flexible. Please e-mail résumé to **tlingc@telus.net** or fax it to **1-780-827-4567.**

COLD LAKE Long-established family practice currently seeking a personable and compassionate Registered Dental Hygienist with excellent communication skills to join our Hygiene Department. This is a perfect opportunity for experienced dental hygienists and conscientious new grads. If you're looking to provide exceptional patient care, with an office that truly appreciates its team of professionals, contact Kelly Avery at Tri-Town Dental Centre, Box 1710, Cold Lake, AB T9M 1P4. Tel: **780-594-5984**; fax, **780-594-5965.**

SASKATCHEWAN

PRINCE ALBERT Permanent F/T hygienist required Monday through Thursday. We offer a competitive salary. Contact Office Manager at **306-763-8525** or fax résumé to **306-763-6433.**

NORTHWEST TERRITORIES

FORT SMITH The Fort Smith Dental Clinic is a well-established family practice that has been in business for 11 years. We are looking for a dental hygienist with strong teamwork skills and an ability to work independently to join our team. Please contact Dr. Hill at **867-872-3509** for enquiries or fax your résumé to **867-872-5813.** E-mail, **whill@auroranet.nt.ca.**

CDHA CLASSIFIED ADS

Classified job ads appear primarily on the CDHA's website (www.cdha.ca) in the Career Centre (*Members' Only* section). On-line advertisers may also have their ad (maximum of 70 words) listed in the journal *CJDH* for an additional $50. If an advertiser wishes to advertise only in the print journal, the cost will be the same as an on-line ad. These classified ads reach over 11,000 CDHA members across Canada, ensuring that your message gets to the target audience promptly. Contact CDHA at **info@cdha.ca** or **613-224-5515** for more information.

INTERNATIONAL

AUSTRALIA, Queensland Seeking enthusiastic and energetic full-time dental hygienist to join our practice. Successful applicant will enjoy an excellent salary plus a commitment to continuing education. You will be responsible for a variety of clinical duties. These include regular hygiene maintenance, periodontal maintenance, and certain orthodontic procedures. Please send your CV to High Street Dental Surgery, PO Box 5500, Central Queensland Mail Centre, Queensland Australia, 4702. Tel: **0749286000;** fax, **0749265448;** e-mail, **manager@earldental.com.au.**

CHINA, Shanghai Registered dental hygienist needed to work in vibrant Shanghai! Two-year term. Please send your résumé to Dr. Kee-Hau Wong, SMILElink Dental Centre, No. 88, Xian Xia Rd., Sun Plaza, East Tower, 2nd Floor, Room B5-B6, Shanghai, China 200336; e-mail **keehau@pacific.net.sg;** fax +**86 6208 5229.**

SWITZERLAND, Gstaad We are looking for a dental hygienist to start as soon as possible. We have a new, modern office in the Swiss Alps in Gstaad in the German part of Switzerland. 100 meters from ski station and 400 meters from train station. If you are interested and want more information, please call +**4133 744 90 61** or +**41 79 632 45 04**, e-mail to **arkdent@bluewin.ch,** or write to Med. Dent, Per Arman, Promenadenweg, CH-3778 Schönried.

OTHER

FOR SALE Gray MDEC mobile dental hygiene chair. Excellent condition. Very portable, weighing 25 pounds. Price includes zippered carrying case, 2' x 3' x 1'. Will cover mailing/delivery cost if needed. $1000 firm. Contact Linda at **604-231-9747.**

Advertiser's index