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Peer review as professional development

A potential GIIFE

Oral health surveillance

Dalhousie University, Halifax, NS, 134

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The electronic buzzword: social media

Jacki Blatz, RDH

The President should write a regular blog. This statement was presented at the February meeting of the CDHA Board of Directors. We were discussing the social networking area of CDHA's new website—blogs, forums, wikis—all of this made available to us since November 2009. It seems such a great idea to initiate a blog. I already belong to one social networking tool, *Facebook*, but my participation has been only with my family and closest friends. With them, I feel no obligation or pressure to contribute regularly, however much I enjoy reading everybody else's contributions. Yet, why do I feel some apprehension about regularly posting a blog as President of CDHA?

It is interesting how social networking has become part of our lives, and now is becoming part of our profession. Do you want to know what successes your colleagues have had using new products on the market? Start a forum on the CDHA website, and invite other dental hygienists to share their experiences. Are you thinking of setting up private practice? Create your own blog and invite other dental hygienists to tell you their stories. This avenue of communication is endless with possibilities.

So often, we talk about isolation in practice. This means many things to everyone. It may be that you are the sole dental hygienist in your practice, or even in your community. You may be in a remote setting where there are few dental hygiene colleagues, or you may work in an urban setting but feel the isolation of dental hygiene practice. The social networking opportunities through the CDHA website may help you connect with members and share. I think we all desire connections with other dental hygienists.

Recently CDHA had two live webinars on *Oraqix*®. Both sessions were booked and attended to capacity. This rising interest tells me of our members' desire access to new product information when such information is convenient to access. The CDHA website offers webinars that give us product information and education for use, webinars for private practice, webinars on how to access and understand research, and much more. Not only do webinars offer information, they are also professional development opportunities. And the best part is that it is at your convenience. CDHA also offers a wide range of professional development courses on its website. All are accessible in the convenience of your home.

The trend is developing. We are dental hygienists spread

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L'expression électronique à la mode: médias sociaux

La présidente devrait avoir un blogue régulier. *Ce souhait a été présenté à la réunion de février du Conseil d'administration de l'ACHD. Nous discutions alors de l'étendue du réseau social de l'ACHD sur la toile – blogues, forums, wikis –, autant de voies qui nous sont accessibles depuis novembre 2009. Le blogue semble une excellente idée. J'appartiens déjà à un réseau social,* Facebook, *mais ma participation se limite jusqu'ici à ma famille et à mes proches amis. Avec eux, je ne ressens aucune obligation ni pression d'y participer régulièrement, quel que soit le plaisir que je prends à lire les contributions des autres. Néanmoins, pourquoi est-ce que je ressens une certaine appréhension d'afficher régulièrement un blogue à titre de présidente de l'ACHD ?*

C'est intéressant de voir à quel point le réseau de communication sociale par la toile a intégré nos vies, et voilà qu'il s'insère dans notre profession. Voulez-vous savoir comment vos collègues ont réussi en utilisant les nouveaux produits du marché ? Lancez un forum dans le site Web de l'ACHD et invitez les autres hygiénistes dentaires à partager leurs expériences. Songez-vous à vous lancer en pratique privée ? Créez votre propre blogue et invitez les autres hygiénistes dentaires à vous raconter leur histoire. Cette voie de communication offre d'innombrables possibilités.

Nous parlons si souvent d'isolement dans la pratique. Cela en dit beaucoup à chacune. Il se peut que vous soyez la seule hygiéniste dentaire de votre pratique, ou même de votre collectivité. Vous êtes peut-être située dans un environnement éloigné où les collègues hygiénistes dentaires sont peu nombreuses, ou vous vous sentez peut-être isolée dans une pratique d'hygiène dentaire située en milieu urbain. Les occasions de réseautage social par le site Web de l'ACHD peuvent vous aider à établir des contacts et à échanger avec les membres. Je crois que nous désirons toutes faire lien avec les autres hygiénistes dentaires.

Récemment, l'ACHD a tenu deux webinaires en ligne sur Oraqix®. *Les deux séances ont été réservées et suivies à pleine capacité. Cet intérêt croissant m'indique le désir de nos membres d'accéder à ce nouveau moyen de renseignement lorsque l'information en vaut la peine. Le site Web de l'ACHD offre des webinaires dont le produit sert à l'information et à la formation, des webinaires pour la pratique privée, des webinaires sur les moyens d'accéder à la recherche et de comprendre celle-ci, et beaucoup plus. Les webinaires ne font pas qu'offrir de l'information, ils comportent aussi des occasions de perfectionnement professionnel. Puis, ce qu'il y a de mieux encore, le site est accessible à votre convenance. L'ACHD offre aussi une vaste gamme de cours de perfectionnement professionnel dans son site Web. Tout vous est accessible à votre convenance à la maison.*

La tendance se développe. Nous sommes des hygiénistes dentaires réparties dans un vaste pays, mais nous pouvons nous réunir par le biais des blogues, des forums ou des webinaires et

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My benchmarked decade

Dr. Susan A. Ziebarth

We must welcome the future, remembering that soon it will be the past; and we must respect the past, remembering that it was once all that was humanly possible.

– George Santayana, American philosopher, poet, and humanist. 1862–1952

At a glittering award's night televised to a large audience, you see a very jubilant winner accept a prestigious award and, through tear-laden eyes, unfold what appears to be a tiny scrap of paper for a victory speech. The awardee ends up giving a 10 minute soliloquy on whom the winner wants to acknowledge, and how she or he came to be standing there. Well, the drafts of this particular message to you have resembled those tiny folded paper scraps, and while there have been many iterations, the deadline has come, and this message is the last one.

In the course of my day, I get to work with a group of dedicated people who are here to serve our dental hygienist members. They vie for attention for their areas of specialty much like the issues facing the profession vie for attention. Everyone believes that the issue at the top of one's own priority list should be at the top or, pretty close to the top, of everyone's list. The day may start with an issue regarding education programs, then evolve to include an issue of advocacy, of member service, of communication, of governance, of technology, of finance, or of strategic partnerships, and many times the issues are complex and involve elements of them all. Sometimes from an individual's perspective the right issue is at the top of the list and other times not, sometimes from that person's shoes the issue is addressed in the best way, and other times not. But at the end of the day, in CDHA's governance model, it is my role to accept the responsibility for those complex interactions, and for both the happy and the unhappy perspectives of those group members whether they are staff or members.

Ten years ago, on my third day at CDHA, Cindy Fletcher, Executive Director of BCDHA, called to tell me the honeymoon was over. We had dental hygienists in British Columbia who could own their own practices but were not being paid by insurance companies, and were being rebuffed by dental suppliers. Through the past ten years some of the ways we have worked this issue together have been through national e-claims projects as well through advocacy initiatives at both the government and industry level. One of my favourite days in those early times was receiving a fax from Paula A. McAleese with a self portrait displaying a big smile as she announced her first paid claim from Sunlife. Today we have close to 300 dental hygienists billing insurance companies and, sometimes, the process is still frustrating. When we look back to that anomaly payment today with forty insurance companies accepting claims and one successful e-claims trial for CDHA-AHDCnet in Alberta and one about to be conducted in Ontario, as well as suppliers actively seeking dental hygienists business, we can see how far we have come.

Tied to the progress of third party reimbursement is the ability to submit such claims. A barrier to this process was the lack of self regulation of the profession that prevented access to dental hygienists as primary care providers, and did not provide a significant mass of dental hygienists who would be billing insurance plans. The self regulation initiative led us to providing resources to political action strategies in many provinces, and we have been able to move from five to eight self regulated jurisdictions in this time. How exciting it was to work with groups of dental hygienists in the provinces regulated by dentistry as we began meeting with Dr. Ginette Lemire Rodger to make a change that we believed was socially necessary. The ability to participate in and witness the passion of dental hygienist volunteers was phenomenal. From the early stages of funding and minute taking to the amazing experience of being invited to celebrate in Winnipeg with the newly self regulated profession, the progress was unforgettable. Hopefully the time for such celebrations is in the not to distant future for Newfoundland and Labrador, and for Prince Edward Island.

Tied to self regulation is the issue of whether or not dental hygienists have sufficient education to be primary care providers. This issue is a contentious one due to the varying forms of education and educational institutions in Canada. It was also contentious because politically those opposed to self regulation also tied the issue of baccalaureate education to self regulation. Separating those issues politically was often times like trying to unwind the thread in a spider's web. Today the issue of dental hygiene education is still prominent in the minds of many whether it is because of such higher level issues as legislation or of such everyday issues as feeling that your colleague does not have sufficient education to be working alongside you. The launch and implementation of the *Entry-to-Practice Competencies and Standards for Canadian Dental Hygienists*, and advocacy regarding concerns about the quality of graduates from non accredited private schools as well as obtaining a better understanding of how provincial governments monitor the number of graduates, remain current issues at the top of the priority list. Baccalaureate as an entry to practice requirement and advanced degrees in dental hygiene in Canada are in the offing.

Operationally since 2000, we have accomplished so much. Our flagship communication vehicle, evolved from the *Probe* to the *Canadian Journal of Dental Hygiene*. We have developed online professional development programs including courses and webinars, and a library resource. We moved from annual general conferences to targeted meetings for special interest groups such as students, and people interested in owning their own dental hygiene practice. We also hosted the world at the International

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Symposium of Dental Hygiene in 2007. We took a pioneering step towards dental hygiene research and education in establishing the Canadian Foundation for Dental Hygiene Research and Education in 2004, and to date have granted about $65,000 to further the Foundation's mandate. We have partnered with Canadian Institutes of Health Research to offer a Master's Award, and plan to partner with them again this year and also award another $10,000. Two major database implementations in 2001 and in 2009 occurred that integrate data with the website, and as Buzz Lightyear would say, "… to infinity and beyond" through our social networking community. We recognize that for some of our members these implementations have been less than smooth. Their frustrations were also significant and were something that they could not escape from during those intense periods. We are all pleased the bulk of that transition work is behind us and that we are approaching this decade with a system that will prove itself to you as a wonderful resource.

Before my Editor in Chief takes the proverbial hook out and edits this message to a few lines, I want to add a huge "thank you" to everyone who has contributed to my vast learnings and magnificent experiences. Some of these experiences have been in person at our many events. Some have been through letters expressing frustration with CDHA and with my leadership, and I can assure you that I did reflect upon your thoughts. While we in a service industry often hear much about and focus our attention on what is not working right, it is so very much appreciated when expressions of appreciation through notes, emails, and even bouquets of flowers arrive to brighten our day.

This 56th message, culminating those of the past ten years, is my last contribution to the journal as the Association moves forward with new leadership sometime soon. There are many celebrations to come in the emergence of the dental hygiene profession. I shall watch for them as I recognize that those who have contributed are doing everything humanly possible to achieve their professional dreams.

Welcome the future.

ADDENDUM

Dr. Susan Ziebarth left the CDHA in April this year. The Board of Directors and the staff wish Sue the best in her future plans and endeavours.

The Board appointed Ann E. Wright, RDH, MBA, to serve as Acting Executive Director of CDHA in the interim. Ann began her professional career as a dental hygienist. She added a business dimension to her academic portfolio after completing her Master of Business Administration from the University of Ottawa. In addition to the responsibilities of her new role, Ann will continue to serve as CDHA's Business Development Manager, a position that has grown significantly since she stepped into CDHA's office in the Spring of 2008.

La Dre Susan Ziebarth a quitté l'ACHD au mois d'avril cette année. Le Conseil d'administration et le personnel lui souhaite voulue dans sa nouvelle orientation.

Le Conseil a désigné Ann E. Wright au poste de chef intérimaire de la direction de l'ACHD. Ann a commencé sa carrière comme hygiéniste dentaire. Elle a ajouté une dimension commerciale à ses acquis universitaires en complétant une maîtrise en gestion commerciale de l'Université d'Ottawa. Outre les responsabilités qui lui incomberont dans son nouveau poste, Ann continuera d'assumer la direction du développement des affaires, poste qui a grandi considérablement depuis son arrivée à l'ACHD au printemps de 2008.

Nous devons accueillir l'avenir en pensant qu'il sera bientôt passé; et nous devons respecter le passé en pensant qu'il était alors tout ce qu'il était humainement possible.

– George Santanyana, philosophe, poète et humaniste américain. 1862–1952

Ma décennie de référence

Lors d'une fascinante soirée de remise des prix télévisée à un vaste public, une gagnante fort jubilante s'avance pour recevoir un prix prestigieux et, les larmes aux yeux, déplie ce qui ressemble à un petit bout de papier froissé avec des notes de victoire. La récipiendaire finit par livrer un soliloque exprimant tous ses remerciements et racontant comment elle en était arrivée là, debout. Hé bien, pour les ébauches de ce message particulier que vous avez inspiré sur ce petit bout de papier, malgré les nombreuses itérations, c'est maintenant la tombée. Ce message est le dernier.

Dans la journée, je travaille avec un groupe de personnes dévouées qui sont ici au service de nos membres, hygiénistes dentaires. Elles rivalisent d'attention pour leurs spécialités tout comme le font les problèmes qui confrontent la profession. Chacune croit que le problème qui prime dans sa propre liste de priorités devrait se trouver en tête de liste de chacune, ou tout près. La journée peut commencer par un problème de formation, puis évoluer pour comprendre un problème d'intervention, de service aux membres, de communication, de gouvernance, de technologie, de finance ou de stratégie de partenariat; et souvent les problèmes sont complexes et impliquent des éléments de tous les autres. Parfois, dans une perspective individuelle, le bon problème est en tête de la liste et, à d'autres moments, ce n'est pas le cas; parfois, selon cette personne, le problème est bien abordé,

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d'autres fois, il ne l'est pas. Mais, à la fin de la journée, selon le modèle de gouvernance de l'ACHD, il m'incombe d'accepter la responsabilité de ces interactions complexes ainsi que des perspectives heureuses et malheureuses au sein des ces groupes, qu'il s'agisse du personnel ou des membres.

Il y a dix ans, ma troisième journée à l'ACHD, Cindy Fletcher, directrice générale de l'AHDCB, m'appelle pour me dire que la lune de miel était terminée. Nous avions en Colombie-Britannique des hygiénistes dentaires qui pouvaient posséder leurs propres pratiques mais n'étaient pas payées par les compagnies d'assurance et étaient rabrouées par les fournisseurs dentaires. Au cours des dix dernières années, face à ce problème, nos efforts ont porté sur des projets de réclamations par voie électronique à l'échelle du pays ainsi que sur des initiatives d'intervention sur les plans gouvernemental et industriel. Au tout début, une de mes journées favorites a été marquée par la réception d'un courriel de Paula A. McAleese qui m'annonçait, avec un grand sourire, qu'elle avait reçu de la Sunlife le paiement de sa première réclamation. Aujourd'hui, nous comptons près de 300 hygiénistes dentaires qui facturent les sociétés d'assurance mais, parfois, la démarche est encore frustrante. Aujourd'hui, nous pouvons voir cependant toute la distance parcourue si l'on compare les problèmes de paiement du passé aux quarante sociétés d'assurances qui acceptent maintenant les réclamations et à un essai réussi de réclamation par voie électronique de l'ACHD et du réseau de l'AHDA en Alberta et à un autre essai sur le point de se faire en Ontario, ainsi qu'aux fournisseurs qui cherchent activement à faire affaires avec les hygiénistes dentaires.

Liée au progrès du remboursement par les tierces parties, il y a la capacité de soumettre de telles réclamations. Une barrière a cependant marqué ce processus. C'est le manque d'autoréglementation de la profession, qui a empêché l'accès aux hygiénistes dentaires à titre de prestataires de soins primaires et n'a pas fourni suffisamment d'hygiénistes dentaires susceptibles de présenter la facture aux sociétés d'assurance. L'initiative d'autoréglementation nous a cependant fourni des ressources pour les stratégies d'action politique dans plusieurs provinces et jusqu'ici nous avons pu passer de cinq à huit juridictions autoréglementées. Comme ce fut excitant de travailler avec les groupes d'hygiénistes dentaires réglementés par la dentisterie quand nous avons entrepris nos rencontres avec la Dre Ginette Lemire Rodger pour entreprendre un changement que nous estimions socialement nécessaire. La capacité de participer à la passion des hygiénistes dentaires bénévoles et d'en témoigner a été phénoménale. Des premières étapes de financement et premiers comptes-rendus à l'expérience exceptionnelle de l'invitation à célébrer à Winnipeg la nouvelle autoréglementation de la profession, la progression demeure inoubliable. Nous espérons que de semblables célébrations viendront prochainement à Terre-Neuve et Labrador, et à l'Île-du-Prince-Édouard.

Liée à l'autoréglementation, se pose la question de savoir si oui ou non les hygiénistes dentaires ont la formation voulue pour dispenser des soins primaires. La question prête aussi à controverse à cause de la diversité des formes d'enseignement et des institutions de formation au Canada. Elle est aussi controversée parce que les personnes qui s'opposent à l'autoréglementation lient aussi celle-ci à la formation au baccalauréat. Politiquement, la distinction ressemble souvent à une tentative de délier le fil d'une toile d'araignée. Aujourd'hui, la formation en hygiène dentaire est toujours le premier souci dans l'esprit de plusieurs, car elle occupe un niveau tellement élevé de préoccupation sur le plan législatif, sans compter la crainte quotidienne que notre compagne de travail n'aie pas la formation suffisante. Le lancement et l'application des Compétences et normes exigées pour l'admission à la profession des hygiénistes dentaires canadiennes *ainsi que la promotion de la qualité des diplômées des écoles privées non accréditées de même que l'obtention d'une meilleure compréhension du mode de monitorage du nombre des diplômées par les gouvernements provinciaux demeurent des préoccupations courantes en tête de la liste des priorités. Le baccalauréat permet d'accéder à la pratique et l'utilisation des diplômes supérieurs en hygiène dentaire est imminente.*

Sur le plan opérationnel, nous avons beaucoup accompli depuis l'an 2000. Notre fer de lance en matière de communication est passé de Probe *au* Journal canadien d'hygiène dentaire. *Nous avons mis au point des programmes de perfectionnement professionnel en ligne, comprenant des cours, des webinaires et une ressource documentaire. Nous sommes passées des conférences générales annuelles aux rencontres ciblées pour les groupes d'intérêts particuliers, tels les étudiantes et les personnes intéressées à posséder leur propre pratique d'hygiène dentaire. Nous avons accueilli le monde au Symposium international d'hygiène dentaire en 2007. Nous avons aussi innové en matière de recherche et de formation en créant la Fondation canadienne de la recherche et de la formation en hygiène dentaire en 2004; nous y avons octroyé jusqu'ici environ 65 000 $ pour favoriser son mandat. Nous avons fait équipe avec les Instituts canadiens de la recherche en santé pour offrir une bourse de maîtrise et nous nous proposons de refaire le geste cette année en octroyant une autre bourse de 10 000 $. Deux importantes bases de données ont été mises en place en 2001 et 2009 pour intégrer les données au site Web et, comme le dirait Buzz Lightyear, « … jusqu'à l'infini et au-delà » par notre réseau social communautaire. Nous reconnaissons que pour certaines de nos membres ces réalisations ont moins d'un mois. Leurs frustrations furent aussi importantes et n'ont pu être évitées pendant ces périodes d'intense activité. Nous sommes heureuses de voir que le gros de ce travail de transition est maintenant derrière nous et que nous abordons la présente décennie avec un système qui s'avérera une magnifique ressource.*

Avant que ma rédactrice en chef sorte son proverbial grappin et réduise ce message à quelques lignes, je souhaite ajouter un immense « merci » à toutes celles qui ont contribué à mon vaste apprentissage et à mes magnifiques expériences. Certaines de ces expériences sont survenues en personne à plusieurs de nos activités. D'autres le furent par des lettres de frustration à l'égard de l'ACHD et de mon leadership, et je peux vous assurer que vos pensées m'ont fait beaucoup réfléchir. Lorsque, dans une industrie de services, nous entendons parler souvent et beaucoup de ce qui ne fonctionne pas bien, les expressions de satisfaction par le biais de notes et de courriels sont fort appréciées, et même les bouquets de fleurs arrivent à égayer notre journée.

Ce 56e message, qui culmine ceux des dix récentes années, est ma dernière contribution au journal, car l'Association ira bientôt de l'avant avec une nouvelle direction. Plusieurs autres célébrations marqueront l'évolution de la profession d'hygiéniste dentaire. Je demeurerai à l'affût, car je sais que celles qui y contribuent font tout ce qui est humainement possible pour réaliser leurs rêves professionnels.

Bienvenue, l'avenir.

Peer review as professional development: A bigger picture

Sandra J. Cobban, RDH, MDE; and Laura J. Dempster, DipDH, BScD, MSc, PhD

In the scientific community, peer review is a common and necessary process that authors go through in order to get manuscripts published. Peer review makes an important contribution to the quality of a journal and, by extension, to the professional organization that produces that journal. Generally speaking, peer review is a process whereby one or two "peers" or experts in the field, scrutinize a manuscript submitted for publication and provide comments to the journal's editor regarding the academic quality and scientific rigor of the paper. It involves judgment of the merits of the research question, the methods used to address it, and the interpretation of the results based on the data collected.[1–3] This process provides editors, authors, and readers alike with an assurance that the publication is reporting relevant findings, warranted claims and supported interpretation of the results.[4] This assurance is important and serves as a filter for readers, given the avalanche of materials available from multiple sources in this information age.[5] Peer review also supports decision making by editors regarding what to include or not include in a journal, as structured rigorous review processes lend objectivity to editorial decisions.[4,5]

The peer review process has also been studied and found to make measureable and substantive improvements to the quality of articles.[2] While all components of articles in the study were improved by peer review, manuscripts weak in certain areas were more greatly improved by this process than those that were already good when submitted.[2]

Those who participate in peer review also benefit from this process. They may broaden their knowledge of a topic area, and develop or enhance their skills in scientific criticism.[4] The ongoing development of these skills contributes to continuing competency, an important attribute of a profession, and a responsibility of all of its members.

Peer review also contributes to career rewards and recognitions, both for the individuals being reviewed and those providing it.[6] Faculty members of universities and colleges receive greater recognition for works that appear in peer reviewed journals.[3,6] Articles found in peer reviewed publications are more likely to be identified during electronic literature searches and subsequently cited by other authors, which in turn helps develop an author's standing in the field.[3] Those who volunteer as peer reviewers can also benefit from such career rewards as being recognized for their contribution of service to the profession, and receiving credit for continuing competency activity. Through exposure to different writing styles as well as writing shortcomings, peer reviewers also learn how to improve their own work.

Peer review aims to improve the quality of a manuscript as previously discussed, but can only do so in terms of the writing and reporting of a study. Reviewers give direction to the author to ensure the information in the manuscript is valid and well written, which then gives the reader assurance that the information presented is credible. From there the readers can draw their own conclusions. However, peer review cannot correct or compensate for fundamental flaws in the methodology of a study or a weak research question.[2] If peer reviewers identify poorly constructed studies, they can then make recommendations to editors against publication.[6]

Dental hygiene continues to evolve as a profession, and implicit in this evolution is the continuing development of the *Canadian Journal of Dental Hygiene (CJDH)*, the Canadian Dental Hygienists Association's (CDHA) professional publication, that was first published in 1967 under the title, *Canadian Dental Hygienists Association Journal*. The journal has changed and developed over the years, and CDHA now publishes six issues a year to update the profession on a variety of issues including scientific articles related to oral health. Incorporating peer review as part of the publication process has helped improve the quality of the publications and reflects favourably on the Association and the profession.

There is however, no standard format for development of peer reviewer skills. Most peer reviewers learn their skills through experience or by reading articles about it although these are not plentiful. We are suggesting that *CJDH* implement a professional development opportunity for dental hygienists to learn peer review skills by "shadowing" experienced peer reviewers. This process would be in addition to the standard peer review processes already in place at *CJDH*. When a manuscript is received by the Scientific Editor and assigned to the formal peer reviewers, it would also be assigned to a 'shadow' peer reviewer. All reviewers would assess the manuscript and provide the Scientific Editor feedback. After the peer review process is complete, the Scientific Editor would provide copies of the formal peer reviews to the 'shadow' reviewer, along with suggestions for development, if any.

Development of a shadow review process would require permission from authors to share their submitted manuscripts, and for formal reviewers to share their comments with the shadow reviewers. Shadow reviewers would also have to adhere to the same ethical obligations as the peer reviewers to honour confidentiality. Resources for development of peer review skills would be provided in advance to prepare shadow reviewers; a list can be found at the end of this editorial. A letter of confirmation of participation

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This is a peer reviewed article.

in the peer review process could be provided for inclusion with continuing competency documentation.

We could not locate published materials on the use of shadowing to develop peer review skills, but we are aware anecdotally that this has occurred at other journals. We suggest that this would also be a useful activity for graduate students as they learn how to write manuscripts to publish their own research.

CDHA's *Milestones in Dental Hygiene Research in Canada* document points to the need and the opportunities for increasing dental hygiene's research capacity in Canada.[7] We suggest that increasing our cadre of peer reviewers through implementing a shadow peer reviewer development program will contribute to increasing our research capacity by helping develop quality writing skills as the reviewers' skills develop.

We encourage the *CJDH* to demonstrate leadership among health professional journals by actively developing and promoting a shadow peer review program. Subsequent evaluation of such a program would make a valuable contribution to the literature on professional development. This would also contribute to the continuing advancement of dental hygiene in Canada.

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7. Canadian Dental Hygienists Association: *Milestones in dental hygiene research in Canada*. Ottawa: CDHA, 2003.

SUPPLEMENTARY INFORMATION

For those who are interesting in knowing more about peer reviewing, the following are useful sources:

- Basic information: http://resources.bmj.com/bmj/reviewers/
- Support materials: http://resources.bmj.com/bmj/reviewers/peer-reviewers-guidance
- Specific training materials: http://resources.bmj.com/bmj/reviewers/training-materials

For those who are interesting in finding out more about becoming a peer reviewer for the CJDH, please contact Managing Editor, Chitra Arcot at journal@cdha.ca.

CDHA Board of Directors Meeting: Highlights
CDHA office, Ottawa, Ontario

18–20 February 2010 — The first day was dedicated to *Ownership Linkage Planning* with Caroline Oliver and Dr. Sandy Kolberg as facilitators. The goal for this segment of the meeting was to develop a three year plan that would engage CDHA members as owners in creating the future of CDHA. 2010 Board member succession and orientation were discussed. Special interest was given to reach the student community and the northern areas in Canada.

Nominations for the *Life and Distinguished Service Award* were reviewed, and the recipient was chosen.

On Day 2, John Peart, CDHA's legal counsel, gave a presentation on the implications of Bill C-4; *Canada Not-for-profit Corporations Act*, and its possible impact on the CDHA bylaws. This *Act* is not expected to be proclaimed until the Spring of 2011. John Peart will facilitate a formal review of CDHA's bylaws in the fall of 2010.

Planning for a new AGM format was discussed for 2010. The decision was that the AGM would become a part of an annual CDHA event and would allow more members to attend. *Vision to Venture* Leadership event will be held from 12 to 15 August 2010 in Montreal. Karl Albrecht will be the facilitator at this event.

On the final day of the meeting, Susan Ziebarth, CEO of CDHA, provided an environmental scan to inform the Board of trends in health related fields that would support their decision making at the Board meeting. She also presented the current status of the innovative IT project that CDHA is implementing in phases to bring an exciting new online platform to its membership.

Policy revisions were agreed on and accepted as were the monitoring reports given by the CEO.

The International Federation of Dental Hygiene (IFDH) conference will be held in Glasgow, Scotland, in July 2010. Wanda Fedora, Past President of CDHA, and Alison MacDougall from PEI are the CDHA representatives at this conference.

The Board voted Arlynn Brodie of British Columbia as President-Elect for 2011.

Bonnie Blank presented an update on the *Entry-to-Practice Competencies and Standards for Canadian Dental Hygienists*.

CDHA has received funding from the Human Resources and Skills Development Canada (HRSDC) for the *Federal Elder Abuse Initiative*. This two year project will be administered under the New Horizons for Seniors Program (NHSP). The project includes the development and dissemination of bilingual online and face-to-face professional development initiatives including an online course, webinar, resources for dental hygienists, and a presentation at the 2011 national conference.

The Board's next meeting is scheduled this fall in October.

Canadian Journal of Dental Hygiene

CANADIAN JOURNAL OF DENTAL HYGIENE :: JOURNAL CANADIEN DE L'HYGIÈNE DENTAIRE
CJDH JCHD

Change of seat: A "Thank you", and a welcome

This Spring, the journal sees a transition in its stewardship. **Dr. Susanne Sunell**, our Scientific Editor took the editorial helm in September 2004 when the journal moved from *Probe* to the *Canadian Journal of Dental Hygiene*. Susanne monitored the scientific rigor while mentoring many an author. She wore many hats then, as she continues to do now, and the journal, the editorial board, and CDHA are indebted to her stellar service.

Susanne never let a vacation come in between her and the journal's work, and Internet cafés were her operational bases whether in the Alps or the Andes. Her editorial decisions after peer review were as sharp and prompt even when sleep deprived after a trek to Machu Picchu. Well, Susanne, we thank you from the bottom of our hearts.

Stepping into the Scientific Editor's position is **Dr. Katherine Zmetana**. Katherine has explored the dimensions of dental hygiene and dental therapy, and brings strong academic, research, and public health skills. Her expertise includes twenty years of instructional and administrative leadership in post secondary education and training. She has extensive background in program planning, curriculum development and evaluation, and is currently leading an international education project.

Katherine graciously volunteered to shadow Susanne the past few months, to imbibe the feel of the journal, its many valiant struggles, and share in its successes. Welcome to our world, Katherine! We're both grateful and thankful to have you on our side.

Federal budget misses the mark on oral health

CDHA found a leadership deficit on oral health issues in the federal budget released in March 2010. The budget misses the mark in supporting a pressing need for oral health promotion and disease prevention for vulnerable, lower income Canadians, seniors, Aboriginal peoples and children.

CDHA calls on the federal government to take action to improve oral health in First Nations and Inuit communities by revising First Nations Inuit Health Branch dental policies. Thirty-three private and public dental insurance plans across Canada now recognize a new service delivery model — dental hygienists providing services directly to clients, outside of a dental office. Strong support exists for this model, with 90% of Canadians indicating that dental hygiene services should be covered by dental insurance. Recognizing dental hygienists as service providers in their own right will result in improved health system performance, along with access to care and individual oral health.

CDHA calls for a four part formula for better oral health, which includes healthy food, daily tooth brushing, flossing and rinsing. Good oral health goes hand in hand with general health, so an investment in oral health results in improvements to general health and quality of life.

To read CDHA's summary of the 2010 Federal Budget, and the brief CDHA submitted to the House of Commons Standing Committee on Finance, visit www.cdha.ca

Le budget fédéral rate la cible en matière de santé buccodentaire

L'ACHD estime que le budget fédéral témoigne d'une insuffisance de leadership dans le dossier de la santé buccodentaire. Le budget manque le but : il ne répond pas aux besoins pressants en ce qui a trait à la promotion de la santé buccodentaire et à la prévention de la maladie chez les Canadiennes et les Canadiens à faible revenu et vulnérables, les personnes âgées, les Autochtones et les enfants.

L'ACHD réclame du gouvernement fédéral qu'il prenne des mesures pour améliorer la santé dans les communautés inuites et celles des Premières nations et révise à cette fin les politiques dentaires de la Direction générale de la santé des Premières nations et des Inuits. Trente-trois régimes d'assurance-soins dentaires privés et publics d'un bout à l'autre du Canada reconnaissent désormais un nouveau modèle de prestation de services : celui où des hygiénistes dentaires offrent leurs services directement aux clients, en dehors d'un cabinet de dentiste. Ce modèle jouit d'un vigoureux appui : 90 p. 100 des Canadiens ont en effet indiqué que les services d'hygiène dentaire devraient être couverts par l'assurance-soins dentaires. Le fait de reconnaître les hygiénistes dentaires comme de véritables fournisseurs de services entraînera une amélioration de l'efficacité du système de santé; il facilitera également l'accès aux soins et favorisera la santé buccodentaire de chacun et chacune.

L'ACHD préconise une formule à quatre volets pour améliorer la santé buccodentaire; celle-ci comprend l'alimentation saine ainsi que le brossage des dents et l'utilisation de la soie dentaire et du rince-bouche tous les jours. La bonne santé buccodentaire va de pair avec la santé générale; c'est dire qu'un investissement dans la santé buccodentaire entraîne des améliorations dans la santé générale et la qualité de vie.

On trouvera le mémoire présenté par l'ACHD au Comité permanent des finance, et prendre connaissance du résumé du budget fédéral de 2010 fait par l'ACHD, sur notre site Web www.cdha.ca

Educator-Director at CDHA's Board

The CDHA Board of Directors is committed to having a Director with an educator background. The Board intends to resolve the manner how this individual comes to the Board when the forthcoming federal legislation, *Canadian Not for Profit Corporations Act*, becomes law.

In the interim, the CDHA Board will fill this position under its bylaws section (Article VII Section 1a, in keeping with Board Policy 3.1.1). If you are an educator interested in filling the Board position, visit the homepage at www.cdha.ca.

Éducatrice au Conseil de l'ACHD

Le Conseil d'administration de l'ACHD s'est engagé à se doter d'une personne du milieu de l'éducation comme membre. Il a l'intention de résoudre le mode de désignation de cette personne lorsqu'entrera en vigueur la prochaine législation fédérale, la *Loi canadienne sur les organisations à but non lucratif*.

Entre-temps, le conseil de l'ACHD comblera le poste en vertu de sa propre réglementation (Article VII Section 1a, conformément à la politique 3.1.1 du Conseil). Si le poste vous intéresse en tant que membre du milieu de l'éducation, visitez notre site Internet : www.cdha.ca.

Errata

Volume 43n6, November–December 2009 issue of *CJDH*

Increasing cultural competence in the dental hygiene profession by Charbonneau, Neufeld, Craig, and Donnelly. 297–305.

The editorial office regrets the truncated definition in the article on page 298, column 2, under 'What is cultural competence?' paragraph 1, sentence 1, and would like to correct this error. The first sentence should correctly read:

> Multiple definitions exist for the term "cultural competence" with one of the first being "a set of congruent behaviors, attitudes, and policies that come together in a system, agency or amongst professionals and enables that system, agency or those professionals to work effectively in cross-cultural situations".[22]

Volume 44n2, March–April 2010 issue of *CJDH*

Recognizing excellence in 2009. Page 66

CDHA *Visionary* prize 2009 in participation with TD Insurance Meloche Monnex

The editorial office regrets the error in reporting the school and program of the prize winner, and would like to post a correction in this issue as below:

> This honour, with a $2,000 prize, is presented to **Janice Murray of Hope, BC**, currently enrolled in the Master of Dental Science in Dental Hygiene at Idaho State University, USA.

Award winners

Recipient of the *CDHA Symposium Bursary 2010 in participation with P&G* announced

Congratulations to **Pauline Imai, MSc, RDH**, for being selected to receive the *CDHA Symposium Bursary 2010 in participation with P&G*. The award is offered to attend the Canadian Cochrane Centre (CCC) Symposium in Ottawa, Ontario, on 19–20 May 2010. Pauline will attend the Partners Meeting during the conference and represent CDHA by delivering a report on Cochrane related activities that CDHA has been involved in within the last year, as well as activities planned for the upcoming year. For details about the symposium, visit the CCC symposium website. http://ccncsymposium.com/

Recipient of the *CDHA International Ambassador Travel Bursary 2010 in participation with P&G* announced

Congratulations to **Sandra J. Cobban, RDH, MDE**, for being selected to receive the *CDHA International Ambassador Travel Bursary 2010 in participation with P&G*. The award is offered to support a Canadian researcher who is submitting an abstract for an oral presentation, poster presentation, or a workshop at the International Symposium on Dental Hygiene (ISDH), 1–3 July 2010 in Glasgow, Scotland. For details on the symposium, visit the ISDH website. http://www.bsdht.org.uk/isdh_2010.html

Vacancy for Executive Director/Registrar

With the announcement that Kellie Hildebrandt, Executive Director/Registrar, College of Dental Hygienists of Manitoba (CDHM), is resigning this summer, CDHM wishes to ensure that any interested dental hygienist has notice of this position's availability in July 2010. For information, please contact Donna Bilodeau, Senior Consultant, Legacy Bowes Group at 204-934-8825, or donna@legacybowes.com You may also contact Mickey Emmons Wener, CDHM Council Chair, at mewener@cdhm.info

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

CDHA ACHD

Call for Abstracts for the Canadian Dental Hygienists Association Conference

Advancing Dental Hygiene Practice

Halifax, Nova Scotia, 10–11 June 2011

Closing date for Abstracts: 30 September 2010

Abstract Categories

- ***Research Presentations:*** This category includes 1-hour oral presentations on research and program evaluation. Submissions will give a unique perspective on research and evaluation that have not been previously presented or published to a primarily dental hygiene audience. The initial submission on 30 September 2010 may include findings you intend to discuss if your data collection phase is not yet completed. You will then need to forward a **final abstract submission by 30 November 2010** indicating your results and conclusions.
  In this category, you will also need to submit a condensed version of your oral research presentation in 750–1000 words by **5 January 2011** for publication in the *Canadian Journal of Dental Hygiene*. Please note that CDHA reserves the right to edit your submission prior to publication.
- ***Poster Presentations:*** The topics for the 4' x 4' sized posters are research, program evaluation, and community projects.
- ***Community Connections:*** The oral presentations in this category will be 15-minute oral presentations on community projects with a Q & A session of 15 minutes.

Abstract Guidelines and Requirements

1. Send the abstract submission form electronically to abstracts@cdha.ca **no later than 30 September 2010**. *Every applicant must meet this submission deadline*. The abstract submission form is available at http://www.cdha.ca/pdfs/CallForAbstracts.pdf
2. Abstracts are accepted in English. However, its presentation at the conference may be either in English or in French.
3. You may submit more than one abstract. However each abstract must be submitted separately. Individuals submitting multiple abstracts may be the primary presenter on only one abstract but may be the coauthor on other abstracts. Presenters are not required to be the principal investigator of the study, but should be a member of the research team.
4. Previously presented and/or published abstracts will be considered, and must include the citation and/or the title and date of the event where the abstract was presented.
5. If an emergency arises and the presenter is unable to attend, he/she must notify CDHA in writing ***prior to the conference*** that he/she is withdrawing the abstract or naming a substitute presenter. All notices should be emailed to abstracts@cdha.ca
6. To view examples of abstracts please visit http://www.cdha.ca/pdfs/Abstract_examples.pdf
7. Presenters are responsible for financial costs incurred with attending the conference.
8. Submission of an abstract constitutes a commitment by the identified presenter to be in attendance at the conference if the abstract is selected.

Review and Selection Process

Abstracts will be selected through a blind peer reviewed process based on the following: relevance to dental hygiene, importance of issue, uniqueness of topic, quality of research methodology/approach, and clarity of abstract.

Notification of results

Participants will receive notification of either acceptance or rejection of their abstract in January 2011. Accompanying acceptance notices, will be a consent form for the abstract's publication.

Information inquires should be directed to:
CDHA Abstract Coordinator
Toll free in Canada and the US: 1-800-267-5235 ext. 143 or Fax: 1-613-224-7283
Telephone from other countries: 00+1+613-224-5515
Fax: 00+1+613-224-7283
E-mail: abstracts@cdha.ca

A potential Gingival Inflammation Index for Frail Elders

Leeann R. Donnelly, Dip DH, BDSc(DH), MSc; Chris C.C.L. Wyatt, DDS, MSc; and Mario M. Brondani, DDS, MSc, PhD

ABSTRACT

Gingivitis is often diagnosed by the presence of gingival bleeding with or without other signs of inflammations such as changes in tissue colour, contour, and consistency. Gingivitis remains a prevalent oral disease among institutionalized elders. Many indices have been developed to aid examiners in the identification and quantification of gingivitis. However these indices might not be suitable for use due to compromised operator positioning and poor lighting with frail elders, particularly those who are institutionalized. Frail elders living in institutions are often medically compromised, may require antibiotic prophylaxis for probing, and may have a limited tolerance for lengthy examinations. For these reasons the authors propose the use of a new gingivitis index that does not elicit bleeding and uses a dichotomous visual assessment. The Gingival Inflammation Index for Frail Elders (GIIFE) is minimally invasive, does not require antibiotic prophylaxis, and is easy for an operator to perform and client to tolerate. This index has been found to be as effective as the Gingival Bleeding Index in identifying gingivitis, with the benefit of not causing discomfort or difficulty for either the examiner or client. On further testing, it is expected that this new index will provide a more practical method of identifying and assessing gingival inflammation within this population.

RÉSUMÉ

La gingivite est souvent diagnostiquée par la présence de saignement, avec ou sans autres signes d'inflammation comme les modifications de la couleur, du contour ou de la consistance. La gingivite est une maladie buccale qui prévaut toujours dans les institutions pour personnes âgées. Plusieurs indices ont été mis au point pour aider les examinateurs à identifier et à quantifier la gingivite. Ces indices pourraient cependant ne pas convenir à cause de la position risquée de l'opérateur et du faible éclairage avec la fragilité des personnes âgées, surtout celles qui sont en institution. Ces dernières sont souvent compromises médicalement et peuvent avoir besoin de prophylaxie antibiotique et avoir une tolérance limitée à la longueur de l'examen. Pour ces raisons, les auteurs proposent d'utiliser un nouvel indice de gingivite, qui ne repose pas sur le saignement mais sur l'évaluation visuelle dichotomique. L'indice d'inflammation de la gencive pour les aînés fragiles (IIGAF) est minimalement invasif, il ne requiert par de prophylaxie antibiotique et est facile à utiliser pour l'opérateur et à tolérer pour le patient. Cet indice s'est avéré aussi efficace que l'Indice de saignement de la gencive pour identifier la gingivite et il a l'avantage de ne pas causer d'inconfort ni de difficulté pour l'examinateur ou le patient. Avec d'autres tests, on prévoit que ce nouvel indice offrira une façon plus pratique d'identifier et d'évaluer l'inflammation de la gencive chez cette population.

Key words: gingivitis, frail elders, gingival index

INTRODUCTION

Several gingival indices have been developed in an attempt to consistently and accurately quantify gingivitis.[1] Gingival scores measure inflammation at histological and clinical levels as they assess colour, contour, consistency, crevicular fluid flow, and bleeding of the gingiva.[2–7] Dental professionals in clinical practice use gingival indices to asses initial disease status, and to evaluate outcomes of interventions. Researchers use gingival indices to identify the prevalence and incidence of disease, as well as the outcome of a treatment or product intervention in clinical trials. In general, an index should be easy to use, allow for the examination of many subjects in a relatively short period of time, have good inter- or intra-examiner reliability, be objective in its clinical definition, and be amenable to statistical analysis.[8] However, to date, no single index has shown superiority in consistently and accurately assessing gingival inflammation.

A large percentage of elders who reside in long term care facilities experience reduced mobility, poor endurance, muscle loss and weakness, low levels of activity, and are at increased risk of weight loss. An elder who exhibits any three of these characteristics is considered to be frail, and is often institutionalized for this reason.[9] In addition to frailty, elders can also have impaired physical and mental states as well as complex systemic health conditions. All of these characteristics can challenge the proper assessment of the oral cavity due a resident's inability to tolerate a long assessment, compromised examiner positioning, and an increased need for antibiotic prophylaxis.

In this paper, gingivitis in relation to the frail elder will be discussed with particular attention to those residing in long term care. A review of existing gingival indices will be presented to demonstrate why currently there is no single index that is entirely suitable for frail elders. Finally a new index, the Gingival Inflammation Index for Frail Elders (GIIFE), will be proposed as an alternative that can be utilized by both medical and dental professionals to assess more appropriately the gingival health of this population.

Gingivitis

Gingivitis is defined as inflammation of the marginal gingival tissue, and is diagnosed by changes in tissue colour, contour, consistency, texture, and bleeding tendency.[10] The colour of healthy gingiva is most often described as coral pink, while inflamed gingival tissue can appear red to red-blue in colour. Inflamed gingiva has increased vascular permeability due to polymorphonuclear leukocytes in early stages, and plasma cells and B-cells in the more longstanding lesions.[11] As a result, leukocytes invade the gingival crevice increasing the gingival crevicular fluid flow, and bleeding on probing.[12] The influx of inflammatory cells usually causes the gingival tissues to swell thus changing

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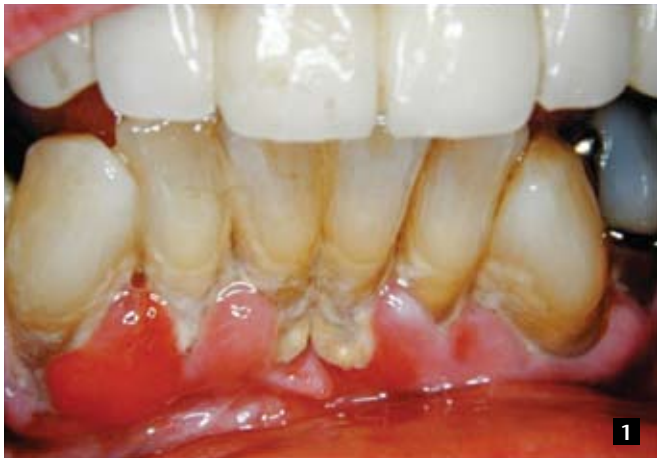
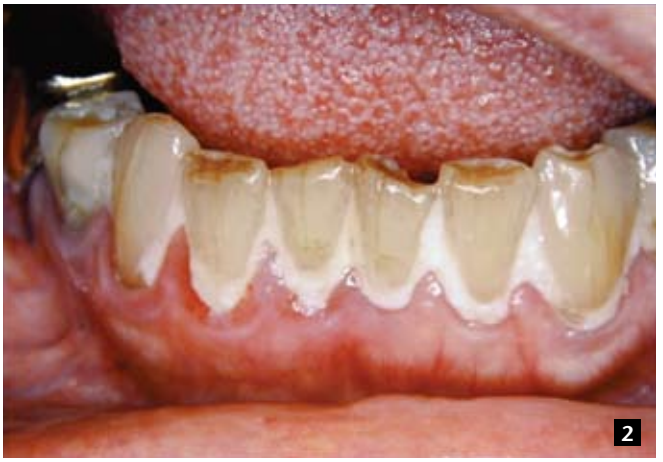




the contour, texture and consistency. Loss of scalloping, knife edge and stippling of the marginal gingiva are common. However a variation in consistency might occur due to destructive tissue changes leading to a more edematous consistency, or to reparative tissue changes resulting in a more fibrotic consistency.[13]

Although gingivitis can be influenced by systemic factors like medications and malnutrition,[14] the most common cause is the accumulation of bacterial plaque along the gingival margin.[15] Undisturbed bacterial plaque causes initial inflammatory changes in as little as 2–4 days, and established lesions within 14–21 days.[15] In most situations, gingivitis can be successfully managed by controlling bacterial plaque.[16]

Assessment of gingivitis

Gingivitis can be assessed using various methods. Although histological evidence of inflammation can be an accurate method of assessing gingivitis, biopsy is not practical for those who do not need periodontal surgery. Therefore a much less invasive assessment is required. The measurement of gingival crevicular fluid flow has shown to be of potential value in the assessment of gingivitis,[17–20] and in bleeding on probing that correlates well with histopathological changes seen in inflamed gingival tissues,[21,22] and in early signs of gingivitis.[23] Gingival indices that measure changes in tissue colour, contour and consistency have also been very popular, since inflamed gingival tissues do not always bleed on probing.[24] As a result, a combination of bleeding and visual characteristics of inflammation has been used for gingival indices.[4,25]

Gingival bleeding

Bleeding is considered an objective measure of gingivitis and can be elicited by wooden tooth sticks,[26,27] dental floss,[28] and periodontal probes.[5,29] Unfortunately the use of a manual periodontal probe is technique sensitive and measurements, whether or not bleeding occurs, can vary within and between examiners depending on the pressure used, and on the depth and angle in which the probe is inserted into the sulcus.[30] Different types of periodontal probes have been tested in order to improve accuracy and examiner reliability.[31–33] A force controlled probe has been shown to reduce variability, and that a pressure no greater than 0.25N is recommended in order to prevent such false positive results as trauma of the junctional epithelium.[29] The angle and depth to which the probe is inserted into the pocket has also been evaluated. In one study, manual probing of the marginal gingiva with an insertion angle of 60 degrees was found to be the best method to evaluate accurately a healthy gingival condition.[30]

Difficulties assessing gingival inflammation in institutionalized frail elders

Although bleeding on probing is the most commonly used method of assessing gingivitis in a dental clinic setting, our experience has demonstrated that bleeding is not a predictable indicator of gingivitis for frail elders, particularly of those living in institutions. In some cases, where the gingiva appears inflamed (Figure 1 and 2) bleeding does not occur. This may be due to variance of probing force, depth and angulations between and within examiners.[31–33] While these variations can occur within any population or setting, variation can be an even greater problem among frail elders in institutions since the oral assessments usually take place within the facility. Because these individuals have limited mobility, most oral assessments are performed while subjects are sitting up in wheelchairs, often with no head support.[34] Lack of head support makes it difficult to keep the head from moving during the assessment, which can be dangerous to the resident or examiner when an instrument such as a periodontal probe is being used. Access, visibility, and comfort of the examiner are compromised since the examiner frequently approaches the resident from the front or bends over the resident to perform the assessment in a wheelchair. Moreover, residents with cognitive impairments or advanced frailty may not be able to keep their mouths open for an extended period of time. The use of dental floss to assess bleeding tendency of the papillary gingiva is not very practical for this population because the resident may close unexpectedly. Floss holders are an option but these too do not overcome unexpected closing, and are then difficult to remove from a resident's mouth.

The majority of residents in long term care have some remaining teeth,[35] but the use of an index that only scores a limited number of identified teeth would be problematic as it may exclude the only remaining tooth structures. Another problem is the scoring of only complete, not fractured teeth and root tips. The number of fractured teeth

	Author	Description of tissue characteristics	Bleeding measurement	Teeth and gingival area
Papillary-Marginal-Attachment Index **(PMA)**	Schour and Massler 1948[3]	Any sign of inflammation present, multiple descriptors (0–4)	X	Facial of all teeth Papillary, marginal and attached gingival scored separately
Gingival Index **(GI)**	Loe and Silness 1963[5]	Slight and marked (0–3)	On probing	All teeth Distofacial, mesiofacial papilla, facial and lingual marginal gingiva
Modified Gingival Index **(MGI)**	Lobene *et al.* 1986[40]	Slight change in color, redness, marked redness (0–4)	X	All teeth Distofacial, mesiofacial papilla, facial and lingual marginal gingiva
Sulcus Bleeding Index **(SBI)**	Muhlemann and Son 1971[23]	Change in color None, slight or obvious swelling	On probing	All teeth All gingival surfaces
Gingival Bleeding Score **(GBS)**	Carter and Barnes 1974[28]	X	Using unwaxed dental floss	All teeth All interproximal areas except between 2nd and 3rd molars
Bleeding Index **(BI)**	Edwards 1975[41]	X	Using dental tape	All teeth All interproximal areas
Gingival Bleeding Index **(GBI)**	Ainamo and Bay 1975[6]	X	On probing	All teeth Facial surfaces
Papillary Bleeding Index **(PBI)**	Saxer and Muhlemann 1975[42]	X	On probing	All teeth All interproximal areas
Papillary Bleeding Index **(PBI) revised**	Saxer *et al.* 1977[32]	X	On probing	All teeth All interproximal areas
Papillary Bleeding Score **(PBS)**	Loesche 1979[43]	Healthy, Edema, red gingiva Marked redness and edema	Insertion of a toothpick interproximal	All teeth All interproximal areas
Periodontal Pocket Bleeding Index **(PPBI)**	Van der Velden 1979[44]	X	Constant force probe .75N	All teeth All interproximal areas
Modified Papillary Bleeding Index **(mPBI)**	Barnett *et al.* 1980[31]	X	On probing	All teeth All mesial interproximal surfaces
Bleeding Time Index **(BTI)**	Nowicki *et al.* 1981[33]	X	On probing	All teeth
Eastmen Interdental Bleeding Index **(EIBI)**	Abrams *et al.* 1984[26]	X	Insertion of a triangular wooden stick interproximal	All teeth All interproximal areas
Modified Sulcular Bleeding Index **(mSBI)**	Mombelli *et al.* 1987[45]	X	On probing	All teeth Papilla and marginal gingival

Table 1. Gingival Indices. X- Indicates not utilized in the dental professional's assessment.

varies, but are present within this population[35] as they are often not extracted for various reasons including resident or family wishes, medical contraindications, and lack of access to dental care.[36–38] Fractured teeth, and retained root tips can still contribute to gingival inflammation and should be included in the assessment.[39]

Existing gingival indices

A PubMed search identified 15 gingival indices used with adult populations (Table 1). Many of these indices use tissue descriptors that are susceptible to subjective examiner subjective such as "slight", "marked" or "obvious" that could reduce reliability. Some of the indices such as the Papillary Marginal Attachment Index, Gingival Index, Modified Gingival Index, and Papillary Bleeding Score do not measure the entire gingival unit or both the buccal and lingual gingiva. Indices that use bleeding as an indicator of gingivitis such as the Gingival Index, Sulcus Bleeding Index, Gingival Bleeding Index, Papillary Bleeding Index, Papillary Bleeding Index revised, Periodontal Pocket Bleeding Index, modified Papillary Bleeding Index, Bleeding Time Index, and modified Sulcular Bleeding Index are not suitable for frail elders as there is an increase in the potential need for antibiotic prophylaxis. Although some indices employ methods of eliciting bleeding that may not require antibiotic prophylaxis such as the Gingival Bleeding Score, Bleeding Index, Papillary Bleeding Score, and Eastmen Interdental Bleeding Index, these indices only assess the

Specific criteria of the GIIFE

1. All teeth, including fractured teeth, root tips and implants are to be assessed.
2. Each tooth is assessed at 6 areas of the gingiva (MB, B, DB, ML, L, DL).
3. Redness defined as any area of the gingival unit no longer appearing coral pink.
4. Swelling defined as loss of scalloping, knife edge or stippling of any of the gingival unit.
5. Overall gingivitis score calculated by summing all scores and dividing by the number of surfaces.
6. Overall score will determine extent or percentage of gingival inflammation.
   0.00 – 0.33 = minimal 0.34 – 0.66 = moderate 0.67 – 1.00 = extensive

Table 2. Specific criteria of the Gingival Inflammation Index for Frail Elders

papillary unit of the gingiva or require the use of floss. As most of the residents do not perform or receive inter-proximal cleaning[35] it is quite possible that a large majority of the gingival inflammation will be inter-proximal thus creating an over estimate of the disease. Moreover, proximal contacts and associated papilla may not be present due to missing, splayed or fractured teeth. For these reasons it would be best to choose an index that did not just measure the papillary unit.

A review of the above indices found that none satisfied us when assessing gingivitis of the institutionalized frail elder. We propose the use of an index that employs only a visual assessment of the gingival tissue with simple criteria. The choice of such an index takes into account some of the important aspects of studying and providing care to this population, such as difficult positioning and access, varying numbers of teeth, tolerance of the subjects, and exclusion of subjects for medical reasons.

While bleeding on probing is currently a popular index for use with this population, it is invasive and will not alter proposed treatment plans. This is also true of current visual gingival indices. The degree to which the gingival tissue is red or swollen will not alter the treatment plan. Most of the gingivitis experienced by this population is due to plaque accumulation. Its removal is often the first recommendation ideally followed by professional debridement. In this population a thorough professional debridement may be contraindicated, and tooth brushing may be the only appropriate treatment depending on the degree of frailty, cognitive limitations, and medical conditions. For these clients, probing obviously inflamed gingiva is excessive and unwarranted; quantifying the degree of inflammation is unnecessary. It is suggested that the following index offers an alternative that is more appropriate for this population.

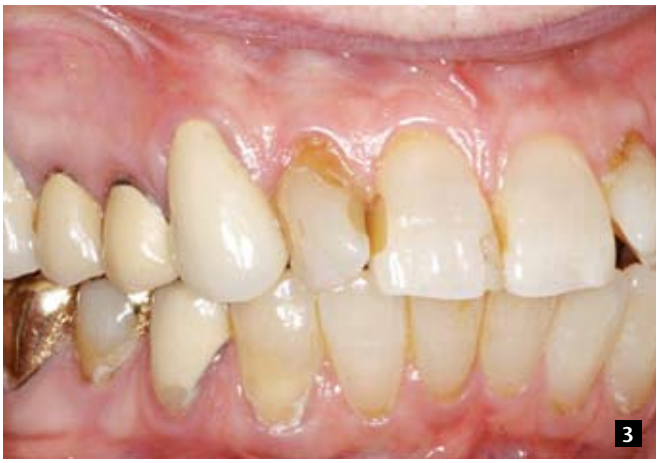
The Gingival Inflammation Index for Frail Elders (GIIFE)

The GIIFE (Table 2) is a simple dichotomous assessment of six areas of the tooth/root/implant surface namely, mesial buccal, mid-buccal, distal buccal, distal lingual, mid-lingual and mesial lingual:

0 - no visual sign of redness or swelling (Figure 3)
1 - visual signs of redness or swelling (Figure 4)

The instruments needed to perform the assessment are a mirror and light or an illuminated mirror such as the DenLite™ by Welch Allen (Figure 5) as it provides superior vision and light to an overhead lamp or flashlight.

This index is easy for the examiner to perform and for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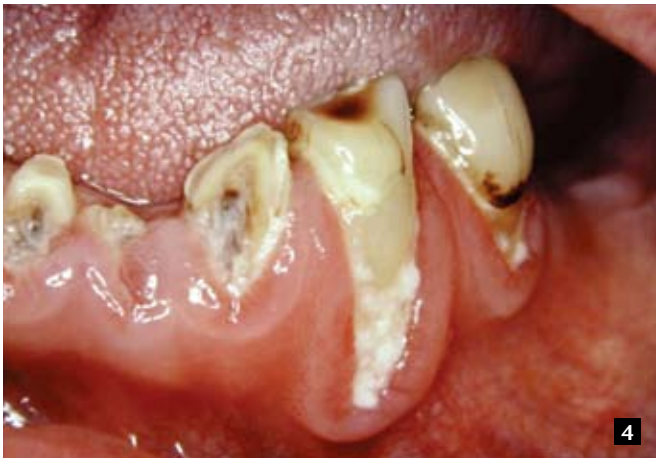
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the subject to tolerate since it is only a visual assessment. The examination can be quick increasing resident tolerance and examiner comfort. Head support is not required reducing the risk of injury from sudden movement since only a mirror will be in the resident's mouth.

The visual characteristics are simple and easily distinguishable from each other. In order to reduce the subjectivity, thus increasing examiner reliability, the degree to which the gingiva is red or swollen does not quantify. Depending on the stage of the gingivitis, edema or fibrosis of the gingiva may be present. Therefore to simplify further the criteria, swelling was chosen to describe change in tissue contour, consistency, and texture. All intact teeth, fractured teeth, and root tips present will be examined, thereby minimizing potential areas of gingival inflammation being excluded from the assessment. All areas of the gingiva will be assessed to ensure that sites more or less prone to gingivitis are given equal representation. By excluding a bleeding on probing assessment this index eliminates the need for antibiotic prophylaxis, and can be applied to all who are dentate. This can be especially beneficial to dental hygienists working within long term care facilities without prescription writing privileges since they would no longer need to wait for an antibiotic order to complete their gingival assessments. The exclusion of probing should also decrease the time per examination. Finally, since this index does not require specialized skill of a dental professional or the use of dental instruments, it can be utilized by nursing staff as part of their initial overall assessment. Registered and licensed practical nurses typically perform these assessments, and with proper training should be easily able to complete this assessment. The oral cavity can be a relatively foreign area of the body for health professionals to assess, resulting in low compliance. However, a simple to use index with appropriate training and support from dental professionals has been shown to enable nursing staff to complete a reliable oral health examination on frail elders.[46]

Limitations of the GIIFE

- Subjectivity of redness and swelling can still be susceptible to examiner variability,
- Medical conditions such as arthritis treated with anti-inflammatory medications may mask some visual signs of inflammation,
- Some residents may still not be able to tolerate the full assessment,
- In the absence of good lighting, certain areas of the gingiva and early signs of gingivitis may be missed.

This index has not been extensively tested to date, however it has been utilized and compared to the Gingival Bleeding Index (GBI). The GBI has been used as an annual oral assessment by a dentist for residents in long term care facilities. While only a small number of subjects (24) were assessed with both indices, it should be noted that the correlation between the GBI and the GIIFE has been found to be r=0.85 (a positive association between the two indices) for 369 teeth, fractured teeth and/or root tips. In addition, feedback from the dentist revealed that the GIIFE:

- was quicker and easier to perform,
- caused less stress,
- could be used on all residents,
- required less time for judgment regarding degree of inflammation, and
- identified areas of inflammation that did not bleed upon probing.

The dentist suggested that due to its simplicity, other health professionals working amongst this frail population could use it with appropriate training. However, the dentist did note that it was difficult to identify all six sites around root tips, and suggested not more than four sites be scored.

CONCLUSION

The gingival indices currently in use with the adult population are not suitable for frail elders, particularly those who are institutionalized. Compromised positioning of the examiner and resident, limited tolerance for a lengthy assessment, variation in dentition and potential need for prophylactic antibiotic coverage need to be taken into consideration when choosing a gingival index for this population. The GIIFE appears to be fast and easy to perform, minimally invasive, and may be utilized by other health professionals, and offers a good alternative to assess gingival inflammation in the frail elderly population. Preliminary findings suggest that the GIIFE may be comparable to the Gingival Bleeding Index, and viewed as more appropriate. Further testing of the GIIFE is warranted to fully assess its utility, validity, and reliability as a gingival index for use with frail elders.

This index should be further tested by dental hygienists who practise in long term care facilities or institutions to support whether the GIFFE is a good model to consider for general use in the frail elderly population. Since this index is intended to serve as a simplified and accessible measure for use by a wide range of health professionals, it could be introduced at interprofessional seminars to test its ease of application by health practitioners who are not specifically from oral health care fields.

It is anticipated that further investigation of the GIIFE will produce an index that offers a more appropriate assessment of gingival health among this unique population.

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▲ Mickey, the presenter, at ADEA conference in Washington, DC, 1–3 March 2010.

Poster Abstracts

Self-centered or Patient-centered? University of Manitoba Clinical Communication Skills Instruments for Patient Feedback and Student Self-assessment.
ADEA Annual Conference, Washington, DC, 1 March 2010.
Wener ME (presenter), Schönwetter DJ, Mazurat N.

Communication is of increasing importance as the public continues to move from a position of unquestioning trust to a desire for an individualized relationship with decisions, subject to negotiation. Benefits resulting from effective communication skills by healthcare practitioners include improved patient satisfaction, improved care outcomes and reduced patient anxiety. Despite the importance of this skill, the systematic development of student oral health practitioners' communication skills tends to be varied and often limited. To augment the existing communications curriculum at the University of Manitoba, patients provide feedback anonymously to their student clinician via a survey instrument that is paired with a self-assessment survey and reflection assignment that has been integrated into six existing clinical courses for dentistry and dental hygiene students. Survey results provide individualized feedback to the student to reinforce clinical communication strengths and to identify areas that require improvement, provide feedback to the Faculty regarding the overall clinical experience, and help to identify curricular gaps. The students' self-assessment assignment asks them to compare their results with their patients', to examine patient comments, to set realistic goals and to devise strategies to meet these goals.

Development of the University of Manitoba instrument began through identification of relevant theoretical constructs and communication models. This was followed by thematic analysis of data from focus group encounters with five stakeholders (patients, students, support staff, clinical instructors, and didactic teachers), incorporation of curricular content, and the development and piloting of clinical communication questionnaires. This inclusion of actual 'patients as teachers' of communication skills is not typical as surveys have often been devised by and for use by trained raters in contrast to patient informed surveys for use by patients. To create a rigorous instrument, item reduction analysis as well as measures of reliability and validity were completed following initial data collection (N=685). Correlations were conducted on patient and clinician demographics (i.e., gender, age, SES, etc.) to identify any unique patterns associated with effective communication. Additionally, the relationship between the length of treatment at the clinic and patient satisfaction was examined.

Evaluating Outcomes for the School of Dental Hygiene at Dalhousie University.
Neish N, Maillet P (primary investigator), Tax C, LeBlanc A.

The purpose of the study was to determine the extent to which dental hygiene graduates perceived the program outcomes for the School of Dental Hygiene at Dalhousie University were being met. Graduates from the classes of 2006, 2007, 2008, and 2009 were surveyed. The results of the survey indicated that graduates who are now practising believe that the program outcomes are being met.

Facutly Development Workshop

The Art of Assessment: Ensuring Effective Evaluation of Affective Assessment.
ADEA Annual Conference, Washington, DC, 27 February 2010.
MacDonald L, Schönwetter D, Nogueira G.

Assidēre, as the origin of the word 'assessment', in Latin refers 'to sit beside' as in a law court and is a word linked to judgement. This FDW invites participants to actively engage in the affective domain of assessment, beginning with the historic origins of assessment. Just as one looks upon a portrait, sits beside it, and reflects and judges its impact on self—meaning, value, implications, so too, is the process of assessing student learning in the classroom, laboratory, and clinic. As teachers, we are more than likely to base the judgement of student learning on inferences, assumptions, and purpose. The teacher 'sits beside' the student and assesses the student's performance. Judgement takes place. Although the portrait of student evaluation has changed over the years—today's canvas paints the human element and creates a humanistic environment for learning, including student evaluation. Evaluation of student learning has at least three main palates: cognitive, psychomotor, and affective. The latter is often the most challenging to master for the educator, both new and seasoned. It can be a messy affair. There is much art to delivering formative and summative feedback to the student. Particularly when the student's performance is less than acceptable. The judgement which takes place may be based on criterion for the competency, but the uneasy feelings that may be felt by the teacher about to deliver the assessment can easily camouflage the message, making it ineffectual, inadequate, and erroneous. The student doesn't actually receive a valid, nor fair assessment. Participants in this workshop will design and explore effective strategies in delivering feedback to the student when the student has not met expectations of performance, when there may be emotional reactions that complicate delivery for both the student and the faculty. The workshop engages participants in case scenarios, reflection, critical thinking, and photo-storytelling; all of which develop the ability to 'sit beside' and deliver effective affective assessment.

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▼ Cara Tax (left) and Mickey Wener (right) flank the Canadian Ambassador to the US, Gary Doer, during a visit on 2 March, while in Washington, DC for the American Dental Educators Association annual conference.

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Using a community health fair for oral health surveillance: A case study in the USA

Mary C. Hollister, RDH, MSPH, PhD; and Kelly Thompson, RD

INTRODUCTION

Native Americans comprise a particularly vulnerable group with low rates of access to care and high rates of unmet dental needs.[1] Additionally, Tribal members often comprise a low percentage of the total population, so are not clearly identified as an ethnic group in state or national oral health surveys. Health professionals have a social and ethical responsibility to provide effective services in health care systems that are challenged with disparities.[2] Public health professionals strive to address these disparities using the core public health functions, assessment, assurance, and policy.[3] These core functions address health disparities because assessment defines the health disparities and determines overall program effectiveness, assurance addresses appropriate services, and policies serve to institutionalize successful practices. In this case study, oral health assessment was accomplished through community surveillance. Using the surveillance information, Tribal health staff was able to follow up high risk individuals to ensure appropriate care was given. This surveillance information was also used to refine policies regarding preventive service frequency and reimbursable procedures.

Without regular surveillance it is difficult for the Tribe to determine if members are getting appropriate services, and if current policies are beneficial. The Jena Band of Choctaw Indians is a federally recognized tribe with a majority of members residing in a three-parish area of east central Louisiana including Grant, LaSalle, and Rapides parishes in the USA. The Tribe has 189 members who reside in the service area, and are therefore eligible for oral care services provided by the Tribe. The Tribal members living within the service area belong to these ranges of age: 0–18 years=81 members; 19–54 years=114 members; 55–62 years=11 members, and 63–85 years=2 members. The service area is rural, but these Tribal members have been able to receive dental care in local private practice dental offices. Because of the Tribe's size, few direct services are delivered on site. Most of the medical and dental services are funded through the Tribe's Contract Health Services (CHS) to local private practitioners. This is an efficient means of providing health care for Tribal members because the Tribe does not maintain medical and dental facilities nor employ health professionals. However using CHS only creates a unique challenge for the Tribe. The Tribe can determine the number of visits that have been paid through CHS but because the Tribe does not maintain a health record for most services, it is difficult to track health status, determine Tribal member's health needs, or identify Tribal members at high risk for targeted services.

The Tribal Health Department has set a goal to monitor annually the health status of eligible Tribal members. The Tribe tracked several health indicators at the community events including hypertension, blood glucose, glaucoma, and immunizations; the results of those indicators are not included in this case report. The purpose of this case study is to describe planning and conducting a community health fair for the purpose of monitoring oral health indicators.

PLANNING THE EVENT

The Tribal Health Department had tried several strategies to track the health status of Tribal members including group classes, such targeted services as blood pressure and blood sugar screening on demand. Reports from dentists in private practice had been requested following dental exams. None of these strategies achieved the desired effect. The Tribal Health staff realized a carefully planned, evidence-based approach was needed to achieve the goal of monitoring several health indicators, including oral health. The rest of this report includes the oral health findings only.

Assessment: Evidence-based decision making

The basic principles of evidence-based decision making include: assessing scientific literature, professional expertise, local needs, and community values.[4] Each of these must be considered when planning a community health intervention. In the case of the health surveillance, applicable literature may be found in *Healthy People 2010* recommendations and dental public health *Best Practices*. *Healthy People* documents oral health needs and sets goals by predicting trends, disease, rates of caries, periodontal disease, dentate status, and other key indicators.[5]

Trends are determined by such surveillance tools as Basic Screening Survey (BSS), National Health and Nutritional Examination Survey (NHANES), the Indian Health Service Oral Health Survey, and others. The Association for State and Territorial Dental Directors endorses the use of the BSS for community oral health surveillance.[6] The BSS uses a visual screening to identify individuals with untreated decay, caries experience, presence of dental sealants and treatment urgency. The disadvantages of this type of screening are that it is not as sensitive as the complete examination done in NHANES, and that it does not track such oral conditions as periodontal disease or soft tissue lesion. The benefits of BSS are that large numbers of children can be assessed with minimal equipment, and that the survey can be repeated frequently. Therefore the use of BSS to monitor oral health status is supported in scientific literature, and endorsed by the professional expertise of the dental public health community.

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Local needs played a major role in determining the method of accomplishing oral health surveillance. Frequently, screening surveys are done in schools or dental clinics. However, in this case the Tribe does not operate a school nor a dental clinic. Therefore local needs dictated that if surveillance was to be accomplished, it must be conducted in a community setting.

Community values were carefully considered to decide what type of event would be supported by Tribal and community members. The health planners knew that the Tribal members attended previous health fairs and similar events. Several community partners agreed to participate in health fairs.

Objectives

With the goal in place, planners set measurable objectives. The objectives served as benchmarks to ensure the event was appropriate for the goal and sufficient numbers were achieved. In this case the objectives were:

- Annually screen at least 25% of eligible Tribal members for hypertension, blood sugar and glaucoma
- Obtain Body Mass Index (BMI) on at least 25% of eligible Tribal members annually
- Annually determine oral health status on at least 30% of eligible Tribal members between the ages of 0 and 18.

Activities and resources

Community health fairs were selected as the means to achieve the objectives. Two health fairs were held; the fall event targeted adults with diabetes, and the spring event was just for children. Some children were screened at the fall event, but most of the children were screened in spring. The Tribal Health Department staff planned the days, set up the rooms, purchased materials and food, scheduled the professional staff, ensured appropriate privacy, tracked attendance, and assisted throughout the day. Dental hygienists trained in BSS conducted the dental screenings. Local nursing students and medical professionals offered medical services.

- *Fall: Adult health fair–focus on diabetes*
  - Services were: blood pressure screening, blood sugar screening, dental screening and oral hygiene instructions, flu shots, blood drive, education on a variety of health topics
  - Healthy lunch was served
- *Spring: Children's Easter egg hunt*
  - Services were BMI, oral health screening, oral hygiene instructions as needed, fluoride varnish and referral
  - Games were open all day. The Easter egg hunt started *after* all of the children had completed the health screenings.

ORAL HEALTH FINDINGS

The results of screening for hypertension, blood sugar, BMI, and other health indicators were reported internally and are not included in this report. Only seven adults (5% of the eligible population) received oral health screening. Because of the small number of adults included, results are presented for children only. Forty-six children (57% of the eligible Jena Band children) were screened. Among this group, 18 children were in the age group of 2–5 years, and 24 were aged 6–16 years. Only four of the older children aged 8–10, which are the ages included in the state survey, are presented here for comparison. Results are reported for all children but generalizability is limited in the 8–10 age group because of the very small sample.

Being the first BSS for this population, previous decay experience is not available for the Jena Band of Choctaw Tribe. The data will serve as baseline oral health information.

Dental caries

- A lower percentage (22.2%) of children aged 2–5 years at Jena Band (n-24) had untreated decay compared to children (37.0%) surveyed in similar Nashville area community settings in the US (n=710).[7,8]
- 57% of children aged 1–18 years had no caries history. No comparable data are available.
- In children aged 8–10 years (n=4), a lower percentage (25%) had untreated decay compared to children in the state of Louisiana (42%).[9]

Sealants

- Among children of school age, 6–16, (n=24), 41% had molar sealants. In Louisiana's third graders, 33.3% of children had molar sealants.[9]

Urgent dental needs

- None of the children in either age group at Jena Band had signs of urgent dental needs.

Access to care

- The oral health screening reached 30% of the total Tribe's membership. This figure included a very small number of adults. However 57% of the Tribe's children aged 1–18 were screened. Additionally, the percentage of individuals who had a dental visit in the last year was similar in the Tribe and the State as a whole.[10]

These results show that Jena Band Tribal members have oral health status comparable to the population of the state of Louisiana, USA, and in some cases, better than the overall Nashville Area Indian Health Service. Results further indicate that the Tribal Health Department has been effective in identifying oral health needs and helping Tribal members establish a dental home.

EVALUATION

The challenge when conducting a successful health fair is achieving a meaningful outcome. To address this issue, careful evaluation was done to ensure that objectives were met, and sufficient information was available to improve the project in the future.

Outcomes were measured both quantitatively and qualitatively; all objectives regarding number of participants screened were exceeded; however some age groups were under represented. Individuals who had an oral health screening also received appropriate oral health instructions and fluoride varnish treatments. The number of participants was tracked by overall health fair registration,

and by services provided at individual stations. All clinical data were entered into the Registration Patient Management System (RPMS), the clinical tracking system used in the Indian Health Service.

Qualitative evaluation was limited to attendance and satisfaction. The rational for this evaluation was that satisfied individuals would continue to attend future events. To assess qualitatively the process of the events, staff observed patient flow, waiting lines for all services, and participant's reactions and comments. Many of the elders appreciated the social gathering at the fall event. Children and parents enjoyed the spring event and wanted it to be held every year. Event staff met at the end of the day to discuss each of the qualitative issues. Results will be used to plan next year's events. Future evaluation may include more substantive information on health attitudes or practices.

CONCLUSION

The purpose of the Oral Health Screening survey was to determine oral health status in a community that relies on a network of private practitioners to provide dental care. With no central database, oral health status can only be determined using a community based survey. This method has been used by many states but not by individual Tribes. A further challenge to Tribes is that because of relatively low numbers, Tribal members included in state surveys are frequently not identified as an ethnic group, so specific information on Native Americans or Alaska Natives is not available.

By using health fairs, the Jena Band of Choctaw Indians was able to establish a system of oral health surveillance. This initial screening was most successful with very young children. Limitations of the surveillance are self selection of participants, and the low number of older children and adults. Planners will use the results of the participant interviews and community input to increase participation in under represented age groups in future events. These limitations affect the ability to make strong conclusions regarding the oral health status of the entire Tribe. However, it is a promising practice that will be repeated and refined to track oral health status, identify high risk individuals, and ensure that Tribal members are receiving appropriate dental care.

An advantage of screening at the community health fair was that most children were accompanied by parents or guardians. Consent for fluoride varnish was obtained and parents were informed of their child's treatment needs, and available dental resources. With evaluation and adjustment, the Tribe can repeat the surveillance regularly, allowing trending, planning, and effective use of Tribal resources.

The purpose of this report was to demonstrate the use of the Basic Screening Survey in a community setting to gather oral health information. The Tribe also screened for medical conditions such as diabetes, glaucoma, Body Mass Index and immunizations. Reports on those indicators were reported internally, and not included in this report.

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It's not that easy bein' green

Business Development Manager, Ann E. Wright

It's not that easy bein' green
Having to spend each day the color of the leaves
When I think it could be nicer being red or yellow or gold
Or something much more colorful like that.
Kermit the Frog. Lyrics by Joe Raposo.

Interest in green technology and eco practices is becoming more common in dental and dental hygiene practices. As many people worldwide share a strong belief in reducing their carbon footprint, health practitioners are increasingly interested in building practices and using products that make a positive contribution to the sustainable environment.

Dental hygiene practices can take a lead in developing their own green practices. Last year the CDHA featured dental hygiene practices on the covers of this journal. One dental hygiene practice offered aromatherapy and promoted the use of natural products along with traditional oral health services. A second one was designed and built according to eco dentistry standards.

What is Green Dentistry? According to the Eco Dentistry Association (www.ecodentistry.org) the general principles include adherence to the following: reducing waste and pollution, saving water and energy, incorporating high tech equipment and knowing the links between oral health, green dental practices *and* overall wellness.

Dr. Fred Pockrass and his wife, Ina, leaders in eco dentistry and founders of the Eco Dentistry Association, articulated four basic rules; rethink, reduce, reuse, and recycle. The following is a brief description of each rule:

1. **Rethink:** Look around your practice for items you might add, take away, or change so you use less energy or water, decrease pollutants, reduce disposables, or increase recyclables. Adding a green plant will improve indoor air quality. Instead of using plastic chair barriers, wipe chairs down with hospital grade non toxic disinfectants. Use energy efficient florescent lighting to reduce kilowatts of electricity, and reduce CO_2 emissions.

2. **Reduce:** We can conserve resources if we use less of them. The Eco-Dentistry Association developed the "Save 90 a day" campaign and urges oral health practitioners to incorporate this into all oral hygiene coaching. It encourages us to ask our clients to turn off the water fixture while they brush their teeth. If this advice is followed twice a day, there is the potential to save up to 90 glasses of water per person/day. Another water saving strategy is to use water free hand disinfectants. Not only does this save water, but also paper towels and paper waste. Other helpful tips include purchasing large jars of prophy paste to eliminate plastic waste from the individual packaged cups.

3. **Reuse:** This means finding a new use for an item that would otherwise be thrown away. An investment in reusable cloth sterilization pouches will last for years and will replace the thousands of disposable autoclave bags that are thrown out after only one use.

CDHA welcomes your feedback: awright@cdha.ca

4. **Recycle:** Recycling is the first thing that comes to mind when most of us consider protecting our environment. When his cloth head rest covers and bibs become threadbare, Dr. Pockrass donates them to his local animal shelter.

Dr. Ali Farahani was drawn to building an eco practice in Canada. He and Mittale Suchak, graduating student from the University of Waterloo, researched, developed an eco dentistry model, and published their report entitled *Eco-Friendly Dentistry: The Environmentally Responsible Dental Practice*.[2] Their article lists several environment friendly products to make a practice eco compatible. This includes paint products that do not contain VOCs (volatile organic compounds), eliminating paint odour in a freshly painted room. Flooring can be purchased that is hypo allergenic, biodegradable, and does not contain formaldehyde. Carpet products are available in wool and other natural fibres. Furniture can be chosen that is made from recycled or reclaimed wood. Interestingly, Dr. Farahani estimated that he would use approximately 100,000 plastic suction tips over the next 10 years, and now uses only stainless steel, reusable ones.

Dr. Michael Gradeless discussed his venture into a green practice.[3] By applying LEED (Leadership for Energy and Environmental Design) concepts to his facility design, he focused on four key issues during construction: sustainable site development, water savings, energy efficiency, and indoor environmental quality. His office design uses strategies similar to those previously mentioned.

Dr. Gradeless believes that this commitment to a green practice and sustainable features were an unforeseen marketing boon for his practice. Clients appreciated his philosophy and commitment, and this helped distinguish him in a competitive marketplace. He renamed his practice "Mint Dental Works" to give the public an instant impression of what was important to his practice.

While Kermit the Frog worries about being "green" at the beginning of his plaintive lament, he realizes that the positives far outweigh the negatives as the song ends:

But green's the color of Spring
And green can be cool and friendly-like
And green can be big like an ocean
Or important like a mountain
Or tall like a tree

When green is all there is to be
It could make you wonder why
But why wonder, why wonder?
I am green and it'll do fine
It's beautiful!
And I think it's what I want to be.

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Online event	24 June 2010	Virtual Q & A	DENTSPLY *Oraqix*®: Needle free anesthesia for non surgical periodontal therapy	For better dentistry DENTSPLY CANADA
Onsite event	October 2010		CDHA Annual General Meeting	CDHA ACHD
Onsite event	10–11 June 2011	Halifax, NS	*Advancing Dental Hygiene Practice*—CDHA National Conference	CDHA ACHD

President's message, *The electronic buzzword: social media*
…continued from 99

across a huge country but we can come together via a blog, forum, or webinar, and share. Why is this important? Well, I believe that this opportunity of social networking expands our viewpoints and gives us access to knowledge, information, and current events within our profession. It is a networking opportunity for all.

So I have tried to overcome my initial reservations on a "president's blog", and aired out my blogging skills a bit. I am still nervous about my venture, but when I receive a comment back from a member, the adrenalin rush is exciting and encouraging. I challenge other CDHA members to join me in the forums or blogs.

Let's talk, connect, and share dental hygiene in Canada! ©CDHA

Message de la présidente, *L'expression électronique à la mode: médias sociaux*
…suite 99

du partage. Pourquoi est-ce important ? Hé bien, je crois que cette opportunité de réseautage social permet d'élargir nos points de vue et nous donne accès au savoir, à l'information et aux activités courantes au sein de notre profession. C'est pour nous toutes une occasion de travailler en réseau.

Ainsi, j'ai essayé de surmonter mes premières réserves sur un « blogue de présidente » et exposé un peu mes talents de blogeuse. Je suis encore nerveuse de cette aventure, mais quand je reçois une réaction d'un membre, la poussée d'adrénaline est excitante et encourageante. Je défie les autres membres de l'ACHD de me joindre dans les forums ou les blogues.

Parlons-nous, branchons-nous et partageons l'hygiène dentaire au Canada ! ©CDHA

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ABOUT THE COVER

The outer front covers in the six issues of Volume 44 in 2010 feature **dental hygiene educators in Canada**, honouring their service to the dental hygiene profession. This picture was one among the entries selected for the front cover competition first advertised mid-November 2009 in the journal. ©CDHA. Printed with permission.

The front cover features the second graduating class of the one-year degree completion *Bachelor of Dental Hygiene* program at Dalhousie University, and the dental hygiene faculty who teach or administer the *BDH* program. In the rows from left to right, at the front are Prof. Peggy Maillet, coordinator of the program, Prof. Cara Tax, Jessica Nowlan, Prof. Patricia Grant, Dr. Joanne Clovis, Amber Binns, Janet Munn; in the second row are Nancy Neish, Director of the School of Dental Hygiene, Prof. Terry Mitchell, Kaila Wiebe, Deanna Way, Danielle Newell, Lauren Feero, Simone d'Entremont; and the top row has Myrna de Assis-Soares, Ebbiny Price and Teanne MacCallum. ©CDHA. Printed with permission.