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13e conférence annuelle professionnelle
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A Mouth Care In-Service Pilot Project

by Mickey Emmons Wener, BS (DH), MEd, CTESL, Carol-Ann Yakiwchuk,† DipDH, and D.J. Brothwell,◊ DMD, BEd, DDPH, MSc*

The following is based on a presentation made at the Community Connections session of the CDHA Conference in September, 2002, Moncton, New Brunswick.

Deer Lodge Centre (DLC), a 500-bed long-term care facility in Winnipeg, houses a dental clinic operated by the Centre for Community Oral Health (CCOH), the outreach department of the Faculty of Dentistry of the University of Manitoba. Initially a veterans' hospital, DLC offers personal care, rehabilitation, and chronic care programs as well as a variety of outreach programs for the community. Although DLC serves a predominantly older population, it is also home to many younger adults who require medical supervision and care. DLC's dental clinic has been in operation since World War I, with the university beginning its affiliation in 1982. In 2000, the CCOH established the Health Promotion Unit (HPU), based at the university, with dental hygienists Mickey Wener and Carol-Ann Yakiwchuk. Part of their mandate is to complement DLC's existing clinical services with initiatives focused on prevention, health promotion, and increased clinical utilization.

Deer Lodge Centre, Winnipeg, Manitoba

Deer Lodge Centre, having already identified a need for mouth care training, was from the beginning very receptive to collaboratively developing a customized program for their nursing staff, which includes nurses and health care aides. The current article is our story of how this pilot project unfolded, from its inception in January 2001 until its wrap-up in April 2002. We discuss the groundwork required, the results of the pre- and post-assessment, the components and highlights of the three-part caregiver in-service program, and the teaching materials. Having learned much from both our successes and challenges, we take this opportunity to share our experience with you. We conclude with the spin-offs of our involvement and reflections on how we as dental hygienists can keep mouth care for this population on the front burner.

The dental hygiene process of care—assessment, planning, implementation, and evaluation—provided a framework for both our project and this article. While we present our account chronologically, assessment and planning were occurring simultaneously, as were implementation and evaluation, a case that often occurs in the real world.

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† CAROL-ANN YAKIWCHUK, a 1992 graduate of the University of Manitoba's School of Dental Hygiene, joined the Health Promotion Unit of the Centre for Community Oral Health in 2000, following eight years of private practice. While the majority of her efforts are focused on health promotion, she also works closely with students as a clinical instructor and provides clinical care at Deer Lodge Centre Dental Clinic two mornings a week. Committed to life-long learning, Carol looks forward to finishing her BSc (DH) this year and to undertaking graduate work in the near future.

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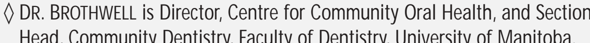


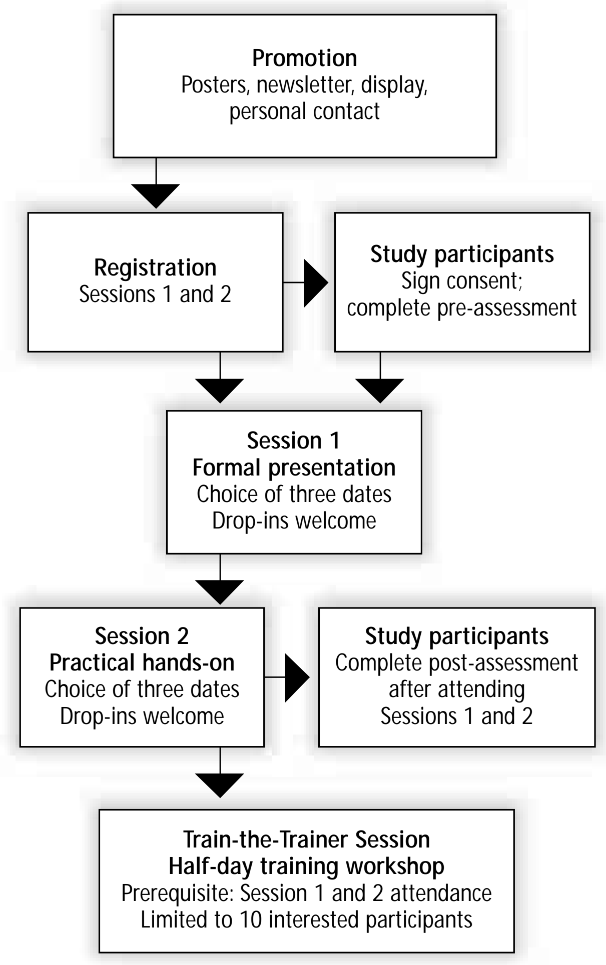


Figure 1. Training program flow chart

Assessment and planning: getting ready

THE GROUNDWORK

The first critical step was to identify and meet DLC's stakeholders—the chief medical officer, the director and assistant director of nursing, dental clinic staff, some of the unit coordinators, and the two nurse educators, our key Healthy Mouth ~ Healthy Body partners. Our strategy was to listen and learn in a non-judgmental fashion so that we could most effectively address their specific needs. While doing this legwork, we also began identifying the best evidence upon which to base our program and daily mouth care practice recommendations. We consulted the literature, tackling PubMed (National Library of Medicine's on-line database) with a vengeance, and began to search for existing resources and products specialized for this population. One of the most valuable resources was the *Oral Health Manual* published by Alberta's Lakeland Regional Health Authority.[1]

PROGRAM DEVELOPMENT

After several planning meetings with Educational Services, it was decided that with our limited time and resources, we alone could not train DLC's entire caregiver population of 600, which included three shifts, day, evening, and night. The format that was ultimately chosen included offering both Session 1 (presentation) and Session 2 (practical) on three separate occasions. Afternoon sessions, during the end of the day shift, were chosen to potentially attract registrants from both the day and evening shifts. In an effort to maximize attendance, we limited these sessions to one-hour segments. As well, there was a time lag between attending Sessions 1 and 2 to prevent overload and to allow for some reflection. We did not anticipate much participation from other shifts as care facilities such as Deer Lodge Centre do not have the financial means to encourage attendance off-shift. Therefore plans included videotaping Session 1 for those unable to attend live sessions. To extend the reach further and to build sustainability into the program, a half-day "Train-the-Trainer" workshop was planned where a small core of interested DLC staff would receive additional training to become peer mouth care trainers (see Figure 1). Our project's approach of training non-dental personnel to become vital peer resources has been shown to be successful in other long-term care settings, such as the Oral Care Link Nurse described by Charteris and Kinsella.[2]

The goals and objectives of the in-service program captured the importance of caregivers in long-term care facilities not only being knowledgeable and skilled, but also developing a favourable attitude toward providing mouth care.

Deer Lodge Centre caregivers will:

Goals

1. value the importance of the relationship between a healthy mouth and overall health for both residents and themselves;
2. provide effective daily mouth care services that will promote the oral and overall health of all residents;

Objectives

1. increase their knowledge of the many links between a healthy mouth and overall health and wellness; the causes and prevention of oral disease; how to perform mouth care; where to obtain mouth care products; the professional dental services located on-site at Deer Lodge Centre; existing Deer Lodge Centre's oral health policies;
2. value the importance of daily mouth care for themselves and the residents;
3. improve their practices related to providing daily individualized mouth care with a variety of residents, including those with teeth and those without; performing regular mouth checks during daily mouth care; identifying an oral problem and providing appropriate referral.

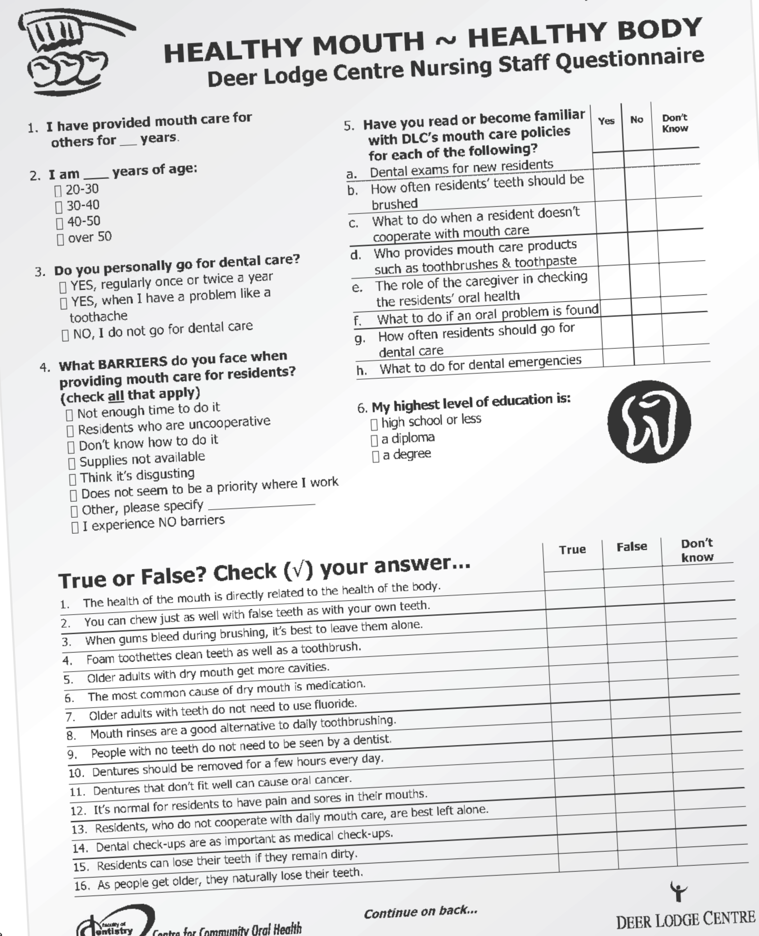
A questionnaire was used as a pre- and post-assessment tool in order to customize and evaluate the program. The assessment tool was a further refinement of a questionnaire developed initially for the University of Manitoba's 2000 National Dental Hygiene Week˘ event and included items adapted from previous research by Hardy et al.[3] This project's two-page version of the questionnaire gathered data on the respondent's age, number of years providing mouth care, educational background, regularity of personal dental care, awareness of DLC oral health policies, perceived barriers to

providing mouth care, knowledge (16 true/false questions), frequency and level of preparedness for mouth care (15 services), and priority given to daily mouth care. (See Figure 2.)

We then began the process of writing the documentation to apply for ethics approval, by both DLC and the University of Manitoba's Research Ethics Board (REB). This included a detailed application, the study protocol, information participants would receive, and the consent and registration forms. It was critical to document the need for, and past effectiveness of, caregiver training. It was also essential to inform the program registrants that (1) participation in the study was voluntary; (2) choosing not to participate would not jeopardize their position at DLC; (3) responses would be confidential; and (4) there were no anticipated risks associated with participating. Registration and data collection would be handled by the DLC study coordinator, while program development, delivery, evaluation, and data analysis would be the responsibility of the Health Promotion Unit. By July 2001, our ethics proposal had been approved with only a few minor modifications required. This process not only helps to protect the study participants but also is necessary for reporting in many professional publications.

The following excerpt from the REB proposal documents the literature regarding caregiver training.

> "It is a well-established fact that in Canada the proportion and number of persons over 65 is increasing. In industrialized countries, persons 85 years of age and over represent the fastest growing portion of the population; in Canada, 1/3 of those over 85 currently are living in long-term care (LTC) facilities.[4]
>
> "Coupled with this is the fact that the proportion of those keeping their natural teeth is also increasing.[5] Although the majority of older adults perceive oral health as important to their quality of life, noting in particular eating and comfort,[6] it has been consistently documented that older adults, particularly those living in LTC facilities, are at increased risk for oral diseases.[7] There are significant unmet dental needs in LTC facilities: dental prostheses in poor condition; poor oral hygiene; and a high prevalence of disease, including denture stomatitis, periodontal diseases, and caries.[8,9] In spite of the obvious need, residents in LTC facilities frequently have difficulty accessing dental treatment due to transportation limitations, financial constraints, and low perceived needs. When residents do seek treatment, it is often of an emergency nature rather than for a routine dental check.[8,10]
>
> "To the health professions' discredit, the mouth has become disconnected from the rest of the body. In spite of serious ramifications such as oral cancer and systemic implications, oral problems are not seen as significant or worthy of attention; mouth care is often seen as a basic chore rather than a vital task.[11] Oral health is integral to general health as is being increasingly reported in studies where chronic oral infections have been linked to increasing individuals' susceptibility to cardiovascular disease, respiratory disease (i.e. aspiration pneumonia), arthritis, and diabetes.[7,12] It has been estimated that between 30–60% of homebound and institutionalized elderly are malnourished; poor oral health and tooth loss affect their ability to chew and change dietary preferences.[13] Ensuring older adults have healthy mouths can improve their quality of life and may further increase their life expectancy.[4]
>
> "As self-care becomes more difficult for the functionally dependent due to physical handicaps or impaired cognitive functions, oral care increasingly becomes the responsibility of caregivers. Although residents are requiring help with daily mouth care, many are not receiving it.[9] Barriers to providing daily mouth care in LTC facilities are numerous. Those most likely to be involved in providing daily oral hygiene have been reported to be least likely to view oral care assistance in a positive light.[14] Mouth care is often given a low priority compared to other tasks performed by health care providers; caregivers have indicated that they are doing the best they can, considering current staffing levels. Common reasons reported for not providing oral care include residents not wanting to be helped and caregivers deciding that residents were able to manage the oral care themselves.[14] Providing mouth care is viewed by some as invading an individual's privacy, raising bioethical considerations regarding autonomy and informed consent.[14] Difficult, uncooperative patients are frequently cited as a problem.[11] Oral care has been reported to be unpleasant and unrewarding, seen as the most undesirable task of caregivers, over changing diapers, feeding and hairwashing.[14] Although carers have been noted to have positive attitudes toward their own and residents' health, they were also fearful of being bitten and disliked seeing food debris and mucus.[15]



HEALTHY MOUTH~HEALTHY BODY
Pre- and post-assessment of mouth care In-service for Nursing Staff at Deer Lodge Centre

HEALTHY MOUTH ~ HEALTHY BODY
Deer Lodge Centre Nursing Staff Questionnaire

1. **I have provided mouth care for others for ___ years.**
2. **I am ___ years of age:**
   - 20-30
   - 30-40
   - 40-50
   - over 50
3. **Do you personally go for dental care?**
   - YES, regularly once or twice a year
   - YES, when I have a problem like a toothache
   - NO, I do not go for dental care
4. **What BARRIERS do you face when providing mouth care for residents? (check all that apply)**
   - Not enough time to do it
   - Residents who are uncooperative
   - Don't know how to do it
   - Supplies not available
   - Think it's disgusting
   - Does not seem to be a priority where I work
   - Other, please specify ___
   - I experience NO barriers

5. Have you read or become familiar with DLC's mouth care policies for each of the following?	Yes	No	Don't Know
a. Dental exams for new residents			
b. How often residents' teeth should be brushed			
c. What to do when a resident doesn't cooperate with mouth care			
d. Who provides mouth care products such as toothbrushes & toothpaste			
e. The role of the caregiver in checking the residents' oral health			
f. What to do if an oral problem is found			
g. How often residents should go for dental care			
h. What to do for dental emergencies			

6. **My highest level of education is:**
   - high school or less
   - a diploma
   - a degree

True or False? Check (√) your answer...	True	False	Don't know
1. The health of the mouth is directly related to the health of the body.			
2. You can chew just as well with false teeth as with your own teeth.			
3. When gums bleed during brushing, it's best to leave them alone.			
4. Foam toothettes clean teeth as well as a toothbrush.			
5. Older adults with dry mouth get more cavities.			
6. The most common cause of dry mouth is medication.			
7. Older adults with teeth do not need to use fluoride.			
8. Mouth rinses are a good alternative to daily toothbrushing.			
9. People with no teeth do not need to be seen by a dentist.			
10. Dentures should be removed for a few hours every day.			
11. Dentures that don't fit well can cause oral cancer.			
12. It's normal for residents to have pain and sores in their mouths.			
13. Residents, who do not cooperate with daily mouth care, are best left alone.			
14. Dental check-ups are as important as medical check-ups.			
15. Residents can lose their teeth if they remain dirty.			
16. As people get older, they naturally lose their teeth.			

Continue on back...

Centre for Community Oral Health

DEER LODGE CENTRE

Figure 2. Pre- and post-assessment tool

"There is no one solution to addressing this significant challenge; however, educating key individuals both during training and while in the workforce, particularly those providing daily mouth care, is repeatedly expressed in the literature as a necessary strategy.[3,9,16] Caregiver training programs have reported having a positive impact on the oral health status of residents[8,17] and improving nurses' accuracy in completing oral assessments.[18] Effective training that links oral health and quality of life is required in order to best meet the needs of residents.[19] In addition to providing theoretical knowledge and practical training, educational programs should aim to establish positive attitudes toward oral health care and offer opportunities to discuss problems.[14] Integrating dental personnel with LTC facility staff for training was seen as being preferable and beneficial.[20,21] The climate for providing a mouth care in-service program is positive as interest in receiving additional oral care training has been expressed by the caregivers themselves."[15,22]

Materials development

One of the most beneficial, but time-consuming, aspects of this project was the development of a series of fact sheets. It was evident that in addition to the previously mentioned manual, everyone who participated needed to walk away with the basics. Based on reviewing the literature, perusing the Internet, and discussions with manufacturers and experts, we developed nine user-friendly handouts (using Microsoft Publisher) on the following topics: gloving, basic mouth care (with teeth), basic mouth care (without teeth), mouth care helpers, special considerations, dental recipes, monthly oral screening, dry mouth, and product suppliers.

Next came the development of the backbone of Session 1, a 60-slide presentation (using Microsoft PowerPoint). For Session 2, the practical component, backboards for three stations were developed (dentate, edentulous, monthly oral screening), participant product packages were assembled, and overheads to prompt discussion were made. Although the train-the-trainer materials were not fully developed until after implementing Sessions 1 and 2, we began the process of assembling 10 training kits, each including a manual, handouts, products for demonstration, and interactive learning activities. Open-ended evaluation forms were designed in order to gather feedback following each session.

Promotion and support

To increase awareness and promote registration, we worked closely with Educational Services to advertise the fall 2001 Healthy Mouth ~ Healthy Body training program. However, several issues came into play at this point: (1) there were a number of other DLC training opportunities occurring in the fall; (2) one of our two DLC partners was leaving for a position elsewhere; and (3) there was a shortage of staff, which made it a challenge to free up individuals to attend. After some deliberation, it was decided by all to delay the program until January 2002. This decision gave us additional time to increase staff awareness of the upcoming program through newsletter announcements and posters. On-site promotion also involved two University of Manitoba dental hygiene students who helped staff a display located on "Main Street," DLC's main floor corridor.

As the planning progressed, it became evident that financial support was needed. Our commitment as the Health Promotion Unit was one of time and expertise, while Deer Lodge Centre absorbed the costs associated with delivery. Through the generous support of several manufacturers, we were able to gather many of the products we needed. However, the costs of purchasing numerous copies of the Lakewood *Oral Health Manual,* containers and items for the trainers, along with other expenses such as photocopying were beginning to mount. At this point, the study coordinator suggested that we submit a joint proposal to the Deer Lodge Centre Foundation for funding. With her guidance and support, Educational Services was able to secure a generous grant to offset costs.

Registration and pre-assessment

In December 2001, nursing staff were encouraged to register for sessions being held in January, February, and March 2002. Due to the holiday break and general January inertia, registrations were slow to trickle in. Although we were expecting larger numbers, Centre staff reassured us that registrations were surprisingly high considering how difficult it is for nursing staff to leave co-workers who are already taxed in order to attend a training program during their shift, no matter how valuable it may be. With many registrants choosing to attend, but not participate, in the study, it became evident our numbers would not support the level of data analysis we had planned. In the end, we had approximately 60 registrants, with 27 participating in the study and completing the pre-assessment. Because of limited follow-up due to unavoidable DLC staff issues, only 11 of the 27 completed post-assessments.

We were very pleasantly surprised at the level of participation by DLC's speech language pathologists (SLPs). We quickly learned we have many overlapping professional concerns, as their role often includes an oral inspection associated with assessing swallowing and the general condition of the oral cavity. This opened our eyes to a logical future partnership between dental hygienists and SLPs. At DLC, the speech language pathologists do not provide daily mouth care; therefore, several portions of the questionnaire did not apply to them directly. Since they constituted about one third of the 27 pre-assessments, this influenced data results concerned with the provision of mouth care.

Although the data were scant and were not obtained solely from those providing daily mouth care, we were able to identify some trends using Epi Info for entry and analysis. The barriers to daily mouth care that received the most responses included: *not a priority where I work*, followed by *uncooperativeness* (of residents), *no time,* and *no supplies.* There was a perceived lack of policy awareness regarding *how to deal with uncooperative clients, what to do with a dental emergency*, and *how often residents should receive professional care.* Based on their answers to the true/false questions, it became apparent that they had limited knowledge about *the cause/effect of dry mouth, that ill-fitting dentures could be linked to oral cancer, that tooth loss is not part of natural aging,* and that *most*

mouthwashes are ineffective. In the daily mouth care skill section, no one reported *cleaning between* (the teeth), the majority felt unprepared to *screen for oral disease*, and most felt unprepared to use *therapeutic rinses that contain fluoride or chlorhexidene.*

Implementation: a glimpse of our program

SESSION 1: GETTING THE FACTS

We began Session 1 by sharing the results of the pre-assessment data, reinforcing the fact that we had tailored the program for them. To get the participants' buy-in, we emphasized the many reasons why dental disease has become an epidemic in long-term care while also acknowledging the challenges they face and their obvious compassion for others.

Session 1 – Get the facts
Large group presentation
(60 PowerPoint slides including 50+ digital photos)

- Mouth~Body~Health links
- Plaque and dental diseases
- Mouth care strategies and specialized products
- Tour of the mouth
- DLC mouth care policies

Sharing current research findings that link poor oral health with systemic disease proved to be a major attention-getter, and one that set the stage for the section on the importance and value of effective daily mouth care. During the discussion on plaque, participants were interested to learn that even tube-fed residents require daily mouth care whether food is introduced into the oral cavity or not. Many were surprised that dental caries is in fact an infection linked to factors such as lack of food clearance; disease and drug-induced xerostomia; frequent eating; frequent consumption of sugars in candies, food supplements, and medications and that combining any of these with resistive behaviour can lead to rapid and serious destruction of the dentition. Preventive strategies were suggested, such as consuming food supplements through a straw, followed by a drink of water, and using fluoridated oral care products (pre-test results showed the majority of caregivers were unaware older dentate adults could benefit from its use).

While discussing the signs and sequelae of periodontal disease, we addressed the limitations of tooth replacement. Many residents in long-term care cannot tolerate denture fabrication procedures or wearing a denture once fabricated. And for some, the reduced chewing power of dentures often results in changes in both food choice and the amount consumed, leading to malnutrition, or more seriously, weight loss and morbidity.[13] This emphasis on the perils of periodontal disease and resulting tooth loss—more than just a missing tooth or bleeding gums—was another key point that helped drive home the importance of daily mouth care.

To help caregivers define their role in maintaining residents' oral health, we utilized a continuum of care model, specifically the one to *remind~assist~provide.* Some residents may need only a gentle reminder to brush; others may require

Session 1. Get the facts

assistance; while others will be totally dependent on caregivers to provide daily mouth care. We have learned that "long-distance brushing," blindly placing the toothbrush in the resident's mouth with no retraction of tissues, is a common practice among caregivers. Many caregivers have been taught to "never put fingers in someone's mouth." Encouraging cheek and lip retraction and directing the toothbrush to the gumline was stressed. Using a moist, clean facecloth, gauze, or toothette is a strategy we recommended for "clearing the way" of debris, tissue cleansing, and toothpaste removal.

Caregivers were excited to learn about and see the many effective mouth care products available. Especially well-received were the time-saving partnering of the three-sided Collis-Curve™ toothbrush[23] with the Specialized Care disposable mouth prop, and for those with access to suction, the Plak-Vac suction toothbrush. Focusing on halitosis reduction through tongue cleaning got everyone's attention (pre-test results indicated the majority did not include this as part of their daily mouth care regimen). Bad breath puts residents at risk for social isolation, not only from their family and fellow residents, but also from caregivers.

We emphasized that daily denture care was a combination of mechanical and chemical deposit removal, since neither was performed routinely. Many individuals may use commercial denture cleaners only when stain is present, not recognizing the bacteriocidal effect (99 per cent kill-rate) when using commercial denture cleaners.[24] With denture wearers at increased risk for candidiasis, incorporating daily chemical denture disinfection is critical. Emphasizing daily tissue care, thorough removal of all adhesives, and taking dentures out for a minimum of 4 to 6 hours for a rest period were also taught as part of comprehensive mouth care for denture wearers.

We encouraged the replacement of caries-causing dry mouth relievers—such as the ubiquitous sugar-containing mints and candies—with frequent sips of water, room humidification, and use of moisturizing products specifically designed for those with dry mouth. Biotene Oral Balance, although a

Session 2. Hands-on practice

mouth moisturizer, was also recommended for lubricating fragile lips during mouth care. Experts suggest that petroleum-based products can clog feeding tubes, are flammable for those on oxygen therapy, increase wound inflammation, and may contribute to aspiration pneumonia.[1] Biotene dry mouth toothpaste was recommended as an excellent choice for those with dry mouth, swallowing disorders, or dependent on others for care. Its non-foaming attribute improves visibility and reduces toothpaste volume during toothbrushing.

An oral health protocol would not be complete without some mechanism in place for regular oral screening. We encouraged a thorough and regular look in each resident's mouth to identify unusual/abnormal findings and to evaluate the current adequacy of a resident's daily mouth care. This is particularly important as mouth care needs of those with dementia can escalate very quickly, going from independent brushing to complete dependence on others for care in a short period of time.

A less than 50 per cent survival rate continues to exist for oral cancer[13] as the mouth is often not included in other routine assessments. Caregivers were surprised to hear that the incidence of oral cancer is more common than cancer of the ovary, stomach, brain, thyroid, and cervix, to name a few.[25] For these reasons and others, we took our participants on a "tour of the mouth" using digital intra-oral pictures to help familiarize caregivers with some of the normal and abnormal findings in the oral cavity. Discussing caregiver contact with body fluids—frequently including blood—and showing pictures of Herpes Simplex I and Herpetic Whitlow supported the rationale behind gloving for mouth care procedures.

A key area of concern in long-term care is maintaining skin integrity. When skin breaks down, the resulting wound or pressure sore is measured, treated, and closely monitored. Explaining that the composite oral wound size of an individual affected by periodontal disease could potentially be as large as the palm of one's hand not only raised eyebrows; it was information tailored and translated into their nursing language. And here we invented our new jingle: "Together, let's make gums as important as bums." Brushing teeth, which some equate with grooming activities such as combing hair, is indeed a "two-minute clinical intervention" to maintain oral and overall health. And, on that note, we ended Session 1.

The second time we presented Session 1, it was videotaped. Although an excellent strategy to offer the content to others not present, the videographer taped a still of each slide projected, with no speaker visible. We were disappointed in the result and would choose a different format next time. At this time, we are unsure how many caregivers, if any, viewed the video.

Session 2: Practice with the products

Session 2 was an informal and interactive opportunity for small groups of 10–15 caregivers to gain practical hands-on experience in mouth care. We welcomed the assistance of additional facilitators: two dental hygiene students and the dentist from the DLC clinic. We opened Session 2 with a discussion of any mouth care issues that had arisen since Session 1 and followed with a video clip[26] on positioning for mouth care, including suggestions for uncooperative clients. As a group, we then developed a list of tips "for getting in there" when providing mouth care for resistant residents. Mirroring, hand-over-hand brushing, offering a rummage box to keep hands busy, and partnering up for mouth care were just a few of the strategies generated. An overall theme that we continued to emphasize was "be creative and keep trying."

Session 2 – Try the products

Interactive learning stations
Positioning video/demonstration
Strategies for challenging residents

- Station #1 – Mouth care for those with teeth
- Station #2 – Mouth care for those without teeth/with dentures
- Station #3 – Oral screening and referral

Participants spent 15 minutes at three interactive stations where they watched demonstrations, asked questions, and then practised using the products we had introduced in Session 1. Most participants were not willing to partner up to practise mouth care on each other. The mouth is often seen as a very personal and sensitive space, with caregivers often reluctant to "invade" not only each other's mouths, but also those of residents who resist care. Caregivers were willing, however, to try the specialized products and practise the demonstrated techniques on themselves, which resulted in an unexpected positive outcome. Many remarked on how much they liked the taste/feel/adaptation of these products and this definitely increased their willingness to use them with residents.

At the "teeth and gums" station, they taste-tested Biotene products, practised mouth prop placement, brushed with regular and Collis-Curve toothbrushes, and tried out a floss

holder. At the “denture care” station, they observed and practised denture cleaning and labelling. Our “three-minute oral screening” station that focused on helping them to be more familiar with looking in someone’s mouth for anything out of the ordinary was received with some trepidation. Although many felt oral screening was important and should become an integral part of each resident’s current overall assessment, clearly most caregivers did not feel adequately prepared to perform this task or that it was their responsibility. Based on their feedback and our limited time, this portion was deleted for the last two sessions, leaving more time for practice at the mouth care stations. To encourage referrals and clinic utilization, participants were made aware of the dental clinic’s full range of services. Highlighted were the free initial entry exams, the importance of regular professional care, the fact that the clinic welcomes all and that ultrasonic denture cleaning was offered free-of-charge for residents’ dentures with heavy deposits. Many staff were not aware that they could also become patients.

The last segment of Session 2 was an on-unit mouth care demonstration with a consenting DLC resident. Unfortunately, this coincided with a shift change and we lost most of the participants. Unable to adjust the timing of the next two sessions, it was decided to move this portion to the Train-the-Trainer workshop.

As a wrap-up, we asked the group to tell us what were the “next steps” that were needed to support excellence in mouth care at DLC. This generated many comments, including the importance of the unit coordinators getting on board by hearing the same message, the need for informal mouth care demonstrations with residents on-unit, and access to specialized mouth care products. To encourage a personal commitment, participants were asked to define and record their own mouth care goals.

SESSION 3: TRAINING-THE-TRAINERS

Seven DLC staff members elected to become peer mouth care trainers at DLC. After participating in the two-part training program, they attended this additional half-day workshop to further prepare them. With support from the Deer Lodge Foundation, we were able to purchase and supply each mouth care trainer with an oral health demonstration kit containing basic and specialized mouth care tools and products, as well as the Lakeland Regional Health Authority’s *Oral Health Manual.* We developed several teaching tools, which served as learning activities during this workshop, but which could also be used for future peer training.

Session 3 – Train-the-trainer workshop
Half-day event
- Oral Health Challenge – refresh and continue to learn
- Show & Tell Us – practise teaching using oral hygiene products
- Application – providing daily mouth care for a DLC resident
- Strategies for peer mouth care training

The “Oral Health Challenge” questionnaire served as a review of past information and helped us identify some deficits still remaining in their oral health knowledge base. It became clear that to facilitate learning, and particularly retention, the information we were sharing throughout the in-service program needed to be offered in a variety of ways with multiple exposures. To assist them in developing the necessary skills for teaching mouth care to others, we created an interactive game called “Show & Tell Us.” After familiarizing themselves with the contents of their demonstration kits, trainers taught the group about several oral hygiene tools—when and how to use them—with each pictured on a teaching card. The teaching materials were a very effective way to assist trainers in solidifying their new-found knowledge, as well as developing their own personal presentation style before taking the “show on the road.” Trainers then had the opportunity to select appropriate products, provide daily mouth care, and receive feedback for a consenting DLC resident.

Evaluation and reflection: How did it go and where to go from here?

Overall, the comments on the evaluations gathered at the end of each session were very positive. Participants were interested in the mouth-body-health links, welcomed the opportunity to practise mouth care using specialized products, and found the fact sheets useful. Many felt more motivated and equipped to provide better mouth care and were making changes to their own daily regimen. To date, there have been insufficient post-assessment data to determine if the program objectives have been met, specifically any significant change to caregivers’ knowledge, attitude, or skill. To rectify this shortcoming, we may administer an additional post-assessment to those who had both completed the pre-assessment questionnaire and attended Sessions 1 and 2.

Session 3. Program participant practising mouth care with volunteer resident; infection control at DLC consists of gloving with masking and eye protection optional.

As dental hygienists, we are accustomed to process evaluation, frequently assessing progress as we go along. This project was no stranger to unexpected challenges and constant adjustments. Nursing shortages, key staff changes, and scheduling training around shift changes were all factors that led us to ever-changing plans and to improvements. In our passion to spread the word in a limited time period, the clock became our worst enemy. On a positive note, each time a session was offered, we reflected on the experience, our time management, and the evaluations received. As a result of our on-going assessment, the Healthy Mouth ~ Healthy Body program continued to evolve and became more streamlined and tailored to this audience.

OUTCOMES OF OUR INVOLVEMENT AND VISIBILITY

This program and networking created a definite mouth care "buzz" with many positive spin-offs. To date, many caregivers, residents, and families have received mouth care information from peer trainers. Along with the resident dentist, we have been involved in the revision of DLC's oral health policies, which now include a quarterly oral screening by unit coordinators for all residents. At the dental clinic, there has been a significant increase in the number of new residents referred for an initial exam. Nursing is currently revisiting their policy on mouth care supplies, now aware that the current stocks of toothettes and mouth rinse are ineffective in controlling dental plaque. A variety of specialized mouth care products are now available at the Deer Lodge Centre gift shop. Caregivers are welcoming informal on-unit training from Carol-Ann Yakiwchuk as she follows up on residents who present with poor oral hygiene at their appointments. Beginning in November 2002, dental and dental hygiene students will receive valuable experience providing morning mouth care on-unit.

The "next step," a joint venture between the CCOH and the School of Dental Hygiene at the University of Manitoba, has been planned for March 2003. A full-day faculty-based continuing education program is being offered to caregivers, as the majority of staff are employed in settings without on-site dental professionals or clinics. Oral health professionals interested in facilitating caregiver in-services are also invited to attend. As we continue to provide and refine our program, we also look toward making our materials available to others.

AS A PROFESSION, WHAT ARE OUR NEXT STEPS?

As dental hygienists, we must continue to be change agents and keep oral health on the front burner for the sake of those who cannot care for themselves. We must be advocates for the vulnerable, helping facilities to put into place all the pieces to the oral health puzzle, including the following:

- getting everyone on board, from the CEO to the front-line caregivers;
- establishing supportive mouth care policies and protocols that are regularly updated;
- providing effective daily mouth care for all;
- ensuring regular access to a full range of clinical dental services;
- offering on-going caregiver training;
- making the connection with family/guardian regarding mouth care; and
- lobbying for supportive legislation that sets standards for daily mouth care and provides the public with direct access to the full range of services provided by dental hygienists.

WE ENCOURAGE YOU TO TAKE A MOMENT AND THINK ABOUT HOW YOU CAN MAKE A DIFFERENCE FOR THIS POPULATION.

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"SHORTAGE OF DENTAL HYGIENISTS?" *(continued from page 9)*

The recently completed profile of the dental hygiene workforce in *Dental Hygiene Practice in Canada 2001* shows a low attrition rate and a low inactive pool. The dental hygiene workforce is very stable with one-half of its members remaining in the same job over the previous 10 years.[6]

However, a recent study from the University of California indicates that in considering shortages, important information about preventive services will be lost if dental hygienists are measured only in relation to dentists and dental practice.[7] The same critical review speaks of the need to examine indicators of unmet clinical need when considering definitions of shortage and to not focus on traditional provider ratios as indicators of shortage of oral health care.

There is a difference between demand and need in the population. There is a difference between professional expectations and public expectations. There are differentials in remuneration across the country and within different practice settings. There are changing scopes of practice and different regulatory requirements across all jurisdictions in Canada.

But any discussion of a perceived shortage has to look at professional education. Education of health professionals has faced the challenges of (1) low government support that forces higher tuitions, and (2) fear in the early '90s of over-supply in the health professions that led to a reduction in many health professional programs. Dental hygiene did counter this specific national trend: "Between 1988 and 2000, graduates in physical therapy, occupational therapy and dental hygiene grew, while the numbers in medicine and dentistry decreased."[8] However, the field of health care in general has become a less desirable career choice for the country's youth who may believe that other fields such as high tech may offer a more rewarding career. Education programs are often not accessible to the populations who need the programs. For example, Aboriginal peoples who have great health care needs may have to move far away from home and adjust to a different culture in order to obtain their education and then return home to their communities. These health human resource issues, common to most health professions in Canada, have an impact on access to care and health care outcomes.

An ageing population, advanced technology, and increased client populations with compromising and degenerative health concerns have put great pressure on dental hygiene diploma programs. A significant amount of additional essential content has been included in the curriculum over the last few years and it is overloaded. Practising evidenced-based dental hygiene and dentistry demands that practitioners keep abreast of all current research findings. These findings expand educational programs and make continuing education mandatory in most jurisdictions. New study areas include care of implant clients and exceptional-needs individuals; the ageing individual; current research on tobacco use and counselling; tobacco use and bone resorption; pain, fear, and anxiety control—to mention just a few. More recently, the impact of periodontitis on low birth weight babies and systemic disease has significantly affected the role of dental professionals, particularly those who do most of the preventive education and health promotion—the dental hygienists. The need to expand the current education programs to the baccalaureate degree is evident. The depth and breadth of education offered in a degree program allows the preparation of graduates who can meet the health care needs of Canadians now and in the future.

Shortages are affected by recruitment and retention, not by the length of initial educational preparation. Baccalaureate degrees are attractive to potential students and the possibility of being able to continue their education at the post-graduate level is a factor that aids in recruitment.

Recruiting dental hygienists is one thing; retaining them is another and is related to working conditions, salary or wages, and benefits. Dentistry, as an employer group, often refers to dental hygiene wages as being relatively high. But it

SHORTAGE OF DENTAL HYGIENISTS?... *continued on page 46*