Providing Oral Hygiene Care
to Residents of Long Term Care Homes

A Guide for Personal Support Workers
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The Connection Between Oral Health and Overall Health

Good daily oral health care is as important to the health and well-being of elderly long term care (LTC) residents as nutritious food and regular bathing. Unfortunately, evidence shows that it rarely gets the same level of attention as these other basic needs.

LTC residents often suffer from some form of dementia and most have physical and medical challenges too. These fragile elderly are at an especially high risk for a number of serious conditions because they:

- often forget to brush their teeth or are unable to do it without help
- may resist or refuse assistance
- may have problems recognizing and reporting pain and discomfort in the mouth

A clean, healthy, pain-free mouth contributes greatly to:

- chewing and being able to enjoy a variety of nutritious foods
- clear speech and communication
- sleeping well
- overall health
- general comfort and a higher quality of life
- a more attractive personal appearance, positive self-esteem and satisfying social interactions

Poor oral hygiene, on the other hand, causes tooth decay and gum disease, which often lead to:

- unintended weight loss and malnutrition because of chewing difficulties
- pain
- bad breath
- dry mouth
- speech difficulties
- inability to sleep well
- social isolation and depression, and a generally lower quality of life

Mounting scientific evidence also suggests an association between poor oral health and serious, sometimes life-threatening medical conditions in older adults:

There is evidence of a connection between aspiration pneumonia (lung infection caused by foreign bodies or bacteria entering the lungs via the mouth) and poor oral health. The bacteria that cause pneumonia, which is the leading cause of death of LTC residents, are commonly found in the dental plaque of elderly people.

- Oral infections cause blood sugar to rise and make diabetes harder to control.
- Studies also point to a relationship between poor oral health and cardiovascular (heart and blood vessel) disease. When bacteria in infected gums break free, they can enter the bloodstream, attach to blood vessels and cause clots, which aggravate high blood pressure and increase the chances of a heart attack or stroke.
- Gum disease has also been associated with osteoporosis.

It is vital that staff caring for elderly LTC residents learn the techniques that will provide them with the best care.
Basics About Plaque and Tartar

**Plaque** is a sticky, colourless film of living and dead bacteria that constantly forms on the teeth and around the gum line. Food, saliva and fluids combine to create plaque. When it isn’t removed by regular brushing and flossing, it can harden into a rock-hard crust known as **tartar**. Tartar can only be removed by an oral health professional, and should be done at least once a year. Much tartar build-up can be prevented by getting rid of plaque when it first forms.

Unlike plaque, tartar can be easily seen as a yellowish or brownish build-up. Tartar gives plaque more surface area on which to grow and a much stickier surface to adhere. Tartar and plaque make the teeth look, feel and smell bad, and a tartar and plaque crust on the teeth often leads to more serious conditions like dental caries (tooth decay) and gum disease.

Health Effects of Gingivitis

Gingivitis, which is caused by plaque, is an inflammation of the gums surrounding the teeth. It is the initial stage of gum disease and the easiest to treat.

Signs of gingivitis include bleeding, red puffy gums, bad breath, and receding gums that pull away from the teeth. It can also cause pockets to form between the teeth and gums, where plaque and food debris gather. If the inflammation becomes especially well-developed, it can invade the gums and allow bacterial toxins into the bloodstream.

When left untreated, gingivitis leads to more serious gum disease that can cause bone loss and tooth loss. Gum disease has also been linked to a variety of serious illnesses such as pneumonia, diabetes, osteoporosis, heart attacks and strokes.

While some health conditions and medicines can contribute to gingivitis in the elderly, studies show that rigorous daily oral hygiene and regular professional cleaning can reduce its incidence dramatically.
Basic Care

Basic Brushing

Natural teeth should be cleaned twice a day. Residents should be encouraged to do as much of their own oral care as possible, but never assume that those capable of doing it always do so. It’s important to confirm that it has indeed been done.

Pros and Cons of Toothpaste

- The choice of toothpaste, including no toothpaste, should depend on the individual needs of the resident.
- Since decay on the root surfaces of the teeth is more common in older adults, non-abrasive fluoride toothpaste should normally be used for people who still have their own teeth.
- As the foaming action of most toothpastes increases saliva flow, foaming toothpaste should only be used by residents who have shown they can spit and swallow.
- DO NOT use toothpaste for residents who have dysphagia (difficulty swallowing), who cannot spit/rinse properly, or have a high level of dementia. There are non-foaming oral cleansing gels available.
- Some residents may require anti-sensitivity toothpaste for sensitive teeth.
- Keep in mind that toothpaste may have a strong flavour that does not appeal to older adults, particularly those suffering from dementia.
- Only pea-sized amounts of toothpaste should be used.

Appropriate Toothbrush Storage

Toothbrushes should be thoroughly rinsed after use, dried with a clean paper towel and then placed in an upright position in a designated container. When a washroom is shared by more than one resident, toothbrushes and holders should be labelled with the resident’s name.

When to Change a Toothbrush

A toothbrush should be replaced every three months or earlier if frayed or dirty. After illness or infection, they should be sterilized or replaced.
Props to Enable Access to the Mouth

Some older people have problems opening the mouth wide or holding it open. There are many possible causes for this, including stroke, TMJ disorders and Parkinson’s disease. In these cases, propping devices can help. There are several options:

- The mouth can be propped open using a two-toothbrush technique: have the resident bite down on the rubberized handle while using the second toothbrush for oral care. Switch sides by sliding the handle of the second toothbrush between the teeth, then pulling the first toothbrush out to use for oral care.
- Similarly, the handle of the second toothbrush can be used to hold back a resident’s cheek to allow access to the mouth.
- Fingers may be placed inside the cheeks or lips, but never between the teeth.
- A homemade mouth prop can also be easily made by moistening a washcloth, folding it and inserting it on one side of the mouth to keep it open when needed.
- Another simple mouth prop can be made from several tongue depressors with a large amount of tape wrapped around them for bulk.
- High-density foam mouth props of varying thicknesses have been specially formulated to help keep the mouth open for dental care. They are nearly impossible to bite through. The handle end can also be used for cheek retraction. These are available through oral care professionals.
Basic Care

How to Assist With / Do Oral Health Care

Assess

It's important to assess each resident's level of oral hygiene capability. To do this, ask the resident to brush his or her own teeth or dentures. Observe which steps he or she is capable of doing independently and which require assistance. The level of capability of each resident should be noted in an oral care plan, accessible to all staff providing care. Residents should be re-evaluated regularly.

Most residents fall within one of four categories:

- Is independent and doesn't require assistance
- Needs reminding and prompting
- Needs some assistance
- Needs full assistance

Assistance with daily oral hygiene is often needed for older adults with loss of strength, mobility or dexterity, or other functional loss.

- People with dementia often forget to brush or how to brush and need a great deal of assistance. Behaviour problems can also arise, making care challenging.
- Other conditions that can make self-care difficult include tremors, inability to grip a toothbrush (possible result of stroke, Parkinson's, etc), inability to hold mouth open (possible result of paralysis, TMJ joint disease, etc.), visual impairments and difficulty swallowing.

For Those Capable of Self-Care

Adaptive Toothbrushes

Residents who have demonstrated they can successfully take care of their own oral hygiene should still be monitored daily to ensure it continues to be done correctly and regularly. Look into the mouth if necessary. Reminders and assistance should be provided when needed.

Some older people have difficulty gripping a standard toothbrush. They can be modified and adapted in a number of ways:

A toothbrush can be enlarged by wrapping it in a washcloth to make it easier to grip.

A toothbrush with a rubber “bicycle grip” is another alternative. Tennis balls and sponge foam are other options.

A toothbrush can also be lengthened with a rod or a stick.
For Residents Needing Assistance

The best place to do oral care is in the washroom where there is good lighting, access to water, and where familiar personal care items are found. The toothbrush should have a small, soft-bristled head and a larger handle with a rubberized grip. Have the toothbrush, toothpaste and any other needed supplies ready before you bring the resident into the washroom. Always wear protective gloves and a face mask.

- Place the resident in a comfortable seated position and sit or stand at the same level as the resident, maintaining eye contact.
- Lay a small hand towel across his or her chest, just below the chin.
- Have the resident open his or her mouth. If he or she is not able to do this, use a mouth prop.
- Numerous effective techniques for brushing the teeth have been developed. The following are two recommended methods. For each method, start with placing the brush at a 45-degree angle towards the junction of the tooth and the gum, which is the position for brushing the sides of the teeth. Then, either:

**Brush** gently in a circular movement,

Or

Gently “scrub” the teeth by moving the brush backwards and forwards horizontally in very small, vibratory motions. Each stroke should be no more than the width of one tooth.

- With either method, make sure to brush all surfaces of all the teeth, brushing behind the front teeth with an up and down movement using the end of the brush.
- The teeth should be brushed for a minimum of 60 seconds, but preferably about the time it takes for a song to play on the radio.
- The tongue should also be gently cleaned with the soft bristles of the toothbrush or with a tongue scraper.
- Use the toothbrush to gently massage the gums and clean the lining and roof of the mouth.

**Flossing** removes plaque and food particles in places where a toothbrush cannot easily reach — under the gum line and between the teeth. To floss a resident’s teeth, wrap one end of floss around the third finger of each hand. To floss the upper teeth, use the thumb and index finger to stretch the floss. Move the floss up and down between the teeth from top to gum and along the gum lines as far as possible. Make a “C” with the floss around each tooth being flossed. To floss the lower teeth, use your index fingers to stretch the floss.

**Interdental brushes** are an alternative to flossing and are often easier for caregivers to use. The brushes have small, bristled heads designed to clean between the teeth. They are preferable to floss when the gaps between the teeth are slightly larger. To use a an interdental brush, gently push it back and forth between the teeth along the gum line, never using force.
To get rid of loosened food particles, the mouth should be well-rinsed with water after cleaning the teeth. If the resident is unable to rinse or spit, use moistened gauze wrapped around a toothbrush, to wipe out the mouth. If the lips are dry, apply lip moisturizer.

Oral hygiene care should be thorough and never rushed. Try to keep to a routine, same time and place each day. Wherever possible, enlist the resident’s participation, using a hand-over-hand technique to guide the toothbrush in the mouth. Explain and show each step before you do it, and offer praise and encouragement as you go. Be patient, gentle and smile!

Also, never awaken a sleeping resident to provide oral care. Come back later and try again.
Communicating With Residents Regarding Oral Care and Dealing With Behaviour Issues

Residents with dementia can require a great deal of help with oral hygiene care, and behaviour problems during care can often make it difficult.

5 techniques that can help are:

- **Bridging** involves engaging the resident’s senses to help him or her understand the task you are trying to do for them. Place a toothbrush in the resident’s hands. Many people will automatically start to brush their own teeth after holding it for a few minutes. Never, however, give a toothbrush to an aggressive resident who is likely to throw it or use it inappropriately.

- **Distraction** involves placing an item such as a rolled up washcloth or cushion in the resident’s hands during oral hygiene care in order to distract his or her attention from the task. Familiar music, singing, gentle touch or talking may also distract and relax the resident.

- **Chaining** means the caregiver starts the oral hygiene process and the resident helps to finish it.

- **Hand-over-hand technique** can help to improve a resident’s awareness of the task. The caregiver’s hand is placed over the resident’s to guide the resident.

- **Rescuing** can be used to help complete oral hygiene for residents with dementia. If attempts at oral hygiene are not going well and the resident is being highly uncooperative, a second caregiver can enter the situation and ask the first caregiver to leave so the second can help his or her “friend”, the resident. The second caregiver then completes the task.

Sometimes it is helpful to try oral hygiene at another time of day when the resident is less aggressive or in a different environment that is more suitable. Successful strategies should be recorded in the resident’s oral hygiene care plan.
Medications and Xerostomia

Xerostomia (dry mouth) is caused when the salivary glands don’t produce enough saliva. It can be extremely uncomfortable and can also have a negative impact on dental health. Saliva flushes food particles and bacteria from the mouth. A lack of saliva in the mouth causes bacteria to accumulate, increasing the risk of developing cavities and gum disease.

Dry mouth, which is very common among LTC residents, is a common side-effect of hundreds of prescription and over-the-counter medications and also a symptom of some conditions and diseases, including diabetes, Parkinson's disease, and cancer treatments. Drugs that can cause dry mouth include decongestants, diuretics and other blood-pressure medications, sedatives, antidepressants, antihistamines, muscle relaxants, drugs for urinary incontinence and those used to treat Parkinson’s disease.

In the elderly, dry mouth often leads to serious tooth decay and oral infections. Residents suffering from dry mouth may also have difficulty speaking, problems chewing and swallowing, bad breath, a swollen and red tongue, and bleeding gums.

Saliva Substitutes

Residents suffering from dry mouth should be encouraged to sip water frequently. Sucking on ice chips and sugar-free candy or chewing gum may also help. Avoid lemon-flavoured hard candy as it makes the saliva acidic, increasing the possibility of tooth decay.

Over-the-counter saliva substitutes can also be used to replace lost moisture and make a resident’s mouth much more comfortable. These products usually come as a gel or a spray and are used to replace missing saliva. They can be used as often as required.

Nutrition

Nutrition affects oral health and oral health affects nutrition. Taking care of the mouth enhances the ability to bite, chew and swallow a variety of nutritious foods. In turn, a healthful, balanced diet contributes greatly to both oral health and general health. An adequate intake of nutritious food helps the body resist infection and inflammation, including periodontal disease.

Poor oral health, whether caused by tooth decay, gum disease, tooth loss, loose or ill-fitting dentures, dry mouth, etc., can greatly affect a resident’s ability to consume all the nutrients needed for good health. This can lead to severe underweight, malnutrition, and increased risk for a number of serious conditions. Excellent daily oral hygiene and a nutritious diet go hand in hand and both are needed to maintain good health.
Dealing with Dentures

Denture Identification

In LTC homes, it's not unusual for dentures to be wrapped in a napkin and left on a food tray, removed during a nap and left in the bed sheets, or to be accidentally taken by another resident. To minimize the possibility of lost dentures, labelling is critical.

False teeth can be labelled at any time. If they were not labelled at the time they were made, a dentist can insert labels in an area of the denture that does not interfere with its appearance or function. Never attempt to label them yourself with felt tip pens or markers.

The storage box should also be clearly labelled. This can be done with a marker or adhesive label.

Care of Dentures

Plaque sticks to dentures in the same way it sticks to natural teeth. Soaking them in a cup with a cleansing tablet at night is not enough. Dentures and partial plates should be removed and rinsed after each meal and cleaned thoroughly with a denture brush just before bed.

When helping a denture-wearing resident with oral care, ask first if they can remove the dentures themselves. If not, assist them as follows:

- The lower denture should always be removed first to reduce any risk of aspiration (inhaling foreign material — usually food, liquids, vomit or secretions from the mouth) into the lungs. Use two fingers to grasp it firmly behind the front teeth, gently rocking to break the seal.

- Next remove the upper dentures by using two fingers behind the front teeth and lightly rocking to break the seal, then dropping the denture downwards and gently rotating it out of the mouth.

- To avoid gagging, dentures should always be re-inserted in the opposite order after cleaning, with the upper denture going in first and then the lower one. Use a gentle rotating motion for both.

- For partial dentures, place thumbnails over or under the clasps and gently pulling, taking care not to bend the clasps or catch them on the resident’s lips or gums. Take care when handling small partial dentures, as they can be fragile and easily broken.

- Clean the dentures over a water-filled sink. Rinse them with cold water to remove any food. Place a small amount of liquid hand soap on the denture brush and scrub all surfaces, including the clasps on a partial denture. (Do not use ordinary toothpaste on dentures, as it is too abrasive and may damage the polished surface of the denture.) Rinse well with water.

- A soft standard toothbrush should be used to clean the palate, tongue, cheeks, gums and ridges of the resident’s mouth. Use the brush to gently massage the gums.

- For those wearing partial dentures, the supporting teeth must also be cleaned thoroughly.

- Tartar may form on the smooth surfaces of dentures. This can cause irritation and should be removed by an oral health professional as soon as it’s noticed.
**Advanced Care**

* Dentures should be left out of the mouth at night to allow gum tissue to rest. Store the dentures dry in a labelled denture cup. The denture cup should be rinsed on a daily basis and thoroughly cleaned once a week.

* To re-insert dentures, wet them first with water to prevent discomfort.

**The Correct Way to Remove Dentures**

- Remove complete dentures by placing two fingers behind front teeth and gently rocking to break the seal.
- Partial dentures are removed by placing fingers over the clasps and pulling.

**Conditions to Look for in Denture Wearers**

**Denture Stomatitis**
Denture Stomatitis shows as a generalized redness in the upper palate and sometimes at the corners of the mouth. It is caused by dentures not being cleaned properly, being left in the mouth too long or from a fungal or bacterial infection. It is treated with an anti-fungal or antibacterial agent ordered by a dentist or physician.

**Oral Thrush**
Thrust/Yeast Infection (Candida) looks like creamy white patches or small red dots. This can be painful and can cause a burning sensation. It is caused from leaving dentures in too long, a weak immune system, or from certain medications. It also must be treated with an antifungal agent prescribed by a dentist or physician.
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Developed with the assistance of the Ontario Dental Association's Working Group on Access to Care

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