Principles of effective oral and denture care in adults

Oral health is essential to good health and quality of life, and is defined by the World Health Organization (2018) as “a state of being free from mouth and facial pain, oral and throat cancer, oral infection and sores, periodontal (gum) disease, tooth decay, tooth loss, and other diseases and disorders that limit an individual’s capacity in biting, chewing, smiling, speaking, and psychosocial wellbeing”.

Maintaining patients’ oral hygiene is an essential nursing duty and is considered a fundamental aspect of care (Department of Health, 2010). Evidence suggests that oral health deteriorates while people are in hospital (Terezakis et al, 2011) and it is generally acknowledged that mouth care in hospitals and care homes needs to be improved (Binks et al, 2017). Barriers to providing effective oral care include:
- Lack of staff training;
- Lack of mouth care assessment tools, policies and equipment (Binks et al, 2017).

In response to concerns, in 2015 Heath Education England launched Mouth Care Matters (MCM – www.mouthcarematters.hee.nhs.uk) to improve oral care for adults in care homes and hospitals (Box 1).

Reasons for poor oral hygiene
There are many reasons people may have poor oral hygiene, including:
- Inability to carry out oral care, for example due to stroke, arthritis, arm injury, head injury, surgery;
- Lack of knowledge or motivation;
- Lack of access to dental services;
- Lack of money to afford oral care equipment;
- Medicines, such as anticholinergic drugs and oxygen therapy, that cause a dry mouth or an unpleasant taste;
- Poor diet or reduced fluid intake (Wilson, 2011);
- Nil by mouth due to surgery or dysphagia;
- Xerostomia – sensation of a dry mouth – which frequently affects older people;
- Surgery, radiotherapy and/or trauma to the head and neck (Dougherty and Lister, 2015).

Benefits of a clean mouth
Providing effective mouth care to patients can:
- Promote self-esteem and comfort (Wilson, 2011);
- Improve appetite and enjoyment of food and drink – poor nutrition associated with oral problems can slow recovery and increase length of hospital stay (Binks et al, 2017);
- Prevent halitosis;
- Reduce the risk of hospital-acquired pneumonia (Pássaro L et al, 2016; Pace and McCollough, 2010).

How often should oral care be carried out?
Teeth should be brushed at least twice a day with a fluoride toothpaste (Public Health England, 2017; National Institute for Health and Care Excellence, 2016).

In hospital and care homes frequency can be determined using an oral assessment tool and depends on individual need. Patients receiving oxygen therapy, nil by mouth or those who are vomiting will require frequent mouth care. Nurses should prompt and support patients to carry out oral care and undertake oral care for those who cannot maintain a clean mouth for themselves (NICE, 2016).

Oral assessment
A pen torch and tongue depressor can make it easier to see inside the oral cavity. The assessment will:
- Provide baseline information about the condition of the patient’s oral cavity;
- Help monitor progress of oral care/treatments;
- Identify whether the patient has a denture or appliance to prevent it being lost while in hospital.

Fig 1 details the features that will be evident in a healthy oral cavity. Oral assessment will help to identify issues such as:
- Dry mouth and lips;
- Coated tongue;
- Broken teeth/stumps;
- Thick tenacious secretions;
- Dry, sore lips;
- Nil by mouth;
- Fluttering soft palate;
- Sore or red gums;
- Swollen, sore or red lips;
- Fissures in the inside of the lips;
- Loose or sloping teeth;
- Xerostomia – dry mouth;
- Difficulties with eating and swallowing.

Box 1. Mouth Care Matters
The Mouth Care Matters initiative states that staff need to have:
- Knowledge of good mouth care and how oral health is linked to general health and wellbeing;
- Skills on how to assess and carry out mouth care;
- Tools, such as toothbrushes and denture pots, to carry out mouth care effectively;
- Support from doctors and dental practitioners where necessary.

Authors Rachael Otukoya is a dentist in special care dentistry and dental public health at East Surrey Hospital; Eileen Shepherd is clinical editor, Nursing Times.

Abstract Oral care is a fundamental part of nursing care and failure to provide it can have a negative effect on health and wellbeing. This article explains the procedure for oral and denture care.


Keywords Mouth care/Denture/oral health/oral hygiene

This article has been double-blind peer reviewed.

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- Fissures in the inside of the lips;
- Loose or sloping teeth;
- Xerostomia – dry mouth;
- Difficulties with eating and swallowing.
10. Offer the patient tissues to wipe their mouth.

11. Apply moisturiser to the patient’s lips if required. Dry-mouth gel can be used to alleviate oral dryness.

12. Check the patient is comfortable.

13. Clean the toothbrush and allow it to air dry.

14. Remove gloves and apron, and dispose of equipment according to local policy.

15. Wash and dry your hands.


### Procedure for denture care

Good denture hygiene is essential as food and debris can collect under dentures. Denture care reduces the risk of developing problems such as oral thrush. Loss of dentures is a major problem in hospital and affects patients’ ability to eat and communicate, and may also affect their psychological wellbeing (Binks et al, 2017). Obtaining new dentures is expensive and inconvenient for patients.

Mouth Care Matters identifies three key principles for denture care (Doshi, 2016):

1. Dentures should be cleaned at least once daily and, ideally, after meals with a toothbrush or toothbrush and soap over a bowl filled with water; non-foaming toothpaste should be used for patients with dysphagia (swallowing problems) (Doshi, 2016).

2. Use a gentle, rotating movement to clean the inner, outer and biting surfaces of the teeth (Fig 3). You can also gently brush the surface of the tongue and the gums. Brushing should take approximately two minutes, or 30 seconds per quarter of the mouth.

3. Allow the patient to spit out excess toothpaste. They should not rinse their mouth with water as this dilutes the fluoride in the toothpaste, which protects teeth from decay (PHE, 2017).

4. Assemble equipment.

5. Ask the patient to sit in an upright position or help them to do this. If the patient is unable to sit up, the procedure should be undertaken with the patient’s head turned to the side to prevent choking and suction equipment should be available.

6. Wash and dry hands again, and put on non-sterile gloves and a plastic apron.

7. Select an appropriate toothbrush and wet the head. Apply a pea-sized amount of toothpaste to a gloved finger and rub it into the toothbrush – this will prevent a large amount of toothpaste from dropping into the patient’s mouth. Non-foaming toothpaste should be used for patients with dysphagia (swallowing problems) (Doshi, 2016).

8. Use a gentle, rotating movement to clean the inner, outer and biting surfaces of the teeth (Fig 3). You can also gently brush the surface of the tongue and the gums. Brushing should take approximately two minutes, or 30 seconds per quarter of the mouth.

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10. Offer the patient tissues to wipe their mouth.

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12. Check the patient is comfortable.

13. Clean the toothbrush and allow it to air dry.

14. Remove gloves and apron, and dispose of equipment according to local policy.

15. Wash and dry your hands.


### The procedure for oral hygiene

**Equipment**
- Pen torch;
- Receiver;
- Tissues;
- Tongue depressor;
- Non-sterile disposable gloves and plastic apron;
- Toothbrush – this is the most effective means of removing plaque and debris. A paediatric soft toothbrush can be used for patients who have a sore mouth;
- Toothpaste;
- Assessment and recording tools.

In 2012 the Medicines and Healthcare products Regulatory Agency issued an alert advising that foam swabs should not be used with patients as the foam heads can become detached (MHRA, 2012). Many organisations have subsequently banned them on patient safety grounds. They are not as effective as a toothbrush at removing dental plaque and should not be used as a replacement for toothbrushes (Pearson and Hutton, 2002).

**Procedure**
1. Explain the procedure to the patient and gain their consent to carry it out.
2. Screen the patient to ensure privacy during the procedure. Oral hygiene should take place in the bathroom, where possible.
3. Wash and dry your hands.
4. Assemble equipment.
5. Ask the patient to sit in an upright position or help them to do this. If the patient is unable to sit up, the procedure should be undertaken with the patient’s head turned to the side to prevent choking and suction equipment should be available.
6. Wash and dry hands again, and put on non-sterile gloves and a plastic apron.
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13. Clean the toothbrush and allow it to air dry.
14. Remove gloves and apron, and dispose of equipment according to local policy.
15. Wash and dry your hands.

### Ulcers;
- Plaque and dental caries;
- Candidiasis (oral thrush) (Fig 2).

The patient should be referred to a dental professional if there are concerns about excessive plaque, ill-fitting dentures or multiple/long-standing ulcers.

### The healthy oral cavity

- Lips – pink and moist
- Tongue – pink and moist
- Teeth and gums – clean, teeth not broken or loose
- Cheeks, palate, under the tongue – clean, saliva present, looks healthy

**Fig 2. Oral thrush**

Oral thrush is a common problem that is associated with dentures and poor oral hygiene.

**Fig 3. Toothbrushing technique**

Brush the teeth using a rotating movement.
Fig 4. Removing dentures

Slide a gloved finger by the side of the denture to help break the seal between the denture and the mouth.

- They should be removed at night and stored in water, in a labelled denture pot;
- An incident report form must be completed by wards for every denture that is lost.

**Equipment**
- Small torch;
- Plastic cup;
- Mouthwash;
- Denture cleaner;
- Denture brush;
- Non-sterile disposable gloves and apron;
- Denture pot;
- Tissues.

**Procedure**

1. Explain the procedure to the patient and gain their consent to carry it out.
2. Wash and dry your hands.
3. Assemble equipment.
4. Fill a disposable bowl with water.
5. Wash and dry your hands again, and put on the non-sterile gloves and apron.
6. Ask the patient to remove the denture from their oral cavity and place it in the bowl of water.
7. Allow the patient to rinse their mouth with water. A soft toothbrush may also be used to gently brush the gums.
8. If the patient needs help to remove the denture, slide a gloved finger by the side of it to help break the seal between the mouth and the denture (Doshi, 2016) (Fig 4).
9. Carry out an oral assessment using a pen torch if required.
10. Clean the denture using a denture brush or soft toothbrush and denture cleaner. Toothpaste should not be used as this can be abrasive (Doshi, 2016).
11. Check the denture for damage, such as cracks or sharp edges.
12. Rinse the denture with cold water before repositioning it in patient’s mouth or storing it in water in a denture pot. Advise the patient to leave the denture out at night to allow the oral tissue to recover.
13. Always use a dedicated denture container, carefully labelled with the patient’s details according to local policy.
14. Check the patient is comfortable.
15. Clean the denture brush and allow it to air dry.
16. Remove your gloves and apron, and dispose of the equipment according to local policy.
17. Wash and dry your hands.
18. Document the care and any observations of the oral cavity.
19. If the patient has a partial denture it is important that they also clean their remaining teeth. Separate tooth brushes should be used for dentures and teeth (Doshi, 2016). NT

- This article is an update of Wilson A (2011) How to provide effective oral care. Nursing Times; 107: 6, 14-15.

**References**

**Clinical Practice**

**Practical procedures**

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