Clinical Skills

Oral Hygiene

Clinical Skills and Simulation Team
Aims & Outcomes

The aim of this module is to facilitate student learning regarding how to assess oral hygiene and how to provide safe and effective oral care to patients. It has been produced using guidance from The Royal Marsden Hospital Manual of Clinical Nursing Procedures along with video and photography from internet and local sources.

Learning Outcomes

At the end of the session the student should be able to:

✓ Identify the reasons for maintaining good oral health.
✓ Demonstrate knowledge and understanding of the basic anatomy and physiology of the mouth.
✓ Discuss the steps required to prepare the patient, environment and self prior to assisting a patient with oral hygiene needs.
✓ Describe the equipment required for carrying out oral hygiene.
✓ Demonstrate how to perform a comprehensive risk assessment of a patient's oral hygiene requirements.
✓ Discuss and describe how to perform oral hygiene given various scenarios.
✓ Evaluate own knowledge of the principles of oral care.
Oral hygiene can be defined as:

‘the efficient care of all areas of the mouth which include gums, tongue, lips and teeth/dentures.’

It is commonly assumed that oral hygiene is a simple task and easy to perform as we all do it daily. However, performing oral hygiene on another person is much more difficult than you would expect and is complicated more if the person is unable to assist you.

The level of assistance required by a patient may vary depending on their health status. It can be as simple as verbal prompting and passing them equipment to total dependence on you to perform the whole procedure of oral hygiene for them.
Oral Hygiene

Introduction

It is imperative to perform good and effective oral hygiene on a daily basis to prevent problems and disease occurring, such as cavities, gingivitis and bad breath.

Poor oral hygiene can be detrimental to a person's general health status as it can lead to malnutrition through being unable to maintain sufficient oral intake of food and fluids due to pain and discomfort within the mouth. This pain and discomfort may also affect communication as verbal responses may become difficult.

A more serious risk of poor oral hygiene is the affect on other organs within the body. Research projects worldwide have provided evidence that poor oral hygiene can be linked to respiratory, cardiovascular, gastrointestinal and musculoskeletal diseases/infections. A few examples are pneumonia, infective endocarditis, malnutrition, rheumatoid arthritis.

Risk assessing the oral hygiene needs of each patient is important to ensure that the most effective care and treatment plan is devised.
Anatomy & Physiology

The oral cavity is the anterior end of the digestive tract and consists of:
• Oral cavity (cavum oris proprium)
• Oral vestibule (vestibulum oris)
These are adjoined by the lips, tongue, cheeks, teeth, gums, hard and soft palates.

The oral cavity is lined with mucous membranes that serve three purposes of protection, secretion and sensation. The salivary glands that supply secretions to the mouth are the parotid, submandibular and sublingual. These can produce up to 1.5 litres of saliva each day.

All parts of the mouth work together to aid with ingestion and digestion of food. Through movements produced by the tongue, lips and cheeks the mouth plays the most integral part in the production of speech.
Risk Assessment for Oral Hygiene

Completing a thorough assessment of a person’s oral hygiene status and needs is imperative in planning the required effective care.

A comprehensive documented initial assessment will allow for comparisons to be made to evaluate the effectiveness of the oral hygiene being performed and any response to initiated treatment. This will allow for monitoring of any conditions and identification of new problems as they occur.

Documenting all assessments and all care planned or provided is a legal requirement of every healthcare professional.

There are many assessment tools available. Always check which one is advisable in each area that you work.

The next table shows descriptions of healthy and unhealthy findings when assessing each mouth part.
## Risk Assessment for Oral Hygiene

<table>
<thead>
<tr>
<th></th>
<th>HEALTHY</th>
<th>UNHEALTHY</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Lips &amp; soft tissues</strong></td>
<td>Smooth, intact, moist</td>
<td>Dry, cracked, coated, broken areas at corners of mouth.</td>
</tr>
<tr>
<td>(inside mouth)</td>
<td></td>
<td>Bleeding/blistered lips. Swelling/lump/red or white area &gt;3weeks.</td>
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<tr>
<td></td>
<td></td>
<td>Multiple ulcers. Very sore mouth.</td>
</tr>
<tr>
<td><strong>Tongue</strong></td>
<td>Intact, moist, not coated.</td>
<td>Dry, patchy, fissured, inflamed, coated. An area that is red and/or white,</td>
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<tr>
<td></td>
<td></td>
<td>ulcerated and swollen &gt;3weeks.</td>
</tr>
<tr>
<td><strong>Saliva</strong></td>
<td>Soft tissues moist, watery and free flowing</td>
<td>Soft tissues dry, little or no saliva, thick tenacious secretions. Dry moth</td>
</tr>
<tr>
<td></td>
<td>saliva.</td>
<td>feeling.</td>
</tr>
<tr>
<td><strong>Gums</strong></td>
<td>Moist, no bleeding.</td>
<td>Bleeding, dry, shiny, swollen, pain, bad breath, loose teeth, ulcers and/or</td>
</tr>
<tr>
<td></td>
<td></td>
<td>white patches. Generalised inflammation and/or tenderness &gt;3weeks.</td>
</tr>
<tr>
<td><strong>Oral Cleanliness</strong></td>
<td>Clean, no food or visible plaque on teeth or</td>
<td>Food, visible plaque, tarter, bad breath.</td>
</tr>
<tr>
<td></td>
<td>dentures.</td>
<td></td>
</tr>
<tr>
<td><strong>Natural Teeth</strong></td>
<td>No decayed or broken teeth.</td>
<td>Decayed or broken teeth/roots. Continuous pain, swelling to face or gums.</td>
</tr>
<tr>
<td><strong>Dentures</strong></td>
<td>Clean and intact.</td>
<td>Not clean, broken area. Loose or painful when worn. Unable to cope with</td>
</tr>
<tr>
<td></td>
<td></td>
<td>dentures due to illness e.g. stroke.</td>
</tr>
<tr>
<td><strong>Health Status</strong></td>
<td>Alert, pain free, good nutritional and fluid</td>
<td>Requires assistance to perform oral hygiene or totally dependent on</td>
</tr>
<tr>
<td></td>
<td>intake.</td>
<td>someone e.g. unconscious.</td>
</tr>
</tbody>
</table>
Oral Hygiene
Risk Factors to Poor Oral Health

There are many risk factors that need to be taken into consideration when assessing a person's oral health and their requirements of oral hygiene.

**Risk Factors to Poor Oral Health**

- **LEARNING & PHYSICAL DISABILITIES**
  - Inability to perform
  - Lack of Understanding
  - Behaviour Issues
  - Mouth Breathing

- **UNCONSCIOUS OR INTUBATED**
  - Total dependence
  - Mouth breathing

- **POOR DIET**
  - Malnutrition
  - Reduced Saliva
  - Risk of Infection

- **MEDICATIONS**
  - Some can reduce saliva production, such as:
    - Anticholinergics
    - Antiemetics
    - Antibiotics
    - Diuretics
    - Antihypertensives
    - Antidepressants
    - Anticonvulsants
    - Analgesics (specifically opiates)

- **MEDICAL CONDITIONS**
  - Immunosuppressed
  - Dehydration

- **MENTAL HEALTH**
  - Awareness of importance
  - Communication

- **AGE (VERY YOUNG / VERY OLD)**
  - Dexterity
  - Communication

- **Some suppress the immune systems:**
  - Steroids
  - Chemotherapy
Oral Care Agents & Solution

There are many types of oral care agents and solutions available to use. Which type and particular one that is used is dependent on the needs of the patient.

Some solutions will aid the removal of debris and plaque whilst others offer protection and prevention of infection. There are some solutions that will alleviate pain and discomfort within the mouth and others that assist with lubrication or treat specific issues.

Some are used prophylactically whilst others are used as specific treatments.

Following the completion of a comprehensive oral care risk assessment healthcare professionals will be able to determine the best oral agents and solutions required.
Oral Hygiene
Principles of Oral Hygiene Procedure

Principles of Assisting a Patient with Oral Hygiene

The main principle to adhere to are:

- Obtain informed consent from patient
- Maintain patient comfort and dignity throughout
- Decontaminate hands pre and post procedure
- Use efficient procedure
- Where possible encourage patient independence
Preparation of AREA

Preparation of EQUIPMENT

Preparation of PATIENT

Preparation of SELF
Preparation of AREA

Prior to commencement of oral hygiene in a healthcare setting:

✓ Ensure the surrounding area is tidy and free of any clutter

✓ Pull screens/curtains around the bed area
Preparation of **EQUIPMENT**

You will require:

- Clean tray
- Plastic cups
- Mouthwash or clean solutions
- Appropriate equipment for cleaning
- Clean receiver or bowl
- Paper tissues/gauze
- Wooden tongue depressor
- Small-handled, soft bristle toothbrush
- Toothpaste
- Denture pot
- Small torch
Preparing to Perform Oral Hygiene for a Patient

**Preparation of EQUIPMENT**

✓ Gather all personal protective equipment (PPE) that you will require, e.g. apron, gloves and mask if required
Preparation of **PATIENT**

- Explain the procedure and gain informed consent from the patient
- Check comfort of patient, such as their position and whether they require the toilet
- If necessary protect and cover bed clothes and/or personal clothing from any spillages
- Ensure that warmth, comfort and dignity of the patient is maintained throughout
Preparing to Perform Oral Hygiene for a Patient

**Preparation of SELF**

- Adhere to local uniform and work wear policy ensuring hair is tied back and no items of clothing or jewellery (apart from a wedding band) are worn below the elbow.

- Perform hand hygiene in accordance with the hand hygiene policy depending on whether preparing for a standard or surgical aseptic procedure.

- Put on apron, gloves and any other PPE that may be required as indicated by the patient's condition.
Preparation of SELF

How to Handrub?
RUB HANDS FOR HAND HYGIENE! WASH HANDS WHEN VISIBLY SOILED

Duration of the entire procedure: 20-30 seconds

1. Apply a pouch of the product in a spread hand, covering all surfaces;
2. Rub hands palmar;
3. Fold palm over left fingers, interlock fingers and pull washer;
4. Pass palm of hands over fingers;
5. Smooth of fingers to opposing washer with fingers interlocked;
6. Rubbing of left thumb clasped in right palm and vice versa;
7. Rubbing of backhands and forwards with clasped fingers of right hand in left palm and vice versa;
8. Once dry your hands are safe.

SAVE LIVES
Clean Your Hands

How to Handwash?
WASH HANDS WHEN VISIBLY SOILED OTHERWISE, USE HANDBRUB

Duration of the handwash (steps 3/7): 15-30 seconds
Duration of the entire procedure: 45-60 seconds

1. Wet hands with water;
2. Right angle swipe in corner against surfaces;
3. Right hand with water;
4. Left palm with water;
5. Left hand with water;
6. Right hand with water;
7. Left palm with water;
8. Right hand with water.

World Health Organization
Patient Safety
SAVE LIVES
Clean Your Hands
Summary

- Gain Consent
- Prepare Area
- Prepare Equipment
- Prepare Self
- Maintain Patient Comfort & Dignity
- Prepare Patient
- Clean Area and Reusable Equipment
- Document Procedure in Patient Notes
**Oral Care Procedure Tips**

Once the risk assessment has been completed and all steps of preparation are fulfilled, the procedure itself will need to be carried out.

The level of assistance required will vary. The following is advice on how to complete some tasks:

**INSPECTION OF MOUTH**

Use torch, spatula and gauze

Document any changes in condition with respect to moisture, cleanliness, infection, bleeding, pain, ulcers

**DENTURE REMOVAL**

If patient is unable to remove dentures....

Use tissue or gauze, grasp the denture plate at the front with thumb and second finger, move denture up & down slightly until it loosens then place into a denture pot.

Lift lower plate at an angle to aid removal without stretching the lips.

Underlying tissues (gums) need to be cleaned. Using tissue or gauze gives improved grip and moving gently releases the suction force holding denture in place.
Oral Care Procedure Tips

**PARTIAL DENTURE**

- Exert equal pressure on the border of each side of the denture
- Never hold the clasps as this could cause damage

**BRUSHING THE TEETH**

- Use soft bristled small toothbrush
- Ensure all teeth surfaces are cleaned
- Remember to brush the tongue too, be careful of this inducing the gag reflex

**REMEMBER TO RINSE**

- Provide patient with beaker of water or mouthwash to rinse their mouths
- Place a receptacle below chin for patient to void the rinse into
- If patient unable to do this, use a moistened brush to rinse their mouth
Frequency of Oral Hygiene

There are many schools of thought regarding how often oral care should be performed. However, there has been very few research studies into the most effective frequency of oral care.

The studies that have been completed recommend that:

- Four-hourly care will reduce the potential for infections from micro-organisms
- Two-hourly care will reduce potential of oral care problems and ensure patient comfort
- One-hourly care is advised for patients on oxygen therapy, patients that mouth breath, those with oral infections and any patients that remain unconscious (intubated and dying patients)
Oral Hygiene
Effects of Poor Oral Hygiene

Effects of Poor Oral Hygiene

- Bacterial and chronic infections
- Chronic pain
- Reduced salivary flow – can lead to xerostomia which is dryness of the mouth
- Taste changes
- Dental plaque – a biofilm of microorganisms that attach to the teeth and cause dental caries and infections of the gingival tissue
- Dental caries – plaque induced problem caused by interaction of food with bacteria from dental plaque
- Gingivitis – red, swollen, bleeding areas of the gingiva on the margins surrounding each tooth
- Halitosis – offensive smelling breath usually caused by poor oral hygiene or infections
- Stomatitis – inflammation of the oral cavity with or without ulceration
- Tartar – hardened plaque adhered to the teeth

All of the above can lead to:

- Problems with speaking and learning
- Malnutrition
- Poor social relationships
- Problems gaining employment
Effects of Poor Oral Hygiene

- Gingivitis
- Periodontitis
- Tooth Decay
Oral Hygiene
Effects of Poor Oral Care on the Body

- **Halitosis**: Lack of regular brushing and flossing leaves small food particles wedged between the teeth that collect bacteria and emit chemicals, like hydrogen sulfide—the same compound that gives rotten eggs their characteristic smell.

- **Heart Disease**: People with periodontal disease are 2x likely to develop heart disease and arterial narrowing as a result of periodontal bacteria and plaque entering the bloodstream through the gums. In fact, one study found that the presence of gum disease, cavities, and missing teeth are as good at predicting heart disease as cholesterol levels.

- **Diabetes**: 95% of US adults with diabetes also have periodontal disease, and 1/3 have advanced periodontal disease that has lead to tooth loss.

- **Periodontal Disease**: Bone deterioration around the teeth leads to loosening and eventual tooth loss. 25% of US adults over 65 have lost all of their teeth.

- **Atherosclerosis**: High levels of disease-causing bacteria in the mouth can lead to clogging of the Carotid Artery and increased risk of stroke.

- **Respiratory Problems**: Bacteria from periodontal disease can travel through the bloodstream to the lungs where it can aggravate respiratory systems—especially in patients who already have respiratory problems.

- **Erectile Dysfunction**: Periodontal bacteria can travel through the bloodstream, enflaming blood vessels and blocking blood flow to the genitals. In fact, men with periodontal disease are 7x more likely to experience erectile dysfunction than men with good dental hygiene.
Oral Care and Cancer

Research has found that patients with blood or lymph cancers are at greater risk of oral complications than those with solid tumours. The malignant disease itself can lead to oral complications such as gum infiltration, higher risk of oral infection and bleeding.

Part of the increased risk of oral problems in cancer patients is due to the treatments that they receive for the cancer which are mostly cytotoxic (chemotherapy and radiotherapy). Most cancer treatments reduce general immunity which leads to cancer patients being at greater risk of developing oral infections.

Greater care needs to be given to oral care of patients with cancer to prevent complications.

The care required may be as simple as advice at the beginning when diagnosis first given. Though as the disease progresses the care required may be for involved or result in healthcare professionals providing all oral care for the patient. The level of care required and equipment used should always be determined through completion of a comprehensive risk assessment.
Web Resources


