Learning Outcomes

After completing this chapter, you will be able to:

- Describe hygienic care that nurses provide to patients.
- Identify factors influencing personal hygiene.
- Identify normal and abnormal assessment findings while providing hygiene care.
- Apply the nursing process to common problems related to hygienic care of the skin, feet, nails, mouth, hair, ears and nose.
- Identify the purposes of bathing.
- Explain specific ways in which nurses help hospitalised patients with hygiene.
- Describe steps for identified hygienic-care procedures.
- Identify steps in removing contact lenses and inserting and removing artificial eyes.
- Describe steps for removing, cleaning and inserting hearing aids.
- Identify safety and comfort measures underlying bed-making procedures.

CASE STUDY

Joan is 45 years old and has suffered an injury affecting her nervous system. This injury also affects her ability to perform activities of daily living unaided including attending to her own personal hygiene needs. As a relatively young person Joan is expressing feelings of distress when receiving assistance from members of the nursing team which in turn is making her mood low and causing depression.

Joan’s husband shows you a picture of a very smartly dressed lady with immaculate make up and perfect hair style. Her husband comments that she would spend hours ensuring she was ‘perfect’ to go anywhere. As you reflect upon this image and look at the lady in front of you it is easy to appreciate why Joan is so upset and distressed.

In consultation with Joan a plan of care is designed that assists her to be as independent as possible to attend to her own needs with minimal assistance. The plan also incorporates aspects of her life style considerations prior to her admission to your care.

After reading this chapter you will be able to discuss the importance of maintaining personal hygiene.
INTRODUCTION

Hygiene is the science of health and its maintenance. Personal hygiene is the self-care by which people attend to such functions as bathing, toileting, general body hygiene and grooming. Hygiene is a highly personal matter determined by individual values and practices. It involves care of the skin, hair, nails, teeth, oral and nasal cavities, eyes, ears and perineal-genital areas.

It is important for nurses to know exactly how much assistance a patient needs for hygienic care. Patients may require help after urinating or defecating, after vomiting, and whenever they become soiled, for example, from wound drainage or from profuse perspiration. Table 13-1 lists factors that influence hygiene practices.

HYGIENIC CARE

Morning care is provided to patients as they awaken in the morning or after breakfast. A patient who requires assistance would have their elimination needs provided for, an assisted wash, bath or shower, perineal care, skin pressure areas checked, oral, nail and hair care. Making the patient’s bed is part of morning care.

Prior to the patient settling for the night elimination needs should be provided for, hands and face washed as necessary, and oral care performed. Individuals frequently need additional care during the day or night as necessary including assistance with elimination. Additionally a patient who is diaphoretic (sweating profusely) may need more frequent bathing and a change of clothes and linen.

SKIN

The skin is the largest organ of the body. It serves five major functions:

1. It protects underlying tissues from injury by preventing the passage of micro-organisms. The skin and mucous membranes are considered the body’s first line of defence.
2. It regulates the body temperature. Cooling of the body occurs through the heat loss processes of evaporation of perspiration, and by radiation and conduction of heat from the body when the blood vessels of the skin are vasodilated. Body heat is conserved through lack of perspiration and vasoconstriction of the blood vessels.
3. It secretes sebum, an oily substance that (a) softens and lubricates the hair and skin, (b) prevents the hair from becoming brittle, and (c) decreases water loss from the skin when the external humidity is low. Because fat is a poor conductor of heat, sebum (d) lessens the amount of heat lost from the skin. Sebum also (e) has a bactericidal (bacteria-killing) action.
4. It transmits sensations through nerve receptors, which are sensitive to pain, temperature, touch and pressure.
5. It produces and absorbs vitamin D in conjunction with ultraviolet rays from the sun, which activate a vitamin D precursor present in the skin.

The normal skin of a healthy person has transient and resident micro-organisms that are not usually harmful. Sudoriferous (sweat) glands are on all body surfaces except the lips and parts of the genitals. The body has from two to five million, which are all present at birth. They are most numerous on the palms of the hands and the soles of the feet. Sweat glands are classified as apocrine and eccrine. The apocrine glands, located largely in the axillae and anogenital areas, begin to function at puberty under the influence of androgens. Although they produce sweat almost constantly, apocrine glands are of little use in thermoregulation. The secretion of these glands is odourless, but when decomposed or acted on by bacteria on the skin, it takes on a musky, unpleasant odour. The eccrine glands are important physiologically. They are more numerous than the apocrine glands and are found chiefly on the palms of the hands, the soles of the feet and forehead. The sweat they produce cools the body through evaporation. Sweat is made up of water, sodium, potassium, chloride, glucose, urea and lactate.

Table 13-1 Factors Influencing Individual Hygienic Practices

<table>
<thead>
<tr>
<th>Factor</th>
<th>Variables</th>
</tr>
</thead>
<tbody>
<tr>
<td>Culture</td>
<td>Society places a high value on cleanliness. Many people bathe or shower once or twice a day, whereas people from some cultures will bathe once a week only. Some cultures consider privacy essential for bathing, whereas others practise communal bathing. Body odour is offensive in some cultures and accepted as normal in others.</td>
</tr>
<tr>
<td>Religion</td>
<td>Ceremonial washings are practised by some religions.</td>
</tr>
<tr>
<td>Environment</td>
<td>Finances may affect the availability of facilities for bathing. For example, homeless people may not have warm water available; soap, shampoo, shaving equipment and deodorants may be too expensive for people who have limited resources.</td>
</tr>
<tr>
<td>Developmental level</td>
<td>Children learn hygiene in the home. Practices vary according to the individual’s age; for example, pre-schoolers can carry out most tasks independently with encouragement.</td>
</tr>
<tr>
<td>Health and energy</td>
<td>Ill people may not have the motivation or energy to attend to hygiene. Some patients who have neuromuscular impairments/illness may be unable to perform hygienic care.</td>
</tr>
<tr>
<td>Personal preferences</td>
<td>Some people prefer a shower to a bath.</td>
</tr>
</tbody>
</table>
Assessment of the patient’s skin and hygienic practices is included within the majority of nursing care models. The assessment should usually include (a) a nursing health history to determine the patient’s skin care practices, self-care abilities and past or current skin problems; (b) physical assessment of the skin; and (c) identification of patients at risk for developing skin impairments.

Patient History

Data about the patient’s skin care practices enable the nurse to incorporate the patient’s needs and preferences as much as possible in the plan of care. Andrews and Boyle (2003) suggest that people in most Western cultures try to disguise natural body odours by bathing frequently and using deodorant, cologne or perfumes. Immigrants from other countries where water is scarce may bathe less often than people from countries where water is more accessible.

Assessment of the patient’s self-care abilities determines the amount of nursing assistance and the type of bath (e.g. bed, immersion bath or shower) best suited for the patient. Important considerations include the patient’s balance (for bath and shower), ability to sit unsupported (in the bath or bed), activity tolerance, coordination, adequate muscle strength, appropriate joint range of motion, vision and the patient’s preferences. Cognition and motivation are also essential. Patients whose cognitive function is impaired or whose illness alters energy levels and motivation will usually need more assistance. It is important for the nurse to determine the patient’s functional level and to maintain and promote as much independence as possible. This also enables the nurse to identify the individual’s potential for growth and rehabilitation. There are several models of functional levels of self-care. One example is shown in Table 13-2.

The presence of past or current skin problems alerts the nurse to specific nursing interventions or referrals the patient may require. Many skin care conditions have implications for hygienic care. The patient may provide descriptions of these problems during the nursing assessment, or the nurse may observe some during the physical examination that follows. Common skin problems and implications for nursing interventions are shown in Table 13-3. Questions to elicit information about the patient’s skin care practices, self-care abilities,
and skin problems are shown in the Assessment questions on page 00.

Physical Assessment

When assisting with bathing and other hygienic care, the nurse often has the opportunity to collect information about skin discolouration, uniformity of colour, texture, turgor, temperature, intactness and lesions.

Difficulties encountered by the patient in performing bathing activities include the inability to wash the body or body parts, to obtain or get to a water source, and to regulate water temperature or flow. Difficulties in dressing and grooming include inability to obtain, put on, take off, fasten or replace articles of clothing; and to maintain appearance at a satisfactory level. Toileting problems may involve difficulties getting to the toilet or commode or sitting on and rising from it. In addition, the patient may experience problems manipulating clothing for toileting, carrying out proper toilet hygiene, or flushing the toilet or emptying the commode. The reasons (aetiologies or related factors) for these problems are varied (see Box 13-1).

Deficient knowledge related to:
- lack of experience with skin condition (acne) and need to prevent secondary infection;
- new therapeutic regimen to manage skin problems;
- lack of experience in providing hygiene care to dependent person;
- unfamiliarity with devices available to facilitate sitting on or rising from toilet.

Situational low self-esteem related to:
- visible skin problem (e.g. acne or alopecia);
- body odour.

### Table 13-3 Common Skin Problems

<table>
<thead>
<tr>
<th>Problem and appearance</th>
<th>Nursing implications</th>
</tr>
</thead>
<tbody>
<tr>
<td>Abrasion</td>
<td>1. Prone to infection; therefore, wound should be kept clean and dry.</td>
</tr>
<tr>
<td></td>
<td>2. Do not wear rings or jewellery when providing care to avoid causing abrasions to patients.</td>
</tr>
<tr>
<td></td>
<td>3. Use appropriate moving and handling techniques.</td>
</tr>
<tr>
<td>Excessive dryness</td>
<td>1. Prone to infection if the skin cracks; therefore, provide alcohol-free lotions to moisturise the skin and prevent cracking.</td>
</tr>
<tr>
<td></td>
<td>2. Use no soap, or use nonirritating soap and limit its use. Rinse skin thoroughly because soap can be irritating and drying.</td>
</tr>
<tr>
<td></td>
<td>3. Encourage increased fluid intake if health permits to prevent dehydration.</td>
</tr>
<tr>
<td>Ammonia dermatitis (nappy rash)</td>
<td>1. Keep skin dry and clean by applying protective ointments containing zinc oxide to areas at risk (e.g. buttocks and perineum).</td>
</tr>
<tr>
<td></td>
<td>2. If reusable nappy in use boil the infant’s nappy or wash them with an antibacterial detergent to prevent infection. Rinse nappy well because detergent is irritating to an infant’s skin.</td>
</tr>
<tr>
<td>Acne</td>
<td>1. Keep the skin clean to prevent secondary infection.</td>
</tr>
<tr>
<td>Erythema</td>
<td>2. Treatment varies widely.</td>
</tr>
<tr>
<td>Hirsutism</td>
<td>1. Wash area carefully to remove excess micro-organisms.</td>
</tr>
<tr>
<td></td>
<td>2. Apply antiseptic spray or lotion to prevent itching, promote healing and prevent skin breakdown.</td>
</tr>
<tr>
<td></td>
<td>1. Remove unwanted hair by using depilatories, shaving, electrolysis or tweezing.</td>
</tr>
<tr>
<td></td>
<td>2. Enhance patient’s self-concept.</td>
</tr>
</tbody>
</table>

and skin problems are shown in the Assessment questions on page 00.

### BOX 13-1 Aetiologies of Self-Care Deficits

- Decreased or lack of motivation
- Weakness or tiredness
- Pain or discomfort
- Perceptual or cognitive impairment
- Inability to perceive body part or spatial relationship
- Neuromuscular or musculoskeletal impairment
- Medically imposed restriction
- Therapeutic procedure restraining mobility (e.g. intravenous infusion, cast)
- Severe anxiety
- Environmental barriers
PLANNING

In planning care, the nurse and, if appropriate, the patient and/or family set outcomes for each problem identified. The nurse then performs nursing interventions and activities to achieve the patient outcomes.

The specific, detailed nursing activities taken by the nurse may include assisting dependent patient with bathing, skin care and perineal care; instructing patients/families about appropriate hygienic practices and alternative methods for dressing; and demonstrating use of assistive equipment and adaptive activities in conjunction with other members of the multi-disciplinary team.

Planning to assist a patient with personal hygiene includes consideration of the patient’s personal preferences, health and limitations; the best time to give the care; and the equipment, facilities and personnel available. A patient’s personal preferences — about when and how to bathe, for example — should be followed as long as they are compatible with the their health and the equipment available. Nurses should provide whatever assistance the patient requires, either directly or by delegating this task to other nursing support personnel.

Planning for Home Care

To provide for continuity of care, it is important that the nurse assess the patient’s and family’s abilities for care and the need for referrals and home health services. In addition, the nurse needs to determine the patient’s learning needs.

A home care assessment of the patient’s normal home environment is usually performed by the Occupational Therapist (see page 00).

IMPLEMENTING

The nurse applies the general guidelines for skin care while providing one of the various types of baths available to patients. Procedure 13-1 describes how to bathe an adult or pediatric patient (see page 00).

General Guidelines for Skin Care

1. An intact, healthy skin is the body’s first line of defence. Nurses need to ensure that all skin care measures prevent injury and irritation. Scratching the skin with jewellery or long, sharp fingernails must be avoided. Harsh rubbing or use of rough towels and washcloths can cause tissue damage, particularly when the skin is irritated or when circulation or sensation is diminished. Bottom bed sheets are kept taut and free from wrinkles to reduce friction and abrasion to the skin. Top bed linens are arranged to prevent undue pressure on the toes. When necessary, bed cradles on footboards are used to keep bedclothes off the feet.

2. The degree to which the skin protects the underlying tissues from injury depends on the general health of the cells, the amount of subcutaneous tissue, and the dryness of the skin. Skin that is poorly nourished and dry is less easily
protected and more vulnerable to injury. When the skin is
dry, lotions or creams with moisturising agents can be
applied, and bathing is limited to once or twice a week
because frequent bathing removes the natural oils of the
skin and causes dryness.

3. Moisture in contact with the skin for more than a short time
can result in increased bacterial growth and irritation. After
a bath, the patient’s skin is dried carefully. Particular atten-
tion is paid to areas such as the axillae, the groin, beneath
the breasts and between the toes, where the potential for
irritation is greatest. A non-irritating dusting powder, such
as baby talcum, tends to reduce moisture and can be
applied to these areas after they are dried. Patients who are
incontinent of urine or faeces or who perspire excessively
are provided with immediate skin care to prevent skin
irritation.

4. Body odours are caused by resident skin bacteria acting
on body secretions. Cleanliness is the best deodorant.
Commercial deodorants and antiperspirants can be
applied only after the skin is cleaned. Deodorants diminish
odours, whereas antiperspirants reduce the amount of perspiration. Neither should be applied immediately after shaving, because of the possibility of skin irritation, nor are they used on skin that is already irritated.

5. Skin sensitivity to irritation and injury varies among individuals and in accordance with their health. Generally speaking, skin sensitivity is greater in infants, very young children, and older people. A person’s nutritional status also affects sensitivity. Emaciated or obese persons tend to experience more skin irritation and injury. The same tendency is seen in individuals with poor dietary habits and insufficient fluid intake. Even in healthy persons, skin sensitivity is highly variable. Some people’s skin is sensitive to chemicals in skin care agents and cosmetics. Hypoallergenic cosmetics and soaps or soap substitutes are now available for these people. The nurse needs to ascertain whether the patient has any sensitivities and what agents are appropriate to use.

6. Agents used for skin care have selective actions and purposes. Commonly used agents are described in Table 13-4.

### Table 13-4 Agents Commonly Used on the Skin

<table>
<thead>
<tr>
<th>Agent</th>
<th>Action</th>
</tr>
</thead>
<tbody>
<tr>
<td>Soap</td>
<td>Lowers surface tension and thus helps in cleaning. Some soaps contain antibacterial agents, which can change the natural flora of the skin.</td>
</tr>
<tr>
<td>Detergent</td>
<td>Used instead of soap for cleaning. Some people who are allergic to soaps may not be allergic to detergents, and vice versa.</td>
</tr>
<tr>
<td>Bath oil</td>
<td>Used in bathwater; provides an oily film on the skin that softens and prevents chapping. Oils can make the bath surface slippery, and patients should be instructed about safety measures (e.g. using nonskid bath surface or mat).</td>
</tr>
<tr>
<td>Skin cream, lotion</td>
<td>Provides a film on the skin that prevents evaporation and therefore chapping.</td>
</tr>
<tr>
<td>Powder</td>
<td>Can be used to absorb water and prevent friction. For example, powder under the breasts can prevent skin irritation. Some powders are antibacterial.</td>
</tr>
<tr>
<td>Deodorant</td>
<td>Masks or diminishes body odours.</td>
</tr>
<tr>
<td>Antiperspirant</td>
<td>Reduces the amount of perspiration.</td>
</tr>
</tbody>
</table>

bathing offers an excellent opportunity for the nurse to assess all patients. The nurse can observe the condition of the patient’s skin and physical conditions such as sacral oedema or rashes. While assisting a patient with a bath, the nurse can also assess the patient’s psychosocial needs, such as orientation to time and ability to cope with the illness. Learning needs, such as a diabetic patient’s need to learn foot care, can also be assessed.

### Categories

Two categories of baths are given to patients: cleaning and therapeutic. Cleaning baths are given chiefly for hygiene purposes and include these types:

- **Complete bed bath.** The nurse washes the entire body of a dependent patient in bed.
- **Self-help bed bath.** Patients confined to bed are able to bathe themselves with help from the nurse for washing the back and perhaps the feet.
- **Partial bath (abbreviated bath).** Only the parts of the patient’s body that might cause discomfort or odour, if neglected, are washed: the face, hands, axillae, perineal area and back. Omitted are the arms, chest, abdomen, legs and feet. The
nurse provides this care for dependent patients and assists self-sufficient patients confined to bed by washing their backs. Some ambulatory patients prefer to take a partial bath at the sink. The nurse can assist them by washing their backs.

- **Immersion bath.** Immersion baths are often preferred to bed baths because it is easier to wash and rinse in a bath. Baths are also used for therapeutic interventions. The amount of assistance the nurse offers depends on the abilities of the patient. There are specially designed baths for dependent patients. These baths greatly reduce the work of the nurse in moving and handling patients in and out of the bath and offer greater benefits than a sponge bath in bed.

Sponge baths are suggested for the newborn because daily immersion baths are not considered necessary. After the bath, the infant should be immediately dried and wrapped to prevent heat loss. Parents need to be advised that the infant’s ability to regulate body temperature has not yet fully developed. Infants perspire minimally, and shivering starts at a lower temperature than it does in adults; therefore, infants lose more heat before shivering begins. In addition, because the infant’s body surface area is very large in relation to body mass, the body loses heat readily.

- **Shower.** Many ambulatory patients are able to use shower facilities and require only minimal assistance from the nurse. Patients in long-term care settings are often given showers with the aid of a shower chair. The wheels on the shower chair allow patients to be transported from their room to the shower. The shower chair also has a commode seat to facilitate cleansing of the patient’s perineal area during the shower process (see Figure 13-3).

The water for a bath should feel comfortably warm to the patient. People vary in their sensitivity to heat; generally, the temperature should be 32°C to 42°C. Most patients will verify a suitable temperature. Patients with decreased circulation or cognitive problems will not be able to verify the temperature. Therefore, the nurse must check the water temperature to avoid patient injury with water that is too hot. The water for a bed bath should be changed when it becomes dirty or cold.

**Therapeutic baths** are given for physical effects, such as to soothe irritated skin or to treat an area (e.g., the perineum). Medications may be placed in the water. A therapeutic bath is generally taken in a bath one-third or one-half full. The patient remains in the bath for a designated time, often 20 to 30 minutes. If the patient’s back, chest, and arms are to be treated, these areas need to be immersed in the solution. The bath temperature is generally included as part of the prescription. **Procedure 13-1** (see page 00) provides guidelines for bathing patients.

**Clinical Anecdote**

Children are especially prone to accidental injury with hot water in baths so the nurse should always be alert. Sarah, a third-year student describes seeing an injured child on a paediatric ward. ‘David, an 18-month-old, had been admitted to the ward after he was put into a bath by his mother that was too hot. I will never forget seeing the burns on his legs and buttocks. His mother was so upset that she had hurt her precious baby. I will always check the temperature of water even more so now before putting anyone into a bath. I always feel that if the water is too hot for my hand then it is too hot for the patient. I never want to see anyone accidentally injured, I cannot imagine how the mother felt.’

*Sarah, a third-year student*
**SKIN**

**Purposes**
- To remove transient micro-organisms, body secretions and excretions, and dead skin cells
- To stimulate circulation to the skin
- To produce a sense of well-being
- To promote relaxation and comfort
- To prevent or eliminate unpleasant body odours

**Assessment**

**Assess:**
- Condition of the skin (colour, texture and turgor, presence of pigmented spots, temperature, lesions, excoriations, and abrasions)
- Fatigue
- Presence of pain and need for adjunctive measures (e.g. an analgesic) before the bath
- Range of motion of the joints
- Any other aspect of health that may affect the patient’s bathing process (e.g. mobility, strength, cognition)
- Need for use of clean gloves during the bath

**Planning**

**Equipment**
- Basin or sink with warm water (check water temperature comfortable for patient requirements)
- Soap and soap dish
- Towels, washcloth, clean gown or pyjamas or clothes as needed, additional bed linen, if required
- Gloves, if appropriate (e.g. presence of body fluids or open lesions)
- Personal hygiene articles (e.g. deodorant, powder, lotions)
- Shaving equipment for male patients
- Table for bathing equipment
- Laundry bag as required

**Implementation**

**Preparation**

Before bathing a patient, determine (a) the purpose and type of bath the patient needs; (b) self-care ability of the patient; (c) any movement or positioning precautions specific to the patient; (d) other care the patient may be receiving, such as physiotherapy or x-rays, in order to coordinate all aspects of healthcare and prevent unnecessary fatigue; (e) patient’s comfort level with being bathed by someone else; and (f) necessary bath equipment and towels.

Caution is needed when bathing patients who are receiving intravenous therapy or have multiple connections to equipment. Easy-to-remove gowns that have Velcro or snap fasteners along the sleeves may be used. If a special gown is not available, the nurse needs to pay special attention when changing the patient’s gown after the bath (or whenever the gown becomes soiled). General guidelines are provided in Box 13-2 (see page 00). These guidelines do not apply if the patient has an intravenous infusion pump or controller. In this situation, either use a special gown or do not put the sleeve of a gown over the patient’s involved arm.

**Performance**

1. Explain to the patient what you are going to do, why it is necessary, and how he or she can cooperate. Discuss with the patient the plan for bathing and explain any unfamiliar procedures to the patient.
2. Wash hands and observe other appropriate infection control procedures.
3. Provide for patient privacy by drawing the curtains around the bed or closing the door to the room.
4. Prepare the patient and the environment.
   - Invite a family member or significant other to participate if desired.
   - Close windows and doors to ensure the room is a comfortable temperature. *Air currents increase loss of heat from the body by convection.*
   - Offer the patient a bedpan or urinal or ask whether the patient wishes to use the toilet or commode. *Warm water and activity can stimulate the need to void. The patient will be more comfortable after voiding, and voiding before cleaning the perineum is advisable.*
Encourage the patient to perform as much personal self-care as possible. This promotes independence, exercise and self-esteem.

During the bath, assess each area of the skin carefully.

**For a bed bath**

5. Prepare the bed and position the patient appropriately.
   - Position the bed at a comfortable working height. Lower the side rail on the side close to you. Keep the other side rail up (if in use). Assist the patient to move near you. This avoids undue reaching and straining and promotes good body mechanics.
   - Place a towel over the top sheet. Remove the top sheet from under the towel by starting at patient’s shoulders and moving linen down toward the patient’s feet (Figure 13-4). Ask the patient to grasp and hold the top of the bath towel while pulling linen to the foot of the bed. The towel provides comfort, warmth and privacy.
   - Place patient’s gown/clothing while keeping the patient covered with the towel.

6. Make a bath mitt with the washcloth. A bath mitt retains water and heat better than a cloth loosely held and prevents ends of washcloth from dragging across the skin. See Figure 13-5 for the triangular method and Figure 13-6 for the rectangular method.

7. Wash the face. Begin the bath at the cleanest area and work downward toward the feet.
   - Place towel under patient’s head.
   - Wash the patient’s eyes with water only and dry them well. Use a separate corner of the washcloth for each eye. Using separate corners

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**Figure 13-4** Remove top sheet from under the bath towel.

**Figure 13-5** Making a bath mitt, triangular method. (A) Lay your hand on the washcloth; (B) fold the top corner over your hand; (C) fold the side corners over your hand; (D) tuck the second corner under the cloth on the palm side to secure the mitt.

**Figure 13-6** Making a bath mitt, rectangular method. (A) Lay your hand on the washcloth and fold one side over your hand; (B) fold the second side over your hand; (C) fold the top of the cloth down and tuck it under the folded side against your palm to secure the mitt.
SKIN

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prevents transmitting micro-organisms from one eye to the other. Wipe from the inner to the outer canthus (Figure 13-7). This prevents secretions from entering the nasolacrimal ducts.

- Ask whether the patient wants soap used on the face. Soap has a drying effect, and the face, which is exposed to the air more than other body parts, tends to be drier.
- Wash, rinse, and dry the patient’s face, ears and neck.
- Remove the towel from under the patient’s head.

8. Wash the arms and hands. (Omit the arms for a partial bath.)
   - Place a towel lengthwise under the arm away from you. It protects the bed from becoming wet.
   - Wash, rinse and dry the arm by elevating the patient’s arm and supporting the patient’s wrist and elbow (Figure 13-8). Use long, firm strokes from wrist to shoulder, including the axillary area. Firm strokes from distal to proximal areas promote circulation by increasing venous blood return.
   - Apply deodorant or powder if desired.
   - (Optional) Place a towel on the bed and put a washbasin on it. Place the patient’s hands in the basin. Many patients enjoy immersing their hands in the basin and washing themselves. Soaking loosens dirt under the nails. Assist the patient as needed to wash, rinse and dry the hands, paying particular attention to the spaces between the fingers.

9. Wash the chest and abdomen. (Omit the chest and abdomen for a partial bath. However, the areas under a woman’s breast may require bathing if this area is irritated or if the patient has significant perspiration under the breast.)
   - Place bath towel lengthwise over chest. Fold bath blanket down to the patient’s pubic area. Keeps the patient warm while preventing unnecessary exposure of the chest.
   - Lift the bath towel off the chest, and bathe the chest and abdomen with your mitted hand using long, firm strokes (Figure 13-9). Give special attention to the skin under the breasts and any other skin folds particularly if the patient is overweight. Rinse and dry well.
   - Replace the towel when the areas have been dried.

10. Wash the legs and feet. (Omit legs and feet for a partial bath.)
    - Repeat for hand and arm nearest you. Exercise caution if an intravenous infusion is present, and check its flow after moving the arm.
    - Place a towel lengthwise under the arm away from you. It protects the bed from becoming wet.
    - Wash, rinse and dry the arm by elevating the patient’s arm and supporting the patient’s wrist and elbow (Figure 13-8). Use long, firm strokes from wrist to shoulder, including the axillary area. Firm strokes from distal to proximal areas promote circulation by increasing venous blood return.
    - Apply deodorant or powder if desired.
    - (Optional) Place a towel on the bed and put a washbasin on it. Place the patient’s hands in the basin. Many patients enjoy immersing their hands in the basin and washing themselves. Soaking loosens dirt under the nails. Assist the patient as needed to wash, rinse and dry the hands, paying particular attention to the spaces between the fingers.
Covering the perineum promotes privacy and maintains the patient's dignity.

- Lift leg and place the bath towel lengthwise under the leg. Wash, rinse and dry the leg using long, smooth, firm strokes from the ankle to the knee to the thigh (Figure 13-10). Washing from the distal to proximal areas promotes circulation by stimulating venous blood flow.
- Reverse the coverings and repeat for the other leg.
- Wash the feet by placing them in the basin of water (Figure 13-11).
- Dry each foot. Pay particular attention to the spaces between the toes. If you prefer, wash one foot after that leg before washing the other leg.
- Obtain fresh, warm bathwater now or when necessary. Water may become dirty or cold. Because surface skin cells are removed with washing, the bathwater from dark-skinned patients may be dark, however, this does not mean the patient is dirty. Raise side rails when refilling basin. This ensures the safety of the patient.

11. Wash the back and then the perineum.
- Assist the patient into a prone or side-lying position facing away from you. Place the bath towel lengthwise alongside the back and buttocks while keeping the patient covered with the towel as much as possible. This provides warmth and undue exposure.
- Wash and dry the patient's back, moving from the shoulders to the buttocks, and upper thighs, paying attention to the gluteal folds (Figure 13-12).
- Assist the patient to the supine position and determine whether the patient can wash the perineal area independently. If the patient cannot do so, cover the patient as shown in Procedure 13-2 (see page 00) and wash the area.

12. Assist the patient with grooming aids such as powder, lotion, or deodorant.
- Use powder sparingly. Release as little as possible into the atmosphere. This will avoid irritation of the respiratory tract by powder inhalation. Excessive powder can cause caking, which leads to skin irritation.
- Help the patient put on fresh clothing.
- Assist the patient to care for hair, mouth, and nails. Some people prefer or need mouth care prior to their bath.

For an immersion bath or shower

13. Prepare the patient and the bath.
- Fill the bath about one-third to one-half full of water, put cold water in before hot. Sufficient water is needed to cover the perineal area.
- Cover all intravenous catheters or wound dressings with plastic coverings, and instruct the patient to prevent wetting these areas if possible.
13. **SKIN**

- Put a rubber bath mat or towel on the floor of the tub if safety strips are not on the tub floor. These prevent slippage of the patient during the bath or shower.

14. **Assist the patient into the shower or tub.**
- Assist the patient taking a standing shower with the initial adjustment of the water temperature and water flow pressure, as needed. Some patients need a chair to sit on in the shower because of weakness. Hot water can cause elderly people to feel faint.
- If the patient requires considerable assistance with an immersion bath, a hydraulic chair may be required (see Variation below).
- Explain how the patient can signal for help, leave the patient for 2–5 minutes. For safety reasons, do not leave a patient with decreased cognition or patients who may be at risk (e.g. history of seizures, syncope).

15. **Assist the patient with washing and getting out of the bath.**
- Wash the patient’s back, lower legs, and feet, if necessary.
- Assist the patient out of the bath. If the patient is unsteady, place a bath towel over the patient’s shoulders and drain the water before the patient attempts to get out of it. Draining the water first lessens the likelihood of a fall. The towel prevents chilling.

16. **Dry the patient, and assist with follow-up care.**
- Follow step 12.
- Assist the patient back to his or her room.
- Clean the bath or shower in accordance with local policy, discard the used linen in the laundry skip.

17. **Document**
- Type of bath given (i.e. complete, partial, or self-help).
- Skin assessment, such as excoriation, erythema, exudates, rashes, drainage or skin breakdown.
- Nursing interventions related to skin integrity.
- Ability of the patient to assist or cooperate with bathing.
- Patient response to bathing.
- Educational needs regarding hygiene.

**Variation: bathing using a hydraulic bath chair**

A hydraulic lift, often used in long-term care or rehabilitation settings, can facilitate the transfer of a patient who is unable to walk to the bath.
- Bring the patient to the bathroom in a wheelchair or shower chair.
- Fill the bath and check the water temperature with a bath thermometer to avoid thermal injury to the patient.
- Lower the hydraulic chair lift to its lowest point, outside the bath.
- Transfer the patient to the chair lift and secure the seat belt (Figure 13-13).
- Raise the chair lift above the bath.
- Support the patient’s legs as the chair is moved over the bath to avoid injury to the legs.
- Position the patient’s legs down into the water and slowly lower the chair lift into the bath.
- Assist in bathing the patient, if appropriate.
- Reverse the procedure when taking the patient out of the bath.
- Dry the patient and transport them back to their room.

**Evaluation**
- Note the patient’s tolerance of the procedure (e.g. respiratory rate and effort, pulse rate, behaviours, statements regarding comfort).
- Conduct appropriate follow up, such as
  - Condition and integrity of skin (dryness, turgor, redness, lesions, and so on)
- **Patient strength**
- **Percentage of bath done without assistance.**
- **Relate to prior assessment data, if available.**

**Figure 13-13** Secure the seat belt before moving the patient in a hydraulic bath chair.
BOX 13-2 Changing a Hospital Gown for a Patient with an intravenous Infusion

- Slip the gown completely off the arm without the infusion and onto the tubing connected to the arm with the infusion.
- Holding the container above the patient’s arm, slide the sleeve up over the container to remove the used gown.
- Place the clean gown sleeve for the arm with the infusion over the container as if it were an extension of the patient’s arm, from the inside of the gown to the sleeve cuff.
- Rehang the container. Slide the gown carefully over the tubing toward the patient’s hand.
- Guide the patient’s arm and tubing into the sleeve, taking care not to pull on the tubing.
- Assist the patient to put the other arm into the second sleeve of the gown and fasten as usual.
- Check the rate of flow of the infusion to make sure it is correct before leaving the bedside.

LIFESPAN CONSIDERATIONS

Bathing

**Infants**
- Sponge baths are suggested for the newborn because daily immersion baths are not considered necessary. After the bath, the infant should be immediately dried and wrapped. Parents need to be advised that the infant’s ability to regulate body temperature has not yet fully developed and newborns’ bodies lose heat readily.

**Children**
- Encourage a child’s participation appropriate for developmental level.
- Closely supervise children in the bath. Do not leave them unattended.

**Adolescents**
- Assist adolescents if they need help to choose deodorants and antiperspirants. Secretions from newly active sweat glands react with bacteria on the skin, causing a pungent odour.

**Older Adults**
- Changes of ageing can decrease the protective function of the skin in older adults. These changes include fragile skin, less oil and moisture, and a decrease in elasticity.
- To minimise skin dryness in older adults, avoid excessive use of soap. The ideal time to moisturise the skin is immediately after bathing.
- Avoid powder because it causes moisture loss and is a hazardous inhalant.
- Protect older adults and children from injury related to hot water burns.

COMMUNITY CARE CONSIDERATIONS

**Hygiene**
- Suggest that the patient or family do the following:
  - Consider purchasing a bath seat that fits in the bath or shower.
  - Install a hand shower for use with a bath seat and shampooing.
  - Use a nonskid surface on the bath or shower.
  - Install hand bars on both sides of the bath or shower to facilitate transfers in and out of the bath or shower.
  - Carefully monitor the temperature of the bathwater.
  - Apply lotion and oil after a bath, not during, because these solutions can make a bath surface slippery.
Long-Term Care Setting

From a historical perspective, the bath has always been a part of nursing care and considered a component of the ‘art’ of nursing. In today’s nursing world, however, the bath is seen as ‘basic’ and often delegated to nonprofessionals (Hektor and Touhy, 1997).

In spite of the previously listed therapeutic values associated with bathing, the choice of bathing procedure often depends on the amount of time available to the nurse or support worker and the patient’s self-care ability. Nursing authors (Brawley, 2002; Hektor and Touhy, 1997; Rader, Lavelle, Hoeffer and McKenzie, 1996; Skewes, 1997) challenge nurses to switch from a task-centered approach to an individualised and aesthetic approach to bathing, especially for the older person in a long-term care setting.

The bath routine (e.g. day, time, and number/week) for patients in healthcare settings is often determined by local policy, such that the bath becomes routine and depersonalised versus therapeutic, satisfying and person focused. An individualised approach focusing on therapeutic and comforting outcomes of bathing is especially important for patients with dementia.

Providing personal hygiene to a patient with dementia is often an ongoing challenge. Being sensitive to the rhythm of their behaviour and looking for cues can often offset problems related to this. Patients with dementia, whether they are at home or in a healthcare facility, often have certain times of the day when they are more agitated – these are times to avoid doing things that will increase their fear and agitation. It is sometimes helpful to wait awhile (e.g. half an hour or so) and then try giving the bath because they may forget that they were protesting and be willing to participate.

Perineal-Genital Care

Perineal-genital care is also referred to as perineal care or pericare. Perineal care as part of the bed bath is embarrassing for many patients. Nurses also may find it embarrassing initially, particularly with patients of the opposite sex. Most patients who require a bed bath from the nurse are able to clean their own genital areas with minimal assistance. The nurse may need to hand a moistened washcloth and soap to the patient, rinse the washcloth and provide a towel.

Because some patients are unfamiliar with terminology for the genitals and perineum, it may be difficult for nurses to explain what is expected. Most patients, however, understand what is meant if the nurse simply says, ‘I’ll give you a washcloth to finish your bath.’ Older patients may be familiar with the term private parts. Whatever expression the nurse uses, it needs to be one that the patient understands and one that the nurse finds comfortable to use.

The nurse needs to provide perineal care efficiently and matter-of-factly. Nurses should wear gloves while providing this care for the comfort of the patient and to protect themselves from infection. Procedure 13-2 (see page 00) explains how to provide perineal-genital care.

CLINICAL ALERT

Always wash or wipe from ‘clean to dirty’. For a female, cleanse perineal area from front to back. For a male, cleanse the urinary meatus by moving in a circular motion from centre of urethral opening around the glans.

PROCEDURE 13-2 Providing Perineal-Genital Care

**Purposes**

- To remove normal perineal secretions and odours
- To promote patient comfort

**Assessment**

- Irritation, excoriation, inflammation, swelling
- Excessive discharge
- Odour; pain or discomfort
- Urinary or faecal incontinence
- Recent rectal or perineal surgery
- Indwelling catheter.

Determine:

- Perineal-genital hygiene practices
- Self-care abilities
Planning

Equipment
Perineal-genital care provided in conjunction with the bed bath:
+ Bath towel
+ Clean gloves
+ Wash bowl with warm water
+ Soap
+ Washcloth.

Implementation

Preparation
+ Determine whether the patient is experiencing any discomfort in the perineal-genital area.
+ Obtain and prepare the necessary equipment and supplies.

Performance
1. Explain to the patient what you are going to do, why it is necessary, and how they can cooperate, being particularly sensitive to any embarrassment felt by the patient.
2. Wash hands and observe other appropriate infection control procedures (e.g. clean gloves).
3. Provide for patient privacy by drawing the curtains around the bed or closing the door to the room.
4. Prepare the patient:
   - Fold the top bed linen to the foot of the bed and fold the gown up to expose the genital area.
   - Place a towel under the patient’s hips. The towel prevents the bed from becoming soiled.
5. Position and drape the patient and clean the upper inner thighs.

For females
- Position the female in a back-lying position with the knees flexed and spread well apart.
- Cover her body and legs with the towel. Drape the legs by tucking the bottom corners of the towel under the inner sides of the legs (Figure 13-14). Minimum exposure lessens embarrassment and helps to provide warmth. Bring the middle portion of the base of the blanket up over the pubic area.
- Put on gloves, wash and dry the upper inner thighs.

For males
- Position the male patient in a supine position with knees slightly flexed and hips slightly externally rotated.

Special perineal-genital care:
+ Bath towel
+ Clean gloves
+ Gauze swabs
+ Solution bottle, or container filled with warm water or a prescribed solution
+ Bedpan to receive rinse water
+ Moisture-resistant bag or receptacle for used swabs
+ Perineal/incontinence pad

Figure 13-14 Draping the patient for perineal-genital care.

- Put on gloves, wash and dry the upper inner thighs.
6. Inspect the perineal area.
- Note particular areas of inflammation, excoriation or swelling, especially between the labia in females and the scrotal folds in males.
- Also note excessive discharge or secretions from the orifices and the presence of odours.
- Wash and dry the perineal-genital area.

For females
- Clean the labia majora. Then spread the labia to wash the folds between the labia majora and the labia minora (Figure 13-15). Secretions that tend to collect around the labia minora facilitate bacterial growth.
- Use separate quarters of the washcloth for each stroke, and wipe from the pubis to the rectum. For menstruating women and patients with indwelling catheters, use clean wipes, or gauze. Take a clean wipe/gauze for each stroke. Using separate quarters of the washcloth or new gauzes prevents the transmission of microorganisms from one area to the other. Wipe from the area of least contamination (the pubis) to that of greatest (the rectum).
Rinse the area well. Dry the perineum thoroughly, paying particular attention to the folds between the labia. Moisture supports the growth of many micro-organisms.

For males
- Wash and dry the penis, using firm strokes. Handling the penis firmly may prevent an erection.
- If the patient is uncircumcised, retract the prepuce (foreskin) to expose the glans penis (the tip of the penis) for cleaning. Replace the foreskin after cleaning the glans penis (Figure 13-16). Retracting the foreskin is necessary to remove the smegma that collects under the foreskin and facilitates bacterial growth. Replacing the foreskin prevents constriction of the penis, which may cause oedema.
- Wash and dry the scrotum. The posterior folds of the scrotum may need to be cleaned when the buttocks are cleaned (see step 9). The scrotum tends to be more soiled than the penis because of its proximity to the rectum; thus it is usually cleaned after the penis.

8. Inspect perineal orifices for intactness.
- Inspect particularly around the urethra in patients with indwelling catheters. A catheter may cause excoriation around the urethra.

9. Clean between the buttocks.
- Assist the patient to turn onto the side facing away from you.
- Pay particular attention to the anal area and posterior folds of the scrotum in males. Clean the anus with toilet tissue before washing it, if necessary.
- Dry the area well.
- For post child delivery or menstruating females, apply a perineal pad as needed from front to back. This prevents contamination of the vagina and urethra from the anal area.

10. Document any unusual findings such as redness, excoriation, skin breakdown, discharge or drainage and any localised areas of tenderness.

Evaluation
- Relate current assessments to previous assessments.
- Conduct appropriate follow-up such as prescribed ointment for excoriation.

Patient teaching: Patients often need information about dry skin, skin rashes, and acne.

EVALUATING

Using data collected during care, the nurse judges whether desired outcomes have been achieved. If the outcomes are not achieved, the nurse explores reasons why. For example:
- Did the nurse overestimate the patient’s functional abilities (physical, mental, emotional) for self-care?
- Were provided instructions not clear to the patient?
- Were appropriate assistive devices or supplies not available to the patient?
- Did the patient’s condition change?
- Were required analgesics provided before hygienic care?
- What currently prescribed medications and therapies could affect the patient’s abilities or tissue integrity?
- Is the patient’s fluid and food intake adequate or appropriate to maintain skin and mucous membrane moisture and integrity?
TEACHING: PATIENT CARE

Skin Problems and Care

**Dry Skin**
- Use cleansing creams to clean the skin rather than soap or detergent, which cause drying and, in some cases, allergic reactions.
- Use bath oils, but take precautions to prevent falls caused by slippery bath surfaces.
- Thoroughly rinse soap or detergent, if used, from the skin.
- Bathe less frequently when environmental temperature and humidity are low.
- Increase fluid intake.
- Use moisturising or emollient creams that contain lanolin, petroleum jelly or cocoa butter to retain skin moisture.

**Skin Rashes**
- Keep the area clean by washing it with a mild soap. Rinse the skin well, and pat it dry.
- To relieve itching, try a tepid bath or soak. Some over-the-counter preparations, may help but should be used with full knowledge of the product.
- Avoid scratching the rash to prevent inflammation, infection, and further skin lesions.
- Choose clothing carefully. Too much can cause perspiration and aggravate a rash.

Acne
- Wash the face frequently with soap or detergent and hot water to remove oil and dirt.
- Avoid using oily creams, which aggravate the condition.
- Avoid using cosmetics that block the ducts of the sebaceous glands and the hair follicles.
- Never squeeze or pick at the lesions. This increases the potential for infection and scarring.

FEET

The feet are essential for ambulation and merit attention even when people are confined to bed. Each foot contains 26 bones, 107 ligaments and 19 muscles. These structures function together for both standing and walking.

**Developmental Variations**

At birth, a baby’s foot is relatively unformed. The arches are supported by fatty pads and do not take their full shape until five to six years of age. During childhood, the bones and small muscles of the feet are easily damaged by tight, binding stockings and ill-fitting shoes. For normal development, it is important that the arches be supported and that the bony structure and the feet grow with no external restrictions. Feet are not fully grown until about age 20. Healthy feet remain relatively unchanged during life. However, the elderly often require special attention for their feet. For example, reduced blood supply and accompanying arteriosclerosis can make a foot prone to ulcers and infection following trauma.

**Clinical Alert**

Patients with diabetes are at high risk for lower extremity amputations (LEA). Routine foot assessment and patient education in proper foot care can significantly reduce the risk for LEA.
NURSING MANAGEMENT

ASSESSING

Assessment of the patient’s feet includes identifying patients at risk for foot problems.

Nursing Health History

The nurse determines the patient’s history of (a) normal nail and foot care practices, (b) type of footwear worn, (c) self-care abilities, (d) presence of risk factors for foot problems, (e) any foot discomfort and (f) any perceived problems with foot mobility. To elicit such data, the nurse may ask the patient the questions provided in the Assessment interview (see page 00).

ASSESSMENT INTERVIEW

Foot Hygiene

Foot Care Practices

- How often do you wash your feet and cut your toenails?
- What hygiene products do you usually use on your feet (e.g., soap, foot powder or deodorant, lotion or cream)?
- What type of shoes and socks do you wear?
- How often do you change your socks or put on clean socks?
- Do you ever go barefoot? If so, when, and how often?

Self-Care Abilities

- Do you have any problems managing your foot care? If so, what are these?
- How can the nurses best help you?

Foot Problems and Risk Factors

- Do you have any problems with foot odour?
- Do you have any foot discomfort? If so, where? When does this occur? What do you do to relieve the discomfort? Does this discomfort affect how you walk?
- Have you noticed any problems with foot mobility (e.g., joint stiffness)?
- Do you have diabetes, any circulatory problems with feet (e.g., swelling, changes in skin colour, arthritis) or any instances of prolonged exposure to chemicals or water?

Table 13-5 Assessment of the Feet

<table>
<thead>
<tr>
<th>Method</th>
<th>Normal findings</th>
<th>Deviations from normal</th>
</tr>
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<tbody>
<tr>
<td>Inspect all skin surfaces, particularly between the toes, for cleanliness, odour, dryness, inflammation, swelling, abrasions or other lesions.</td>
<td>Intact skin Absence of swelling or inflammation</td>
<td>Excessive dryness Areas of inflammation or swelling (e.g., corns, calluses) Fissures Scaling and cracking of skin (e.g., athlete’s foot) Plantar warts</td>
</tr>
<tr>
<td>Palpate anterior and posterior surfaces of ankles and feet for oedema.</td>
<td>No swelling</td>
<td></td>
</tr>
<tr>
<td>Palpate dorsalis pedis pulse on dorsal surface of foot.</td>
<td>Strong, regular pulses in both feet Warm skin temperature</td>
<td></td>
</tr>
<tr>
<td>Compare skin temperature of both feet.</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

NURSING MANAGEMENT
can be softened by soaking the foot in warm water with Epsom salts, and abraded with pumice stones or similar abrasives. Creams will help to keep the skin soft and prevent the formation of calluses.

A corn is a keratosis caused by friction and pressure from a shoe. It commonly occurs on the fourth or fifth toe, usually on a bony prominence such as a joint. Corns are usually conical (circular and raised). The base is the surface of the corn and the apex is in deeper tissues, sometimes even attached to bone. Corns are generally removed surgically. They are prevented from reforming by relieving the pressure on the area (i.e. wearing comfortable shoes), and massaging the tissue to promote circulation. The use of oval corn pads should be avoided because they increase pressure and decrease circulation.

Unpleasant odours occur as a result of perspiration and its interaction with micro-organisms. Regular and frequent washing of the feet and wearing clean hosiery help to minimise odour. Foot powders and deodorants also help to prevent this problem.

Plantar warts appear on the sole of the foot. These warts are caused by the virus papovavirus hominis. They are moderately contagious. The warts are frequently painful and often make walking difficult. Curettage of the warts may be performed, freeze them with solid carbon dioxide several times, or apply salicylic acid.

Foot Care

- Wash the feet daily, and dry them well, especially between the toes.
- When washing, inspect the skin of the feet for breaks or red or swollen areas. Use a mirror if needed to visualise all areas.
- To prevent burns, check the water temperature before immersing the feet.
- Use creams or lotions to moisturise the skin, or soak the feet in warm water with Epsom salts to avoid excessive drying of the skin of the feet. Lotion will also soften calluses. A lotion that reduces dryness effectively is a mixture of lanolin and mineral oil.
- To prevent or control an unpleasant odour due to excessive foot perspiration, wash the feet frequently and change socks and shoes at least daily. Special deodorant sprays or absorbent foot powders are also helpful.
- File the toenails rather than cutting them to avoid skin injury. File the nails straight across the ends of the toes. If the nails are too thick or misshapen to file, consult a podiatrist.
- Wear clean stockings or socks daily. Avoid socks with holes or darns that can cause pressure areas.
- Wear correctly fitting shoes that neither restrict the foot nor rub on any area; rubbing can cause corns and calluses. Check worn shoes for rough spots in the lining. Break in new shoes gradually by increasing the wearing time 30 to 60 minutes each day.
- Avoid walking barefoot, because injury and infection may result. Wear slippers in public showers and in change areas to avoid contracting athlete’s foot or other infections.
- Several times each day exercise the feet to promote circulation. Point the feet upward, point them downward, and move them in circles.
- Avoid wearing constricting garments such as knee-high elastic stockings and avoid sitting with the legs crossed at the knees, which may decrease circulation.
- When the feet are cold, use extra blankets and wear warm socks rather than using heating pads or hot water bottles, which may cause burns. Test bathwater before stepping into it.
- Wash any cut on the foot thoroughly and apply a mild antiseptic.
- Avoid self-treatment for corns or calluses. Pumice stones and some callus and corn applications are injurious to the skin. Consult a podiatrist first.
- Notify the physician if you notice abnormal sores or drainage, pain, or changes in temperature, colour, and sensation of the foot.

Athlete’s foot, or tinea pedis (ringworm of the foot), is caused by a fungus. The symptoms are scaling and cracking of the skin, particularly between the toes. Sometimes small blisters form, containing a thin fluid. In severe cases, the lesions may also appear on other parts of the body, particularly the hands. Treatments usually involve the application of commercial antifungal ointments or powders. Prevention is important.
Common preventive measures are keeping the feet well ventilated, drying the feet well after bathing, wearing clean socks or stockings, and not going barefoot in public showers.

An **ingrown toe nail**, the growing inward of the nail into the soft tissues around it, most often results from improper nail trimming. Pressure applied to the area causes localised pain. Treatment involves frequent, hot antiseptic soaks and surgical removal of the portion of nail embedded in the skin. Preventing recurrence involves appropriate instruction and adherence to proper nail-trimming techniques.

**Identifying Patients at Risk**

Because of reduced peripheral circulation to the feet, patients with diabetes or peripheral vascular disease are particularly prone to infection if skin breakage occurs. Many foot problems can be prevented by teaching the patient simple foot care guidelines (see *Teaching: patient Care* on page 00).

**PLANNING**

Planning involves (a) identifying nursing interventions that will help the patient maintain or restore healthy foot care practices and (b) establishing desired outcomes for each patient. Interventions may include teaching the patient about correct nail and foot care, proper footwear, wearing the correct size and ways to prevent potential foot problems (e.g. infection, injury, and decreased circulation). For patients with self-care difficulties, the nurse plans a schedule for soaking the patient’s feet and assisting with regular cleaning and trimming of nails (if not contraindicated). Foot and nail care is often provided during the patient’s bath but may be provided at any time in the day to accommodate the patient’s preference or schedule. The frequency of foot care is determined by the nurse and patient and is based on objective assessment data and the patient’s specific problems. For some patients feet may need to be bathed daily; for those whose feet perspire excessively, bathing more than once a day may be necessary.

**IMPLEMENTING**

*Procedure 13-3* (see page 00) describes how to provide foot care. See also the discussion of nails. During these procedures, the nurse has the opportunity to teach the patient appropriate methods for foot care, that is, methods designed to prevent tissue injury and infection (see the *Teaching: Patient Care* box on page 00).

**EVALUATING**

Examples of desired outcomes for foot hygiene include the patient being able to:

- Participate in self-care (foot hygiene) to optimal level of capacity (specify)
- Describe hygienic and other interventions (e.g. proper footwear) to maintain skin integrity, prevent infection, and maintain peripheral tissue perfusion
- Demonstrate optimal foot hygiene, as evidenced by
  - (a) Intact, smooth, soft, hydrated, and warm skin
  - (b) Intact cuticles and skin surrounding nails
  - (c) Correct foot care and nail care practices.

**PROCEDURE 13-3 Providing Foot Care**

**Purposes**

- To maintain the skin integrity of the feet
- To prevent foot infections
- To prevent foot odours
- To assess or monitor foot problems

**Assessment**

**Determine**

- History of any problems with foot odour, foot discomfort, foot mobility, circulatory problems (e.g. swelling, changes in skin colour and/or temperature, and pain), structural problems (e.g. bunion, hammer toe, or overlapping digits)
- Usual foot care practices (e.g. frequency of washing feet and cutting nails, foot hygiene products used, how often socks are changed, whether the patient ever goes barefoot, whether the patient sees a podiatrist)
- Skin temperatures of the two feet to assess circulatory status and the dorsalis pedis pulses
- Self-care abilities (e.g. any problems managing foot care)
Planning

Equipment
- Washbowl containing warm water
- Pillow
- Moisture-resistant disposable pad
- Towels
- Soap
- Washcloth
- Toenail cleaning and trimming equipment
- Lotion or foot powder

Implementation

Performance
1. Explain to the patient what you are going to do, why it is necessary, and how they can cooperate.
2. Wash hands and observe other appropriate infection control procedures.
3. Provide for patient privacy by drawing the curtains around the bed or closing the door to the room.
4. Prepare the equipment and the patient.
   - Fill the washbowl with warm water. Warm water promotes circulation, comforts and refreshes.
   - Assist the ambulatory patient to a sitting position in a chair, or the bed patient to a supine or semi-Fowler’s position.
   - Place a pillow under the bed patient’s knees. This provides support and prevents muscle fatigue.
   - Place the washbowl on the moisture-resistant pad at the foot of the bed for a bed patient or on the floor in front of the chair for an ambulatory patient.
   - For a bed patient, pad the rim of the washbowl with a towel. The towel prevents undue pressure on the skin.
5. Wash the foot and soak it.
   - Place one of the patient’s feet in the bowl and wash it with soap, paying particular attention to the interdigital areas. Prolonged soaking is generally not recommended for diabetic patients or individuals with peripheral vascular disease. Prolonged soaking may remove natural skin oils, thus drying the skin and making it more susceptible to cracking and injury.
   - Rinse the foot well to remove soap. Soap irritates the skin if not properly removed.
   - Rub callused areas of the foot with the washcloth. This helps remove dead skin layers.
   - If the nails are brittle or thick and require trimming, replace the water and allow the foot to soak for 10-20 minutes. Soaking softens the nails and loosens debris under them.
6. Dry the foot thoroughly and apply lotion or foot powder:
   - Blot the foot gently with the towel to dry it thoroughly, particularly between the toes. Harsh rubbing can damage the skin. Thorough drying reduces the risk of infection.
   - Apply lotion or cream. This lubricates dry skin.
   - Apply a foot powder containing a non-irritating deodorant if the feet tend to perspire excessively. Foot powders have greater absorbent properties than regular bath powders; some also contain menthol, which makes the feet feel cool.
7. If local policy permits, trim the nails of the first foot while the second foot is soaking.
   - See the discussion on nails for the appropriate method to trim nails. Note that in many healthcare settings toenail trimming requires a chiropodist or is contraindicated for patients with diabetes mellitus, toe infections and peripheral vascular disease, unless performed by a podiatrist.
8. Document any foot problems observed.
   - Foot care is not generally recorded unless problems are noted.
   - Record any signs of inflammation, infection, breaks in the skin, corns, troublesome calluses, bunions, and pressure areas. This is of particular importance for patients with peripheral vascular disease and diabetes.

Evaluation
- Inspect nails and skin after the soak.
- Compare to prior assessment data.
NAILS

Nails are normally present at birth. They continue to grow throughout life and change very little until people are elderly.

At that time, the nails tend to be tougher, more brittle, and in some cases thicker. The nails of an older person normally grow less quickly than those of a younger person and may be ridged and grooved.

who have diabetes or circulatory problems should have their nails filed rather than cut; inadvertent injury to tissues can occur if scissors are used. After the initial cut or filing, the nail is filed to round the corners, and the nurse cleans under the nail. The nurse then gently pushes back the cuticle, taking care not to injure it. The next finger or toe is cared for in the same manner. Any abnormalities, such as an infected cuticle or inflammation of the tissue around the nail, are recorded and reported.

NURSING MANAGEMENT

ASSESSING

During the nursing assessment, the nurse explores the patient’s usual nail care practices, self-care abilities and any problems associated with them (see the Assessment interview box below). Physical assessment involves inspection of the nails (e.g. nail shape and texture, nail bed colour and tissues surrounding the nails).

PLANNING

The nurse identifies measures that will assist the patient to develop or maintain healthy nail care practices. A schedule of nail care needs to be established.

IMPLEMENTING

To provide nail care, the nurse needs a nail cutter or sharp scissors, a nail file, hand lotion or mineral oil to lubricate any dry tissue around the nails, and a bowl of water to soak the nails if they are particularly thick or hard.

One hand or foot is soaked, if needed, and dried; then the nail is cut or filed straight across beyond the end of the finger or toe. Avoid trimming or digging into nails at the lateral corners. This predisposes the patient to ingrown toenails. Patients who have diabetes or circulatory problems should have their nails filed rather than cut; inadvertent injury to tissues can occur if scissors are used. After the initial cut or filing, the nail is filed to round the corners, and the nurse cleans under the nail. The nurse then gently pushes back the cuticle, taking care not to injure it. The next finger or toe is cared for in the same manner. Any abnormalities, such as an infected cuticle or inflammation of the tissue around the nail, are recorded and reported.

EVALUATING

Examples of desired outcomes for nail hygiene include the patient being able to:

- Describe factors contributing to the nail problem
- Describe preventive interventions for the specific nail problem
- Demonstrate nail care as instructed.

In addition, the patient should have pink nail beds and quick return of nail bed colour after capillary refill test.

ASSESSMENT INTERVIEW

Nail Hygiene

- What are your usual nail care practices?
- Do you have any problems managing your nail care? If so, what are these?
- Have you had any problems associated with your nails (e.g. inflammation of the tissue surrounding the nail, injury, prolonged exposure to water or chemicals, circulatory problems)?
MOUTH

Each tooth has three parts: the crown, the root, and the pulp cavity (see Figure 13-17). The crown is the exposed part of the tooth, which is outside the gum. It is covered with a hard substance called enamel. The ivory-coloured internal part of the crown below the enamel is the dentin. The root of a tooth is embedded in the jaw and covered by a bony tissue called cementum. The pulp cavity in the centre of the tooth contains the blood vessels and nerves.

Developmental Variations

Teeth usually appear five to eight months after birth. Baby-bottle syndrome may result in decay of all of the upper teeth and the lower posterior teeth (Pillitteri, 2003: 824). This syndrome occurs when an infant is put to bed with a bottle of sugar water, formula, milk or fruit juice. The carbohydrates in the solutions causes demineralisation of the tooth enamel, which leads to tooth decay.

By the time children are two years old, they usually have all 20 of their temporary deciduous teeth (see Figure 13-18). At about age six or seven, children start losing their deciduous teeth, and these are gradually replaced by the 32 permanent teeth (see Figure 13-19). By age 25, most people have all of their permanent teeth.

The incidence of periodontal disease increases during pregnancy because the rise in female hormones affects gingival tissue and increases its reaction to bacterial plaque. Many pregnant women experience more bleeding from the gingival sulcus during brushing and increased redness and swelling of the gingiva (the gum).

Some older adults may have few permanent teeth left, and some have dentures. Loss of teeth occurs mainly because of periodontal disease (gum disease) rather than dental caries (cavities); however, caries are also common in middle-aged adults.

Some receding of the gums and a brownish pigmentation of the gums occur with age. Because saliva production decreases with age, dryness of the oral mucosa is a common finding in older people.
MOUTH

25

visible, hard deposit of plaque and dead bacte-
ria that forms at the gum lines. Tartar buildup
may alter the fibres that attach the teeth to
the gum and eventually disrupt bone tissue.

Periodontal disease is characterised by
gingivitis (red, swollen gingiva), bleeding, receding gum lines, and the formation of
pockets between the teeth and gums. In advanced periodontal
disease (pyorrhea), the teeth are loose and pus is evident when
the gums are pressed. Table 13-6 lists additional problems of
the mouth.

Identifying Patients at Risk

Certain patients are prone to oral problems because of lack of
knowledge or the inability to maintain oral hygiene. Among
these are seriously ill, confused, comatose, depressed and dehy-
drated patients. In addition, people with nasogastric tubes
or receiving oxygen are likely to develop dry oral mucous
membranes, especially if they breathe through their mouths.

Patients who have had oral or jaw surgery must have meticu-
lous oral hygiene care to prevent the development of infections.

Healthy-appearing individuals, too, may be at risk. High-
risk variables such as inadequate nutrition, lack of money for
dental care, excessive intake of refined sugars and family his-
tory of periodontal disease also need to be identified. Some
older people may also be at risk, for example, those who choose
salty and enamel-eroding sugary foods because of a decline in
their number of taste buds. The decreased saliva production in
older adults, which produces a dry mouth and thinning of the
oral mucosa, is another factor.

A dry mouth can be aggravated by poor fluid intake, heavy
smoking, alcohol use, high salt intake, anxiety and many
medications. Medications that can cause dryness of the
mouth include diuretics; laxatives, if used excessively; and

NURSING MANAGEMENT

ASSESSING

Assessment of the patient’s mouth and hygiene practices
includes (a) a nursing health history, (b) physical assessment
of the mouth, and (c) identification of patients at risk for
developing oral problems.

Nursing Health History

During the nursing health history, the nurse obtains data about
the patient’s oral hygiene practices, including dental visits, self-
care abilities and past or current mouth problems. Data about
the patient’s oral hygiene help the nurse determine learning
needs and incorporate the patient’s needs and preferences in
the plan of care. Assessment of the patient’s self-care abilities
determines the amount and type of nursing assistance to
provide. Patients whose hand coordination is impaired, whose
cognitive function is impaired, whose illness alters energy
levels and motivation, or whose therapy imposes restrictions
on activities will need assistance from the nurse. Information
about past or current problems alerts the nurse to specific
interventions required or referrals that may be necessary.

Questions to elicit this information are shown in the
Assessment interview.

Physical Assessment

Dental caries (cavities) and periodontal disease are the two
problems that most frequently affect the teeth. Both problems
are commonly associated with plaque and tartar deposits.

Plaque is an invisible soft film that adheres to the enamel sur-
face of teeth; it consists of bacteria, molecules of saliva, and
remnants of epithelial cells and leukocytes. When plaque
is unchecked, tartar (dental calculus) is formed. Tartar is a

NURSING MANAGEMENT

ASSESSMENT INTERVIEW

Oral Hygiene Practices

What are your usual mouth care and/or denture

care practices?

What oral hygiene products do you routinely use
(e.g. mouthwash, type of toothpaste, dental floss,
denture cleaner)?

When was your last dental examination, and how
often do you see your dentist?

Self-Care Abilities

Do you have any problems managing
your mouth care?

Past or Current Mouth Problems

Have you had or do you have any
problems such as bleeding, swollen or reddened
gums, ulcerations, lumps or tooth pain?
tranquilisers, such as chlorpromazine and diazepam. Some chemotherapeutic agents used to treat cancer also cause oral dryness and lesions. A common side effect of the anticonvulsant drug phenytoin is gingival hyperplasia. Optimal oral hygiene (e.g. brushing with a soft toothbrush and flossing) is needed. Patients who are receiving or have received radiation treatments to the head and neck may have permanent damage to salivary glands. This results in a very dry mouth and can often be treated by providing a thick liquid called artificial saliva. Some patients prefer to just sip on liquids to moisten their mouth. Radiation can also cause damage to teeth and jaw structure, with actual damage occurring years after the radiation.

PLANNING

In planning care, the nurse and, if appropriate, the patients and/or family set outcomes for identified problem or self-care deficit. The nurse then performs nursing interventions and activities to achieve the patient outcomes.

During the planning phase, the nurse also identifies interventions that will help the patient achieve these goals. Specific, detailed nursing activities taken by the nurse may include the following:

- Monitor regularly for dryness of the oral mucosa.
- Monitor for signs and symptoms of glossitis (inflammation of the tongue) and stomatitis (inflammation of the mouth).
- Assist dependent patients with oral care.
- Provide special oral hygiene for patients who are debilitated, unconscious or have lesions of the mucous membranes or other oral tissues.

IMPLEMENTING

Good oral hygiene includes daily stimulation of the gums, mechanical brushing and flossing of the teeth, and flushing of the mouth. The nurse is often in a position to help people maintain oral hygiene by helping or teaching them to clean the teeth and oral cavity, by inspecting whether patients (especially children) have done so, or by actually providing mouth care to patients who are ill or incapacitated. The nurse can also be instrumental in identifying problems that require the intervention of a dentist or oral surgeon and arranging a referral.

Promoting Oral Health Through the Life Span

A major role of the nurse in promoting oral health is to teach patients about specific oral hygienic measures.

Infants and Toddlers

Most dentists recommend that dental hygiene should begin when the first tooth erupts and be practised after each feeding. Cleaning can be accomplished by using a wet washcloth or small gauze moistened with water. Dental caries occur frequently during the toddler period, often as a result of the excessive intake of sweets or a prolonged use of the bottle during naps and at bedtime. The nurse should

Table 13-6 Common Problems of the Mouth

<table>
<thead>
<tr>
<th>Problem</th>
<th>Description</th>
<th>Nursing implications</th>
</tr>
</thead>
<tbody>
<tr>
<td>Halitosis</td>
<td>Bad breath</td>
<td>Teach or provide regular oral hygiene.</td>
</tr>
<tr>
<td>Glossitis</td>
<td>Inflammation of the tongue</td>
<td>As above</td>
</tr>
<tr>
<td>Gingivitis</td>
<td>Inflammation of the gums</td>
<td>As above</td>
</tr>
<tr>
<td>Periodontal disease</td>
<td>Gums appear spongy and bleeding</td>
<td>As above</td>
</tr>
<tr>
<td>Reddened or excoriated mucosa</td>
<td>Cracking of lips</td>
<td>Check for ill-fitting dentures.</td>
</tr>
<tr>
<td>Excessive dryness of the buccal mucosa</td>
<td>Teeth have darkened areas, may be painful</td>
<td>Increase fluid intake as health permits.</td>
</tr>
<tr>
<td>Cheilosis</td>
<td>Accumulation of foul matter (food, micro-organisms and epithelial elements) in the mouth</td>
<td>Lubricate lips, use antimicrobial ointment to prevent infection as prescribed.</td>
</tr>
<tr>
<td>Dental caries</td>
<td>Inflammation of the oral mucosa</td>
<td>Teach or provide regular cleaning.</td>
</tr>
<tr>
<td>Sordes</td>
<td>Inflammation of the parotid salivary glands</td>
<td>Teach or provide regular oral hygiene.</td>
</tr>
</tbody>
</table>

Teach patients about good oral hygiene practices and other measures to prevent tooth decay.

Reinforce oral hygiene regimen as part of discharge teaching.
give parents the following instructions to promote and maintain dental health:

- Beginning at about 18 months of age, brush the child’s teeth with a soft toothbrush. Use only a toothbrush moistened with water at first and introduce toothpaste later. Use one that contains fluoride.
- Schedule an initial dental visit for the child at about two or three years of age, as soon as all 20 primary teeth have erupted.
- Some dentists recommend an inspection type of visit when the child is about 18 months old to provide an early pleasant introduction to the dental examination.
- Seek professional dental attention for any problems such as discoloring of the teeth, chipping, or signs of infection such as redness and swelling.

**Pre-school and School-Age Children**

Because deciduous teeth guide the entrance of permanent teeth, dental care is essential to keep these teeth in good repair. Abnormally placed or lost deciduous teeth can cause misalignment of permanent teeth. Fluoride remains important at this stage to prevent dental caries. Pre-schoolers need to be taught to brush their teeth after eating and to limit their intake of refined sugars. Parental supervision may be needed to ensure the completion of these self-care activities. Regular dental checkups are required during these years when permanent teeth appear.

**Adolescents and Adults**

Proper diet and tooth and mouth care should be evaluated and reinforced to adolescents and adults. Specific measures to prevent tooth decay and periodontal disease are listed in Procedure 13-4 (see page 00).

**Brushing and Flossing the Teeth**

Thorough brushing of the teeth is important in preventing tooth decay. The mechanical action of brushing removes food particles that can harbour and incubate bacteria. It also stimulates circulation in the gums, thus maintaining their healthy firmness. One of the techniques recommended for brushing teeth is called the sulcular technique, which removes plaque and cleans under the gingival margins. Many toothpastes are marketed. Fluoride toothpaste is often recommended because of its antibacterial protection.

**Caring for Artificial Dentures**

Some people have artificial teeth in the form of a plate—a complete set of teeth for one jaw. A person may have a lower plate or an upper plate or both. When only a few artificial teeth are needed, the individual may have a bridge rather than a plate. A bridge may be fixed or removable. Artificial teeth are fitted to the individual and usually will not fit another person. People who wear dentures or other types of oral prostheses should be encouraged to use them. Those who do not wear their prostheses are prone to shrinkage of the gums, which results in further tooth loss.

Like natural teeth, artificial dentures collect micro-organisms and food. They need to be cleaned regularly, at least once a day. They can be removed from the mouth, scrubbed with a toothbrush, rinsed, and reinserted. Some people use commercial cleaning compounds for plates.

**Assisting Patients with Oral Care**

When providing mouth care for partially or totally dependent patients, the nurse should wear gloves to guard against infections. Other required equipment includes a curved kidney basin that fits snugly under the patient’s chin to receive the rinse water and a towel to protect the patient and the bedclothes (see Procedure 13-4 on page 00).

Foam swabs are often used in clinical areas to clean the mouths of dependent patients (see Figure 13-20). These swabs are convenient and effective in removing excess debris from the teeth and mouth but should be used infrequently and for short periods (i.e. less than three days) because they do not remove plaque that is at the base of the teeth. Increasingly clinical policies are being changed to remove these swabs from clinical areas and recommend the use of a toothbrush instead.

Most people prefer privacy when they take their artificial teeth out to clean them. Many do not like to be seen without their teeth; one of the first requests of many post-operative patients is ‘May I have my teeth in, please!’ The Variation section in Procedure 13-4 describes how to clean artificial dentures.

**Figure 13-20** Example of foam swab used to clean mouth of a dependent patient.
Patients with Special Oral Hygiene Needs

For the patient who is debilitated or unconscious or who has excessive dryness, sores or irritations of the mouth, it may be necessary to clean the oral mucosa and tongue in addition to the teeth. Depending on the health of the patient’s mouth, special care may be needed every two to eight hours. Mouth care for unconscious or debilitated people is important because their mouths tend to become dry and consequently predisposed to infections. Saliva has antiviral, antibacterial, and antifungal effects (Walton, Miller and Tordecilla, 2001: 40). Dryness occurs because the patient cannot take fluids by mouth, is often breathing through the mouth, or may be receiving oxygen that tends to dry the mucous membranes.

Procedure 13-5 (on p. 000) focuses on oral care for the unconscious person but may be adapted for conscious persons who are seriously ill or have mouth problems.

PROCEDURE 13-4 Brushing and Flossing the Teeth

**Purposes**
- To remove food particles from around and between the teeth
- To remove dental plaque
- To enhance the patient’s feelings of well-being
- To prevent sores and infection of the oral tissues

**Assessment**
- Determine the extent of the patient’s self-care abilities.
- Assess the patient’s usual mouth care practices.
- Inspect lips, gums, oral mucosa, and tongue for deviations from normal.
- Identify presence of oral problems such as tooth caries, halitosis, gingivitis and loose or broken teeth.
- Check if the patient has bridgework or wears dentures. If the patient has dentures, ask if any tenderness or soreness is present and, if so, the location of the area(s) for ongoing assessment.

**Planning**

**Equipment**
- Brushing and flossing
  - Towel
  - Disposable gloves
  - Curved basin (kidney basin)
  - Toothbrush
  - Cup of tepid water
  - Toothpaste
  - Mouthwash if required
- For cleaning artificial dentures
  - Disposable gloves
  - Tissue or piece of gauze
  - Denture container
  - Clean washcloth
  - Toothbrush or stiff-bristled brush
  - Toothpaste or denture cleaner
  - Tepid water
  - Container of mouthwash if required
  - Curved basin (kidney basin)
  - Towel

**Implementation**

**Preparation**
Assemble all the necessary equipment.

**Performance**
1. Explain to the patient what you are going to do, why it is necessary, and how they can cooperate.

**CLINICAL ALERT**
Long-term use of lemon-glycerine swabs can lead to further dryness of the mucosa and changes in tooth enamel. Mineral oil is contraindicated because aspiration of it can initiate an infection (lipid pneumonia).
2. Wash hands and observe other appropriate infection control procedures (e.g., disposable gloves). Wearing gloves while providing mouth care prevents the nurse from acquiring infections. Gloves also prevent transmission of microorganisms to the patient.

3. Provide for patient privacy by drawing the curtains around the bed or closing the door to the room.

4. Prepare the patient.
   - Assist the patient to a sitting position in bed, if health permits. If not, assist the patient to a side-lying position with the head turned so liquid may be prevented from draining down the patient’s throat.

5. Prepare the equipment.
   - Place the towel under the patient’s chin.
   - Put on disposable gloves.
   - Moisten the bristles of the toothbrush with tepid water and apply the toothpaste to the toothbrush.
   - Use a soft toothbrush (a small one for a child) and the patient’s choice of toothpaste.
   - For the patient who must remain in bed, place or hold the curved basin under the patient’s chin, fitting the small curve around the chin or neck.
   - Inspect the mouth and teeth.

6. Brush the teeth.
   - Hand the toothbrush to the patient, or brush the patient’s teeth as follows:
     (a) Hold the brush against the teeth with the bristles at a 45-degree angle. The tips of the outer bristles should rest against and penetrate under the gingival sulcus (see Figure 13-21). The brush will clean under the sulcus of two or three teeth at one time. This sulcular technique removes plaque and cleans under the gingival margins.
     (b) Move the bristles up and down using a vibrating or jiggling motion from the sulcus to the crowns of the teeth (see Figure 13-22).

7. Remove and dispose of equipment appropriately.
   - Remove and clean the curved basin.
   - Remove and discard the gloves.

(c) Repeat until all outer and inner surfaces of the teeth and sulci of the gums are cleaned.
(d) Clean the biting surfaces by moving the brush back and forth over them in short strokes (see Figure 13-23).
(e) If the tongue is coated, brush it gently with the toothbrush. Brushing removes accumulated materials and coatings. A coated tongue may be caused by poor oral hygiene and low fluid intake. Brushing gently and carefully helps prevent gagging or vomiting.
   - Hand the patient the water cup or mouthwash to rinse the mouth vigorously. Then ask the patient to spit the water and excess toothpaste into the basin. Vigorous rinsing loosens food particles and washes out already loosened particles.
   - Repeat the preceding steps until the mouth is free of toothpaste and food particles.
   - Remove the curved basin and help the patient wipe the mouth.
8. Document assessment of the teeth, tongue, gums, and oral mucosa. Include any problems such as sores or inflammation, bleeding and swelling of the gums.

**Variation: artificial dentures**

1. Remove the dentures.
   - Put on gloves. Wearing gloves protects the nurse and patient from infection.
   - If the patient cannot remove the dentures, take the tissue or gauze, grasp the upper plate at the front teeth with your thumb and second finger, and move the denture up and down slightly (see Figure 13-24). The slight movement breaks the suction that holds the plate on the roof of the mouth.
   - Lower the upper plate, move it out of the mouth, and place it in the denture container.
   - Lift the lower plate, turning it so that the left side, for example, is slightly lower than the right, to remove the plate from the mouth without stretching the lips. Place the lower plate in the denture container.
   - Remove a partial denture by exerting equal pressure on the border of each side of the denture, not on the clasps, which can bend or break.

2. Clean the dentures.
   - Take the denture container to a sink. Take care not to drop the dentures as they may break. Place a washcloth in the bowl of the sink to prevent damage if the dentures are dropped.
   - Using a toothbrush or special stiff-bristled brush, scrub the dentures with the cleaning agent and tepid water. Hot water is not used because heat will change the shape of some dentures.
   - Rinse the dentures with tepid running water. Rinsing removes the cleaning agent and food particles.
   - If the dentures are stained, soak them in a commercial cleaner. Be sure to follow the manufacturer’s directions. To prevent corrosion, dentures with metal parts should not be soaked overnight.

3. Inspect the dentures and the mouth.
   - Observe the dentures for any rough, sharp, or worn areas that could irritate the tongue or mucous membranes of the mouth, lips and gums.
   - Inspect the mouth for any redness, irritated areas, or indications of infection.
   - Assess the fit of the dentures. People who have them should see a dentist at least once a year to check the fit and the presence of any irritation to the soft tissues of the mouth.

4. Return the dentures to the mouth.
   - Offer some mouthwash and a curved basin to rinse the mouth. If the patient cannot insert the dentures independently, insert the plates one at a time. Hold each plate at a slight angle while inserting it, to avoid injuring the lips (see Figure 13-25).

5. Assist the patient as needed.
   - Wipe the patient’s hands and mouth with the towel.
   - If the patient does not want to or cannot wear the dentures, store them in a denture container with water. Label the container with the patient’s name and identification number.

6. Remove and discard gloves.

7. Document all assessments and include any problems such as an irritated area on the mucous membrane.
PROCEDURE 13-5 Providing Special Oral Care

Purposes
+ To maintain the intactness and health of the lips, tongue, and mucous membranes of the mouth
+ To prevent oral infections
+ To clean and moisten the membranes of the mouth and lips
+ Identify presence of oral problems such as tooth caries, halitosis, gingivitis and loose or broken teeth.
+ Assess for gag reflex, when appropriate.

Assessment
+ Inspect lips, gums, oral mucosa, and tongue for deviations from normal.
+ Identify presence of oral problems such as tooth caries, halitosis, gingivitis and loose or broken teeth.
+ Assess for gag reflex, when appropriate.

Planning

Equipment
+ Towel
+ Curved basin (kidney basin)
+ Disposable clean gloves
+ Toothbrush
+ Cup of tepid water
+ Toothpaste or denture cleaner
+ Tissue or piece of gauze to remove dentures (optional)
+ Denture container as needed
+ Mouthwash
+ Suction catheter with suction apparatus (optional)
+ Foam swabs and cleaning solution for cleaning the mucous membranes

Performance
1. Explain to the patient and the family what you are going to do and why it is necessary.
2. Wash hands and observe other appropriate infection control procedures (e.g. disposable gloves).
3. Provide for patient privacy by drawing the curtains around the bed or closing the door to the room.
4. Prepare the patient.
   + Position the unconscious patient in a side-lying position, with the head of the bed lowered. In this position, the saliva automatically runs out by gravity rather than being aspirated into the lungs. This position is the one of choice for the unconscious patient receiving mouth care. If the patient’s head cannot be lowered, turn it to one side. The fluid will readily run out of the mouth or pool in the side of the mouth, where it can be suctioned.
   + Place the towel under the patient’s chin.
   + Place the curved basin against the patient’s chin and lower cheek to receive the fluid from the mouth (see Figure 13-26).
   + Put on gloves.
5. Clean the teeth and rinse the mouth.
   + If the person has natural teeth, brush the teeth as described in Procedure 13-4. Brush gently and carefully to avoid injuring the gums. If the patient has artificial teeth, clean them as described in the Variation component of Procedure 13-4.
   + Rinse the patient’s mouth by drawing about 10 ml of water or alcohol-free mouthwash into a syringe and injecting it gently into each side of the mouth. If the solution is injected with force, some of it may flow down the patient’s throat and be aspirated into the lungs.
   + Watch carefully to make sure that all the rinsing solution has run out of the mouth into the basin. If not, suction the fluid from the mouth. Fluid remaining in the mouth may be aspirated into the lungs.
   + Repeat rinsing until the mouth is free of toothpaste, if used.
6. Inspect and clean the oral tissues.
   + If the tissues appear dry or unclean, clean them with the foam swabs, toothbrush or gauze and cleaning solution following local policy.

Figure 13-26 Position of patient and placement of curved basin when providing special mouth care.
Picking up a moistened foam swab, wipe the mucous membrane of one cheek. If no foam swabs are available, wrap a small gauze square around a tongue depressor and moisten it. Discard the swab or tongue depressor in a clinical waste container; use a fresh one to clean the next area. Using separate applicators for each area of the mouth prevents the transfer of microorganisms from one area to another. Clean all mouth tissues in an orderly progression, using separate applicators: the cheeks, roof of the mouth, base of the mouth and tongue.

Observe the tissues closely for inflammation and dryness. Rinse the patient’s mouth as described in step 5. Remove and discard gloves.

7. Ensure patient comfort. Remove the basin, and dry around the patient’s mouth with the towel. Replace artificial dentures, if indicated.

8. Document assessment of the teeth, tongue, gums, and oral mucosa. Include any problems such as sores or inflammation and swelling of the gums.

Evaluation
- Consider the patient’s medical diagnosis and treatment (e.g. chemotherapy, oxygen) and the necessary nursing interventions related to oral hygiene.
- Conduct an ongoing assessment, if appropriate, of the oral mucosa, gums, tongue, and lips.
- Conduct appropriate follow-up such as a referral to a dentist for dental caries.

LIFESPAN CONSIDERATIONS

Oral Hygiene

Infants
- Most dentists recommend that dental hygiene should begin when the first tooth erupts and be practised after each feeding. Cleaning can be accomplished by using a wet washcloth or small gauze moistened with water.

Children
- Beginning at about 18 months of age, brush the child’s teeth with a soft toothbrush. Use only a toothbrush moistened with water. Introduce toothpaste later and use one that contains fluoride.

Older Adults
- Oral care is often difficult for certain older adults to perform due to problems with dexterity or cognitive problems with dementia.
- Most long-term healthcare facilities have dentists that come on a regular basis to see patients with special needs.
- Dryness of the oral mucosa is a common finding in older adults because saliva production decreases with age.
- Promoting good oral hygiene can have a positive effect on the individual’s ability to eat.

EVALUATING

Using data collected during care – status of oral mucosa, lips, tongue, teeth, and so on – the nurse judges whether desired outcomes have been achieved.

If outcomes are not achieved, the nurse and patient need to explore the reasons before modifying the care plan. Examples of questions to consider are as follows:

- Did the nurse overestimate the patient’s functional abilities?
- Is the patient’s hand coordination or cognitive function impaired?
- Did the patient’s condition change?
- Has there been a change in the patient’s energy level and/or motivation?
HAIR

The appearance of the hair often reflects a person’s feelings of self-concept and socio-cultural well-being. Becoming familiar with hair care needs and practices that may be different than our own is an important aspect of providing competent nursing care to all patients. People who feel ill may not groom their hair as before. A dirty scalp and hair are itchy, uncomfortable and can have an odour. The hair may also reflect state of health (e.g. excessive coarseness and dryness may be associated with endocrine disorders such as hypothyroidism).

Each person has particular ways of caring for hair. Many dark-skinned people need to oil their hair daily because it tends to be dry. Oil prevents the hair from breaking and the scalp from drying. A wide-toothed comb is usually used because finer combs pull and break the hair. Some people brush their hair vigorously before retiring; others comb their hair frequently.

Developmental Variations

Newborns may have lanugo (the fine hair on the body of the foetus, also referred to as down or woolly hair) over their shoulders, back, and sacrum. This generally disappears, and the hair distribution on the eyebrows, head and eyelashes of young children subsequently becomes noticeable. Some newborns have hair on their scalp; others are free of hair at birth but grow hair over the scalp during the first year of life.

Pubic hair usually appears in early puberty followed in about six months by the growth of axillary hair. Boys develop facial hair in later puberty.

In adolescence, the sebaceous glands increase in activity as a result of increased hormone levels. As a result, hair follicle openings enlarge to accommodate the increased amount of sebum, which can make the adolescent’s hair more oily.

In older adults, the hair is generally thinner, grows more slowly and loses its colour as a result of ageing tissues and diminishing circulation. Men often lose their scalp hair and may become completely bald. This phenomenon may occur even when a man is relatively young. The older person’s hair also tends to be drier than normal. With age, axillary and pubic hair becomes finer and scantier, in contrast to the eyebrows, which become bristly and coarse. Many women develop hair on their faces, which may be a concern to them. All these changes can affect the patient’s body image.

Chemotherapeutic agents and radiation of the head may cause alopecia (hair loss). Hypothyroidism may cause the hair to be thin, dry, and/or brittle. Use of some hair dyes and curling or straightening preparations can cause the hair to become dry and brittle. Questions to elicit these data are shown in the Assessment overview.

ASSESSING

Assessment of the patient’s hair, hair care practices, and potential problems includes a nursing health history and physical assessment.

NURSING HEALTH HISTORY

During the patient history/assessment the nurse elicits data about usual hair care, self-care abilities, history of hair or scalp problems, and conditions known to affect the hair.

ASSESSMENT INTERVIEW

Hair Care

Hair Care Practices

- What are your usual hair care practices?
- What hair care products do you routinely use (e.g. hair spray, lubricant, shampoo, conditioners, hair dye, curling or straightening preparations)?

Self-Care Abilities

- Do you have any problems managing your hair?

Past or Current Hair Problems

- Have you had any of the following conditions or therapies: recent chemotherapy, hypothyroidism, radiation of the head, unexplained loss of hair, growth of excessive body hair?
Dandruff

Often accompanied by itching, dandruff appears as a diffuse scaling of the scalp. In severe cases it involves the auditory canals and the eyebrows. Dandruff can usually be treated effectively with a commercial shampoo. In severe or persistent cases, the patient may need specialist prescribed shampoo.

Hair Loss

Hair loss and growth are continual processes. Some permanent thinning of hair normally occurs with ageing. Baldness, common in men, is thought to be a hereditary problem for which there is no known remedy other than the wearing of a hairpiece or a costly surgical hair transplant, in which hair is taken from the back or the sides of the scalp and surgically moved to the hairless area. Although some medications are being developed, their long-term outcomes are unknown.

Pediculosis (Lice)

Lice are parasitic insects that infest mammals. Infestation with lice is called pediculosis. Hundreds of varieties of lice infest humans. Three common kinds are Pediculus capitis (the head louse), Pediculus corporis (the body louse), and Pediculus pubis (the crab louse).

Pediculus capitis is found on the scalp and tends to stay hidden in the hairs; similarly, Pediculus pubis stays in pubic hair. Pediculus corporis tends to cling to clothing, so that when a patient undresses, the lice may not be in evidence on the body; these lice suck blood from the person and lay their eggs on the clothing. The nurse can suspect their presence in the clothing if (a) the person habitually scratches, (b) there are scratches on the skin and (c) there are haemorrhagic spots on the skin where the lice have sucked blood.

Head and pubic lice lay their eggs on the hairs; the eggs look like oval particles, similar to dandruff, clinging to the hair. Bites and pustular eruptions may also be noticed at the hair lines and behind the ears.

Lice are very small, grayish white, and difficult to see. The crab louse in the pubic area has red legs. Lice may be contracted from infested clothes and direct contact with an infested person.

The treatment often includes topical pediculicides. Another treatment, occlusive agents, is used by some. The idea is that an oily substance, such as olive oil, smothers the lice and they die.

Removal of nits (eggs) after applying the treatment is not necessary to prevent spread but most people remove them for aesthetic reasons (Frankowski and Weiner, 2002). Fine-toothed ‘nit’ combs are available. Transmission is from head-to-head contact and it is suggested that the hair care items and bedding of the person who has the lice infestation be washed with hot water.

Scabies

Scabies is a contagious skin infestation by the itch mite. The characteristic lesion is the burrow produced by the female mite as it penetrates into the upper layers of the skin. Burrows are short, wavy, brown or black, threadlike lesions most commonly observed between the webs of the fingers and the folds of the wrists and elbows. The mites cause intense itching that is more pronounced at night because the increased warmth of the skin has a stimulating effect on the parasites. Secondary lesions caused by scratching include vesicles, papules, pustules, excoriations, and crusts. Treatment involves thorough cleansing of the body with soap and water to remove scales and debris from crusts, and then an application of a scabicide lotion. All bed linens and clothing should be washed in very hot or boiling water.

Hirsutism

The growth of excessive body hair is called hirsutism. The acceptance of body hair in the axillae and on the legs is largely dictated by culture. In Western culture, the well-groomed woman, as depicted in magazines, has no hair on her legs or under her axillae. Excessive facial hair on a woman is thought unattractive in most Western and Asian cultures. For example, some Japanese brides follow the custom of shaving their faces the day before the wedding.

The cause of excessive body hair is not always known. Older women may have some on their faces, and women in menopause may also experience the growth of facial hair. Excessive body hair may be due to the action of the endocrine system. Heredity is also thought to influence the pattern of hair distribution.

Planning

In planning care, the nurse and, if appropriate, the patient and/or family set outcomes for each identified nursing problem. The nurse then performs nursing interventions and activities to achieve the patient outcomes.

The specific, detailed nursing activities taken by the nurse to assist the patient should take into account the patient’s personal preferences, health and energy resources as well as the time, equipment and personnel available. Often, patients like to receive hair care after a bath, before receiving visitors, and before retiring.

Implementing

Hair needs to be brushed or combed daily and washed, as needed, to keep it clean. Nurses may need to provide hair care for patients who cannot meet their own self-care needs.

Brushing and Combing Hair

To be healthy, hair needs to be brushed daily. Brushing has three major functions: it stimulates the circulation of blood in the scalp, it distributes the oil along the hair shaft, and it helps to arrange the hair.
Long hair may present a problem for patients confined to bed because it may become matted. It should be combed and brushed at least once a day to prevent this. A brush with stiff bristles provides the best stimulation to blood circulation in the scalp. The bristles should not be so sharp that they injure the patient’s scalp, however. A comb with dull, even teeth is advisable. A comb with sharp teeth might injure the scalp; combs that are too fine can pull and break the hair. Some patients are pleased to have their hair tied neatly in the Dark-skinned people often have thicker, drier, curlier hair than light-skinned people. Very curly hair may stand out from the scalp. Although the shafts of curly or kinky hair look strong and wiry, they have less strength than straight hair shafts and can break easily.

**PROCEDURE 13-6 Providing Hair Care for Patients**

**Purposes**
- To increase the patient’s sense of well-being
- To assess or monitor hair or scalp problems (e.g., matted hair or dandruff)

**Assessment**

**Determine**
- History of the following conditions or therapies: recent chemotherapy, hypothyroidism, radiation of the head, unexplained hair loss and growth of excessive body hair
- Usual hair care practices and routinely used hair care products (e.g., hair spray, shampoo, conditioners, hair oil preparation, hair dye, curling or straightening preparations)
- Whether wetting the hair will make it difficult to comb. Kinky hair is easier to comb when wet, however, it is very difficult to comb when it dries (Jackson, 1998: 102).

**Assess**
- Condition of the hair and scalp. Is the hair straight, curly, kinky? Is the hair matted or tangled? Is the scalp dry?
- Evenness of hair growth over the scalp, in particular, any patchy loss of hair; hair texture, oiliness, thickness, or thinness; presence of lesions, infections, or infestations on the scalp; presence of hirsutism
- Self-care abilities (e.g., any problems managing hair care).

**Planning**

**Equipment**
- Clean brush and comb
- A wide-toothed comb is usually used for many black-skinned people because finer combs pull the hair into knots and may also break the hair
- Towel
- Hair oil preparation, if appropriate

**Implementation**

**Performance**
1. Explain to the patient what you are going to do, why it is necessary, and how they can cooperate and gain informed consent.
2. Wash hands and observe other appropriate infection control procedures.
3. Provide for patient privacy by drawing the curtains around the bed or closing the door to the room.
4. Position and prepare the patient appropriately.
   - Assist the patient who can sit to move to a chair.
   - Hair is more easily brushed and combed when the individual is in a sitting position. If health permits, assist a patient confined to a bed to a sitting position by raising the head of the bed. Otherwise, assist the patient to alternate side-lying positions, and do one side of the head at a time.
   - If the patient remains in bed, place a clean towel over the pillow and the patient’s shoulders. Place it over the sitting patient’s shoulders. The
towel collects any removed hair, dirt, and scaly material.

5. Remove any mats or tangles gradually.
   - Mats can usually be pulled apart with fingers or worked out with repeated brushings.
   - If the hair is very tangled, rub alcohol or an oil, such as mineral oil, on the strands to help loosen the tangles.
   - Comb out tangles in a small section of hair toward the ends. Stabilise the hair with one hand and comb toward the ends of the hair with the other hand. This avoids scalp trauma.

6. Brush and comb the hair.
   - For short hair, brush and comb one side at a time. Divide long hair into two sections by parting it down the middle from the front to the back. If the hair is very thick, divide each section into front and back subsections or into several layers.

7. Arrange the hair as neatly and attractively as possible, according to the individual’s desires.
   - Braiding long hair helps prevent tangles.

8. Document assessments and special nursing interventions. Daily combing and brushing of the hair are not normally recorded.

Excessively matted or tangled hair may be infested with lice.

EVALUATION

- Conduct ongoing assessments for problems such as dandruff, alopecia, pediculosis, scalp lesions, or excessive dryness or matting.
- Evaluate effectiveness of medication (e.g. for treating pediculosis), if appropriate.

**Shampooing the Hair**

Hair should be washed as often as needed to keep it clean. There are several ways to shampoo patients’ hair, depending on their health, strength, and age. The patient who is well enough to take a shower can shampoo while in the shower. The patient who is unable to shower may be given a shampoo while sitting on a chair in front of a sink. The back-lying patient who can move to a stretcher can be given a shampoo on a stretcher wheeled to a sink. The patient who must remain in bed can be given a shampoo with water brought to the bedside.

Shampooing basins to catch the water and direct it to the washbasin or other receptacle are usually made of plastic or metal. A bowl or large jug can be used as a receptacle for the shampoo water. If possible, the receptacle should be large enough to hold all shampoo water so that it does not have to be emptied during the shampoo.

Water used for the shampoo should be warm enough for an adult or child and be comfortable and not injure the scalp. Dry shampoos are also available. They will remove some of the dirt, odour, and oil. Their main disadvantage is that they dry the hair and scalp.

How often a person needs a shampoo is highly individual, depending largely on the person’s activities and the amount of sebum secreted by the scalp. Oily hair tends to look stringy and dirty, and it feels unclean to the person. Procedure 13-7 explains how to provide a shampoo for a patient confined to bed.

**PROCEDURE 13-7 Shampooing the Hair of a Patient Confined to Bed**

### Purposes
- To clean the hair and increase the patient’s sense of well-being

### Assessment
- Determine routinely used shampoo products
- Assess:
  - Any scalp problems
  - Activity tolerance of the patient
Planning

Equipment

- Comb and brush
- Plastic sheet or pad
- Two bath towels
- Shampoo basin
- Washcloth or pad
- Receptacle for the shampoo water
- Cotton balls (optional)
- Jug of water
- Liquid or cream shampoo
- Hair dryer if required

Implementation

Preparation

- Determine the type of shampoo to be used (e.g., medicated shampoo).
- Determine the best time of day for the shampoo. Discuss this with the patient. A person who must remain in bed may find the shampoo tiring. Choose a time when the patient is rested and can rest after the procedure.

Performance

1. Explain to the patient what you are going to do, why it is necessary if appropriate, and how they can cooperate.
2. Wash hands and observe other appropriate infection control procedures as needed.
3. Provide for patient privacy by drawing the curtains around the bed or closing the door to the room.
4. Position and prepare the patient appropriately.
   - Assist the patient to the side of the bed from which you will work.
5. Arrange the equipment.
   - Put the plastic sheet or pad on the bed under the head. The plastic keeps the bedding dry.
   - Remove the pillow from under the individual’s head, and place it under the shoulders unless there is some underlying condition (e.g., neck surgery, arthritis of the neck). This hyperextends the neck.
   - Tuck a bath towel around the patient’s shoulders. This keeps the shoulders dry.
   - Place the shampoo basin under the head (see Figure 13-27), putting a folded washcloth or pad where the patient’s neck rests on the edge of the basin. If the patient is on a stretcher, the neck can rest on the edge of the sink with the washcloth as padding. Padding supports the muscles of the neck and prevents undue strain and discomfort.
   - Fanfold the top bedding down to the waist, and cover the upper part of the patient with a towel. The folded bedding will stay dry, and the bath towel, which can be discarded after the shampoo, will keep the patient warm.
   - Place the receiving receptacle on a table or chair at the bedside. Put the spout of the shampoo basin over the receptacle.
6. Protect the patient’s eyes and ears.
   - Place a damp washcloth over the patient’s eyes. The washcloth protects the eyes from soapy water. A damp washcloth will not slip.
   - Place cotton balls in the patient’s ears if indicated. These keep water from collecting in the ear canals.
7. Shampoo the hair.
   - Wet the hair thoroughly with the water.
   - Apply shampoo to the scalp. Make a good lather with the shampoo while massaging the scalp with the pads of your fingertips. Massage all areas of the scalp systematically, for example, starting at the front and working toward the back of the head. Massaging stimulates the blood circulation in the scalp. The pads of the fingers are used so that the fingernails will not scratch the scalp.

Figure 13-27 Shampooing the hair of a patient confined to bed. Note the shampoo basin and the receptacle below.
Beard and Moustache Care

Beards and moustaches also require daily care. The most important aspect of the care is to keep them clean. Food particles tend to collect in beards and moustaches, and they need washing and combing periodically. Patients may also wish a beard or moustache trim to maintain a well-groomed appearance.

Male patients often shave or are shaved after a bath/shower. See Box 13–3 for the steps involved in shaving facial hair with a safety razor.

**Evaluation**

- Conduct ongoing assessments such as any scalp problems or intolerance to the procedure.
- Report any problems noted to the nurse in charge.

**LIFESPAN CONSIDERATIONS**

**Hair Care**

- **Infants**
  - Shampoo an infant’s hair daily to prevent seborrhea.

- **Children**
  - Monitor school-age children for nits (pediculosis).

- **Older Adults**
  - Ensure adequate warmth for elders when shampooing their hair, because they are susceptible to chilling.

**Beard and Moustache Care**

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Male patients often shave or are shaved after a bath/shower. See Box 13–3 for the steps involved in shaving facial hair with a safety razor.

**BOX 13–3 Using a Safety Razor to Shave Facial Hair**

- Wear gloves in case facial nicks occur and you come in contact with blood.
- Apply shaving cream or soap and water to soften the bristles and make the skin more pliable.
- Hold the skin taut, particularly around creases, to prevent cutting the skin.
- Hold the razor so that the blade is at a 45-degree angle to the skin, and shave in short, firm strokes in the direction of hair growth (see Figure 13-28).
- After shaving the entire area, wipe the patient’s face with a wet washcloth to remove any remaining shaving cream and hair.
- Dry the face well, then apply aftershave lotion or powder as the patient prefers.
- To prevent irritating the skin, pat on the lotion with the fingers and avoid rubbing the face.

**Figure 13-28** Shaving in the direction of hair growth.
EVALUATING

Using data collected during care, the nurse judges whether desired outcomes have been achieved. Examples of patient outcomes that are measurable or observable include the patient being able to:
- Perform hair grooming with assistance (specify)
- Exhibit clean, well-groomed, resilient hair with a healthy sheen
- Reduce or get rid of scalp lesions or infestations
- Describe factors, interventions, and preventive measures for specific hair problem (e.g., dandruff).

EYES

Normally eyes require no special hygiene, because lacrimal fluid continually washes the eyes, and the eyelids and lashes prevent the entrance of foreign particles. Special interventions are needed, however, for unconscious patients and for patients recovering from eye surgery or having eye injuries, irritations or infections. In unconscious patients, the blink reflex may be absent, and excessive drainage may accumulate along eyelid margins. In patients with eye trauma or eye infections, excessive discharge or drainage is common. Excessive secretions on the lashes need to be removed before they dry on the lashes as crusts. Individuals who wear eyeglasses, contact lenses, or an artificial eye may require instruction from and care by the nurse.

NURSING MANAGEMENT

ASSESSING

Assessment of the patient’s eyes includes a nursing health assessment and physical assessment.

Nursing Health History

During the patient history, the nurse obtains data about the patient’s eyeglasses or contact lenses, recent examination by an ophthalmologist, and any history of eye problems and related treatments. Questions to elicit these data are shown in the Assessment interview.

Physical Assessment

In physical assessment, all external eye structures are inspected for signs of inflammation, excessive drainage, encrustations, or other obvious abnormalities.

PLANNING

In planning care, the nurse identifies nursing activities that will assist the individual to maintain the integrity of the eye structures or a prosthesis and to prevent eye injury and infection.

IMPLEMENTING

Nursing activities may include teaching individuals about how to insert, clean and remove contact lenses or a prosthesis, and ways to protect the eyes from injury and strain.

Eye Care

Dried secretions that have accumulated on the lashes need to be softened and wiped away. Soften dried secretions by placing a sterile gauze moistened with sterile water or normal saline over the lid margins. Wipe the loosened secretions from the inner canthus of the eye to the outer canthus to prevent the particles and fluid from draining into the lacrimal sac and nasolacrimal duct.

If the patient is unconscious and lacks a blink reflex or cannot close the eyelids completely, drying and irritation of the cornea must be prevented. Lubricating eye drops may be prescribed. Box 13-4 gives suggestions for providing eye care for the comatose patient.

Eyeglass Care

It is essential that the nurse exercise caution when cleaning eyeglasses to prevent breaking or scratching the lenses. Glass...
lenses can be cleaned with warm water and dried with a soft tissue that will not scratch the lenses. Plastic lenses are easily scratched and may require special cleaning solutions and drying tissues. When not being worn, all glasses should be placed in an appropriately labeled case and stored at the patients bedside.

Contact Lens Care

Contact lenses, thin curved discs of hard or soft plastic, fit on the cornea of the eye directly over the pupil. They float on the tear layer of the eye. For some people, contact lenses offer several advantages over eyeglasses: (a) they cannot be seen and thus have cosmetic value; (b) they are highly effective in correcting some astigmatisms; (c) they are safer than glasses for some physical activities; (d) they do not fog, as eyeglasses do; and (e) they provide better vision in many cases.

Contact lenses may be either hard or soft or a compromise – gas-permeable lenses.

Hard contact lenses are made of a rigid, unwettable, airtight plastic that does not absorb water or saline solutions. They usually cannot be worn for more than 12–14 hours and are rarely recommended for first-time wearers.

Soft contact lenses cover the entire cornea. Being more pliable and soft, they mould to the eye for a firmer fit. The duration of extended wear varies by brand from 1–30 days or

ASSESSMENT INTERVIEW

Eyes

For Patients Who Wear Eyeglasses

✦ When do you use your glasses?
✦ What is your vision like with and without the glasses?

For Patients Who Wear Contact Lenses

✦ How often do you wear lenses? Daily? On special occasions?
✦ How long do you wear your lenses in a given day, including sleep time?
✦ Do you have any problems with the lenses (e.g., cleaning, insertion, removal, damage)?
✦ Do you carry an emergency identification label to alert others to remove the lenses and ensure appropriate care in an emergency? (If not, advise the patient to acquire one.)
✦ What are your insertion and removal procedures?
✦ What are your cleaning and storage procedures?
✦ Have you had any problems with either or both eyes or eyelids, such as excessive tearing, burning, redness, sensitivity to light, swelling or feelings of dryness? Describe them.
✦ Are you using any eyedrops or ointments? (These medications can combine chemically with soft lenses and cause lens damage and eye irritation.)

For All Patients

✦ When did you last have your eyesight tested?
✦ Are you currently taking any eye medication? If so, provide name, dosage and frequency.
✦ Do you have any of the following eye problems: difficulty reading or seeing objects, blurring of vision, tearing, spots or floaters, photophobia (sensitivity to light), burning, itching, pain, double vision, flashing lights or halos around lights?

BOX 13-4 Eye Care for the Comatose Patient

When a comatose patient’s corneal reflex is impaired, eye care is essential to keep moist the areas of the cornea that are exposed to air.

✦ Administer moist compresses to cover the eyes every two to four hours.
✦ Clean the eyes with saline solution and gauze swabs. Wipe from the inner to outer canthus. This prevents debris from being washed into the nasolacrimal duct.
✦ Use a new gauze for each wipe. This prevents extending infection in one eye to the other eye.
    Instill ophthalmic ointment or artificial tears into the lower lids as ordered. This keeps the eyes moist.
    If the patient’s corneal reflex is absent, keep the eyes moist with artificial tears and protect the eye with a protective shield.
    Monitor the eyes for redness, exudate, or ulceration.

NURSING MANAGEMENT
more. Eye specialists recommend that long-wear brands be removed and cleaned at least once a week. These lenses require scrupulous care and handling.

Gas-permeable lenses are rigid enough to provide clear vision but are more flexible than the traditional hard lens. They permit oxygen to reach the cornea, thus providing greater comfort, and will not cause serious damage to the eye if left in place for several days.

Most patients normally care for their own contact lenses. In general, each lens manufacturer provides detailed cleaning instructions. Depending on the type of lens and cleaning method used, warm tap water, normal saline, or special rinsing or soaking solutions may be used.

All users should have a special container for their lenses. Some contain a solution so that the lenses are stored wet; in others, the lenses are dry. Each lens container has a slot or cup with a label indicating whether it is for the right or left lens. It is essential that the correct lens be stored in the appropriate slot so that it will be placed in the correct eye.

Removing Contact Lenses

Hard contact lenses must be positioned directly over the cornea for proper removal. If the lens is displaced, the nurse asks the patient to look straight ahead, and gently exerts pressure on the upper and lower lids to move the lens back onto the cornea. Figure 13-29 shows the steps needed to remove a hard lens. To avoid lens mixups, the nurse places the first lens in its designated cup in the storage base before removing the second lens (see Figure 13-30).

Removal of soft lenses varies in two ways. First, have the patient look forward. Retract the lower lid with one hand. Using the pad of the index finger of the other hand, move the lens down to the inferior part of the sclera. This reduces the risk of damage to the cornea. Second, remove the lens by gently pinching the lens between the pads of the thumb and index finger. Pinching causes the lens to double up, so that air enters underneath the lens, overcoming the suction and allowing removal. Use the pads of the fingers to prevent scratching the eye or the lens with the fingernails. Figure 13-31 shows an individual removing her own contact lens using the method described. Please note that a nurse should wear gloves.
Inserting Contact Lenses

Seriously ill patients whose contact lenses have been removed will not need them reinserted until they become more active in their care and require the lenses to see properly. Contact lenses need to be lubricated in a sterile, nonirritating wetting solution (usually a saline solution) before they are inserted. The wetting solution helps the lens glide over the cornea, thus reducing the risk of injury. Most patients, when well, will reinsert the lenses independently.

Artificial Eyes

Artificial eyes are usually made of glass or plastic. Some are permanently implanted; others are removed regularly for cleaning. Most individuals who wear a removable artificial eye follow their own care regimen. Even for an unconscious patient, daily removal and cleaning are not necessary.

To remove an artificial eye, the nurse puts on clean gloves and retracts the patient’s lower eyelid down over the infraorbital bone while exerting slight pressure below the eyelid to overcome the suction (see Figure 13-32). An alternate method is to compress a small rubber bulb and apply the tip directly to the eye. As the nurse gradually releases the finger pressure on the bulb, the suction of the bulb counteracts the suction holding the eye in the socket and draws the eye out of the socket.

The eye is cleaned with warm normal saline and placed in a container filled with water or saline solution. The socket and tissues around the eye are usually cleaned with cotton wipes and normal saline. To reinsert the eye, the nurse uses the thumb and index finger of one hand to retract the eyelids, exerting pressure on the supraorbital and infraorbital bones. Holding the eye between the thumb and index finger of the other hand, the nurse slips the eye gently into the socket (see Figure 13-33).

General Eye Care

Many individuals may need to learn specific information about care of the eyes. Some examples follow:

- Avoid home remedies for eye problems. Eye irritations or injuries at any age should be treated medically and immediately.
- If dirt or dust gets into the eyes, clean them copiously with clean, tepid water as an emergency treatment.
- Take measures to guard against eyestrain and to protect vision, such as maintaining adequate lighting for reading and obtaining shatterproof lenses for glasses.
- Schedule regular eye examinations, particularly after age 40, to detect problems such as cataracts and glaucoma.

EVALUATING

Using data collected during care, the nurse judges whether desired outcomes have been achieved. Examples of desired outcomes to evaluate the effectiveness of nursing interventions follow:
 Conjunctive and sclera free of inflammation
Eyelids free of secretions
No tearing
No eye discomfort

EARS

Normal ears require minimal hygiene. Individuals who have excessive cerumen (earwax) and dependent patients who have hearing aids may require assistance from the nurse. Hearing aids are usually removed before surgery.

Cleaning the Ears

The auricles of the ear are cleaned during the bed bath. The nurse or patient must remove excessive cerumen that is visible or that causes discomfort or hearing difficulty. Visible cerumen may be loosened and removed by retracting the auricle up and back. If this measure is ineffective, irrigation is necessary. Patients need to be advised never to use keys, toothpicks or cotton-tipped applicators to remove cerumen. Keys and toothpicks can injure the ear canal and rupture the tympanic membrane; cotton-tipped applicators can cause wax to become impacted within the canal.

Care of Hearing Aids

A hearing aid is a battery-powered, sound-amplifying device used by persons with hearing impairments. It consists of a microphone that picks up sound and converts it to electric energy, an amplifier that magnifies the electric energy electronically, a receiver that converts the amplified energy back to sound energy, and an earmold that directs the sound into the ear. There are several types of hearing aids:

- **Behind-the-ear (BTE, or postaural) aid.** This is the most widely used type because it fits snugly behind the ear. The hearing aid case, which holds the microphone, amplifier, and receiver, is attached to the earmold by a plastic tube (see Figure 13-34).
- **In-the-ear aid (ITE, or intra-aural).** This one-piece aid has all its components housed in the earmold (see Figure 13-35).
- **In-the-canal (ITC) aid.** This is the most compact and least visible aid, fitting completely inside the ear canal. In addition to having cosmetic appeal, the ITC does not interfere with telephone use or the wearing of eyeglasses. However, it is not suitable for individuals with progressive hearing loss; it requires adequate ear canal diameter and length for a good fit; and it tends to plug with cerumen more than other aids.
- **Eyeglasses aid.** This is similar to the behind-the-ear aid, but the components are housed in the temple of the eyeglasses. A hearing aid can be in one or both temples of the glasses.
- **Body hearing aid.** This pocket-sized aid, used for more severe hearing losses, clips onto an undergarment, shirt pocket or harness carrier supplied by the manufacturer. The case, containing the microphone and amplifier, is connected by a cord to the receiver, which snaps into the earpiece.

For correct functioning, hearing aids require appropriate handling during insertion and removal, regular cleaning of the earmold, and replacement of dead batteries. With proper care, hearing aids generally last 5–10 years. Earmolds generally need readjustment every 2–3 years. Procedure 13-8 describes how to remove, clean, and insert a hearing aid.
PROCEDURE 13-8 Removing, Cleaning and Inserting a Hearing Aid

Purpose
To maintain proper hearing aid function

Assessment
Determine if the individual has experienced any problems with the hearing aid and hearing aid practices.

Planning

Equipment
- Individual’s hearing aid
- Soap, water, and towels or a damp cloth
- New battery (if needed)

Implementation

Performance

1. Explain to the patient what you are going to do, why it is necessary and how they can cooperate.
2. Wash hands and observe other appropriate infection control procedures.
3. Provide for patient privacy by drawing the curtains around the bed or closing the door to the room.
4. Remove the hearing aid.
   - Turn the hearing aid off and lower the volume. The on/off switch may be labelled ‘O’ (off), ‘M’ (microphone), ‘T’ (telephone), or ‘TM’ (telephone/microphone). The batteries continue to run if the hearing aid is not turned off.
   - Remove the earmold by rotating it slightly forward and pulling it outward.
   - If the hearing aid is not to be used for several days, remove the battery. Removal prevents corrosion of the hearing aid from battery leakage.
   - Store the hearing aid in a safe place and label with individual’s name. Avoid exposure to heat and moisture. Proper storage prevents loss or damage.
5. Clean the earmold.
   - Detach the earmold if possible. Disconnect the earmold from the receiver of a body hearing aid or from the hearing aid case of behind-the-ear and eyeglass hearing aids where the tubing meets the hook of the case. Do not remove the earmold if it is glued or secured by a small metal ring. Removal facilitates cleaning and prevents inadvertent damage to the other parts.
   - If the earmold is detachable, soak it in a mild soapy solution. Rinse and dry it well. Do not use isopropyl alcohol. Alcohol can damage the hearing aid.
6. Insert the hearing aid.
   - Determine from the patient if the earmold is for the left or the right ear.
   - Check that the battery is inserted in the hearing aid. Turn off the hearing aid, and make sure the volume is turned all the way down. A volume that is too loud is distressing.
   - Inspect the earmold to identify the ear canal portion. Some earmolds are fitted for only the ear canal and concha; others are fitted for all the contours of the ear. The canal portion, common to all, can be used as a guide for correct insertion.
   - Line up the parts of the earmold with the corresponding parts of the patient’s ear.
   - Rotate the earmold slightly forward, and insert the ear canal portion.
   - Gently press the earmold into the ear while rotating it backward.
   - Check that the earmold fits snugly by asking the patient if it feels secure and comfortable.
Adjust the other components of a behind-the-ear or body hearing aid.

Turn the hearing aid on, and adjust the volume according to the individual's needs.

7. Correct problems associated with improper functioning.

- If the sound is weak or there is no sound:
  a. Ensure that the volume is turned high enough.
  b. Ensure that the earmould opening is not clogged.
  c. Check the battery by turning the hearing aid on, turning up the volume, cupping your hand over the earmould, and listening. A constant whistling sound indicates the battery is functioning. If necessary, replace the battery. Be sure that the negative (−) and positive (+) signs on the battery match those where indicated on the hearing aid.
  d. Ensure that the ear canal is not blocked with wax, which can obstruct sound waves.

- If the individual reports a whistling sound or squeal after insertion:
  a. Turn the volume down.
  b. Ensure that the earmould is properly attached to the receiver.
  c. Reinsert the earmould.


- The removal and the insertion of a hearing aid are not normally recorded.
- Report and record any problems the patient has with the hearing aid.

Evaluation

+ Speak to the patient in a normal conversational tone and observe patient behaviors.
+ Compare the patient's hearing ability to previous assessments.

**NOSE**

Nurses usually need not provide special care for the nose, because patients can ordinarily clear nasal secretions by blowing gently into a soft tissue. When the external nares are encrusted with dried secretions, they should be cleaned with a cotton-tipped applicator or moistened with saline or water. The applicator should not be inserted beyond the length of the cotton tip; inserting it further may cause injury to the mucosa.

**SUPPORTING A HYGIENIC ENVIRONMENT**

Because people are usually confined to bed when ill, often for long periods, the bed becomes an important element in the patient's life. A place that is clean, safe and comfortable contributes to the individual's ability to rest and sleep and to a sense of well-being. Basic furniture in a healthcare environment includes the bed, bedside table, overbed table, one or more chairs and a storage space for clothing. Most bed units also have a call light, light fixtures, electric outlets and hygienic equipment in the bedside table. Two types of equipment often installed in an acute care facility are a suction outlet for several kinds of suction and, an oxygen outlet for most oxygen equipment.

**Hospital Beds**

The frame of a hospital bed is divided into three sections. This permits the head and the foot to be elevated separately. Most hospital beds have electric motors to operate the movable joints. The motor is activated by pressing a button or moving a small lever, located either at the side of the bed or on a small panel separate from the bed but attached to it by a cable, which the patient can readily use. Common bed positions are shown in Table 13-7.

**Mattresses**

Mattresses are usually covered with a water-repellent material that resists soiling and can be cleaned easily. Most mattresses have handles on the sides called lugs by which the mattress can be moved. Many special mattresses are also used in hospitals to relieve pressure on the body's bony prominences, such as the heels. They are particularly helpful for individuals confined to bed for a long time.

**Side Rails/Cot Sides**

Side rails, or safety sides, are used on both hospital beds and trolleys. They are of various shapes and sizes and are usually made of metal. A bed can have two full-length side rails or four...
half- or quarter-length side rails (also called split rails). Devices to raise and lower side rails differ. Often one or two knobs are pulled to release the side and permit it to be moved. When side rails are being used, it is important that the nurse never leave the bedside while the rail is lowered. Some side rails have two positions: up and down. Others have three: high, intermediate and low.

For decades, the use of side rails has been routine practice with the rationale that the side rails serve as a safe and effective means of preventing patients from falling out of bed. Research, however, has not validated this assumption. In fact, several studies have shown that raised side rails do not deter older patients from getting out of bed unassisted and have led to more serious falls, injuries and even death (Talerico and Capozuti, 2001). Alternatives to side rails do exist and can include low-height bed, mats placed at the side of the bed, motion sensors and bed alarms.

**Bed Cradles**

A bed cradle is a device designed to keep the top bedclothes off the feet, legs and even abdomen of a patient. The bedclothes are arranged over the device and may be pinned in place. There are several types of bed cradles. One of the most common is a curved metal rod that fits over the bed. Part of the cradle fits under the mattress, and small metal brackets press down on each side of the mattress to keep the cradle in place. The frame of some cradles extends over half of the width of the bed, above one leg.

**Intravenous stands**

Intravenous stands usually made of metal, support intravenous (IV) infusion containers while fluid is being administered to a patient. These rods were traditionally freestanding on the floor beside the bed. Now, intravenous stands are often attached to the hospital beds.

**Making Beds**

Nurses need to be able to prepare hospital beds in different ways for specific purposes. In most instances, beds are made after the patient receives certain care and when beds are made up.
unoccupied. At times, however, nurses need to make an occupied bed or prepare a bed for a patient who is having surgery (an anaesthetic, post-operative or surgical bed). Regardless of what type of bed equipment is available, whether the bed is occupied or unoccupied, or the purpose for which the bed is being prepared, certain practice guidelines pertain to all bed-making.

Unoccupied Bed

An unoccupied bed can be either closed or open. Generally the top covers of an open bed are folded back (thus the term open bed) to make it easier for a patient to get in. Open and closed beds are made the same way, except that the top sheet, blanket, and bedspread of a closed bed are drawn up to the top of the bed and under the pillows.

Beds are often changed after bed baths. The linen can be collected before the bath. The linen is not usually changed unless it is soiled. Unfitted sheets, blankets, and bedspreads are mitred at the corners of the bed. The purpose of mitring is to secure the bedclothes while the bed is occupied. Figure 13-36 shows how to mitre the corner of a bed. Procedure 13-9 explains how to change an unoccupied bed.

Figure 13-36  Mitreing the corner of a bed.

**PRACTICE GUIDELINES**

**Bed-Making**

- Always work with a colleague never alone. Wash hands thoroughly after handling a patient’s bed linen. Linens and equipment that have been soiled with secretions and excretions harbour microorganisms that can be transmitted to others directly or by the nurse’s hands or uniform.
- Hold soiled linen away from uniform.
- Linen for one patient is never (even momentarily) placed on another patient’s bed.
- Place soiled linen directly in a portable linen skip or tucked into a pillow case at the end of the bed before it is gathered up for disposal.
- Do not shake soiled linen in the air because shaking can disseminate secretions and excretions and the micro-organisms they contain.
- When stripping and making a bed, conserve time and energy by stripping and making up one side as much as possible before working on the other side.
- To avoid unnecessary trips to the linen supply area, gather all linen before starting to strip a bed.
### PROCEDURE 13-9 Changing an Unoccupied Bed

#### Purposes
- To promote the individual’s comfort
- To provide a clean, neat environment for the patient
- To provide a smooth, wrinkle-free bed foundation, thus minimizing sources of skin irritation

#### Assessment
- Assess the patient’s health status to determine that the person can safely get out of bed.
- Note all the tubes and equipment connected to the patient because this may influence the need for additional linens or waterproof pads.

#### Planning

**Equipment**
- Two flat sheets
- Cloth drapesheet (optional)
- One blanket
- One bedspread
- Waterproof drapesheet or waterproof pads (optional)
- Pillowcase(s) for the head pillow(s)
- Plastic laundry bag or portable linen hamper/slip, if available

#### Implementation

**Preparation**
Determine what linens the patient may already have in the room to avoid stockpiling of unnecessary extra linens.

**Performance**
1. Explain to the patient what you are going to do, why it is necessary and how they can cooperate.
2. Wash hands and observe other appropriate infection control procedures.
3. Provide for patient privacy.
4. Place the fresh linen on the patient’s chair or overbed table; do not use another patient’s bed. This prevents cross-contamination (the movement of microorganisms from one patient to another) via soiled linen.
5. Assess and assist the patient out of bed. Make sure that this is an appropriate and convenient time for the patient to be out of bed. Assist the patient to a comfortable chair.
6. Raise the bed to a comfortable working height.
7. Strip the bed.
   - Check bed linens for any items belonging to the patient and detach the call bell or any drainage tubes from the bed linen.
   - Loosen all bedding systematically, starting at the head of the bed on the far side and moving around the bed up to the head of the bed on the near side. Moving around the bed systematically prevents stretching and reaching and possible muscle strain.
   - Remove the pillowcases, if soiled, and place the pillows on the bedside chair near the foot of the bed.
   - Fold reusable linens, such as the bedspread and top sheet on the bed, into fourths. First, fold the linen in half by bringing the top edge even with the bottom edge, and then grasp it at the centre of the middle fold and bottom edges (see Figure 13-37). Folding linens saves time and energy when replying the linens on the bed.
   - Remove the waterproof pad and discard it if soiled.

![Figure 13-37 Fold reusable linens into fourths when removing them from the bed.](image)
Roll all soiled linen inside the bottom sheet, hold it away from your uniform, and place it directly in the linen hamper (see Figure 13-38). These actions are essential to prevent the transmission of micro-organisms to the nurse and others.

Grasp the mattress securely, using the lugs if present, and move the mattress up to the head of the bed.

7. Apply the bottom sheet and drawsheet.
   - Place the folded bottom sheet with its centre fold on the centre of the bed. Make sure the sheet is hem side down for a smooth foundation. Spread the sheet out over the mattress, and allow a sufficient amount of sheet at the top to tuck under the mattress (see Figure 13-39). The top of the sheet needs to be well tucked under to remain securely in place, especially when the head of the bed is elevated. Place the sheet along the edge of the mattress at the foot of the bed and do not tuck it in (unless it is a contour or fitted sheet).
   - Mitre the sheet at the top corner on the near side (Figure 13-36, earlier) and tuck the sheet under the mattress, working from the head of the bed to the foot.
   - If a waterproof drawsheet is used, place it over the bottom sheet so that the centrefold is at the centreline of the bed and the top and bottom edges extend from the middle of the patient’s back to the area of the midthigh or knee. Fanfold the uppermost half of the folded drawsheet at the centre or far edge of the bed and tuck in the near edge (see Figure 13-40).
   - Lay the cloth drawsheet over the waterproof sheet in the same manner.
   - Optional: Before moving to the other side of the bed, place the top linens on the bed hemsive up, unfold them, tuck them in, and mitre the bottom corners. Completing one entire side of the bed at a time saves time and energy.

8. Move to the other side and secure the bottom linens.
   - Tuck in the bottom sheet under the head of the mattress, pull the sheet firmly and mitre the corner of the sheet.
   - Pull the remainder of the sheet firmly so that there are no wrinkles. Wrinkles can cause discomfort for the patient. Tuck the sheet in at the side.
   - Complete this same process for the drawsheet(s).

9. Apply or complete the top sheet, blanket and spread.
   - Place the top sheet, hemsise up, on the bed so that its centrefold is at the centre of the bed and the top edge is even with the top edge of the mattress.
   - Unfold the sheet over the bed.
   - Optional: Make a vertical or a horizontal toe pleat in the sheet to provide additional room for the patient’s feet.
     - Vertical toe pleat: Make a fold in the sheet 5-10 cm perpendicular to the foot of the bed (see Figure 13-41).
Horizontal toe pleat: Make a fold in the sheet 5–10 cm across the bed near the foot (see Figure 13-42).

Loosening the top covers around the feet after the patient is in bed is another way to provide additional space.

- Follow the same procedure for the blanket and the spread, but place the top edges about 15 cm from the head of the bed to allow a cuff of sheet to be folded over them.
- Tuck in the sheet, blanket, and spread at the foot of the bed, and mitre the corner, using all three layers of linen. Leave the sides of the top sheet, blanket and spread hanging freely unless toe pleats were provided.
- Fold the top of the top sheet down over the spread, providing a cuff (see Figure 13-43). The cuff of sheet makes it easier for the patient to pull the covers up.
- Move to the other side of the bed and secure the top bedding in the same manner.

10. Put clean pillowcases on the pillows as required.

- Grasp the closed end of the pillowcase at the centre with one hand.
- Gather up the sides of the pillowcase and place them over the hand grasping the case. Then grasp the centre of one short side of the pillow through the pillowcase (see Figure 13-44).

- With the free hand, pull the pillowcase over the pillow.
- Adjust the pillowcase so that the pillow fits into the corners of the case and the seams are straight. A smoothly fitting pillowcase is more comfortable than a wrinkled one.
- Place the pillows appropriately at the head of the bed.

11. Provide for patient comfort and safety.

- Attach the signal cord so that the patient can conveniently use it. Some cords have clamps that attach to the sheet or pillowcase.
- If the bed is currently being used by a patient, either fold back the top covers at one side or fanfold them down to the centre of the bed. This makes it easier for the patient to get into the bed.
- Place the bedside table and the overbed table so that they are available to the patient.
- Leave the bed in the high position if the patient is returning by trolley or place in the low position if the patient is returning to bed after being up.

Variation: surgical bed

While the patient is in the operating theatre, the patient’s bed is prepared for the post-operative phase. In some
MAKING BEDS

clinical areas, the patient is brought back to the ward on a trolley and transferred to the bed in the room. In others, the patient’s bed is brought to the operating department and the patient is transferred there. In the latter situation, the bed needs to be made with clean linens as soon as the patient goes to theatre so that it can be taken to the operating department when needed.

+ Strip the bed.
+ Place and leave the pillows on the bedside chair. Pillows are left on a chair to facilitate transferring the patient into the bed.
+ Apply the bottom linens as for an unoccupied bed.
+ Place the top covers (sheet, blanket and bedspread) on the bed as you would for an unoccupied bed. Do not tuck them in, mitre the corners or make a toe pleat.
+ Make a cuff at the top of the bed as you would for an unoccupied bed. Fold the top linens up from the bottom.
+ On the side of the bed where the patient will be transferred, fold up the two outer corners of the top linens so they meet in the middle of the bed forming a triangle (see Figure 13-45).
+ Pick up the apex of the triangle and fanfold the top linens lengthwise to the other side of the bed to facilitate the patient’s transfer into the bed (see Figure 13-46).
+ Leave the bed in high position with the side rails down. The high position facilitates the transfer of the patient.
+ Lock the wheels of the bed if the bed is not to be moved. Locking the wheels keeps the bed from rolling when the patient is transferred from the trolley to the bed.

Figure 13-45 Fold up the two outer corners of the top linens forming a triangle.

Figure 13-46 Surgical bed. The linens are horizontally fanfolded to the other side of the bed to facilitate transfer of the patient into the bed.

Evaluation

+ Make sure the call light is accessible to the patient.
+ Relate patient parameters of activity (e.g. pulse and respirations) to previous assessment data particularly if the patient has been on bedrest for an extended period of time or it is the first time that the patient is getting out of bed after surgery.

Changing an Occupied Bed

Some patients may be too weak to get out of bed. Either the nature of their illness may contraindicate their sitting out of bed, or they may be restricted in bed by the presence of traction or other therapies. When changing an occupied bed (see Procedure 13-10), the nurse works quickly and disturbs the patient as little as possible to conserve the patient’s energy, using the following guidelines:

+ Maintain the patient in good body alignment. Never move or position a patient in a manner that is contraindicated by the patient’s health. Obtain help to ensure safety.
+ Move the patient gently and smoothly. Rough handling can cause the patient discomfort and abrade the skin.
+ Explain what you plan to do throughout the procedure before you do it. Use terms that the patient can understand.
+ Use the bed-making time, like the bed bath time, to assess and meet the patient’s needs.
CHAPTER 13 HYGIENE

PROCEDURE 13-10 Changing an Occupied Bed

Purposes
- To conserve the patient’s energy and maintain current healthy status
- To promote patient comfort
- To provide a clean, neat environment for the patient
- To provide a smooth, wrinkle-free bed foundation, thus minimizing sources of skin irritation

Assessment
- Note specific precautions for moving and positioning the patient.
- Determine presence of incontinence or excessive drainage from other sources indicating the need for protective waterproof pads.
- Assess skin condition and need for special mattress, footboard, or heel protectors.

Planning

Equipment
- Two flat sheets
- Cloth drawsheet (optional)
- One blanket
- One bedspread
- Waterproof drawsheet or waterproof pads (optional)
- Pillowcase(s) for the head pillow(s)
- Plastic laundry bag or portable linen hamper, if available

Implementation

Performance
1. Explain to the patient what you are going to do, why it is necessary and how they can cooperate.
2. Wash hands and observe other appropriate infection control procedures. Put on disposable gloves if linen is soiled with body fluids.
3. Provide for patient privacy.
4. Remove the top bedding.
   - Remove any equipment attached to the bed linen, such as a signal light.
   - Loosen all the top linen at the foot of the bed, and remove the spread and the blanket.
   - Leave the top sheet over the patient (the top sheet can remain over the patient if it is being changed and if it will provide sufficient warmth).
5. Change the bottom sheet and drawsheet.
   - Assist the patient to turn on the side facing away from the side where the clean linen is.
   - Raise the side rail nearest the patient. This protects the patient from falling. If there is no side rail, have another nurse support the patient at the edge of the bed.
   - Loosen the foundation of the linen on the side of the bed near the linen supply.
   - Fanfold the drawsheet and the bottom sheet at the centre of the bed (see Figure 13-47), as close to the patient as possible. Doing this leaves the near half of the bed free to be changed.
   - Place the new bottom sheet on the bed, and vertically fanfold the half to be used on the far side of the bed as close to the patient as possible (see Figure 13-48). Tuck the sheet under the near half of the bed and mitre the corner if a contour sheet is not being used.

Figure 13-47 Moving soiled linen as close to the patient as possible.
MAKING BEDS

- Place the clean drawsheet on the bed with the centre fold at the centre of the bed. Fanfold the uppermost half vertically at the centre of the bed and tuck the near side edge under the side of the mattress (Figure 13-49).
- Assist the patient to roll over toward you onto the clean side of the bed. The patient rolls over the fanfolded linen at the centre of the bed.
- Move the pillows to the clean side for the patient’s use. Raise the side rail before leaving the side of the bed.
- Move to the other side of the bed and lower the side rail.
- Remove the used linen and place it in the portable hamper.
- Unfold the fanfolded bottom sheet from the centre of the bed.
- Facing the side of the bed, use both hands to pull the bottom sheet so that it is smooth and tuck the excess under the side of the mattress.
- Unfold the drawsheet fanfolded at the centre of the bed and pull it tightly with both hands. Pull the sheet in three sections: (a) face the side of the bed to pull the middle section, (b) face the far top corner to pull the bottom section, and (c) face the far bottom corner to pull the top section.
- Tuck the excess drawsheet under the side of the mattress.

6. Reposition the patient in the centre of the bed.
- Reposition the pillows at the centre of the bed.
- Assist the patient to the centre of the bed. Determine what position the patient requires or prefers and assist the patient to that position.

7. Apply or complete the top bedding.
- Spread the top sheet over the patient and either ask the patient to hold the top edge of the sheet or tuck it under the shoulders.
- Complete the top of the bed.

8. Ensure continued safety of the patient.
- Raise the side rails. Place the bed in the low position before leaving the bedside.
- Attach the signal cord to the bed linen within the patient’s reach.
- Put items used by the patient within easy reach.

Evaluation
- Conduct appropriate follow-up, such as determining patient’s comfort and safety, patency of all drainage tubes and patient’s access to call light to summon help when needed.

CRITICAL REFLECTION

Let us revisit the case study on page 000. Now that you have read this chapter what approaches might you use if you feel that the patient does need her hair shampooed and needs to have her personal care attended to? What advantages do bathing patients and attending to their personal hygiene have for the nurse?
Patients' hygienic practices are influenced by numerous factors including culture, religion, environment, developmental level, health and energy and personal preferences.

The major functions of the skin are to: protect underlying tissues; help regulate body temperature; secrete sebum; transmit sensations through nerve receptors for sensory perception; and produce and absorb vitamin D in conjunction with ultraviolet rays from the sun.

When planning hygiene care, the nurse must take the patient's preferences into consideration.

Nurses provide perineal-genital care for patients who are unable to do so for themselves.

Nurses can often teach patients how to prevent foot problems.

Oral hygiene should include daily dental flossing and mechanical brushing of the teeth.

Regular dental checkups and fluoride supplements are recommended to maintain healthy teeth.

Nurses provide special oral care to patients who are unconscious or debilitated.

Hair care includes daily combing and brushing and regular shampooing.

Nurses may need to assist dependent patients with their artificial eyes, eyeglasses and contact lenses.

Patients with a hearing aid may require nursing assistance with the device.

Changing bed linens is a part of maintaining hygiene.

It is important to keep beds clean and comfortable for patients.