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Subject : Nursing Foundations

(Note : The study material has been composed by our academic cell under the supervision of the Director of the college. The concerned students are hereby advised to study the same thoroughly in addition to their prescribed syllabus , text books/ references and the notes provided by your concerned tutors.)

COMPREHENSIVE NURSING CARE

It is an individual plan of care based upon scientific principles and concepts in the form of understanding on the part of the nurses and the utilization of specialized skills and techniques for the care of the whole patient that is to meeting the physical, psychological, spiritual, social, economical and intellectual needs of the patient.

INTRODUCTION TO SICK AND WELL :

The WHO has defined health but not disease. This is because disease has many shades (spectrum of disease) ranging from unapparent cases to severe manifest illness. Some diseases commence acutely e.g., food poisoning and some insidiously e.g. mental illness, in some diseases, a carrier state occurs in which the individual remains outwardly healthy, and is able to infect others.

The clinicians see people who are ill rather than the diseases which he must diagnose and treat. However, it is possible to be victim of disease without feeling ill, and to be ill without signs of physical impairment. In short, an adequate definition of disease is yet to be found, a definition that is satisfactory and acceptable to the epidemiologist, clinician, socialist and the statistician.

The WHO definition of health introduces the concept of well-being. The question then arises what is meant by well being? Recently, psychologists have pointed out that the well being of an individual or group of individuals have objective and subjective components. The objective component of well- being is referred to as quality of life.

Standard of living: The term standard of living refers to the usual scale of our expenditure, the goods we consume and the services we enjoy. It, includes, level of education, employment, food, dress etc.

Quality of life: it is a composite measure of physical, mental and social well-being as perceived by each individual or by a group of individuals.

BASIC NURSING CARE AND NEEDS OF A PATIENT :

HYGIENIC AND PHYSICAL NEEDS

The word **'Hygiene'** is derived from **Hygeia**, the goddess of health in Greek mythology. Hygiene is the science of health and embraces all factors which contribute to healthful living. The concept of nursing is changing fast. Nursing is not only caring for the sick, but takes care of illness, promotion and maintenance of health. Health promotion and maintenance

enables individuals, families and communities to develop their full health potentials. Its scope goes beyond the prevention and treatment of disease.

A healthy environment – personal and environmental hygiene is crucial for the health and well – being of individuals and communities. Several diseases are due to poor personal hygiene e.g. skin diseases, trachoma, leprosy and conjunctivitis and many more are due to poor environmental hygiene e.g. viral hepatitis, polio, cholera, typhoid etc. These diseases are easily spread in areas without community water supplies. In short much of the ill-health in India and many other developing countries are due to poor sanitation, lack of portable water supplies, sub-standard living conditions. Thus, the key to man's health lies in his personal hygiene and environmental hygiene.

BATH

Bathing is an important intervention to promote hygiene. Choice of method depends on the nurse's judgment as well as the medical plan of care.

TYPES

1. **BED BATH**
2. **BATHROOM BATH**
3. **PARTIAL BATH**

BED BATH:-

The client can have complete bed bath or partial bed bath. In complete bed bath, the whole bodies is bathed out, but in partial bed bath only the areas where the secretions accumulate are cleansed e.g. face, hands, axilla, back and perineum.

Bed bath means bathing a client who is confined to bed and who does not have physical and mental capability to self-bath.

PURPOSES

1. To clean body off dirt and bacteria.
2. To increase elimination through skin.
3. To prevent bed sores.
4. To stimulate secretions.
5. To induce sleep.

GENERAL INSTRUCTIONS FOR GIVING BED BATH

1. Maintain privacy.
2. Explain the procedure to the client to win confidence.
3. Wash hands before and after the procedure.
4. Use clean articles.
5. Clients unit should be at hand.
6. All needed articles should be at hand.
7. A thorough inspection should be done especially at the back to find out early signs of bedsore.
8. Special attention to be given at axilla and groin.

9. The temperature of water should be adjusted for the comfort of the client. The temperature for sponge bath should be 110 degree to 115 degree. For tub bath the temperature should be 90 – 100 degree.
10. Avoid bathing immediately after meals.

NURSES RESPONSIBILITY IN GIVING BED BATH

Preliminary Assessment

1. Check the physicians orders to see the specific precautions if any.
2. Assess the clients need for bath.
3. Assess the client's ability for self care.
4. Check vital signs.
5. Assess client's mental status to follow directions.

PREPARATION OF ARTICLES

a. Bath basin
b. Small bowl
c. Soap with soap dish
d. Wash clothes
e. Bath towels
f. Face towel
g. Bath blanket
h. Nail cutter
i. Nail file

PROCEDURE

1. Wash hands to prevent cross infection.
2. Mix hot and cold water in the basin and check the temperature on the back of hand.
3. Place the towel under chin. Wash rinse and dry the areas in sequence – face, neck, arm, chest, abdomen, back, leg and public region.
4. Take wash cloth, wet it, squeeze the excess water, make a mitten, apply soap on it and clean the face, ears and neck.
5. Take the other wash cloth, rinse it in water, squeeze it, make a mitten and clean the area where soap is applied.
6. Turn the client to a prone position. Wash, rinse and dry the back from shoulder to the buttock with brisk circular motion. Pay particular attention to the pressure areas.
7. Put on the upper garments and cover the client with bath blanket.
8. Replace the client's personal belongings.
9. Change bed linen if necessary.
10. Take all articles to the utility room.
11. Wash hands. Record the procedure with time and date.
12. Take opportunity to teach the client or his relatives about personal hygiene.

CARE OF HAIR

Cleanliness of hair is essential for good hygiene. An unclean scalp containing dirt, dandruff, excessive sebum and sweat will allow the growth of micro-organism and parasites on the scalp.

PURPOSES

1. To keep hair clean and healthy.
2. To promote the growth of hair.
3. To prevent the loss of hair.
4. To prevent tangles.
5. To stimulate circulation.

NURSES RESPONSIBILITY IN DAILY CARE OF HAIR

Hair needs to be brushed in order to be healthy. The hair can be combed in the morning so that the clients can feel refreshed.

ARTICLES

1. Clean towels
2. Clean comb
3. Kidney tray
4. Oil
5. Paper bag

PROCEDURE

1. Check the physicians order.
2. Assess the general condition of the clients.
3. Assess the condition of scalp.
4. Check articles.
5. Separate the hair in small strands.
6. Hold the strands above the part being combed to prevent pulling.
7. Comb the tangles out from the ends first and then go up gradually.
8. Application of oil may help to remove tangles.
9. Discard the loose hair.
10. After combing braid the hair into two to make the client comfortable.
11. Remove the towels and kidney tray.
12. Take articles to utility room.
13. Wash hands.
14. Record observations made.

CARE OF EYES, NOSE AND EARS

The eyes, nose and ears are important organs which require no special care in daily life. Hygienic care of the eyes, ears and nose prevents infection and helps to maintain the functions.

CARE OF EYES

Preliminary Assessment:

1. Check the diagnosis of the client.
2. Check the physicians order to see the specific precautions.
3. Assess the general condition.
4. Check the articles available.

Preparation of the Articles

Articles:

1. Mackintosh and towel.
2. Sterile bowl with cotton swabs.
3. Sterile normal saline.
4. Kidney tray and paper bag.
5. Clean face towel.

Preparation of Client:

1. Explain the procedure to the client.
2. Adjust the bed to the comfortable working of the nurse.
3. Arrange the articles.
4. Protect the pillow and bed with a mackintosh.

PROCEDURE

1. Wash hands.
2. Pour sterile saline into the bowl.
3. Stand in front of the client, clean the eyes with the sterile swabs.
4. Discard the swabs into paper bag.
5. For crushed secretions place a wet warm gauze piece or cotton swab over the closed eye.
6. When the eyes are clean, stop the procedure. Wipe the face with face towel.
7. Instill medication if prescribed.
8. Remove mackintosh.
9. Take all articles to the utility room.
10. Wash hand thoroughly.
11. Record the treatment with date and time.

CARE OF NOSE AND EARS

Excessive accumulation of secretions makes the client sniff or blow the nose. The secretions can become crusted and obstruct the airway.

For clients who cannot remove the secretions, assistance is necessary to clear the congestion and protect the nasal mucosa. External crusted secretions can be removed with a wet wash cloth or a cotton applicator moistened with oil, normal saline or water. Then there is poor hygiene of ears debris may accumulate behind the ear. This can lead to ulceration of the skin.

Warm liquid paraffin or a vegetable oil instilled into the ear can soften the wax which sometimes get accumulated and can be removed easily.

CARE OF PERINEUM

Preliminary Assessment

1. Assess the condition of the perineal skin any itching, irritation, ulcers etc.
2. Assess whether the perineal care should be done under an aseptic technique.
3. Check physician's orders.
4. Assess the client's ability for self care.
5. Check articles available.

ARTICLES

1. Mackintosh
2. Jug with warm water
3. Wet cotton balls
4. Gauze or rag pieces
5. Long artery forceps in the kidney tray.
6. Paper bag
7. Clean linen

PROCEDURE

1. Explain the procedure to the client.
2. Provide privacy by screens and drapes.
3. Remove all the articles that may interfere in the procedure.
4. Wash hands.
5. Pour water over the perineum
6. Clean the perineum using wet swabs.
7. Clean from midline outward in the order:
   - The vulua
   - Labia Minora
   - Labia Majora
8. Turn the client to one side and dry the buttocks with a dry rag piece.
9. Change the linen if necessary.
10. Make client comfortable.
11. Clean all articles.
12. Remove screen.
13. Wash hands.
14. Record the procedure with date and time.

ORAL HYGIENE

Oral hygiene means brushing the client's teeth or cleaning the dentures. Oral hygiene is provided to maintain the integrity of the clients' teeth, gums, mucus membrane and lips.

Preliminary Assessment

1. Check the condition of the oral cavity.

2. Check the ability of the client for self care.
3. Doctors order.
4. Articles available.

Articles

1. Small mackintosh
2. Face towel
3. Small jugs
4. Feeding cup
5. Artery forceps
6. Dissecting forceps
7. Rag piece
8. Kidney tray
9. Paper bag
10. Solutions for mouth wash
11. Tongue depressor
12. Bowl of clean water

PROCEDURE

1. Explain the procedure to the client.
2. Provide privacy.
3. Maintain a safe comfortable position.
4. Place mackintosh across the chest.
5. Remove dentures if any.
6. Arrange articles.
7. Wash hands.
8. Prepare mouth wash.
9. Help client to rinse his mouth.
10. Pick up the toothbrush, wet it with mater, and spread a small quantity of toothpaste on it.
11. Instruct the client to brush all sides of the teeth outer side, inner side and chewing surface.
12. Help the client to massage the gums. Place the thumb and index finger over the ridge of the gum using a press and release motion.
13. Apply glycerin or other emollient on the cracked lips and tongue to keep them soft.
14. Take all articles to the utility room.
15. Wash hands.
16. Record the time and nature of the treatment.

NUTRITIONAL NEEDS

Importance of diet in health and disease: Nutrition is a basic human need that changes throughout the life-cycle and along the wellness illness continuum. Food provides nutrition for the body and mind. Eating is not only a necessity in life, but it may also be a source of pleasure, a pass time, medical treatment because nutrition is vital for life and health and a poor nutrition can seriously decrease one's level of wellness.

Nutrition is the science of food and nutrients and of the process by which an organism takes them in and uses them for producing energy to grow, maintain function and renew itself. A client's nutritional status may be good, fair or poor depending on the intake of dietary essentials. A good nutritional status is essential for normal growth, development and functions of the organs or normal reproduction, for optimal activity and working efficiency for resistance to infection and for repair of injury or damage.

FACTORS AFFECTING NORMAL NUTRITION IN SICKNESS

A person's dietary pattern is usually slow to change because food habits are deeply rooted in the past.

1. **PHYIOLOGIC AND PHYSICAL FACTORS**

Throughout the life cycle, the nutrients needs keep changing in relation to growth, development, activity and age related change in metabolism and body composition. Periods of intense growth such as infancy, adolescence, pregnancy and lactation cause increased nutrient needs.

2. **SOCIO CULTURAL AND PSYCHOLOGICAL FACTORS**

Dietary choices or restrictions are also influenced by culture, religion and personal feelings. Emotional states such as boredom, anger, depression or loneliness, stress can influence the quality and quantity of the food eaten.

3. **RELIGION:** Dietary restrictions associated with religion might affect client's nutritional requirements.
4. **ECONOMICS:** The adequacy of a person's food budget affects dietary choices and patterns.

FACTORS AFFECTING NUTRITIONAL INTAKE

DECREASED FOOD INTAKE

There are various reasons for a decreased food intake.

1. Anorexia
2. Psycho social causes such as fear, anxiety.
3. Impaired inability to smell and taste.
4. Clients who have difficulty in chewing.
5. Clients on inadequate food budget.

DECREASED FOOD INTAKE

This may lead to obesity. Obesity increases the risk for numerous medical problems.

DIET IN SICKNESS

Diet is as important as medicine in the treatment of diseases. A modification in the diet or in the nutrients can cure certain diseases. When the person is ill, the food intake becomes a problem. The nurse's responsibility in the care of the sick in regard to nutrition can be analyzed into four major areas:

1. Assisting the clients to obtain needed nourishment either through feeding or assisting with eating e.g. tube feeding.
2. Motivating client to eat.

3. Assisting clients to obtain needed nourishment by proper planning of the diet.
4. Assisting clients with special problems about therapeutic diets e.g. helping a client to accept a salt free diet.

GENERAL INSTRUCTIONS FOR A NURSE IN FOOD SERVICE:

1. The diet of every client in the hospital should be planned according to his need, metabolic changes.
2. Nurse should report the quantity of food that is left in the tray.
3. Create a pleasant environment for the client.
4. Meals should be served in clean and covered containers.
5. The client should be encouraged to take a variety of foods.

FEEDING HELPLESS CLIENT

NURSES ROLE

PRELIMINARY ASSESSMENT

1. Check the physicians order for any specific precautions.
2. Plan the diet according to the need of the client his likes and dislikes.
3. Ensure that the ordered diet is prepared properly and safely.

ARTICLES

1. Mackintosh and towel.
2. Full plate, quarter plate, cup saucer
3. Feeding cup.
4. Spoon, fork.
5. A glass of water.
6. Napkin.
7. Feeding cup with water and kidney tray.

PROCEDURE

1. Wash hands.
2. Sit by the bedside, usually at the right side of the client, facing his head so that the nurse and the client can see each other.
3. Feed the client slowly, in small amounts, waiting for him to chew and swallow one mouthful before giving the next.
4. Give the foods in the order in which they would normally be eaten by the client.
5. Talk pleasantly to the client.
6. When the client has eaten the food in sufficient amount and to his satisfaction then stops feeding and offer a glass of water.
7. Help the client to wash his mouth, face and hands.
8. Take all articles and the food tray to the utility room.
9. Wash hands.
10. Record in the nurses record the amount of the food, if vomiting has taken place.

ELIMINATION NEEDS

The elimination of waste from the bowel and bladder is an essential body function. The major nursing responsibilities associated with bowel and bladder elimination include, assessing the bowel and bladder function, promoting normal bowel and bladder, health and management of altered bowel and bladder functions.

CONSTIPATION

Constipation occurs when stool anoues through the large intestines too slowly or remains in the large intestines for too long. Constipation is referred to the person's normal defecation pattern and involves a change in stool consistency and a change in defecation frequency.

CAUSES

1. Inadequate, irregular diet.
2. Insufficient fluid intake.
3. Insufficient intake of roughage.
4. Lack of exercise and prolonged rest.
5. Emotional upset.
6. Surgery involving the intestines and rectum.

PREVENTION AND MANAGEMENT

Health Teaching

Any person suffering from constipation must understand the physiology of defecation and the factors affecting the defecation.

Adequate Intake of Diet

If the dietary intake is too little, it may met stimulate the peristalsis.

Adequate intake of roughage in Diet

Foods containing high fibrous content should be included in the diet such as raw and cooked vegetables, raw and cooked fruits, whole grain cereals etc. The quantity and quality of breakfast is more important to prevent constipation.

Establishing a habit pattern

Usually the defecation reflex is found immediately after a full breakfast. So the person should find time to sit on the toilet immediately after the breakfast.

Relaxation

Have an environment conducive to relaxation because tension, anger, worry, hurry etc interfere with the defecation reflex.

PRIVACY

All persons need privacy for the defecation.

EXERCISE

Any activity that improves the muscle tone of the abdominal and perineal muscles should be encouraged.

Adequate amount of fluid intake

Normally, an individual should take 2000 to 3000ml of fluid in 24 hours.

DIARRHOEA

Diarrhea is manifested by frequent evacuation of watery stools. Due to increased gastro intestinal motility, there is rapid passage of fecal content through lower gastro intestinal tract. Along with the high water content, diarrheal stools also may contain mucus which contributes to increased volume. Color of stools can vary from light brown to yellow to green. Besides intense urge to defecate, there may be abdominal cramps, nausea and painful burning sensation at the anus.

CAUSES

Intestinal infection (Enteritis)

Diarrhea is caused by mucosal damage by the organisms or their toxins e.g. salmonellosis, ulcerative colitis.

NERVOUS TENSION

This type of emotional or psychogenic diarrhea results from excessive stimulation of the Para sympathetic nervous system.

DIETARY INDISCRETIONS

Individuals vary in their tolerances in some foods and fluids. Some people may have allergies to certain foods and respond with diarrhea to the allergens.

MECHANICAL CAUSES

Incomplete obstruction of the bowel may be caused by stenosis, adhesions and tumors etc.

NURSING CARE IN DIARRHOEA

1. **REPLACEMENT OF FLUID AND ELECTROLYTES:** The fluid lost from the body should be replaced immediately to prevent shock and collapse of the client. When oral fluids are tolerated by the client, the fluids may be given in plenty orally. If there is marked dehydration, the fluids are given by the I.V. route.
2. **SMALL FREQUENT FEEDINGS**: Small frequent feedings of blend food may be helpful to meet the nutritional requirements of the client. Avoid foods containing chilies, spices, excessively hot and cold foods etc because they stimulate peristalsis.
3. **CARE OF SKIN:** Skin excoriation around the anal region can be prevented by proper cleaning and drying of the area after each defecation.
4. **ADEQUATE REST:** Reducing the physical activity is helpful in lessening the bowel activity.
5. **PSYCHOLOGICAL SUPPORT**: If the cause of diarrhea is sustained anxiety, the client should be reassured.
6. **MEDICATIONS:** The usual medications which are administered to the clients with diarrhea are anti diarrhetics, demulcents, astringents, intestinal antiseptics and antispasmodics.

RETENTION OF URINE

The act of micturation can be affected by several factors. The act of micturation is influenced by our mental state, toilet, training experience of the childhood, personal habits, fluids intake etc.

Retention of urine means that the urine is retained in the bladder. Urine production continues but the accumulated urine is not released from the bladder. The possible causes of retention of urine are:

1. Urethral obstruction by enlarged prostate gland, stricture of the urethra etc.
2. Decreased stimulation of the muscle bladder.
3. A lack of muscle tone and muscle spasm can lead to retention of urine.
4. Pressure on the bladder by fecal impaction, fetus in utero pelvic tumors etc.
5. Poor intake of fluids.
6. Surgery and trauma on the urinary structures may interfere with micturation.
7. Change in the living patterns can lead to retention of urine.
8. Some medications such as analgesics and tranquilize, which suppress the central nervous system will also interfere with micturation by diminishing the effectiveness of the neural reflex.

PREVENTION AND TREATMENT OF RETENTION

1. Assist the client to his or her normal position for voiding.
2. Provide privacy. Even children may be accustomed to privacy and may unable to avoid in the presence of another person.
3. Offer a bedpan or urinal that is warm.
4. Foster the muscles relaxation by providing necessary physical support to the client and by relieving pain.
5. Local application of heat to the perineum and lower abdomen by pouring warm water or by the application of the hot water bottles or by a sitz bath can foster muscle relaxation.
6. Reassurance and emotional support are helpful to relax the client.
7. A hot enema, if permitted, may relieve the retention of the urine.
8. Give fluids freely unless contraindicated.

When all these nursing measures are failing, catheterization of the bladder is done with the doctors permission.

INCONTINENCE OF URINE

Urinary incontinence is the inability of urinary sphincters to control the passage of the urine from the bladder.

Incontinence can be caused by anything that interferes with the sphincter control. The following are some of the causes for urinary incontinence.

1. Sphincter damage
2. Weak perineal muscles
3. Tumors
4. Urinary tract infections
5. Fecal impaction
6. Neurological complications
7. Paralysis of the body

8. Unconsciousness

The specific kinds of incontinence are **"stress incontinence"** and **"urge incontinence".** Stress incontinence is due to interference with the functioning of the neck of the bladder seen in any kind physical stress such as coughing, sneezing, causing dribbling of urine.

A number of measures can be employed to help reduce the problem of incontinence.

1. Establish a regular voiding schedule for the client e.g. every 2 hours whether he or she feels the urge or not.
2. Increase the physical activity this will improve the muscle tone.
3. Perineal exercise, increase the tone of muscles concerned with the micturation in particular.
4. Medical and surgical correction of the causative factors e.g. treatment of the treatment of the urinary tract infections, correction of the anatomic problem.
5. **Bladder Training Programme:** The fluid intake is to be maintained between 2000-3000ml/day. An exercise programme is started to strengthen the involved muscles. The client is placed on the commode or toilet every 1-2 hours depending on the frequency of micturation.
6. **Condom Drainage:** A male client with incontinence of urine can be safely managed with condom drainage. In condom drainage, a condom is attached to a piece of plastic drainage tube, and is inserted over the penis. The tube is connected to a drainage bag.

ACTIVITY AND EXERCISE

It is a common knowledge that when a machine is not used, it becomes rusty. If the human body is not used, it can very easily begin to waste away because of the routine nature of daily work, only some parts of the body or groups of muscles are used more than the others. If the brain is used alone, as is common among intellectuals, the body suffers and vice-versa. The aim of exercise is to promote harmonious development of the whole body. Exercise is the basis of physical fitness, it;

1. Tones up the muscles.
2. Improves blood and lymph circulation.
3. Improves the strength of heart.
4. Ventilates the lungs.
5. Stimulates hunger.
6. Promotes excretion of body wastes via; kidney and skin.
7. Speeds up burning of glucose in body.
8. Sharpens muscular and mental coordination.
9. Facilitates relaxation and sleep.
10. Provides an outlet for emotional tensions.

There are many kinds of exercises both indoor and outdoor. A broad classification of the various types of exercises.

EXERCISES

1. **PASSIVE** **2. ACTIVE**

Active Exercises are:-

1. STRENGTH
2. SPEED
3. DEXTERITY
4. ENDURANCE

Endurance includes:-

1. YOGA
2. RECREARTIONAL

The type of exercise will depend upon the age and physical condition of the person. A young person can indulge in vigorous exercise. After the age of 30 it is not wise to indulge in vigorous exercise. For the elderly, morning and evening walks on level ground are the safest and easiest form of exercise.

Yoga is a type of exercise. India is well known for many types of yogic practicians (physical postures), pranayamas (regulated breathing) and kriyas (cleaning processes).

ACTIVE EXERCISES

Active exercises are the type of physical activity accomplished by the clients without assistance. These exercises help the clients to attain normal physiological functions of the body. Some of the active forms of exercises that can be done by the clients on bed are:

1. Deep breathing and coughing exercise for lung expansion.
2. Exercise of limbs through full ranges of motion which include flexion, extension, adduction, abduction and rotation.
3. Moving in bed to change the position.
4. Foot exercise to prevent foot drop and toe deformities.

The ambulatory clients can have both indoor and outdoor exercises. Some of the points to be kept in mind during the exercises are:

1. Exercise should be planned according to the age, sex and physical condition.
2. Check for the doctor's orders for any specific precautions.
3. Avoid over fatigue.
4. Exercise should not be done immediately after a meal.
5. The room should be well ventilated.

PASSIVE EXERCISE

In passive exercise the movement or activity is carried out by another person and the client makes no voluntary effort to assist or resist the action.

The passive exercises are usually carried out by the physiotherapist or the nurse. The performance of certain nursing procedures such as bathing the client, giving back care and changing the position provides some passive exercise for the client. Passive exercises are usually useful for clients with restricted movements, deformities and unconsciousness.

COMFORT MEASURES

Meaning: - Comfort is a state of freedom from pain, discomfort, tension, anxiety. Comfort is concerned with rest, with exercise, with the relation of one part of the body to another, with the bed and the whole environment, with relationship to other human beings, and with the attitude toward oneself and one's own condition and with the state of one's soul. Comfort is a phase of every procedure, it is an aspect of the total care of the patient.

Therapeutic positions are used to promote comfort of the client, proper turning and positioning allows the health care provide to make clients as comfortable as possible prevent contractures and pressure sores, and facilitates diagnostic tests.

COMFORT DEVICES:

1. **Pillows –** Pillows are used to give comfortable position.
2. **Bed Blocks –** Bed block are made up of wood. Size is **"9 to 12".** These are also used to prevent shock, to arrest hemorrhage, to retain enema, after giving spinal anesthesia and after tonsillectomy.
3. **Foot Rest**: It is used to give rest to the feet. It helps to maintain the normal position of the feet i.e. at right angles to the leg.
4. **Bed Cradles**: Bed cradles are of wooden, metal or electric. The bed cradles support and take off the weight of the top bedding. It is used to prevent top cloth coming in contact with the patient, in burn cases, drying plaster.
5. **Sand bags:** Sand bags are used to immobilize the part as in fracture cases and to relieve discomfort. It is also used to give support to any part of the body.
6. **Rubber and Cotton Rings:** These are used to relieve pressure on certain parts of the body e.g. elbow.
7. **Air Cushion**: Air cushions are round in shape and made up of rubber. It can be inflated with air. It is used to relieve pressure on certain parts of the body.

BODY MECHANICS

Body mechanics is defined as using alignment, posture and balance in a coordinated effort to perform activities such as lifting, bending and moving.

Body mechanics is using the body in an efficient and careful way. It involves use of good posture, balance among the strongest and largest muscles of the body to perform work. Body mechanics is the term used when referring to lifting techniques. It involves pushing, stooping, carrying and lifting correctly.

Correct body mechanics are essential and help to avoid work related musculoskeletal injuries diminished excessive strain and fatigue.

Posture or body alignment is the way in which the body parts are aligned with one another. Posture is defined as the position in which the various parts of the body are held when sitting, standing, walking and lying down.

Principles of Body mechanics

1. Proper balancing of all body parts helps to conserve energy.
2. Stability of the body is maintained by having a greater base of support.
3. Injury and strain on the lower back can be avoided by performing pelvic tilt before activity.
4. Facing the direction of work will help to avoid the chances of injury.
5. Initiating movement requires more energy than maintaining the movement of an object.
6. Moving an object on a level surface requires less effort.

NURSES RESPONSIBILITY IN MOVING CLIENTS

Preliminary Assessment

1. Check the diagnosis and the specific precautions regarding the movement of the client.
2. Check the level of consciousness.
3. Check the ability for self care.
4. Abilities and limitations such as paralysis.
5. Articles required.
6. Provide privacy.
7. Explain procedure to the client.
8. Clamp the catheter to prevent back flow of urine during the transfer.
9. Three nurses position themselves at the bedside along the same side.
10. The nurses place their arms on bed sliding them under the client's head, shoulders, chest, hips and legs.
11. Leader gives the signal by counting 1, 2, 3. At the count of '3', move the client to the side of the bed using a right angle (90) pull maneuver.

MOVING A HELPLESS CLIENT UP IN BED

1. Follow the steps of the procedure as above. At the count of '3' move the client to the side of the bed but towards the head end of the bed using a diagonal pull maneuver.
2. Raise the side rail next to the client and go to the opposite side. Repeat the diagonal pull of the body as prescribed above.
3. Pull the client to the edge of the bed on alternate sides of the bed until the desired height in bed is reached.
4. Slide client to the centre of the bed and put the body in correct alignment.

TURNING A CLIENT TO ONE SIDE OF THE BED

1. Before turning the client, the nurse should move him to the same side of the bed, so that he is slightly off the centre of the mattress. To move the client to the side of the bed, follow the procedure as described above.
2. Keep the farthest am along the side of the head and face, the near arm across the chest and the near leg flexed over the farthest leg.
3. Place the arms under the shoulders and hips and roll him gently away from her.
4. Make the client comfortable by placing pillows as in a side lying position.

TRANSFERRING A HELPLESS CLIENT FROM BED TO SHELTER

1. Position the stretcher at right angle to head or foot of the bed.
2. Call helpers and position them at the bed side along the same side of the bed.
3. Move the client to the edge of the bed.
4. At the count of '1' the nurses slide their arms under the client to support the body sections of the client.
5. At the count of '2' the nurses stand with the back erect, holding the client near to their body as possible.
6. On the count of '3' the nurses take one step backward and pivot on their heels towards the stretcher.
7. At the count of '4' move to the side of the stretcher and stand with a wide base and flexed knees ready to lower the client into the stretcher.
8. At the count of '5' the nurses lower the client to the stretcher in a back lying position.

DECUBITUS ULCER OR PRESSURE SORE

Decubitus ulcers, also known as pressure sores or decubiti, are ulcerated or sloughed area of tissue subjected to pressure from lying on mattress or sitting on a chair for a prolonged period of time resulting in the slowing of circulation and finally death (necrosis) of tissue.

COMMON SITES

Pressure points are those that bear weight, so that the skin over them is subject to pressure. This may happen more frequently over the bony prominences of the body where there is no rich blood supply or nourishment and also there is a thin layer of skin.

The pressure points in the supine position are back of the head (occiput), scapula, sacral region, elbow, heels.

CAUSES

DIRECT CAUSES

1. Pressure is considered to be primary cause of the pressure sore.
2. **Friction:** Friction of the skin with a rough or hard surface can cause tissue damage. Wrinkles on the bed clothes, hard surfaces of the plaster casts and splints on the bed.
3. **Moisture**: The skin contact with moisture for a period of time can lead to maceration of the skin.
4. Presence of pathogens. Lack of cleanliness harbors pathogens on the skin.

CLIENTS SUSCEPTIBLE TO PRESSURE SORES

1. Acutely ill clients.
2. Elderly bed ridden clients.
3. Obese clients.
4. Very thin clients.
5. Sedated clients
6. Paralyzed clients
7. Surgical clients
8. Diabetic clients

PREVENTION OF PRESSURE SORE

1. Identification of clients who are particularly prone to the development of ulcer.
2. Daily examination of the Decubitus-prone clients for redness, discoloration on the pressure points.
3. Keep the client clean and dry.
4. Change the position of client every 2 hours so that another body surface bears weight.
5. Keep the clients skin well lubricated to prevent cracking by using powder.
6. Provide clients adequate fluids and with a nourishing diet.
7. Call assistance and lift the client before giving and taking bedpans.
8. Provide a smooth, firm and wrinkle free bed on which the client can take rest.
9. Use special mattresses and beds to decrease the pressure on body parts.
10. Teach the client the hygienic care of skin.

SIGNS AND SYMPTOMS

The early symptoms of pressure sore are redness, tenderness, discomfort and smarting. The area becomes cold to touch and insensitive. There is a local oedema.

TREATMENT OF PRESSURE SORE

1. Report to the sister in charge and the physician, the early symptoms of a bedsore so that steps may be taken as early as possible to prevent further damage.
2. Prevent the ulcerated area from becoming infected.
3. A cleansing agent is used to clean the ulcerated area e.g. normal saline
4. Application of a few drops of insulin draped from a syringe has a healing effect on the wound.
5. Application of water proof ointment e.g. zinc oxide on the surface of the wound will prevent infection of the underlying tissues.
6. If slough is present, clean the area thoroughly twice a day with hydrogen peroxide diluted with distilled water.
7. If infection is settled, it may be necessary to give some of the antibodies prescribed by the physician.

ENEMA

An enema (plural-enemas) is an introduction of fluid into the lower-bowel through the rectum for the purpose of cleansing or to introduce medication or nourishment.

PURPOSE

1. To stimulate defecation and to treat constipation.
2. To soften hard fecal matter e.g. oil enema.
3. To administer medications e.g. sedative enema.
4. To protect and soothe the mucus membrane of the intestine e.g. emollient enema.
5. To destroy intestinal parasites e.g. Anthelmintic enema.
6. To relieve inflammation e.g. astringent enema.
7. To relive gaseous distension e.g. carminative enema.
8. To reduce temperature e.g. cold enema.
9. To make diagnosis e.g. Barium enema.
10. To induce anesthesia e.g. anesthetic enema.

CLASSIFICATION

1. **EVACUANT ENEMA**
   - Simple enema
   - Medicated enema
   - Cold enema

2. RETAINED ENEMA

MEDICATED ENEMA INCLUDES:-

- Oil enema
- Purgative enema
- Astringent enema
- Anthelmintic enema
- Carminative enema

2. **RETAINED ENEMA**
   - Stimulant enema
   - Nutrient enema
   - Emollient enema
   - Sedative enema
   - Anesthetic enema

SIMPLE EVACUANT ENEMA

PURPOSE

- To stimulate defecation and to treat constipation.
- To relieve gaseous distension by stimulating the peristalsis.
- To stimulate uterine contractions and to hasten the child birth.

SOLUTIONS USED

- **SOAP AND WATER**: Soap jelly 50 ml to 1ml of water.
- **NORMAL SALINE**: Sodium chloride 1 teaspoon to half litre of water.
- **TAP WATER**: Amount of solutions to be used.

Adult: 500 to 1000ml

Children: 250 to 500ml

Infant: 250 ml or less.

Temperature of the Solution

Adult: 105 to 110 F

Children: 100 F

- **OIL ENEMA:** These are given to soften fecal matter in case of severe constipation, before the first bowel movement after operations on the rectum and perineum, to avoid straining and injury to the sutures and wounds. It should be retained for half an hour to 1 hour to soften the feces.
- **RETENTION ENEMA**:
  Stimulant enema: A stimulant enema is given in the treatment of shock and collapse e.g. coffee enema is given in cases of opium poisoning.

SOLUTION USED:

Black Coffee: One tablespoon coffee powder to 300ml of water.

Brandy: 15ml of brandy added to 120-180ml of glucose saline.

Amount of solution: 180-240ml

Temperature of Solution: 108 to 110 F

- **SEDATIVE ENEMA:** It is a retention enema containing a sedative drug given to induce sleep.

Drugs Used:

Paraldehyde

Chloral hydrate

Potassium bromide

- **ANESTHETIC ENEMA:** It is a retention enema containing an anesthetic drug to produce anesthesia in the client.

Drugs used: Avertin 150 to 300mg/kg.

- **EMOLIENT ENEMA:** This is the introduction of bland solution into the rectum for the purpose of checking diarrhea or soothing and relieving irritation on an inflamed mucus membrane.

Solutions Used: Starch and opium.

- **NUTRIENT ENEMA: -** It is a retention enema to supply food and fluids of the body. It is used in conditions like hemophilia which makes I.V. infusion difficult or undesirable.

Solutions Used:

- Normal saline
- Glucose saline 2-5%
- Peptonized milk – 120ml

Temperature: 100 degree Fahrenheit

PROCEDURE

1. Check the diagnosis.
2. Check the date of surgery.
3. Check the consciousness.
4. Check the nature of enema ordered.
5. Articles available in the unit.

ARTICLES: Tray Containing:

- Enema can
- Tubing
- Screw clamp
- Rectal tube
- Mackintosh and towel
- Water soluble jelly

- Rag pieces
- Hot and cold water
- Soap jelly
- Ounce glass
- Paper bag
- Specimen bottle
- Bed pan
- Clean linen
- Toilet tray
- I. V. stand

PROCESS:

1. Explain the procedure to the client to win his/her confidence.
2. Provide privacy with curtains.
3. Place client in left lateral position with buttocks close to the edge of the bed.
4. Keep all articles arranged.
5. Adjust I.V. pole to hold the enema can.
6. Wash hands.
7. Attach tubing to the enema can and clamp the tube.
8. Prepare the solution at the required temperature. Add 30ml of soap jelly to 600ml of water. Test the temperature of the solution.
9. Hang the can with solution on the stand and adjust the height at 45cm from anus.
10. Attach rectal tube to the tubing. Loosen the screw clamp and let a small amount of fluid to run into the kidney tray.
11. Lubricate the tip of the rectal tube about 2-4 inches from the tip.
12. Separate the client's buttock to visualize the anus clearly and insert 8-10cm gently.
13. Hold the enema tube in place while releasing the pressure on the tube and let the fluid run in.
14. Continue the fluid administration to give about 500 to 1000ml of solution. Stop the procedure if the client develops discomfort.
15. Clamp the tubing. Gently remove the rectal tube by pulling it through 3-4 layers of rag pieces.
16. Discard the rag pieces in the paper bag. Detach the rectal tube and place it in the kidney tray.
17. Encourage the client to retain fluid for 10-15 minutes.
18. Turn the client on the back and assist him/her into toilet.
19. Observe enema results.
20. Take all articles to utility room.
21. Wash hands.
22. Record the type of enema, the result etc.

SUPPOSITORIES

Suppositories are solid, cone shaped or oval shaped masses that melt at body temperature. There are several varieties of suppositories available e.g. glycerin suppositories, dulcolax suppositories. Before introducing suppositories, explain the procedure to the client. The client is placed in a comfortable position, usually left lateral. Suppositoritory is removed from its package and held in the right hand between the two fingers. Separating the buttocks with the left hand insert

the suppositories into the anus. Once it has passed the external sphincter, advance it beyond the internal sphincter, pushing it with the index finger, otherwise the suppository will be expelled from the anal canal. The nurse should make sure that the suppository is positioned to the side of the rectum against the mucosa, rather than in the fecal matter, because the intended action of the medication is on the intestinal wall.

INSERTION OF FLATUS TUBE

A rectal tube inserted into the rectum relieves the flatulence and gaseous distension of the abdomen. Prepare the client as for an enema. Place the client in a comfortable position. Lubricate the flatus tube and introduce 4 to 6 inches into the anal canal while the free end of the tube being kept under the water in the kidney tray. Watch for the expulsion of the gas which is seen bubbling through the water. The tube is left in place for not more than 20 minutes, longer periods of insertion can lead to permanent sphincter damage.

CARE OF PERINEUM

Perineal hygiene involves cleaning the external genitalia and surrounding area. The most pertinent principle for the perineal care is to clean the perineum from the cleanest to the less clean area.

NURSING RESPONSIBILITY IN THE PERINEAL CARE

Preliminary Assessment

1. Assess the condition of the perineal skin any itching, irritation, ulcers.
2. Assess the need and frequency.
3. Check the articles available.
4. Articles Required:

A tray containing

- Mackintosh
- A jug with warm water
- Wet cotton balls
- Gauze
- Long Artery forceps
- Paper bag
- Clean linen
- Bed pan

PROCEDURE

1. Explain the procedure to the client.
2. Provide privacy by screens.
3. Remove all articles that may interfere with the procedure.
4. Wash hands.
5. Pour water over the perineum.
6. Clean the perineum using wet swab.

COLD APPLICATION

Cold application is the application of a cold agent cooler than skin either in a moist or dry form, on the surface of the skin, to reduce pain and body temperature, to anesthetize an area, to check hemorrhage, to control the growth of bacteria, to prevent gangrene, to prevent oedema and reduce inflammation.

Cold Application: is of two types

1. Local
2. General

1. **Local is further divided into:** Dry cold and Moist cold.

Dry cold includes: Ice bag, ice pack, ice cradle.

Moist cold includes: ice to suck, cold compress, evaporating lotion.

2. **General is further divided into:** Dry cold and Moist cold.

Dry cold includes: Hypothermia

Moist cold includes: Cold sponge, cold bath, cold packs.

Therapeutic uses of local cold applications:

1. Cold relieves pain
2. Prevents gangrene
3. Prevents oedema
4. Controls hemorrhage
5. Checks the growth of bacteria

ICE BAG

An ice bag is a dry cold application. The bag is filled with crushed ice or ice chips and sprinkled sodium chloride. The salt covers the melting point and prevents the ice from melting.

Articles Required:

- Ice bag
- Crushed ice
- Flannel cover
- Sodium chloride
- Paper towels

PROCEDURE:

1. Explain the procedure to the client.
2. Fill the ice bag with water, put the stopper, and turn the bag upside down for leakage.
3. Empty the bag.

4. Fill the bag half to two-third with crushed ice.
5. Sprinkle sodium chloride.
6. Keep the bag on a flat surface and squeeze the air.
7. Screw the cap tightly.
8. Place the bag in the flannel cover.
9. Apply it on the ordered area.
10. The bag is applied on 30 min.
11. Make sure client is comfortable.
12. Wash hands.
13. Document the care-given time, site, skin etc.

COLD PACKS

Commercially prepared ice packs are available. These bags are sealed containers filled with chemical or non toxic substance. Depending on the type, the bags are frozen in the freezer or squeezed to activate the chemical that produces the cold. These packs have the advantage that frozen solution remains pliable and can be easily moulded to fit the body part.

Non commercially, the pack can be a washcloth, towel, flannel or a piece of old line depending on the size of the body part receiving the application. A basin of cold water is prepared and the packs are immersed into it.

HOT APPLICATIONS

Hot application is the application of a hot agent, warmer than skin either in a moist or dry form on the surface of the body to relieve pain and congestion, to provide warmth, to promote suppuration, to promote healing, to decrease muscle tone and to soften the exudates.

HOT APPLICATIONS

Hot application is of two types:

1. Local
2. General

1. Local is further divided into dry and moist heat.

Dry heat includes:

- Hot water bottles
- Chemical heating
- Infra red rays
- Ultra violet rays
- Short wave
- Heating lamps
- Electric cradles

Moist heat includes:

- Warm soaks
- Hot fomentations
- Poultices
- Stupes
- Sitz bath

2. General is further divided into dry and moist heat.

Dry heat includes:

- Sun bath
- Electric cradles
- Blanket bed

Moist heat includes:

- Steam baths
- Hot packs

Therapeutic uses of Hot Applications:

1. Heat decreases pain.
2. Heat decreases muscle tone.
3. Heat promotes healing.
4. Heat relieves deep congestion.
5. Heat provides warmth.

APPLICATION OF HOT WATER BOTTLE

Preliminary Assessment:

1. Check the diagnosis.
2. Assess the type of application to be used.
3. Inspect the body part that is to receive the treatment for any lesions.
4. Check the articles available.
5. Articles required:

A tray contained:

- Hot water bag
- Jug
- Duster
- Towel
- Vaseline
- Lotion thermometer

6. Provide privacy.
7. Wash hands.
8. Take hot water in the jug. Pour some water into the hot water bottle and empty it.

9. Check the temperature of water.
10. Fill one third to half of the bottle with the hot water.
11. Place the bag over a flat surface and expel the air.
12. Apply the hot water bottle over the area and cover it with the towel or sheet.
13. Keeps the bottle in place for about 20-30 min. changing the position of the bag.
14. Remove the hot water when completed.
15. Dry the area.
16. Position the client comfortably.
17. Take all articles to the utility room.
18. Wash hands.
19. Record the procedure with date and time.

FOMENTATIONS (MOIST HEAT)

Fomentations are moist applications of heat over an area by means of double thickness of flannel or other soft material wring out from hot water, protected by a waterproof covering, wool and bandage.

TYPES

1. Simple fomentations
2. Medical fomentations
3. Surgical fomentations

PURPOSES

1. To relieve pain and congestion
2. To relieve inflammation
3. To relive retention of urine
4. To promote suppuration
5. To stimulate peristalsis
6. To relieve muscular spasm
7. To relieve congestion

PROCEDURE

1. Identify the client.
2. Check the diagnosis.
3. Check the articles.
4. Kettle with boiling water is required.
5. Articles required:

Try Contained:

- Cotton balls
- Forceps
- Olive oil
- Paper bag

- Kidney tray
- Lint or flannel pieces

6. Provide privacy.
7. Wash hands.
8. Prepare the hot compresses either at the bedside or in the treatment room from where it can be taken to the client without any delay.
9. Place the fomentation pads in the wringer and keep it inside the basin with the free ends outside.
10. Pour boiling water over the pad and wring out the pad as dry as possible.
11. Keep it in the heated plates.
12. Open the wringer, take out the pad, and shake it well for the steam to escape from the compress.
13. Test the temperature by applying it on the back of your hand.
14. Apply the compress over the area.
15. Secure the dressings with a many tailed bandage or abdominal binder.
16. Place the hot water bag just above the bandages.

MEDICAL FOMENTATIONS

Stupes are moist heat applications, in which a medicine (e.g. turpentine) is applied locally to augment the effects of the hot compresses used. Stupes are commonly used to relieve tympanites by increasing the peristalsis and relaxing the muscle spasm.

Articles needed will be same as that of hot fomentations. After the application of stupes, it will be necessary to insert a flatus tube to expel the flatus. The drugs, used are: Turpentine, well mixed with olive oil (6 parts).

To apply the turpentine stupe: Take the turpentine and the olive oil in the correct proportion, mix them well and warm it by keeping the container in a bowl of hot water. Apply the warm oil mixture over the part, apply the hot compresses and follow the procedure as in hot compresses. After 10-15 minutes insert the flatus tube and watch for expulsion of the fetus

BASIC NEEDS AND CARE

- Care of patient with fever

1. **Regulation of body temperature:** Care of the clients in fevers focuses on reducing the elevated body temperature. When a client's temperature is moderately elevated various methods of reducing the temperature may be started. The room should be maintained at a comfortable temperature. The room should be well ventilated. The blankets and excess clothing should be removed but prevent the client from getting droughts. The various methods used for cooling the body are:

- Exposure to cool by an electric fan.
- Administration of cool drinks.
- Application of cold compress.
- Cold bath.

When surface cooling is used, treatment is directed at not only cooling the body but also for preventing shivering. Shivering must be prevented because it increases metabolic activity, produces heat, increases the oxygen usage markedly, increases circulation, and may cause hyperventilation.

2. **Meeting the Nutritional need:** The cellular metabolism is greatly increased during fever. Therefore, a high caloric diet is indicated in fevers.
3. **Providing Rest and Sleep:** All clients having fever should be asked to take complete bed rest. To ensure rest and sleep, provide a unit which is calm and quiet.
4. **Maintenance of personal hygiene:** Care of mouth is very essential for client's having fever for many days. Sponge bath is given daily to keep the client clean.
5. **Safety factors:** Never leave a client with fever alone. Surface cooling should be done gradually. Sudden cooling can lead to serious side effects such as cardiac arrhythmias.

CARE OF UNCONSCIOUS PATIENT

Introduction: Consciousness is a state of being wakeful and aware of self, environment and time. Unconsciousness can be brief, lasting for few seconds to an hour or so, or sustained lasting for hours to longer. Unconsciousness can be produced by a disorder that disrupts the ascending reticular activating system (RAS).

Coma is a state of sustained unconsciousness in which the client does not respond to verbal stimuli, does not move voluntarily, does not blink, may have altered respiratory patterns.

Nursing diagnosis according to priority:

1. Ineffective airway clearance related to upper airway obstruction by tongue and soft tissues, inability to clear respiratory secretions as evidenced by unclear lung sounds, unequal lung expansion.
2. Ineffective cerebral tissue perfusion related to effects of increased ICP (Increased Cranial Pressure) as evidenced by papilledema, vomiting.
3. Risk for injury related to unconscious state.

NURSING CARE PLAN

1. **Diagnosis 1:**
   a. Assess respiratory rate pattern, lung sounds lung expansion, signs of tissue hypoxia, cyanosis.
   b. Elevate head of bed to 30 or place client in lateral or semi-prone position.
   c. Insert oral airway if tongue to paralyzed or in obstructing the airway.
2. **Diagnosis 2:**
   a. Assess signs of increased intra-cranial pressure, cerebral oedema.
   b. Maintained the head elevated to 30 degree.
   c. Administer low flow oxygen.
   d. Maintain a patent airway.
   e. Administer osmotic diuretics e.g. Mannitol, corticosteroids.
3. **Diagnosis 3:**
   a. Assess risk factors for injury-lack of side rails, seizures, loss of corneal blink reflect.
   b. Keep side rails up and bed in lowest position whenever client is not receiving direct care.
   c. Keep clients nails short.
   d. Administer prescribed seizure drugs.
   e. Always turn the client toward nurse to prevent fall.

CARE OF TERMINALLY ILL OR DYING PERSON

1. **PSYCHOLOGICAL SUPPORT:** There are five psychological stages that dying persons pass through. These are denial, anger, bargaining, depression and acceptance. In all these stages, the nurse needs to be truthful but prudent in all her dealings with the client. Maintain a genuine, honest attitude of interest. The client may ask many questions and may want to clarify many of his doubts.
2. **SYMPTOMATIC MANAGEMENT**: Problems associated with breathing. The dying person who is restless, apprehensive and short of breath may be given the oxygen inhalation to ease his discomfort. Elevation of the client's head and shoulder may make breathing easier.
3. **Problems associated with eating and drinking:** anorexia, nausea and vomiting are commonly seen in the dying persons. Most of them require I.V. fluids. If they can tolerate the oral fluids then sips of fluids may be given with teaspoons that will help the client to keep the mouth moist.
4. **Problems associated with elimination:** Constipation, retention of urine and incontinence of urine and stools are some of the problems faced by the client thorough skin and perineal cares are necessary to keep the client clean and to prevent skin breakdown.
5. **Problems associated with Rest and Sleep**: Pain may be a distressing symptom in these clients. All the possible care should be given to alleviate pain and to ensure rest and sleep. Client should not be disturbed when he is sleeping. The visitors should be instructed not to disturb the client during his rest hours,

CARE OF BODY AFTER DEATH

1. It is the function of the physician to declare the death of the client. Clients are not legally death until the physician has certified death and nothing should be done that would interfere with life, as there is possibility of life remaining in the body.
2. Nurse preparing the body after death should know whether there is to be an autopsy or an inquest. She should get written permission for autopsy.
3. When death occurs following certain communicable diseases such as smallpox, the body requires special attention to prevent the spread of the disease.
4. After the dead body is removed from the room, the room should be treated as in case of 'discharge of client'.

LEAVING AGAINIST MEDICAL ADVICE

A client can decide to leave the hospital against medical advice. For this a client must sign a form that releases the physician and the health care institution from any legal responsibility for his/her health status.

SIGNS OF APPROACHING DEATH

1. **Facial appearance:** Facial muscles relax; cheeks become flaccid, moving in and out with each breath. Facial structure may change, so that dentures cannot be worn. With the dentures removed, mouth structure may collapse, lip pucker and sink in.
2. Changes in sight, speech and hearing, sight gradually fail. The pupils fail to react light. Eyes are sunken and half closed. Speech becomes increasingly difficult, confused finally impossible.
3. **Changes in respiratory system**: Respiration becomes irregular, rapid or slow.
4. **Circulatory system:** Circulatory changes cause alterations in the temperature, pulse and respiration.
5. **Gastrointestinal system**: Hiccoughs, nausea, vomiting, abdominal distension are seen. The gag reflex disappears.
6. **Genito urinary system:** Retention of urine distension of the bladder.
7. **Skin:** The skin may become pale, cool and sweat profusely. Ears and nose are cold to touch.
8. **Central nervous system**: Reflexes and pain are gradually lost. Client may be restless due to the lack of oxygen.

SIGNS OF CLINICAL DEATH

The signs of clinical death are, absence of pulse, heart beat and respiration, red blood cells rolling to stop. Pupils of the eye becoming fixed and non reactive to light, absence of all reflexes.

MOUTH CARE

Infection of the mouth can spread to weigh bouring structures leading to the following:

Parotitis ---- Inflammation of parotid gland.

Sinusitis ------- Inflammation of sinus cavity.

Otitis media ------ Inflammation of middle ear.

Good oral hygiene makes a person feel socially acceptable and to have self-respect. All the persons who are unable to attend the mouth should be assisted to clean the mouth. Nurse's responsibility in attending the mouth of a client in illness.

Preliminary Assessment:

1. Check the condition of the oral cavity.
2. Check the ability of the client for self care.
3. Articles available in client's unit.
4. Articles required:

A tray containing:

- Small mackintosh
- Face towel
- Feeding cup
- Artery forceps
- Dissecting forceps
- Gauze piece
- Kidney tray
- Paper bag
- Choose one of the solutions
- Choose one of the emollients
- Tongue depressor
- Bowl of clean water

- **Solutions commonly used**: Potassium permanganate (KMNO4) 1: 5000 solution (one crystal to a glass of water to give a pink colour and it should be freshly prepared each time).
- Hydrogen peroxide (H2O2) 1:8.
- Sodium chloride, 1 teaspoon to a pint of water,

EMOLLIENT USED:

- Cream or butter
- Liquid paraffin
- Olive oil

PROCEDURE

1. Explain the procedure to the client.
2. Provide privacy.
3. Maintain a safe comfortable position.
4. Wash hands.
5. Prepare the mouthwash by adding hot and cold water and drop one crystal of potassium permanganate into it.
6. Help the client to rinse his mouth.
7. Pick up the toothbrush, wet it with water, spread a small quantity of toothpaste on it and hand it over to the client.
8. Instruct the client to brush all sides of the teeth, outer side, inner side and chewing surface.
9. Help the client to rinse his mouth thoroughly.
10. Ask client to massage the gums.

TUBE FEEDING OR GASTRIC GAVAGE

Gastric feeding is an artificial method of giving fluids and nutrients through a tube that has passed into the esophagus and stomach through the nose, mouth or through the opening made on the abdominal wall, when oral intake is adequate or impossible.

INDICATIONS

1. When the client is unable to take food by mouth for e.g. unconscious, semiconscious.
2. For a client who refuses food e.g. psychotic.
3. When a clients mouth or esophagus is not able to swallow e.g. fracture of jaw, repair of the cleft palate and cleft lips.
4. When the client is too weak to swallow food or when the conditions make it difficult to take a large amount of food orally e.g. acute and chronic infections, malnutrition etc.
5. When the client is unable to retain the food, e.g. anorexia nervosa, vomiting etc.

ADVANTAGES OF TUBE FEEDING

1. An adequate amount of all types of nutrients including distasteful foods and medications can be supplied.
2. Large amount of fluids can be given with safety.
3. Dangers of parenteral feeding are avoided.

ARTICLES REQUIRED

A tray containing:

- Feeding cup with water
- Kidney tray
- Mackintosh and towel
- Cotton tipped applicators
- Saline
- Ryle's tube in a bowl of ice
- Lubricant
- Adhesive plaster
- Paper bag
- Glass of feed
- Ounce glass
- Bowl with water
- Clamp

PROCEDURE

1. Explain the procedure to the client.
2. Identify doctors orders.
3. Check the ability for self care.
4. Provide privacy.
5. Place the mackintosh across the chest.
6. Wash hands.
7. Take the tube and check whether it is in good order.
8. Measure distance on the tube from bridge of the nose to the earlobe plus the distance from the ear lobe to the tip of the xiphoid process of the sternum. Mark the distance of the tube.
9. Lubricate the tube for about 6-8 inches with lubricant.
10. Hold the tube coiled in right hand and introduce the tip into the left nostril.
11. Pass the tube gently but quickly backwards and downwards.
12. When the tube reaches the pharynx the client may gag.
13. Have the client take sips of water and swallow on command.
14. Check the placement of the tube in the stomach.
- Aspirate for gastric contents with syringe.
- Place the end of the tube with a syringe barrel or funnel into a bowl of water and note the rhythm of escaping bubbles.
- Ask the client to hum or speak.
15. Before giving the feed, pour some water through the funnel to expel the air. Then give the feed and medicines kept ready for the client.

CATHETERIZATION

Urinary catheterization is the introduction of a tube through the urethra into the urinary bladder to drain the bladder.

PURPOSE

1. To get a sterile urine specimen for diagnostic purpose.
2. To empty the bladder when a condition of retention is thought to exist.

3. To determine whether the failure to void is due to retention or suppression.
4. To empty bladder prior to surgery involving rectum, vagina and pelvic organs.

ARTICLES REQUIRED

A tray containing:

- Sterile catheter – straight or an indwelling catheter (Foley's)
- A small bowel containing dettol 2%.
- Cotton swabs.
- Gauze piece.
- A pair of gloves.
- Sponge holding forceps.
- Kidney tray.
- Specimen bottles.
- Syringe with distilled water.
- Drainage tubing and collection bag.
- An unsterile tray containing:
    - Mackintosh
    - Towel
    - Kidney tray
    - Spot light
    - Clean linen
    - Pint measure

PREPERATION OF THE CLIENT

1. Explain the procedure to the client.
2. Adjust the position of the bed.
3. Place the client in 'Dorsal recumbent position'.
4. Place the mackintosh under the client.
5. Arrange the articles.

PROCEDURE

1. Scrub the hands as for a surgical procedure.
2. Lift the draping sheet back to expose only perineum.
3. Open the sterile tray with aseptic techniques. Put on the gloves.
4. Place the sterile towel and the slit in position.
5. Lubricate the catheter and place it in the sterile tray.
6. Clean the perineum with the cotton balls dipped in the antiseptic lotion using the forceps.
7. Keep the labia separated and pulled upwards from the time the vulva is cleaned until the catheter is introduced.
8. Pick up the catheter with the gloved hand, holding it about 7.5cm from the tip and place the distal end in the sterile kidney tray.
9. Gently insert the catheter about 5-7.5cm. The urine will flow into the kidney tray.

10. Release the labia Minora and hold the catheter with some fingers. Maintain this position until the catheterization is completed, or balloon on indwelling catheter is inflated.
11. Collect the urine specimen if required. Attach the drainage tubing if an indwelling catheter is put in.
12. Take all articles to utility room.
13. Send urine specimen, if any to lab.
14. Wash hands.
15. Record the procedure.

STORING OF MEDICINES

Care of medicine cabinet and drugs.

1. To stock the medicines, each ward should be provided with a medicine cabinet.
2. Adequate lighting should be provided within the cabinet to read the labels clearly.
3. There should be separate compartments for different categories of drugs- for mintures, tablets, powders etc.
4. A register should be maintained to keep the account of the poisonous drugs.
5. All the poisonous drugs should be marked 'poison' in red ink.
6. No drug should be stored without labels.
7. The drugs that are unusual in colour, odor and consistency should be returned to the pharmacy and replaced with fresh ones.
8. Emergency drugs should be kept in a place where they are readily obtainable for emergency use.

SAFETY MEASURES

The rights ensure safety in giving drugs:-

1. **Right client:** Read the physicians orders to make a sure for whom the medicine is ordered. Call the client by name and ask him to repeat his name.
2. **Right drug**: Read the physicians order to study the correct name of the drug.
   - Be careful of drugs whose names sound alike.
   - Look for the colour.
   - Look for the odor of the drug.
3. **Right dose**: Read the physicians orders to know the correct dose.
   - Know the minimum and maximum dose of the medicine administered.
4. **Right time:** Read the physician's orders.
   - Know the abbreviations for the time e.g. B.D, T.D.S.
   - Give medicines according to the action expected e.g. sleeping pills are given at bedtime.
5. **Right method:** Read the physicians orders.
   - Know the method of giving drugs e.g. orally, rectally etc.
   - Know the abbreviations used to designate the route of administration e.g. I.V, I.M.

COLLECTION OF SPECIMEN

Blood may be collected by pricking the finger tips or ear lobes and be venipuncture. The blood may be collected as 'whole blood' or 'clotted blood'.

The following precautions are kept in mind when the 'whole blood' is collected.

1. Whole blood is collected only by venipuncture. Venipuncture is done under strict aseptic technique.
2. To collect blood by venipuncture a syringe of proper size is selected and sterilized.
3. The syringes and needles should be dried. Well before use, to prevent hemolysis of blood.
4. To collect whole blood, the blood is collected in a test tube or a penicillin bottle in which is placed an optimum quantity of suitable anticoagulant. Commonly used anti-coagulant is E.D.T.A. (Ethylene Diamine Tetra-acetic acid).

GASTRIC LAVAGE OR STOMACH WASH

Stomach wash means to wash out or irrigate the stomach with a solution. It is used most frequently as an emergency treatment in gastric dilatation and poisoning.

PURPOSE

1. To remove the ingested poisons or any irritating matter from the stomach.
2. To relieve nausea and vomiting.
3. To cleanse the stomach as a preparation for surgery.
4. To obtain casts of epithelial cells for bacteriological studies.

SOLUTIONS USED

1. Plain water (plain water is particularly useful when the poison is unidentified).
2. Normal saline.
3. Weak solution of sodium bicarbonate.
4. **Specific antidotes:** If the poison is identified there are three types of antidotes.
   a. **Physical antidotes**: It is the one that mixes with the poison and dilutes the poison or prevents its absorption.
   b. **Chemical antidotes**: These react with the poison and neutralize it.
   c. **Physiologic antidotes**: These have a systematic effect opposite to that of a poison.

AMOUNT OF FLUID:

Gastric lavage is carried until the return flow is clear. About 500ml of fluid is to be introduced at a time to reach all parts of the mucous membranes of the stomach.

GENERAL INSTRUCTIONS

1. Explain the procedure to the patient (if the patient is conscious) to win his confidence and cooperation.
2. Ask the help of the doctor to insert the gastric tube in patients with depression of the central nervous system.
3. Insert the tube slowly and gently to prevent trauma to the tissues. Lubricate the tube with a water soluble jelly to make the insertion easy and to prevent friction.
4. Ensure proper placement of the tube (in stomach).
5. Introduce about 500ml of liquid (irrigating solution in stomach and observe the patients response to the inflow). Stop inflow if any signs of intolerance occur.

PROCEDURE

The tube is introduced either orally or through the nose after making sure that tube is in the stomach, aspirate the contents first save it for laboratory examinations, in case of poisoning.

Attach the funnel to the tube and fill it with the irrigating fluid. Expel out air from the tube and raise the funnel to allow the fluid to run into the stomach. When two or three funnels of liquid have run into the stomach and before the funnel is completely empty, pinch the tube and invert the funnel over a receptable and allow the fluid to siphon back. Continue the treatment by alternately introducing fluid into the stomach and permitting it to run back until the return flow is clear or until the desired effect is achieved. To discontinue the treatment, pinch the tube and pull it quickly. Record the treatment with time and date, on the nurses record.

BANDAGES

Binders and bandages are applied over or around the dressings to provide extra protection and therapeutic benefits by:

1. Creating pressure over the body part.
2. Immobilizing the body part.
3. Supporting a wound.
4. Securing splint.
5. Securing dressings.

Bandages are made up of different materials such as gauze, elasticized knit, muslin, crepe etc. Gauze bandages are light weight and inexpensive, mold easily around the contours of the body. According to the size and shape of the bandages they are classified as:

- Roller bandages
- Tailed bandages
- T – bandages
- Tubular bandages

PRINCIPLE

Correctly applied bandages and binders do not cause injury to underlying and nearby body parts or create discomfort to the client. Before a bandage is applied the nurses responsibility includes:

a. Inspection of the skin for abrasions, edema, discoloration.
b. Exposed movements or open abrasions should be concerned with sterile dressings.
c. Inspect the underlying dressing.

- **Triangular bandages**: Are used mainly as sling to support limbs. They may also be used to cover dressings over a large area.
- **Tailed bandages:** Is a rectangular piece of strong cloth with many tails attached to either sides of it. It is commonly used as abdominal binder for the support of the abdominal musculature to prevent wound dehiscence following abdominal surgery.
- **T – Binders**: Is used to secure rectal or perineal dressings. The double T – binder is used for the males and the single for the females.
- **Tubular gauze**: Is a bandage in the shape of a tube, designed to cover cylindrical parts of the body and to secure dressings.

BLOOD TRANSFUSION

It is the transfusion of whole blood or its components such as blood cells and plasma from one person (donor) to another person (recipient). This involves two procedures – The collection of blood from the donor and the administration of blood to the recipient.

PROCESS

1. To restore the blood volume when there is sudden loss of blood due to hemorrhage.
2. To raise the hemoglobin level in cases of severe anemia which are not corrected by the administration of vitamins and iron therapy.
3. To treat deficiencies of plasma proteins, clotting factors and hemophilic globulin etc.
4. To provide antibodies.
5. To replace the blood with hemolytic agents.

GROUPING AND CROSS MATCHING

The individual from whom the blood is transferred is called the donor. The individual to whom the blood is transferred is known as the recipient. Indiscriminate transfusion may lead to serious conditions and even death. This consequence is due to the process of clumbing or agglutination or breaking up of red corpuscles. Agglutinations are due to the interaction between substances in red blood corpuscles known as agglutinogens and those in the plasma called agglutinins. Types of blood which gets agglutinated in the transfusion is said to be incompatible.

Rh FACTOR

85% of the world population is having the antigen 'D' of the Rh blood group system. Those persons who possess this antigen are called 'Rh- positive' and those who do not inherit this antigen, is called 'Rh negative'. The name Rh factor comes from the 'Rhesus monkeys' whose blood contains these antigens. This antigen was discovered in 1940 by Landsteiner and Wiever.

The Rh-groups are of equal importance as the ABO group because of their relations to hemolytic diseases of the newborn and their significance in blood transfusions. As in case of ABO blood groups persons who are Rh-positive do not have anti D in their serum. However, in contrast, to the ABO blood type, persons who are Rh-negative develop anti-Rh antibodies only after exposure to Rh-positive blood, either by transfusions or transplacental passage of red cells from o Rh- positive fetus.

GENERAL INSTRUCTIONS FOR GIVING BLOOD TRANSFUSIONS

1. Donor shall be free of diseases of heart, kidneys, lungs etc.
2. There should not be any history of cancer, jaundice, hepatitis, tuberculosis etc.
3. Donors must have a normal temperature, pulse and blood pressure.
4. Explain the procedure to the donor and reassure him/her to win his/her confidence.
5. Before the blood is transfused, the donor's blood must be cross matched with the recipient blood.

COLLECTION, STORAGE AND TRANSPORTATION OF BLOOD

1. Collection of blood from the donor is done in the laboratory. The donors blood is collected into a sterile container containing anticoagulant solution.
2. All the articles used for the collection of blood should be sterile. They should be pyrogen free.
3. Each donor unit must be labeled in clear, readable letters.
4. Stored blood shall be inspected daily and before use for evidence of hemolysis.
5. Freezing and heating of the blood will destroy the blood cells.

REGARDING ADMINISTRATION OF BLOOD TO RECIPIENT

1. When sending the recipients blood sample for grouping and cross matching, it must be carefully labeled at the bed side of recipient.
2. Whole blood and blood products should be administered through an appropriate, sterile, pyrogen free transfusion set containing a filter which will remove clots and larger aggregates of leucocytes.
3. No medication – antibodies, vitamins, calcium should be added to the unit of blood or administered through the same intravenous system as they may cause damage to the red cells.
4. Blood may be allowed to stand at the room temperature for 30-45 minutes before it is administered to the patient.
5. The following observations are made throughout the procedure:
    a. Rate of flow
    b. Signs of circulatory overload
    c. Urinary output
    d. Reaction to the blood transfusion
6. Keep the patient warm and comfortable with blankets, if necessary.

VAGINAL DOUCHE

The term 'douche' is applied to a stream of fluid directed to a body cavity to flush that cavity. A vaginal irrigation is the washing of the vagina by a liquid at low pressure. It is similar to the irrigation of external auditory canal, in which the fluid immediately returns after being installed in.

PURPOSE

1. To cleanse the vaginal canal, removing an offensive or irritating discharge.
2. To relieve inflammation and congestion of the genital tract.
3. To arrest hemorrhage.
4. To stimulate circulation of pelvic organs.

SOLUTIONS USED:

1. Sterile water
2. Normal saline
3. Sodium bicarbonate 2%
4. Vinegar 1%
5. Savlon
6. Boric acid 2%

NURSES RESPONSIBILITY

Preliminary Assessment

1. Check the name, bed number of the patient.
2. Check the diagnosis and purpose of vaginal irrigation.
3. Check the condition of the perineum.

ARTICLES REQUIRED:

1. Irrigating can with tubing and a clamp.
2. Douche nozzle.
3. Gloves 1 pair.
4. Jug with extra fluid for irrigation.
5. Bed pan.
6. I.V. pole
7. Kidney tray
8. Vaginal speculum
9. Extra sheets
10. Dry cotton balls
11. Mackintosh and towels

PROCEDURE

1. Explain the procedure to the patient.
2. Provide privacy with screens.
3. Ask the patient to void.
4. Place the mackintosh and towel under the patient.
5. Assist the patient to a dorsal recumbent position on the bed pan.
6. Wash hands.
7. Pour the solution into the can and allow little solution to run through the tubing.
8. To put on gloves.
9. Clean the perineum with wet swabs.
10. Gently insert the nozzle into the vagina about 2 to 3 inches.
11. Allow the fluid to run in a steady stream. Note the character of the return flow.
12. Disconnect the douche nozzle and place it in the kidney tray.

URINE EXAMINATION

Urine is examined by two ways:

1. Physical
2. Chemical

In physical examination, colour, appearance, volume, specific gravity, is examined. In chemical examination, urine is tested especially for sugar and protein.

ARTICLES:

A tray containing:

- Test tubes 4 to 6 on a test tube stand
- Test tube holder
- Spirit lamp
- Conical glass
- Filter paper
- Urinometer
- Kidney tray
- Acetic acid 2%
- Nitric acid
- Benedicts solution
- Sample of urine

URINALYSIS

Color: Normally colour of urine is pale yellow or amber colour.

Appearance: Inspect the whole urine for the presence sediments.

Reaction: To test the reaction, dip one end of a litmus paper into the urine. If urine is acidic, blue litmus turns into red. If urine is alkaline, red litmus turns into blue. If urine is alkaline, red litmus turns into blue. Normal urine is acidic in reaction.

TEST FOR SUGAR:

Pour 5ml of Benedict's solution into a test tube boil it over the spirit lamp. If there is no color change in the benedicts solution, add 7-8 drops of urine to it with a dropper. Boil it again. Allow the test tube to cool. Record the result as follows:

- Blue liquid with no deposits ---------- sugar nil
- Greenish deposits in a greenish liquid ---------- sugar nil
- Yellow deposits ---------- sugar 2%
- Orange ---------- sugar 3%
- Brick red ---------- sugar 5%

INTERPERSONAL RELATIONSHIP IN NURSING

We have seen that the nurse is an important member of the health care team that must work in cooperation and harmony for the care of the client. This cooperation and harmony depends upon the interpersonal relationship that is maintained among the members of the health care team.

Principles of Interpersonal Relationship:

1. Learn every ones individuality.
2. Respect everyone.
3. Keep emotions under control.

4. Team leader should not make any excuse regarding his/her responsibility.
5. Be impartial to others.
6. There should be team spirit or we feeling among the members.
7. There should be delegation of responsibility in a group.
8. Establish a good rapport among the members in order to achieve the aim.
9. Every member should be familiar with the organization plan and the policies.
10. Develop habit of listening.

SPIRITUALITY

Spirituality is defined as the experience and expressions of one's spirit in a unique and dynamic process reflecting faith in God or Supreme Being; connectedness with oneself, with others, universe or God and integration of the dimension, mind, body and spirit.

Religion is a belief system, including dogma, rituals and traditions. Spiritual health refers to a state of wholeness of the spiritual dimensions. Nurse recognizes the spiritual aspect of human nature as an integral component of a person's sense of wellness.

Nurses have an opportunity to contribute or to participate in the spiritual care of clients. The word spirituality is derived from the Latin word "spiritus" which refers to breathe of wind.

SPIRITUAL NEEDS

Just as everybody has a spiritual dimensions, all clients have needs that reflect their spirituality. Those needs are often brought forward by an illness or any other health crisis. Clients who have a well defined spiritual belief may find that their beliefs are challenged by their health situation; clients who have no defined belief may suddenly come face to face with challenging questions related to the meaning and purpose of life.

Spiritual needs include the following:

- Need for love
- Need for hope
- Need for trust
- Need for values
- Need for creativity
- Sense of purpose

GOALS OF SPIRITUAL CARE:

- Help the client to fulfill religious obligations.
- Help the client draw on and use inner resources more effectively to meet the present situation.
- Help the client find meaning of existence.
- Promote a sense of hope.

ASSESSMENT

In the spiritual assessment of a client, four important areas are considered:

1. Concept of God.
2. Source of hope.
3. Religious practices
4. Relationship between spiritual beliefs and state of health.

NURSING DIAGNOSIS

1. Spiritual distress R/T
   - Loss of child
   - Sense of guilt
   - Conflict about belief
   - Sexual abuse
2. Potential for enhanced spiritual well-being.
3. Risk for spiritual distress.
4. Ineffective coping.
5. Readiness to enhanced spiritual well-being related to terminal illness.

INTERVENTIONS:

1. Communicating about spiritual needs.
2. Nurse must use herself therapeutically.
3. Nurse must accompany the Client.
4. Nurse must provide therapeutic environment.
5. Nurse must provide access to spiritual advisors.
6. Nurse must support the client's religious practices.

PREPERATION OF CLIENTS UNIT

There are few factors which are considered as essentials to well being. These are:

- Adequate lighting during the day.
- Provision of an atmospheric temperature and humidity that promotes normal body functions.
- Atmospheric pressure within man's tolerance.
- Provision for disposal of refuse and excreta.
- Removal of dust, injurious chemicals and pathogenic bacteria from the atmospheric air.

Influence of External Environment:

- **Atmospheric temperature**: In an ideal temperature, the person should not feel chilly, but it should be sufficiently warm enough to cause perspiration.
- **Humidity**: Humidity is the amount of moisture in the air. It affects the evaporation of moisture from the skin. A humidity of 40-60% is considered comfortable.
- **Air movement**: Ventilation means movement in the air. The chief purpose of ventilation is to supply fresh air and to maintain a proper humidity.
- **Lighting**: The amount of light is an important factor in comfort. It is provided by natural or artificial light. Avoid direct light on the face and eyes, prevent glare. The amount of light depends upon the use of the client and the time of the day. The client, if conscious should have within his reach a light which he can control.

- **Noise:** Noise produces irritability, restlessness, fatigue and exhaustion in an acutely ill client. Noise interferes with sleep. On the contrary, a melodious sound induces pleasure. The degree of noise may be reduced by various measures. Noise caused by friction may be reduced by lubrication use of rubber tyres and Easters for trolleys and wheel chairs reduce the sound when moving furniture. Make echo-proof rooms. Avoid objects dropping.
- **Purity of air**: Dust cause significant hazards to clients. Dust in hospitals may be laden with micro-organisms which cause infection.
- **Aesthetic factors:** The environment becomes attractive if it appeals to the senses. Whether we are conscious or not, the design or arrangement of the room contributes to its harmony.

Through skillful use of colour, the room can be made attractive, color preference vary with age, sex and race. Aesthetic considerations should include freedom from unpleasant sights, bedpans, urinals, soiled dressings and used linen etc should be removed from the sick room immediately.

STOOL SPECIMENS

Characteristics of normal stool

- **Colour**: Normally the colour of stool is light to dark brown.
- **Odor:** Normally stool has a pungent smell. It is normally affected by the type of bacterial flora by the food.

FREQUENCY: One to two per day.

COMPOSITION: The feces contain 30% water. Remaining portion contains shed epithelium from the intestine a quantity of bacteria, mucin, calcium etc.

METHOD OF COLLECTING STOOL SPECIMEN:

Waterproof disposable containers or wide mouthed containers are provided with necessary instructions. The client passes stool in a clean bedpan. A small amount of stool is removed with a stick or spatula and is placed in the container, discard the stick in the waste bin.

SPUTUM SPECIMENS:

QUANTITY:

Normally no sputum is expectorated. The amount of sputum coughed up in 24 hrs. Varies with the diseases.

CONSISTENCY:

The sputum may be classified into various types according to its consistency and appearance e.g. serous, frothy, mucoid.

ODOUR:

Normally the sputum is odourless. In acute diseases the sputum is odourless. In chronic infection, when the sputum is retained inside the lung odor becomes foul.

COLOUR:

When sputum consists largely of mucus it may be colorless and translucent. Presence of pus may give rise to yellowish colour. Greenish color is seen in bronchiectasis. Rusty color of the sputum is due to the altered hemoglobin as seen in Pneumonia.

METHOD OF COLLECTING SPUTUM SPECIMEN:

Waterproof disposable sputum cups are used to collect sputum specimen. A large container is required if the physician desires to have the total sputum expectorated in 24 hours. If sterile specimens are desired a wide mouthed sterile glass bottle with a screw cap can be used.

The client is given the container and is instructed to raise the material from the lungs by coughing and not simply expectorating the saliva or discharges from the nose or throat. The sputum should be collected in the morning before brushing the teeth and taking the food. To collect the sputum from a young child, use a cotton applicator and a test tube.