

# 10 Preparation of Client's Unit

## Learning objectives

On completion of this chapter, the learner will be able to do the following:

- Understand the need of optimum environment for the client
- Discuss the various factors which help to maintain the safety of the client
- Develop ability to furnish the client's unit with needed articles and equipment
- Develop skill in providing a comfortable bed to the client
- Explain the special types of bed to be prepared to meet the special needs of the client
- Develop skills in preparing the special beds that suit to the client's needs

### Optimum environment for the client

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

- Adequate lighting during the day and night
- Provision of an atmospheric temperature and humidity that promotes normal body functions
- Sufficient air movement to evaporate sweat and favour vascular changes within the skin
- 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
- Reasonable cleanliness of all surfaces and furnishings that the individual is likely to handle
- A dwelling place free from insects, animal pests, fire hazards, mechanical injuries, electric shocks, radiation and poisons
- Freedom from disagreeable odours and noises, harmony of colour and design in the immediate surroundings, provision of privacy etc.

### 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. A room temperature ranging from 68 to 72°F (20 to 22°C) is considered comfortable.

**Humidity:** Humidity is the amount of moisture in the air. It affects the evaporation of moisture

from the skin. A humidity of 40 to 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. Air in motion increases the radiation of heat from the skin and improves circulation and respiration. The velocity of the air movement should be 15 to 45 feet/minute or 1 to 3 miles per hour.

Air may be kept in motion by opening doors and windows, and by the use of fans and air conditioners. The air movement should not be much to cause draughts.

**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. Artificial light should not be too strong for reading. Remember it is difficult for a client to rest when there is excessive light. He will not be able to read and write when there is dim light. The amount of light depends upon the use of light, the kind of work being done, conditions and the age 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 induce pleasure. The degree of noise may be reduced by various measures. Noise caused by friction may be reduced by

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lubrication. Use of rubber tyres and castors for trolleys and wheel chairs reduce the sound when moving furniture. Make echo-proof rooms. Avoid dropping objects. Control the use of radio, television etc. during the rest hours. Loud talking, laughing and heavy walking with shoes within the hearing of ill persons should be avoided. Whispering is also not good as it tends to cause apprehension and uncertainty in the client.

**Purity of air:** Dust cause significant hazards to clients. Dust in hospitals may be laden with micro-organisms which cause infection, in addition to irritation of the respiratory tract and precipitating allergic reactions.

To control the dust, it is important to avoid those activities that stir up dust such as dusting with dry duster and sweeping. Damp dusting and cleaning, folding bed linen and gently shaking them rather than flapping them, restricting the cigarette smoking and above all providing proper ventilation and ample spacing of bed maintains the purity of air.

**Elimination of unpleasant odours:** Good ventilation, cleanliness, proper disposal of excreta and rubbish are necessary to eliminate unpleasant odours.

**Water supply and sewage disposal:** There should be provision for safe water supply and disposal of excreta.

**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. Colour preference vary with age, sex and race. Flower vase, pictures and curtains add to the pleasant outlook of the room.

Aesthetic considerations should include freedom from unpleasant sights. Bedpans, urinals, soiled dressings and used linen etc., should be removed from the sick room immediately. Clients who are very ill, with vomiting or those who present a painful appearance to others should be put in a separate room or they should be screened to protect other clients from unpleasant sights.

## Factors of safety

**Freedom from mechanical injury:** Mechanical injury may be caused by machines by falls and blows. Mechanical injury can be prevented by using rails or guards on beds and windows, by keeping floors dry to prevent slipping, by holding the stretchers and wheel chairs securely while transferring clients etc. A periodic check up of the equipment can prevent accident from them.

**Freedom from thermal injury:** Thermal injury is caused by fires and burns. The triple hazards of fire are burns, trauma and asphyxia. Burns may occur from the application of heat. Some possible cause of fire in a hospital are smoking in bed, defective wiring, explosion of gases and the use of heaters and hot plates.

Fires are prevented by reporting and repairing defective electrical equipment, safeguarding inflammable liquids and gases and having fire extinguishers recharged from time to time.

**Freedom from chemical injury:** Chemical injury involves the use of too strong chemicals and poisonous chemicals kept within the reach of the client. Chemical injury can be prevented by keeping the chemicals in separate cupboards under lock and key and by using them with care.

**Freedom from radiation:** Radiation injury occurs from, over exposure to rays of X-ray, radium, infrared and ultraviolet light rays. These injuries can be prevented by having trained operators and having enough protection from exposure to these rays.

**Freedom from bacteriologic injury:** Bacteriologic safety has to do with the elimination of disease bearing organisms and dirt that harbors them. (See prevention of cross infection in the hospital).

**Freedom from allergens:** Injury from allergens may result from insect bites or from materials in the environment such as feathers, mattresses, food, cosmetics, lotion, powders, medicine etc.

Prevention of allergy may be accomplished by having covers for the mattresses and pillows, adopting dusting without raising the dust and by

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testing for allergies before an agent is applied on the body.

**Freedom from vermin, insects and animal pests:** All building should be rat proof. If rats are present, they should be trapped or poisoned. Flies will find a breeding place where the dirt and filth is accumulated. Therefore, the whole hospital and its surroundings should be kept clean to prevent breeding of flies. Prevent the breeding of mosquitoes by removing the stagnant water and by using mosquito repellants such as D.D.T. spray etc. Mosquito nets are used at night. Moths, bed bugs, and cockroaches are kept away from the client's unit by the use of D.D.T. spray, fumigation of the room and by the use of naphthalene balls in cupboards. There are a number of insecticides available in the market.

### Furnishings for the client's unit

Client's unit is the area furnished and equipped according to the necessity for the care of the client. Units vary in sizes. It may be a private unit including living room, bedroom, a bathroom and latrine or a single room with furnishings and supplies for the care of one client or it may be the immediate surrounding of client in a general ward where several clients are looked after.

Most of the equipment and supplies needed for the client care are kept in the client's unit. They include:

**Cot or bedstead:** The standard hospital beds available are made of metal. It is simple in design, light and easily movable, easy to handle and clean, strong and durable. Hard rubber castors make it possible to move the bed without jarring the client. Some beds may have devices to adjust the position of the client at the head, knees and at the foot end. A standard hospital bed is 78 inch long, 38 inch wide and 28 inch high from the floor. The height of the bed is such that physicians and nurses may have convenient access to the client without undue fatigue and strain. Some beds will have side rails to prevent the client from falling.

**Overbed table:** The client can use the overbed table or cardiac table for such activities as eating, reading, writing and for placing articles for self

care. It is useful for the nurse to place articles while giving care to the client. Generally this is used for the clients suffering from cardiac diseases to lean and rest forward when he has breathing difficulty.

**Bedside locker:** The bedside locker is used to store the client's personal articles. A client's unit is most comfortable for him if he has within his easy reach those items he frequently uses. Such articles can be kept on and inside the bedside locker.

**Bedside table:** The clients who are allowed to move around can use the bedside table for taking the meals and for other purposes.

**Chair and stool:** Most client's units have at least one straight back chair with or without arms and a stool. The workers and visitors should sit on the chair and not on the client's bed. The chair seat is used for the placement of clean linen while changing the bed linen or bathing the client. The client can make use of the chair or stool when he is outside the bed.

**Bedside commode:** Bedside commode is a chair or wheel chair that has an opening in the centre of the seat under which a bedpan can be inserted. The bedside commode is preferred to bedpan because the client can be seated in a sitting position during defecation and urination, a position most comfortable for the client.

**Bedpans and urinals:** For a client confined to bed, bedpans and urinals are used for defecation and urination.

**Sputum cup:** Sputum cups are used to collect the sputum and sittings.

**Kidney trays:** Kidney trays are usually used for collecting the vomits (so it is also called emesis tray), soiled dressings or for collection of body fluids etc.

**Water flasks and drinking glasses:** The water flask is filled with drinking water and is given to the client within his reach.

**Plate, spoon, fork, knives etc.:** These are used to serve the meals for the clients and is kept in the client's unit.

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**Call signal:** A bell is usually kept near the clients to call the nurse in their need.

**Toilet articles:** Soap and soap dish, toothbrush and tooth paste, mouth wash, comb etc., are kept in the client's unit, may be brought by the clients or may be supplied from the hospital on payment.

**Waste basket:** It is used to collect the rubbish.

**Bucket, mug, basin etc.:** These are kept in the bathing room for taking bath.

### Bedding and bed linen

**Mattress:** Mattresses used for the client should be firm, thick and smooth. It gives support to the clients. Mattresses are made by filling with horse hair, coir, dunlop, air and water. All should have a washable cover. The size is 190 cm width.

**Pillow:** Pillows are usually made out of strong cotton or dunlop. Size 60 cm long, 45 cm wide and 10 cm thick.

**Sheets:** The bed sheets are made of strong cotton material. They are used to protect the mattress from soiling and to cover the client. They should be sufficiently long and wide to tuck in well at the head, foot and sides. Size 108 inches long and 76 inches wide.

**Draw mackintosh and draw sheet:** They are drawn from side to side and usually extends from the client's shoulders to below knees. Draw mackintosh is a waterproof sheeting, made up of either rubber or plastic material. It is used to protect the mattress and the bottom sheet from soiling. It is uncomfortable for the client if it is used without lining, because it is not a good conductor of heat. Sometimes, a "Kelley's pad" is used in place of a mackintosh. It is a mechanical device made up of rubber and is used to protect the bed and bed linen from getting wet, while giving bed shampoo for a bedridden client. At one end, it has a rim all round which can be inflated and it acts as a trough to collect the fluid and then it is directed into a receptacle through its open end.

Kelley's pads can be improvised by using a newspaper and a mackintosh. Roll the newspaper into a horseshoe shape and place the mackintosh

over the roll of the newspaper to form a rim. This device is positioned under the head of the client with the open end towards the side of the bed, directed to a receptacle.

Draw sheet is made of the same cotton material as the sheet and is used to cover the mackintosh. It should be long enough to tuck well under both sides of the mattress. The average size will be 150 cm long and 110 cm wide.

**Pillow cases:** Pillow cases are used to protect the pillows. They should be bigger than the size of the pillow for the easy insertion lest they destroy the shape of the pillow. The average size is 65 cm long and 50 cm wide.

**Blanket:** Blankets are usually made up of woolen material. It should be light and warm. It is used to protect the client from draught and chill. Blanket irritates the skin so it should never be used next to the client. Blankets are not laundered also. Protect the blankets with blanket covers or with sheets. Cotton blankets are washable.

**Bedsread or counterpane:** It is used to give a neat appearance to the bed. It protects the blankets and the bed as a whole from dust. Size 3 m long and 3 m wide.

### Comfort devices or mechanical devices

**Back rest:** It is a mechanical device which provides support for the client in the sitting position.

**Knee rest:** Knee rest may be substituted by a pillow, gives relaxation and thus relieves pain on abdominal muscles and on tendons beneath the knees. Many doctors do not allow knee pillows because of the fear of thrombus formation and pulmonary embolism. Change of position at frequent intervals is necessary.

**Foot rest:** It is a device so placed that the feet rest firmly against it. It helps to maintain the normal position of the feet, i.e. at right angles to the leg. It is used for the comfort and to prevent foot drop. Hard pillows, sand bags or foot board etc., may be substituted. Foot rest are also provided for people in office work to support the lower extremities.

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**Bed cradle:** The bed cradles support and take off the weight of the top bed clothing, prevent the top cloth coming in contact with the client as in case of clients with burns or to apply heat as in case of drying plaster casts. Cradles equipped with electric bulbs are used to supply the desired warmth.

**Bed blocks:** Bed blocks made up of wood or metal are used to rise the foot end or head end of the bed. Bed blocks are used to prevent shock, to arrest haemorrhage, to retain enema and after giving spinal anaesthesia.

**Sand bags:** Sand bags are used to immobilize a part as in fractures and to relieve discomfort. It may also be used to give support to any part of the body and to prevent foot drop or wrist drop.

**Air cushion:** Air cushions are made up of rubber and it can be inflated with air. It is used to take off the weight of the body and to relieve pressure on certain parts of the body. Air cushion should not be used directly in contact with the skin. They should have covers.

**Rubber and cotton rings:** These are used to relieve pressure on certain parts of the body like elbow and heels.

**Air and water mattresses:** These are used for very thin and very obese clients and those

who are prone to pressure sores. The principle on which the use of such mattresses are based on is that, pressure exerted by the body will be distributed equally in all directions, thus pressure against bony prominences or areas subject to the development of pressure sores will be reduced.

### Bed making

The purpose of bed making are as follows:

- To provide the clients with a safe and comfortable bed to take rest and sleep
- To give to the unit or ward a neat appearance,
- To adapt to the needs of the client and to be ready for any emergency or critical condition of illness
- To economize time, material and effort
- To prevent bedsores
- To observe the client, e.g., presence of bedsores, oral hygiene, client's ability of self care etc., during bed making
- To promote cleanliness
- To establish an effective nurse-client relationship.
- To provide active and passive exercise to the clients
- To help the relatives to learn to care for the sick at home

### Principles involved in bed making

Principle	Action
1. Micro-organisms are found everywhere on the skin, on the articles used by the client and in the environment. The nurse takes care to prevent the transference of micro-organisms from the source to the new host by direct or indirect contact or prevent the multiplication of the micro-organisms.	<ul style="list-style-type: none"> <li>• The nurse washes her hands before and after bed making to protect the client and herself from cross infection.</li> <li>• Bed clothes are changed frequently to ensure cleanliness.</li> <li>• When removing the bed linen, care to be taken not to drop them on the floor.</li> <li>• Shake the linen gently to remove the dust. Flapping the bed clothes cause air motion and thus cause transference of bacteria along with the dust.</li> <li>• Linen should be folded and held away from the nurse to prevent direct contact with micro-organisms.</li> <li>• Dusting and thorough cleaning of the client's bed and the unit daily and on discharge of the client, keep them free from dust and micro-organisms. Soap, water, air and sunshine will help them to be clean.</li> </ul>

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Principle	Action
<p>2. A safe and comfortable bed will ensure rest, sleep and prevent several complications in bedridden clients e.g., bed-sore, foot drop etc.</p>	<ul style="list-style-type: none"> <li>• Dry dusting raises dust. Damp dusting is recommended.</li> <li>• Since the mattresses, pillows, blankets and rubber sheets are not washed and sterilized ordinarily, the clients are protected from contact with them by washable covers.</li> <li>• The nurse keeps a reasonable distance from the client's face to prevent droplet infection.</li> <li>• Cleaning an area where there are less number of organisms before cleaning an area where there are numerous organisms minimizes the spread of organisms to the clean area e.g., clean the bed first before cleaning the bedside locker.</li> <li>• The linen removed from the isolation unit is disinfected first before they are sent to laundry.</li> <li>• Nurses having respiratory infection should not attend to the clients.</li> <li>• The body exerts uneven pressure against the mattress, the pressure is greatest over the bony prominences. Lumps and creases in the bed can cause bedsores due to friction between the skin and the mattress or wrinkled sheets. Therefore, the nurse should take care to make the bed smooth and unwrinkled.</li> <li>• Pull the bottom sheet tightly so that there are no wrinkles.</li> <li>• The linen is tucked far enough under the mattress, keep it fixed, tight and smooth. It is tucked in one side and tightened as it is tucked in on the opposite side.</li> <li>• While tightening the sheets, do not alter the shape of the mattress. The mattress should remain flat and even, with the corners firm and square.</li> <li>• If lumps are present in the mattress, due to the collection of cotton in any area, it should be made smooth before making the bed. Otherwise it will be a source of discomfort for the clients.</li> <li>• Turning the mattress and pillows keeps them aired, thus keeping them fresh and soft.</li> <li>• No wet linen should remain on the bed.</li> <li>• Daily dusting should be done to remove any peelings or seeds that are adhered to the bed linen of a bedridden client which may cause discomfort to the client.</li> <li>• If the client is in bed for a long time, tight upper bedding may cause foot drop. Any one of the several measures may be used to prevent the bed linen tight over the foot. <ul style="list-style-type: none"> <li>- Make a pleat in the top sheet and blankets across the foot of the bed.</li> <li>- Make a longitudinal box pleat down the middle of the bed.</li> </ul> </li> </ul>

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Principle	Action
<p>3. Good body mechanisms maintain the body alignment and prevents fatigue.</p>	<ul style="list-style-type: none"> <li>- While tucking the upper bedding, ask the client to flex his knees.</li> <li>- Place a pillow, foot board or cradle at the foot of the bed to take the weight of the upper bedding.</li> <li>• A bed made for a client should allow enough freedom for moving side to side. The movement of the client stimulates circulation, prevents bedsores and maintains muscle tone. Comfort devices are used to provide additional comfort to the client.</li> <li>• The stability of the body is assured by keeping its centre of gravity over its base. When the base is wide it ensures that the centre of gravity will fall through its base. In standing position, the nurse can have a wide base by separating her feet.</li> <li>• The nearer to the centre of gravity a weight is held, the less is the strain produced e.g., when opening the linen it should be placed on the edge of the bed rather than holding it above the shoulder level.</li> <li>• When tucking the sheets under the mattress, flexing is done by knees and hips. This position shifts the work to the long and strong muscles of the thighs and keeps the back in good alignment. This reduces strain on the back.</li> <li>• When placing the linen on the bed and tucking them under the mattress face the direction of the work and move with the work rather than twisting the body and over reaching.</li> </ul>
<p>4. Systematic ways of functioning saves time, energy and material.</p>	<ul style="list-style-type: none"> <li>• Assemble all articles and arrange them conveniently, before starting the bed making.</li> <li>• Arrange the linen in the reverse order of use.</li> <li>• Finish on one side of the bed before going to the opposite side.</li> <li>• When stripping the bed, remove the bed linen one by one holding the open end towards the floor, so that the client's possessions and the hospital articles are not sent to the laundry.</li> <li>• The bed sheets are folded in such a way that it can be replaced easily.</li> </ul>

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**General instructions for bed making**

- Wash hands before and after the procedure
- Do not expose the client unnecessarily
- Protect the client from draught
- Do not cover the client's face while placing the linen
- Do not mix clean linen with soiled linen
- Never place the woolen blanket next to the client's body except the bath blanket and never allow the client to lie down on the mackintosh without lining
- Shake the linen gently
- Do not let the linen touch your body or uniform
- Maintain good body mechanics
- Make the bed firm, smooth and unwrinkled
- Practice economy of time, energy and material
- Arrange the bed clothes in such a way that they allow freedom in the day time but come over the shoulders at night and the top linen loose over the feet
- The cotton mattress must be turned, aired and made free of lumps and creases
- Make adaptations according to weather, climatic differences, individual needs, customs and habits of our clients
- Always get extra help to make a bed for helpless clients and prevent them from falling. The side rails may be used to prevent them from falling if extra help is not available
- Keep a reasonable distance from the face of the client to prevent cross infection
- Inspect the cot, mattress and pillows daily for the presence of vermins and destroy them if found on the bed
- The nursing principles such as individuality, comfort, safety and good workmanship should be kept in mind during the bed making

**Nurse's responsibility in bed making (Open Bed)****Preliminary assessment**

- Check the doctor's order for specific precautions regarding the movement and positioning of the client
- Assess the client's ability for self care
- Check the furniture and linen available in the client's unit
- Assess the number of clean linen needed
- Assess the articles needed for the comfort of the client e.g., blankets, backrest etc.

**Preparation of the articles**

The usual articles in the client's unit are:

- Cot
- Mattress and pillows
- Chair or stool
- Bedside table or locker
- Mackintosh
- Blanket

Articles needed for the complete change of linen are:

- Mattress cover
- Two sheets (bottom and top sheets)
- Draw sheet
- Pillow case
- Counterpane

**Additional articles needed and their purpose:**

- Laundry bag : To discard the soiled linen and to be sent to the laundry
- Dusters (2) : One dry duster to dust the mattress and sheets. One damp duster to dust the furniture
- A bowl with antiseptic lotion : To carbolise the furniture

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**Preparation of the client and the unit**

Explain the procedure to the client to win the cooperation and confidence of the client. Explain how the client can assist. Explain the sequence of the procedure.

- Screen the client to provide privacy (if needed).
- Move furniture away from the bed and move the bed away from the wall.

- Lower the backrest, if any.
- Place the chair at the foot end of the bed and place the clean linen on it in the reverse order of use.
- Place the laundry bag within reach.



Mitering technique (bottom sheet) at the head of the bed

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**Stripping and remaking an open bed**

Steps of procedure	Reason
1. Wash hands.	To prevent cross infection.
2. Remove the pillow and place it on the seat of the chair with the open end away from the entrance.	
3. Remove the top linen. - Loosen the top linen start-ing from the head end and proceed to the foot end. - Remove the sheets one by one, by folding them into six. Bring the lower third over the middle third and fold the upper third over the lower third. Fold at the centre towards you, so that it falls in six. Shake them gently, and place it over the back of the chair if it is to be reused or put it in the laundry bag. - Remove the bedspread, blanket and top sheet separately, holding the open end towards the floor.	Allows easy removal of linen and prevent tearing of the sheet. Saves many steps. Folding into six prevents the sheet from dragging on the floor when placed on the chair or stool. Vigorous shaking spreads the dust, and through dust the micro-organisms. The dust and the crumbs fall to the ground. The client's possessions and hospital equipment are sent to the laundry in carelessly removed linen.
<b>NB :</b> Instead of folding into six, adapt other methods of folding linen if you find them convenient.	
4. Fold the draw sheet. Bring the opposite end to the middle of the bed and the near end over it and thus fold them into three. Place it over the chair.	
5. Roll the mackintosh and place it over the chair.	Rubber sheets are not folded. Folding causes creases on the rubber sheets.
6. Remove the bottom sheet folding it into six.	
7. Remove the mattress cover if soiled.	
<b>NB :</b> Most of the dunlop mattresses are smooth only on one side.	
8. Turn the mattress (if cotton).	Helps to air the mattress and to remove the dust.
9. Dust the mattress with a dry duster.	A damp duster can cause mildew on the mattress.
10. Clean all the surfaces of the furniture using a damp duster dipped in antiseptic lotion.	Damp dusting prevents the spread of dust. At the same time loosens and removes the organisms and foreign material.
Dust the cleaner areas first and then the less clean area.	Cleaning the area where there are few organisms before cleaning the area where there are numerous organisms minimizes the spread of organisms to the cleaner area.

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Steps of procedure	Reason
11. Pull the mattress to the top. Put on the mattress cover. If it is loose on the mattress, the excess can be tucked under the mattress.	By tightening the mattress cover, it enables to make the bed firm and wrinkle free.
12. Make the base of the bed (bottom linen) on one side of the bed.	
- When placing the linen on the bed and when tucking them under the mattress, face in the direction of the work and move with the work rather than twisting the body and over reaching.	Facing the direction of the activity keeps the muscle groups in proper position and they function efficiently without strain.
- When tucking the linen under the bed, separate the feet slightly apart (one leg forward and the other leg backward) and flex the knees instead of the back.	Flexing the knees shift the work to the longest and strongest muscles and keeps the back in good alignment.
- Accomplish a task with each movement, e.g., when placing the bottom sheet on the bed begin at the foot end, smooth to the head end, tuck the head end under the mattress, mitre the corner and tuck under the side as you return to the foot of the bed.	Saves many steps.
- Place the bottom sheet on the middle of the mattress, making sure that the central longitudinal crease is in the longitudinal axis of the bed. Unfold it and spread it straight over the mattress allowing 30 to 37 cm to tuck under the top of the mattress and leaving just enough at the foot end to tuck in.	Tucking at the head end and sides of the bed prevents slipping of the sheets and keeps the bed firm.
- Tuck it securely at the top in the near side. Make a mitred corner. Tuck at the foot end, secure the corner as before. Tuck the sheet along the sides.	
- Place the mackintosh approximately 37 cm from the head end and tuck it along the side.	Keeping the mackintosh at the middle of the bed prevents the bottom sheet getting soiled by the excreta of the client.
- Place the draw sheet over the mackintosh, keeping it about 25 cm from the top of the mattress.	Draw sheet above the mackintosh protects the skin of client from direct contact with rubber. Rubber sheet is a poor conductor of heat. Contact with the rubber sheet produces discomfort in the client.
- Go to the opposite side and tuck the sheets in the same manner.	
<b>N.B.</b> While tucking the linen under the mattress, pull the sheets with both hands and the palms turned downwards.	This enables the nurse to pull the sheets tight and protect her knuckles from bed springs.

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Steps of procedure	Reason
13. Return to the side of the bed first made. Place the top sheet with the wrong side out. Unfold it with the top edge even with the top of the mattress.	
14. Place the blanket over the top sheet 15 to 20 cm below from the top of the mattress.	
15. If the bedspread is used, place it over the blanket with the outer side out.	
16. Make the head end of the linen. Cuff the bedspread under the blanket and then bring the top sheet over the spread as second cuff. Make sure that it will reach upto the client's chin.	Gives a neat appearance to the bed, prevents scattering of the linen when the client moves on the bed. To convert it to a closed bed, the top linen will be long enough to cover the whole bed.
17. Tuck at the foot end altogether or separately and make mitre corners allowing the sides to hand free or tucked according to the hospital routine.	Tucking at the foot end keeps the linen fixed on the bed, provide warmth and security and appears neat. It should not be too tight to allow freedom for movement.
18. Put the pillow case on the pillow and place the pillow at the head end, the open end away from the entrance. While putting on the pillow case the pillow should not touch the nurse's uniform.	

#### After care of the client, unit and equipment

1. Help the client to get into the bed. One corner of the top linen is folded back to let the client in. Cover the client with the top linen.
2. Any comfort devices used by the client should be replaced.
3. See that the whole unit is clean and tidy before you leave the unit
  - The beds in a general ward should be arranged in a straight line.
  - The bedpans, urinals, sputum cups, kidney trays etc., lying in the client's unit are to be taken away, emptied, cleaned and are put back in their proper places.
  - The windows and doors should be dusted to keep them dust free.
  - The cupboards are to be dusted and the articles are to be arranged in order and according to the use.
4. Send the laundry bag with the soiled linen to the laundry. If stains are present on the sheets, remove them by appropriate methods before it is sent to the laundry.
5. If there are any blankets, put them in the sun and disinfect before they are stored in the cupboard.
6. The duster is soaked in antiseptic lotion to disinfect it. Rinse it with clean water and put to dry.
7. Wash hands thoroughly.
8. Record in the nurse's record any observations made on the client.

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### **Adaptations in bed making to meet the special needs**

#### **Closed bed**

A closed bed is an empty bed, in which the top covers are so arranged that all linen beneath the spread is fully protected from dust and dirt while waiting for the client. (A bed which will remain empty until the admission of another client).

On admission of the client the closed bed is converted into an open bed. Cuff the bedspread under the blanket and then bring the top sheet over the spread as second cuff.

#### **Open bed**

The term open bed is used to designate the hospital bed when it is about to be occupied by a client. It is made either for a new client or an ambulatory client. The bed is made as usual and one corner of the linen is folded back to let the client in.

When the client is transferred from the trolley to the bed, the top linen is fanfolded to the foot end of the bed or to one side of the bed.

In some hospitals, the top linen remains fanfolded at the foot end of the bed during day time and is used to cover the client at night.

#### **Admission bed**

The bed is made as in an open bed. The client gets into the bed after a thorough bath and changing into the hospital dress, if it is the custom in the hospital. A long mackintosh and a bath blanket is put over the open bed, until such time a thorough bath is given on the bed at the time of admission. After the bath the mackintosh and the bath blanket are removed. The bed may be made warm by the use of hot water bottles.

#### **Occupied bed**

This is to make a bed with the client in (this is made for a client who cannot get out of the bed. The preparation and the after care of the client will be same as in an open bed).

The procedure is as follows:

- Explain how the client can assist and the

sequence of the procedure. Assemble the equipment and arrange the linen within the easy reach.

- Remove all pillows except one. Loosen the bedding on all sides and remove the spread and the blanket leaving the top sheet over the client.
- Turn the client away from you. If the client is very ill, call for assistance.
- Fanfold the draw sheet to the clients and push it as close to the client as possible. Damp dust the rubber sheet and roll it back. Fanfold the bottom sheet to the client.
- Dust the mattress with a dry duster. Then raise the mattress with one hand and clean the cot with a damp duster.
- Place the clean bottom sheet over the mattress making sure that the middle fold is in the middle of the bed. Half of the sheet is fanfolded and kept near to the client. Tuck the head end, make the corners at the top and bottom and tuck sides as in open bed.
- Bring the mackintosh back into place and tuck it tightly under the mattress. Place the clean draw sheet over the mackintosh and tuck the near end under the mattress. The distal half is folded and kept near to the client.
- Turn the client back over the folded linen and then towards you. Go to the opposite side of the bed.
- Remove the soiled linen (bottom sheet and draw sheet) and put them in the laundry bag. Straighten out the bottom sheet, rubber sheet and draw sheet and tuck them separately and firmly.
- Turn the client back to the middle of the bed. Place a clean top sheet over the client and remove the soiled top sheet. Take care neither to expose the client nor to cover the face of the client with the top sheet.
- Replace the blanket and spread over the top sheet and make the bed as in an open bed.
- Tuck the foot end giving enough freedom for movement. Use any one of the following methods:
  - Make a pleat in the sheet and blanket across the foot of the bed

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- Make a longitudinal box pleat down the middle of the bed
- Ask the client to flex the knees while tucking the top linen
- Place a foot board or cradle at the foot of the bed
- Put the clean pillow cases and place the pillows in position and leave the client comfortable. Replace the comfort devices in place to give additional comfort to the client. Leave the unit in order.

### Operation bed or post-anaesthetic bed or recovery bed

It is one which is prepared for a client who

#### Requisites

Articles	Purpose
• All the articles needed for an open bed	
• One small mackintosh and a towel	To protect the head end of the bed
• A tray containing: <ul style="list-style-type: none"> <li>- Clean rag pieces or gauze pieces</li> <li>- Artery forceps</li> <li>- Mouth gag (if necessary)</li> </ul>	To clean the mouth off the secretions
• Airway, tongue forceps and tongue depressor	To keep the air passages clear and to prevent the falling back of the tongue
• Temperature tray, B.P. apparatus and T.P.R. Chart	To record the vital signs frequently
• Saline stand and other requisites for I.V. administration	I.V. fluids may have to be continued in the ward
• Hot water bottles	To keep the bed warm
• Bed block (2)	To raise the foot end of the bed if B.P. falls
• Suction apparatus and oxygen cylinder	To be used in emergency



Operation bed

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**Procedure**

The foundation of the bed is made as in open bed. Extra mackintosh and towel is put at the head end to protect the bed from soiling by vomitus. The foot end of the top linen are left untucked. They are folded back even with mattress. Standing to one side of the bed, the top linen is fanfolded to the opposite side.

All other items needed for the immediate care of the client such as infusion stand, bed blocks, post anaesthetic tray etc. must be ready at hand but not on the way for receiving the client. No pillow is kept at the head end or it may be used to protect the client from injury by hitting against the bars at the head end of the bed.

Additional mackintosh and draw sheet be used according to the side of the operation to protect the bed from becoming wet with blood. If pillows are used to support the operated area, they should be protected with waterproof covers.

**Cardiac bed**

A cardiac bed is used to help the client to assume a sitting position which can afford him greatest amount of comfort with least strain. The main purpose of the cardiac bed is to relieve dyspnoea caused by cardiac disease.

**Requisites**

- Articles for an open bed
- Additional pillows
- Back rest and cardiac tables
- Air cushion, knee pillow and foot rest

**Procedure**

Make the bed as in an open bed. Place the back rest and arrange the pillows in position so that the back is well supported. Keep the client in bed and cover him properly. Adjust the air cushion in place. Place the knee pillow under the knees to prevent slipping of the client. Arrange the pillows on either side so that the arms are well supported. Adjust the cardiac table with pillow in front of the client so that the client can lean forward and rest on it. Make the client comfortable and leave the unit tidy.

**Fracture bed**

It is one which is used for a client with fracture of the trunk or extremities to provide firm support by the use of firm mattress that rest on a fracture board or bed board.

**Requisites**

Same as in an open bed in addition to the fracture boards.

**Procedure**

Arrange the fracture boards on the cot to give firm support to the fractured area. The bed is made as in open bed. For most fracture beds, a balkan frame may be fitted to support the pulleys and weights. Where insertion of the bedpan is difficult or lifting the hips of the client is contraindicated, a divided mattress is used.

**Amputation bed or stump bed or divided bed****Purpose**

- An amputation bed is used after amputation of the leg to take off the weight of the bed clothes, off site of the operation
- To keep the stump in good position
- To be able to watch the stump for haemorrhage and apply tourniquet instantly if necessary
- A divided bed may be used to avoid disturbing the client when constant observation or repeated applications or treatments are necessary for abdomen or legs

**Requisites**

- Articles necessary for an open bed
- An extra set of top linen – top sheet, blanket and counterpane
- Bed cradle
- Pillow with waterproof cover
- Hot water bags to keep the bed warm
- Sand bags and a towel or draw sheet to prevent the jerking movement of the stump and to keep the stump in good alignment. Tourniquet and dressing trays to be used in case of emergency (reactionary). Haemorrhage may take place in 24 hours and the secondary haemorrhage may take place in 7 to 10 days

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**Procedure**

The foundation and head end is made as in an open bed. The other end does not reach the foot end, but it is folded back towards the head end at the level of the stump or the part that is to be observed. The other set of the top linen starts from the level of the stump, but overlapping the first one and the excess is tucked under the mattress at the foot end. When the client is brought back from the operation theatre, fanfold the two sets of top linen to one side of the bed and receive the client on the bed. Elevate the stump on a small pillow protected with a waterproof cover. Place the sand bags on either side of the stump to prevent the jerking movements of the stump. Bed cradle may be used to take off the weight of the top linen. Cover the client and keep the client warm.

The two section of the top linen should overlap each other at least by 8 to 10 inches so that it can be easily lifted to observe the stump and also to prevent unnecessary exposure of the client.

**Blanket bed**

It is made for a client with rheumatism or renal disease.

**Purpose**

- To carry the weight of the bed clothes off the painful joints
- To keep the client warm
- To promote elimination through the skin

**Requisites**

- Articles as for an open bed except a narrow draw sheet and mackintosh
- Two old woolen blankets or two bath blankets to put immediately under and over the client
- Bed cradle to take the weight of the bed clothes off the painful joints
- Sand bags to immobilize the painful joints
- Hot water bottles with covers to provide additional warmth (in a renal bed, the cradle and the sand bags are omitted)

**Procedure**

The bed is made as in an open bed except the following. Place the extra blanket one under and the other over the client. Place the narrow mackintosh and draw sheet just under the client's buttocks. Cradle is used to take off the weight of the top linen off the painful joints. Sand bags are used to immobilize the painful joint. The client is dressed in wooden clothes. Additional warmth may be given by using the hot water bottles or by using electric cradle. Foot board may be used to prevent the foot drop.

**Turning or changing the mattress of a bedridden client**

When a client is able to get out of the bed, we turn or change the mattress with no difficulty. When the movements are restricted for a client, it is difficult to turn or change mattress when it is wet or soiled with urine, etc.

**Requisites**

- All the articles as in an open bed
- Three pillows extra

**Procedure**

Explain the procedure to the client. Get the help of other nurses. Remove the top linen and pillows leaving the top sheet or the bath blanket over the client. Untuck the bottom sheets, mackintosh and draw sheet, rolling them into a smooth roll close to the client on either side from top to the bottom.

The client is then moved to the edge of the mattress. The empty half of the mattress is pulled off the bed, exposing half of the cot. This empty half of the cot is covered with three pillows and the client with the bottom sheets, is shifted on to the pillows.

The mattress is then turned or changed. The client with bottom sheets is shifted back to the mattress. The pillows are removed. The mattress is pulled across on to the whole bed and the bed is made as in an occupied bed. Change linen as necessary.

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