



## CARE OF BEDSORE IN ELDERLY CLIENTS A BIO-PSYCHO-SOCIAL-MODEL APPROACH

### Nursing

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### ABSTRACT

Chronic health conditions often require people to be confined to the bed either temporarily or permanently depending upon the health condition. In case of old age and certain degenerative diseases, a person loses the ability to move. When a patient is confined to the bed chances of getting pressure sores is high. Pressure ulcers occur due to the pressure applied on the soft tissue resulting in completely or partially obstructed blood flow to the soft tissue. This concept article portrays care of elderly patients with bed sore with a Bio Psycho Social Model.

### KEYWORDS

Bedsore, Elderly, Pressure Ulcer, Geriatric Patients.

### 3.INTRODUCTION

Some chronic health conditions require people to be confined to the bed either temporarily or permanently depending upon the health condition. In case of old age and certain degenerative diseases, a person loses the ability to move. When a patient is confined to the bed chances of getting pressure sores is high. It is developed due to the occlusion of blood vessels which leads to localized damage to skin. Skin is the largest body organ. There are three main layers of the skin. Epidermis is the top layer of the skin. Dermis, the second layer of skin and subcutaneous fat is the bottom layer of the skin. The main functions of skin are protection excretion sensation and synthesis of vitamin D. Bed sores /Pressure sores and skin tears are very painful and can take a long time to heal. Optimized skin care can prevent pressure ulcers.

### DEFINITIONS

#### Pressure ulcer/Bed sore/ Decubitus ulcer

Pressure ulcers occur due to the pressure applied on the soft tissue resulting in completely or partially obstructed blood flow to the soft tissue.

Pressure ulcers are defined as, "The localized areas of tissue necrosis that develop when soft tissues are compressed between bony prominence and an external surface for a prolonged period of time".

#### Bio-psycho-social-model

The Biopsychosocial model was first conceptualized by George Engel in 1977, suggesting that to understand a person's medical condition it is not simply the biological factors to consider, but also the psychological and social factors.

The biopsychosocial approach systematically considers biological, psychological, and social factors and their complex interactions in understanding health, illness, and health care delivery.



### I.BIOLOGICAL FACTORS AND ITS CONSIDERATION-CARE OF BEDSORE IN ELDERLY

#### PRESSURE PRONE AREAS

- Supine position: - Occiput, shoulder, elbow, buttocks, sacrum, heels
- Lateral Position: Ear, Acromion process, iliac crest, knee, lateral malleolus.

#### RISK FACTORS

##### I.External factors:

- **Pressure:** It is the primary cause for ischemic damage and tissue necrosis. A pressure to the tissue excess of 32mm/Hg mostly for 1 to 2 hrs is sufficient to cause tissue breakdown.
- **Friction:** It causes the removal of superficial layer of skin and is due to the poor lifting technique.
- **Shearing:** It occurs when individual's head is raised to fowler's position and the person slides downwards or is dragged upward.
- **Excess moisture & maceration:** It is due to the incontinence of urine and faeces. Wound drainage, sweat and vomitus can also irritate the skin causing more damage.

##### II. Internal factors:

- Reduced mobility
- old age
- Sensory impairment (Decreased sensation and loss of sensation)
- Unconsciousness
- Vascular diseases (Varicose veins, edema)
- severe chronic illnesses (Obesity, Renal failure, diabetes mellitus, Hypertension)
- previous history of pressure ulcer
- malnutrition
- Dehydration.

### SIGNS AND SYMPTOMS

Purplish or bluish patches in dark skinned people, red patches in white people, swelling, blisters dry patches, cracks, hard warm areas and swollen skin over bony prominences are seen

### PREVENTION OF PRESSURE ULCER:

#### I. Risk assessment and prevention

- Skin inspection is fundamental in preventing the pressure ulcer.
- Inspect the skin at least once a day.
- Special attention must be given to the part of the body where external forces are exerted by equipment and clothing.
- Early assessment will be helpful.

#### II. Patient assessment and care

##### 1. Care of skin:

- Bed bath at least once daily.
- Clean the skin and keep without moisture.
- Give special attention to skin folds and perineum.
- Use a mild soap.
- Skin should be patted dry and don't rub.
- Barrier cream (Moisturizing cream) to be applied.
- Avoid the use of talcum powder.

**If continent of urine/stool:**

- Use absorbent pads.
- Continuous bladder drainage (Catheterize) if advised by medical personnel.
- Keep the perineal area clean and dry.

**2.Positioning:**

- Change the position at least every 2 hours.
- Reduce friction by lifting rather than dragging.
- Use turning schedule provided (Supine- right lateral- supine - left lateral).

**3. Care of pressure prone areas:**

- Attend to pressure the areas fourth hourly.
- Use water bed or alpha bed to relieve the pressure.

**• Occiput:**

- Inspect the area for redness.
- Massage the area gently in circular manner.
- Keep pillow to support.

**• Scapula:**

- Inspect the area.
- Clean the area.
- Massage gently (Give smooth strokes).
- Keep pillow under the shoulder.

**• Ear**

- Observe any redness or blisters.
- Support with pillow.

**• Sacrum**

- Keep the area clean and dry.
- Massage using circular motion (Stroke upwards to the shoulders knead the skin by grasping between the thumb and fingers).
- Support with pillow or air cushion.

**• Elbows and knees:**

- Observe the bony prominence for any developing pressure ulcer.
- Keep the area elevated.
- Avoid direct pressure and friction.
- Support with a cotton ring.

**• Ischial tuberosities**

- Inspected area daily.
- Massage with smooth circular stroke.
- Apply lubricant if skin is dry.
- Support with pillow.

**• Lateral malleoli and greater trochanter:**

- Inspect daily.
- Pad the bony prominence.
- Support with cotton rings or pillow.

**• Heel:**

- Keep elevated from bed support with a thin pad of cotton or cotton rings.
- Support with pillow under the calf muscles to elevate the heel.
- Keep sand bags under the feet to keep it straight.

**4. Use of bed pan:**

- Don't use cracked or chipped bed pans.
- Lift the patient while giving and removing bed pan.
- Don't leave the patient with bed pan for a long time.
- Don't pull or drag the bed pan.
- Keep the patient clean and dry.

**5. Maintenance of hydration and nutrition**

- Give high protein supplement.
- Encourage fluid diet in chronically ill patients.
- Keep skin hydrated (dry skin leads to inflammation and excoriation).
- Encourage additional fluids. The minimum amount of fluid requirement
- For critically ill patients is 30 ml/kg of body weight.
- Approximately 2 litres of fluid should be taken every day.

**6.Early ambulation is encouraged for all the patients**

- Move all the extremities.
- Flexion, extension, pronation and supination is encouraged.
- Encourage turning from right to left and viceversa.
- Make the patient to sit in bed.
- Support while walking.
- Encourage moving around the bed and in the room as per tolerance.

**• III.Bedsore assessment & management**

Care for the sore as directed by the doctor. Keep the wound clean to prevent infection.

Clean the sore every time while change the dressing.

- For a beginning sore, wash the area gently with mild soap and water.If needed, use a moisture barrier to protect the area from bodily fluids.
- If the pressure sore is extended, it should be cleaned with a salt water (saline)rinse to remove loose and dead tissue. Or, use recommended cleanserby the doctor.
- DO NOT use hydrogen peroxide or iodine cleansers. They can damage skin.Keep the sore covered with a special dressing. This protects against infectionand helps keep the sore moist so it can help to heal.
- Talk with the doctor about the type of dressing to use. Depending on thesize and stage of the sore, may use a film, gauze, gel, foam, or other typeof dressing.
- If sores found with pus, foul smell, edema and warmth around thewound it should be immediately consulted with a doctor.

**Special points to be followed by care givers:**

- Don't bend on your waist while lifting the patient.
- Provide a wide base of support by keeping feet apart.
- Flex at the knees and hip joint.
- Keep the trunk vertical and avoid straining.
- Avoid jerking and twisting during lifting.
- Take assistance while lifting or moving heavy patients.

**II. BEDRIDDEN-A PSYCHOLOGICAL VIEW**

A bedridden patient can easily get depressed with a sense of incapacitation due to illness and disability, or if confined within four walls, with a fixed view, dull lighting and minimal interaction. It is important to provide adequate routine to enhance comfort and relief from pain.

**Solutions**

- Select well lighted room for the patient.
- Selected rooms must be well ventilated.
- Keep the room neat and tidy.
- Give comfort positions.
- Provide calm and quiet environment.
- Maintain good rapport with the patient.
- Ensure privacy in all procedures.
- Provide pleasant smells inside the room according to patient's likes.
- Play calm and soothing music.
- Light hot water bath and simple massages just prior to bed time.
- Encourage communication, positive thinking and interactions that willenable them to ventilate their feelings.

All of the above solutions will help to manage their psychological problems.

**III. BEDRIDDEN-SOCIOLOGICAL PROBLEMS AND SOLUTIONS****• Problem**

- Isolation
- Relationship conflicts
- Spiritual needs

**How to overcome**

- Maintain good rapport with the patient.
- Encourage them to speak freely.
- Communicate with the patient in lovable, positive and empathetical way.
- Frequent visit of friends and relatives enhances the patients progress.

- Arrange prayers and rituals as per the patient needs.
- Arrange for a visit of clergy and read the religious books if needed.
- Encourage simple and enjoyable games within the patient limitations.
- Consider the patients opinions, while taking important decisions that helps to improve self-confidence as well as worthiness.

## CONCLUSION

Pressure ulcer can occur as a complication in most of the bedridden patients. Prevention can be accomplished by decreasing the risk of pressure through the use of the therapeutic mattress, excellent skin care and frequent positioning. Psychological and sociological wellbeing also reduce the risk of bed sore. The responsibility for maintaining health rest on the shoulders of each individual and care givers can help for the better care of chronically ill patients.

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