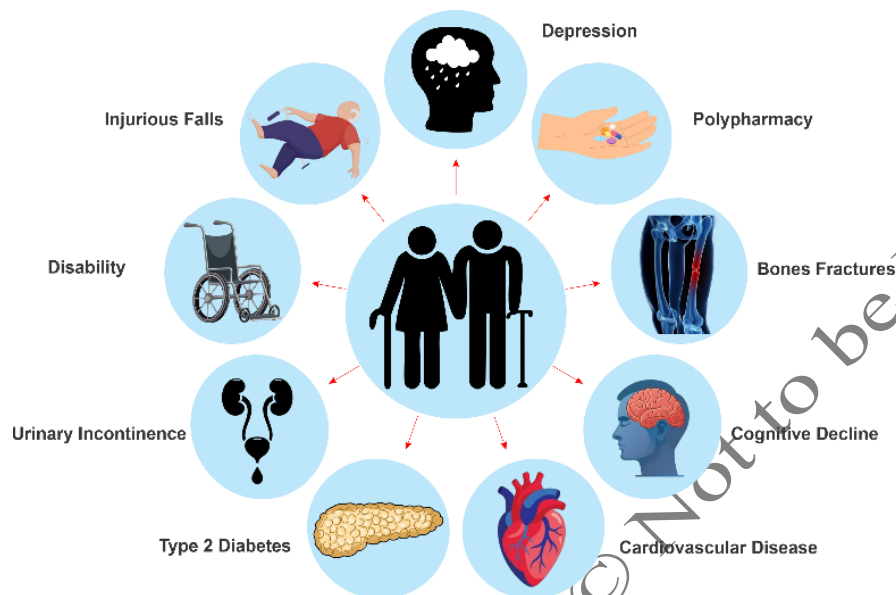


Draft Study Material



GERIATRIC CARE

(QUALIFICATION PACK: HSS/Q6001)

Sector- Health & Paramedical Science

Grade XI



PSS CENTRAL INSTITUTE OF VOCATIONAL EDUCATION

(a constituent unit of NCERT, under MHRD, Government of India)

Shyamla Hills, Bhopal- 462 002, M.P., India

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Preface

The Pandit Sunderlal Sharma Central Institute of Vocational Education (PSSCIVE) a constituent of the National Council of Educational Research and Training (NCERT) is spearheading the efforts of developing learning outcome based curricula and courseware aimed at integrating both vocational and general qualifications to open pathways of career progression for students. It is a part of Centrally Sponsored Scheme of Vocationalisation of Secondary and Higher Secondary Education (CSSVSHSE) launched by the Ministry of Human Resource Development, Government of India in 2012. The PSS Central Institute of Vocational Education (PSSCIVE) is developing curricula under the project approved by the Project Approval Board (PAB) of *Rashtriya Madhyamik Shiksha Abhiyan* (RMSA). The main purpose of the learning outcome based curricula is to bring about the improvement in teaching-learning process and working competences through learning outcomes embedded in the vocational subject.

It is a matter of great pleasure to introduce this learning outcome based curriculum as part of the vocational training packages for the job role of **GERIATRIC CARE**. The curriculum has been developed for the higher secondary students of vocational education and is aligned to the National Occupation Standards (NOSs) of a job role identified and approved under the National Skill Qualification Framework (NSQF).

The curriculum aims to provide children with employability and vocational skills to support occupational mobility and lifelong learning. It will help them to acquire specific occupational skills that meet employers' immediate needs. The teaching process is to be performed through the interactive sessions in classrooms, practical activities in laboratories and workshops, projects, field visits, and professional experiences.

The curriculum has been developed and reviewed by a group of experts and their contributions are greatly acknowledged. The utility of the curriculum will be adjudged by the qualitative improvement that it brings about in teaching-learning. The feedback and suggestions on the content by the teachers and other stakeholders will be of immense value to us in bringing about further improvement in this document.

Deepak Paliwal
Joint Director
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Module 1	PRIORITIZING THE SAFETY OF OLDER ADULTS
Module Overview	
<p>This module on geriatric care promotes dignity, hygiene, and safety for older adults by introducing senior secondary vocational students to the scientific and practical foundations of elderly care. It explores the biological changes associated with aging, highlighting the common health, sensory, and cognitive challenges older adults face. The sessions emphasize the importance of hygiene and safety, handwashing techniques, personal grooming standards, and professional use of personal protective equipment (PPE) to prevent infections and maintain a clean caregiving environment. The module also covers comfort and emotional support strategies, safe handling practices, and the ethical responsibilities of Geriatric Care Assistants (GCAs), including effective communication and respectful behavior. Through interactive activities and demonstrations, students gain hands-on experience in providing compassionate and scientifically-informed care, fostering a deeper understanding of aging and the role of vocational caregivers in promoting health, dignity, and independence for the elderly.</p>	
Learning Outcomes	
<ul style="list-style-type: none"> • Demonstrate the need for prioritizing the safety of older adults • Identify basic components required for bed making to enhance patient comfort • Explore the professional boundaries • Demonstrate personal protective measures 	
Module Structure	
Session 1: Safety of Older Adults	
Session 2: Basic Components of Patient Care	
Session 3: Informing the Elderly Person About the Procedures and Services	
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SESSION 1: SAFETY OF OLDER ADULTS	

Providing safety and comfort for older adults is a primary concern of geriatric care. The basic components required for elderly comfort include a conducive environment such as maintaining the room temperature and humidity of the air, dust, acoustics, lighting, bed comfort, and hygiene. The ability to safeguard themselves from injury increases physical and psychological confidence during this age. Injury is specific, particularly to this age group, which makes them dependent on the younger population.

Geriatric care assistant takes instructions from nurses and follow the rationales of patient care management to ensure patient safety. Observing the mandatory standards of care required by professional laws safeguards the professionals from malpractice. The nursing care plan is provided by a professional nurse after a detailed nursing assessment, diagnosis, planning, implementation, and evaluation of the care. The geriatric aide follows these instructions while caring for the elderly person. The most common geriatric care error occurs while dispensing the medication and treatment, especially at home setup. Hence, maintaining reports and documentation needs extreme attention in nursing care as it is considered care not performed if not recorded in the chart. The patient should be well informed about all the care services given, with full knowledge of risks and prior consent taken before any procedure. Informed consent refers to the necessary authorization taken about the care given, the risks, benefits, costs, and alternatives from the patient. The geriatric care assistant is trained by the nurse to follow care instructions at home. They fit the role by coordinating the daily life needs of older adults to provide a comprehensive system of care. The job role of a geriatric care assistant involves assisting the older adult to manage the impact of multiple medical conditions and issues related to aging, mortality, and end-of-life care. Defining the goals of patient care brings clarity about the outcomes while extending help to people with multiple chronic illnesses. Making a functional daily schedule and chart helps to assess the patient's functional status of daily living while focusing on preventive aspects aids in improving the quality of life.

Mind Map: Geriatric Care Assistant Responsibilities

Geriatric Care Assistant Responsibilities

Roles and Responsibility

- follows nurse's instructions
- Coordinates daily needs of elderly
- Assists with chronic illnesses
- Supports end-of-life care

Common Errors

- Medication dispensing
- Home treatment errors

Documentations

- Mandatory and accurate reporting
- "Not documented = Not done"
- Supports legal protection

Daily Care & Functionality

- Functional Schedule Chart
- Assess Daily Living Skills

Nursing Care Plan

- Provided by
- Assessment
- Diagnosis
- Planning
- Implementation
- Evaluation
- GCA follow care Plan

Informed Consent

- Patient education about:
- Risks
- Benefits
- Costs
- Alternatives
- Consent Before any Procedure

Professional Standards

- Follows Laws and Regulations
- Avoid Malpractice
- Focus on Preventive Care
- Improve Quality of life

Factors affecting the safety of older adults:

As a care provider, it is essential to understand the safety factors while planning to train older adults to protect themselves. Sensory acuity, cognitive disturbances, mobility, and general health issues are identified causes of injury and falls.

Sensory Acuity:

Sensory information provides an understanding of environmental safety. People with impaired vision, auditory, gustation, olfaction, and tactile sensation are susceptible to injury. Clearing objects in the area of geriatric movement, using alternative modes of sound indicators, safeguarding from slippery surfaces, fire safety, protecting from ingestion of harmful substances and medicines, and familiarizing with the equipment such as oxygen tanks, intravenous tubing, and hot packs are potential safety measures.

Cognitive functions

Older adults with intact cognitive functions such as orientation, consciousness, mood and affect, thinking, perception, and speech can follow safety measures efficiently. Conditions such as alterations in consciousness, mental disorders, lack of sleep, stress, substance abuse, and memory disturbances are potential threats to safety. People with speech and language disorders such as aphasia are also at risk for injuries as they are unable to understand the safety commands. The use of signboards, and medications, easing mental tensions, creating supportive community spaces, and awareness about the situation to neighbors enhances the environmental protection needed for safety.

Mobility

People with impaired mobility due to various conditions, such as paralysis, motor coordination, and balance-related disorders, are prone to injury. Safety devices such as walkers and wheelchairs should be used to overcome the discomfort.

General health condition

Planning for emergencies is crucial to ensure the safety and well-being of elderly individuals, especially if they live alone, have limited mobility, or are managing chronic health conditions. An effective emergency plan for elderly care should address medical, environmental, and logistical concerns and guide caregivers, family members, and emergency responders.



Fig.1.2: Emotional Support

Safety precautions for providing a safe and clean environment

Familiarizing with surrounding conditions is crucial to geriatric safety. Maintaining safe home requirements by carbolizing with the antiseptic lotion of all objects that will come in contact with the patient, arranging the room according to the physical needs, maintaining noise-free, ventilated, and adequately lighted environment, removing harmful objects, etc. will help the elderly person lead an active life.

Interventions to prevent falls:

1. Become familiar with the surrounding conditions and injurious fall-related education.

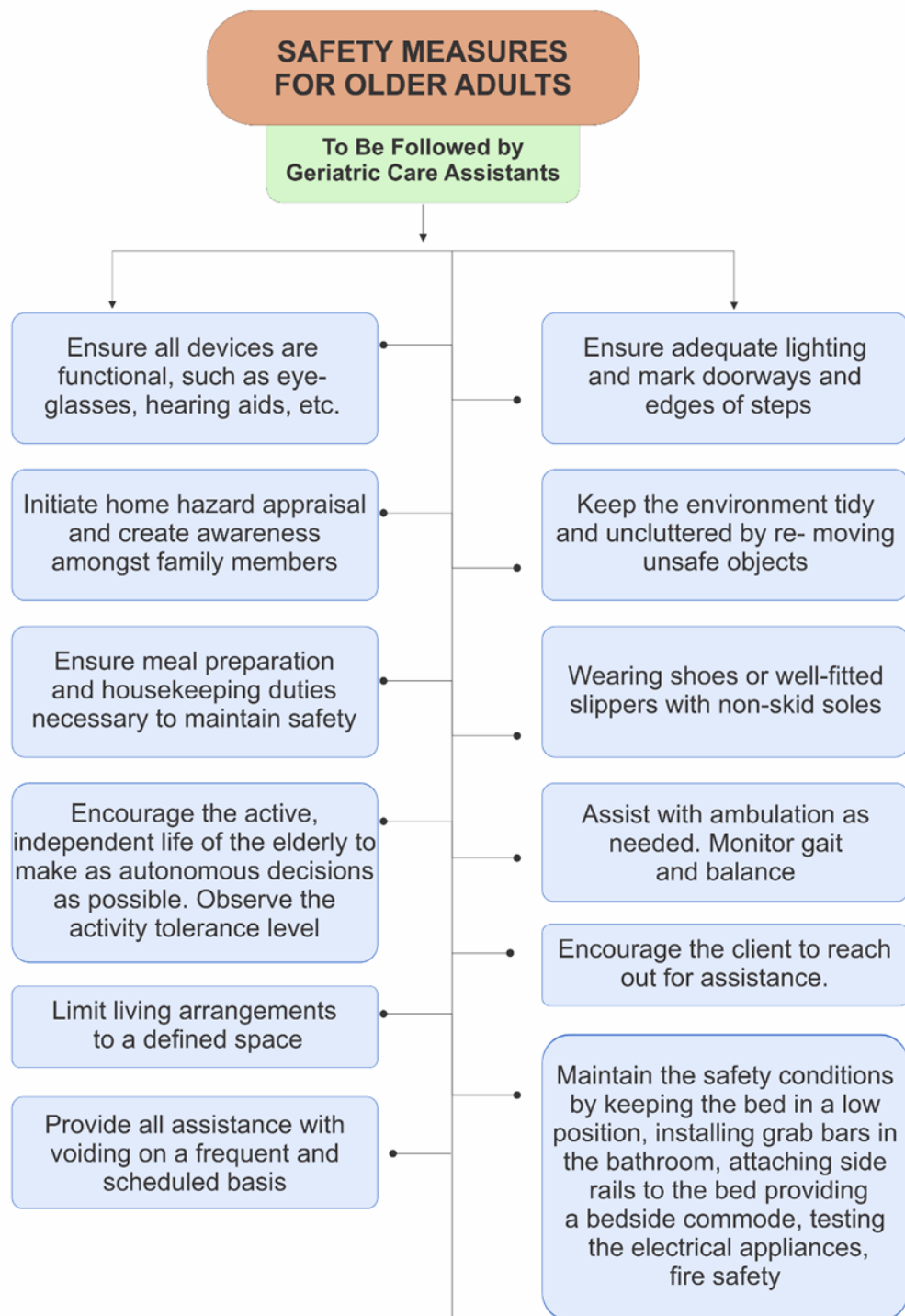
2. Home visits are to be conducted by geriatric care assistants for environmental assessment and modification.
3. Monitor the medication routine.
4. Methods to increase strength balance and endurance.

Have you observed people using safety devices such as mobility aids, restraints, etc.? Prepare a list of safety devices used by older adults. Frame three standard questions to empathetically elicit the requirements for safety devices from elder adults. Being emotionally considerate while dealing with people requiring help is advantageous.

Safety measures for older adults are to be followed by geriatric care assistants.

- Ensure all devices are functional, such as eyeglasses, hearing aids, ambulatory devices, etc.
- Initiate home hazard appraisal and create awareness amongst family members.
- Ensure meal preparation and housekeeping duties necessary to maintain safety.
- Encourage the active, independent life of the elderly to make as autonomous decisions as possible. Observe the activity tolerance level.
- Ensure adequate lighting and mark doorways and edges of steps
- Keep the environment tidy and uncluttered by removing unsafe objects
- Wearing shoes or well-fitted slippers with non-skid soles
- Assist with ambulation as needed. Monitor gait and balance
- Limit living arrangements to a defined space
- Encourage the person to do regular exercise and activity to maintain strength, joint flexibility, and balance
- Encourage the client to reach out for assistance
- Maintain the safety conditions by keeping the bed in a low position, installing grab bars in the bathroom, attaching side rails to the bed, providing a bedside commode, testing the electrical appliances, fire safety measures, etc., if necessary.
- Provide all assistance with voiding on a frequent and scheduled basis

- Evaluate orientation and alertness status. Encourage annual or more frequent reviews of all medications prescribed.
- Ensure that all physical requirements are functional as per medical conditions.



Integrating the aged population into the community is essential for fostering inclusivity, improving well-being, and leveraging their wealth of experience. Strategies include promoting intergenerational programs that bring together youth and seniors through mentorship, shared hobbies, or volunteer activities. Establishing age-friendly public spaces, such as accessible parks and community centers, encourages participation in social and recreational events.



Fig. 1.3: Safety Devices

Digital literacy programs can empower older adults to stay connected through technology, bridging generational gaps and combating social isolation. Additionally, encouraging senior employment or volunteerism allows them to contribute meaningfully, enhancing their sense of purpose. Policymakers, community organizations, and families play critical roles in creating opportunities for active engagement, ensuring that the aged population remains a vibrant part of society.

Safety Devices used by older adults

Safety devices for elderly adults enhance their security, independence, and quality of life by addressing various needs. Caring for the elderly is a growing concern, and hence, to provide holistic care, the strengthening of community and family ties plays a significant role. Geriatric care focuses on promoting and maintaining an optimum level of health and function, early identification of problems, prevent deterioration of an existing condition, and rehabilitation. Safety devices are used for all these functions. Health promotional practices help in maintaining an optimum level of functioning, whereas routine physical examinations are risk indicators. Many devices are used for supporting aged people in their daily functioning.

Assessing the need for safety devices:

The following are the observations to be made for deciding on the requirements for safety devices in older adults.

Physical Assessment:

- Consciousness, Orientation, sensorium and perception, speech, mood, thoughts, judgment, Insight about health status, vital signs, etc.

Basic activities of daily living, including eating, dressing, grooming/personal hygiene, toileting, and ambulatory skills.

- Instrumental activities of daily living include more complex activities of independent living in the community, such as planning finances, management of surrounding needs, medications, seeking health needs, etc.
- Muscle strength and coordination, any other medical conditions that require assistance.
 - Psycho-social functioning assessment:
 - Socioeconomic status, family members staying along with the person, contacts and people visiting, interpersonal relationships, community participation, and independent participation in the community.
 - Major concerns, mood, and thought, Inquire about any problems or issues faced, attitude towards self and others, activities, interests and hobbies, coping skills, planning and management of personal problems, difficulty in experiencing and expressing pleasure, the present state of comfort experienced, plans and hopes.

Safety Devices for support of elder adults

The goal of the elderly care plan is to maximize their functional potential as an individual. This includes prioritizing human needs and devising measures for independent living at their own pace in the environment. Safety devices are aids that suit these conditions.

Fall prevention tools like grab bars, non-slip mats, walkers, and lift chairs reduce the risk of accidents, while emergency alert systems, including medical alert pendants and fall detection wearables, ensure quick access to help. Home safety can be improved with smart doorbells, motion sensor lights, stove shutoff devices, and smoke detectors. Medication management tools like automated pill dispensers and smart pill bottles help maintain health routines. Vision and hearing aids, such as magnifiers and amplified phones, support sensory challenges, while GPS trackers and geofencing apps assist in wandering prevention. Kitchen safety is enhanced with auto-shutoff appliances and cut-resistant gloves, and cognitive engagement is encouraged with user-friendly tablets and brain-training apps. Bed rails, pressure mats, and reflective gear further improve safety in rest and transportation.

These devices collectively foster a safer and more comfortable living environment for elderly adults.

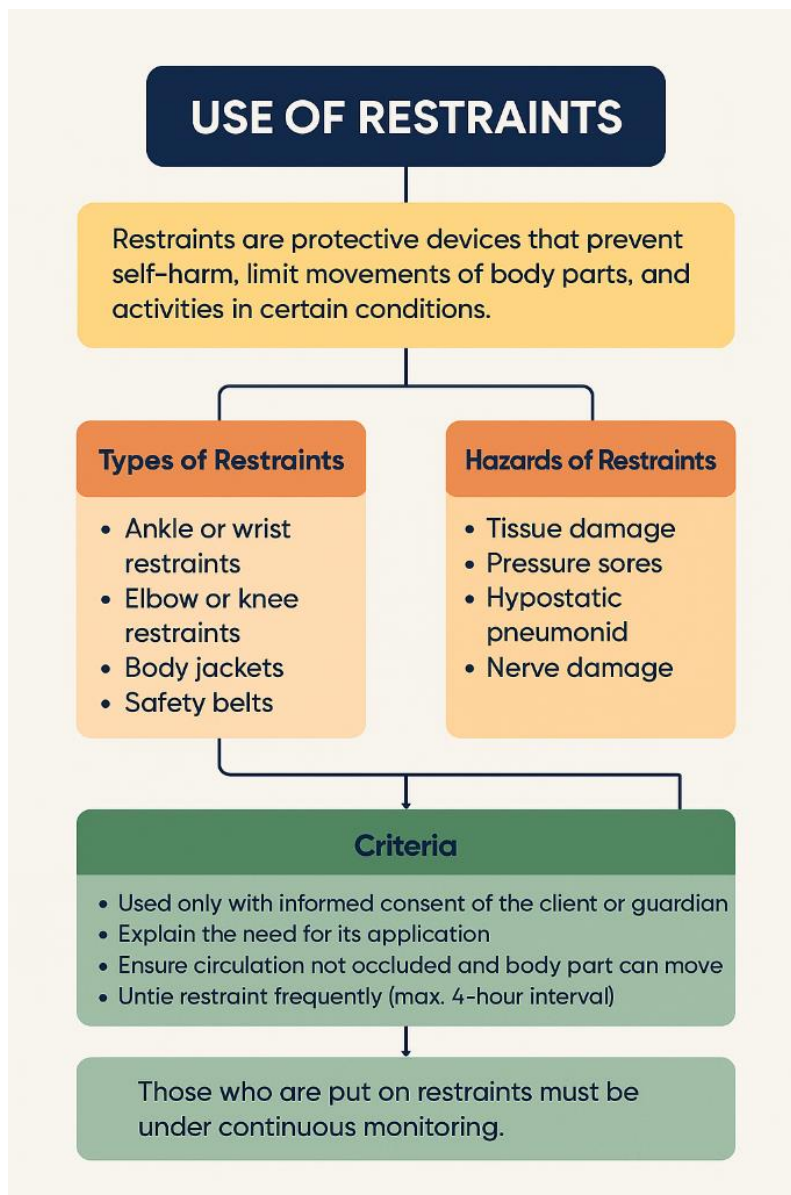


Restraints

Restraints are protective devices that prevent a client from self-harm, limit movements of body parts and activities in certain conditions, and promote a feeling of security in a client who needs control. There are various types of restraints. Ankle or wrist restraints, elbow or knee restraints, body jackets, and safety belts are the various types of restraints used for elderly care. The hazards of using restraints are tissue damage due to constant friction, the development of pressure sores, hypostatic pneumonia, and nerve damage, to mention a few. Asphyxia should be properly handled by providing all-around monitoring as it may turn fatal due to negligence in care. Restraints are used only with the informed consent of the client and their guardian, after explaining the need for its application. Ensure that circulation does not get occluded and the person can move the body part. Untie the restraint frequently at a maximum interval of 4 hours, and it should not be

covering an IV site. Those who are put on restraints must be under continuous monitoring as they are unable to escape injury or death.

Flow Chart



Glossary

Consciousness: The normal state of consciousness includes wakefulness, awareness, or alertness when a person is not asleep, as well as the recognized stages of sleep from which they can be easily awakened.

Orientation: refers to a patient's awareness of their situation and surroundings and is assessed by asking if they know their name, current location (city and state), and date.

Sensorium: The sensorium is the part of the brain that processes sensory stimuli and serves as the center of perception, encompassing the entire sensory apparatus of the body.

Speech assessment evaluates and diagnoses difficulties in speaking, comprehension, writing, and swallowing in children and adults, often due to neurological disorders, stroke, brain injuries, tumors, cerebral palsy, cleft palate, orofacial muscle issues, hearing impairments, stammering, articulation errors, or motor speech disorders.

Affect is the patient's immediate expression of emotion, while mood reflects their sustained emotional state; affect is considered inappropriate when it does not match the patient's experiences or descriptions.

Activities

1. Encourage the use of safety gear among community members by conducting an awareness camp.
2. Make design prototypes of safety devices for various uses by older adults.

Check Your Progress

A. Fill in the Blanks

1. The study of the physical and psychological changes related to old age is called.....
2. During the initial phase of life development, the changes lead to whereas the latter part of life involves regression to earlier stages in the life span.
3. A nursing care plan is provided by a after detailed nursing assessment, diagnosis, planning, implementation, and evaluation of the care.
4. Maintaining reports and documenting needs extreme attention in nursing care as it is considered as if not recorded in the chart.
5. Observing the mandatory standards of care required by safeguard the professionals from malpractice.
6. _____ include more complex activities of independent living in the community such as planning finances, management of surrounding needs, medications, seeking health needs, etc.
7. _____ are the protective devices that prevent a client from self-harm, limit movements of body parts and activities in certain conditions, and promote a feeling of security in a client who needs control.

B. Multiple Choice Questions

1. Old age has certain long-term physical conditions that occur commonly except

- a. Degenerative diseases of heart and blood vessels b. Locomotor disabilities
b. c. Dementia d. Developmental disorders.

2. Geriatric care aims to optimize the quality of life of elderly people by empowering them as.....
a. Active decision makers b. Caretakers c. Dependents d. Nursing Assistant
3. Safety devices used for the mobility of older adults such as walkers, wheelchairs, etc. prevent.....
a. Onset of illness b. injury from fall c. services provided d. overall health and wellness.

C. Short Answer Questions

1. Elaborate on the role of a geriatric aide while assisting an elder adult's home environment.
2. Write six measures to ensure mobility assistance to the older adult.
3. Mention the factors affecting the safety of the elderly.
4. Short note on restraints as safety devices.
5. How do we make a physical assessment to decide on the requirement of safety devices for an older adult?
6. Describe the aspects of psycho-social functioning of older adults.
7. What are restraints and how do they contribute to the safety of older adults?

SESSION 2: BASIC COMPONENTS OF PATIENT CARE

Geriatric aides are essential in providing care at home, in a hospital, or a community setting. Unlike the other adult population, care for elderly people requires more personal warmth and consideration of human emotion and their needs. While creating a comfortable environment to maximize the quality of life of older adults, certain factors make the care plan successful. The aim of providing care and comfort should translate by enhancing personal dignity and self-esteem to help them achieve individualized goals.

- Comfort and care needs for elderly people include considering individuality by utilizing their potential. Acknowledge their thoughts and emotions and the richness of their experience by providing time to listen. Sharing respect and confidence encourages independence to make choices.
- Providing emotional care and support to sort out personal problems and anxieties requires a geriatric aide to extend the time for active listening. Allow them to vent their feelings, and provide comfort through reassurance.
- Orienting to time, place, and person and focusing on here and now improves mental acuity.
- Allow time for their interests and participation in social activities and celebrations to make their stay livelier.
- Maintain confidentiality and respect for their privacy. Geriatric care providers should be mindful that they share the person's domestic space, unlike a nurse who provides care at a hospital.

- Arrange the room comfortably by providing a clean bed, adequate lighting during the day and night, dedicated space for electrical appliances, etc. Ensure to assist in maintaining sensory aids like eyeglasses, hearing aids, dental aids, etc.
- Encourage them to maintain body hygiene and provide clean and comfortable clothing. Facilitate a routine for activities of daily living. Provide nutritious food and assist them in eating and drinking.

Make Bed for Patient

Now you will learn the stepwise procedure to make a bed for the client/patient. Comfort is appreciated by all human beings. Every individual requires basic comforts like a mattress, pillow, a good environment, and comfort devices for good sleep. Bed making is the procedure adopted for making beds using scientific principles of nursing to provide maximum comfort for the patient.

Bed Making

- The need for bed making is as follows:
- To provide the clients with comfortable rest and sleep.
- To give the room a neat appearance
- To be ready to meet any emergency needs of the patient or critical condition of illness
- To efficiently manage time, material, and effort
- To check for bedsores, oral hygiene, the client's ability to self-care, etc.
- To promote cleanliness.
- To teach the relatives to care for the sick at home.



Fig.1.4: Bed making
Courtesy: <https://goo.gl/WbXPPc>

Principles Involved in Bed Making

- Microorganisms are found everywhere in the environment, especially in places that deal with diseases. Care should be taken to reduce the transference of microorganisms from one source to another and prevent their multiplication.
- A safe bed will ensure and prevent several complications in bedridden clients, e.g. bedsores, foot drops, etc.
- Good body mechanism maintains body alignment and prevents fatigue.
- Systematic ways of bed-making save time, energy, and material.

General Instructions for Bed Making

1. The hands of the care provider must be cleaned before and after the procedure.
2. Take permission from the patient before changing the linen.
3. Avoid changing the patient's position many times.
4. The client's face should not be covered while placing the linen.
5. Keep clean linen separate from soiled linen.
6. Never place the woolen blanket near the client's body except the bath blanket and never allow the client to lie down on the mackintosh without lining.
7. Shake the linen gently.

8. The linen should not touch your body or uniform.
9. Maintain good body mechanics.
10. Make the bed firm, smooth and unwrinkled.
11. Practice proper utilization of time, energy, and material.
12. Arrange the bedclothes in such a way that they allow freedom in the daytime but come over the shoulders at night and the top linen loose over the feet.
13. The cotton mattress should be turned often, aired, and made smooth.
14. Provide help to make beds for helpless clients and to prevent them from falling. The side rails of the cot prevent the patient's fall.
15. Keep distance from the face of the client while making bed to prevent cross infection.
16. Inspect the cot, mattress, and pillow frequently for the presence of pests and destroy them if found on the bed.

Preparation

The usual articles in the patient's unit are:

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

Things needed for the complete change of linen are:

- Bed cover
- Two Sheets (Bottom and top sheets)
- Draw sheet
- Pillow Case
- Counterpane

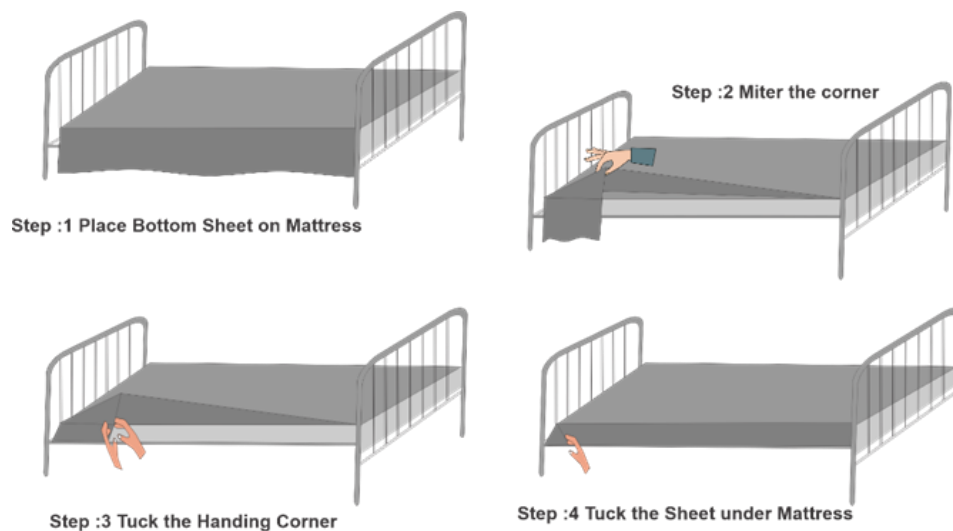


Fig.1.5: Preparation required for bed-making

Additional articles needed	Purpose
Laundry Bag	Discard the used sheets and send the soiled linen to the laundry.
Dusters	One dry duster to dust the mattress and sheets. One damp duster to dust the furniture.
A bowl with antiseptic lotion	To carbolize the furniture.

Different Types of Bed

1. Open bed
2. Closed bed
3. Admission bed
4. Occupied bed
5. Cardiac bed
6. Fracture bed
7. Amputation bed
8. Blanket bed

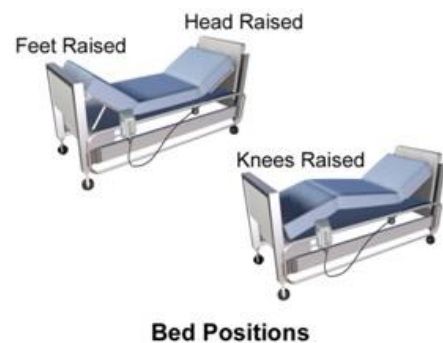


Fig.1.6: Different types of bed

Preparation of the Client and the Unit

1. Explain the procedure to the client to win the cooperation and confidence of the client.
2. Encourage the client to make changes in position.
3. Use Screen to provide privacy
4. Remove any furniture from near the bed and the bed should be placed away from the wall.
5. Place the backrest in a lower position
6. Place a chair at the foot end of the bed and place the clean linen on it in the reverse order of use.
7. Place the laundry bag within the reach

Procedure for Changing Bed Linen in a Hospital Setting

Preparation and Initial Steps

- Perform hand hygiene by washing hands thoroughly with soap and water or using hand sanitizer.
- Remove the pillow and place it on the seat of a chair with the open end facing away from the entrance.

Removing the Top Linen

- Loosen the top linen, starting from the head of the bed and working towards the foot.
- Remove the sheets one by one, folding them properly:
- Bring the lower third over the middle third.

- Fold the upper third over the lower section.
- Fold the sheet in half towards yourself, resulting in six folds.
- Shake the sheets gently before placing them over the back of a chair if they will be reused.
- If not being reused, place them directly into the laundry bag.
- Remove the bedspread, blanket, and top sheet separately, ensuring the open ends face the floor to prevent contamination.

Handling Additional Bed Linens

- Fold the draw sheet by bringing the opposite end to the middle of the bed, then folding the near end over it, forming three layers.
- Place the folded draw sheet on the chair.
- Roll the mackintosh (waterproof sheet) and place it on the chair.

Removing and Cleaning the Mattress

- Remove the bottom sheet, folding it into six parts for easy handling.
- If the mattress cover is soiled, remove it immediately for washing.
- Turn the mattress to ensure even wear.
- Dust the mattress with a dry duster to remove debris.
- Use an antiseptic solution to clean the bed frame and surrounding furniture, always cleaning the cleaner areas first, then moving to less clean areas.

Reassembling the Bed

- Reposition the mattress at the top of the bed.
- Put on a clean mattress cover, ensuring it fits snugly. If there is excess fabric, tuck it securely under the mattress.
- Prepare the base of the bed on one side in preparation for new linens.
- While spreading the linen on the bed and when tucking them under the mattress, position your body towards the direction of the work and move along with the process rather than twisting the body and overreaching to avoid causing hazards.
- Position your feet in a wide base while tucking the linen under the bed (one leg forward and the other leg backward) and flex the knees instead of the back.
- Accomplish a task with each movement, e.g. when placing the bottom sheet on the bed begin at the foot end, smoothen the sheet towards the head end, tuck the head end under the mattress, miter the corner, and tuck under the side as you return to the foot of the bed.
- Place the bottom sheet in the middle of the mattress to ensure the central longitudinal crease is placed in the longitudinal axis of the bed. Unfold the sheet and spread it without any formation of crease over the mattress allowing 30 to 37cm to gather under the mattress and leaving sufficient space at the foot end to tuck in.
- Insert the sheet securely by forming a mitered corner at the top corner side and the foot end to secure the corner. Insert the sheet along the sides of the mattress.
- The mackintosh is placed approximately 37 cm from the head end and pulled towards the side underneath the bed.
- Keep the draw sheet over the mackintosh, keeping it about 25 cm from the top of the mattress.

Position the Top Sheet:

- Return to the side of the bed where the top sheet was placed. Ensure the top sheet is placed with the wrong side facing out. Unfold it so that the top edge is aligned with the top of the mattress.

- Arrange the Blanket. Spread the blanket evenly over the top sheet. Position it 15 to 20 cm below the top edge of the mattress. Add the Bedspread (if used). Place the bedspread over the blanket with the outer side facing outward.
- Make the Head End of the Bed. Fold back (cuff) the bedspread under the blanket. Bring the top sheet over the bedspread to create a second cuff. Ensure the top sheet is positioned so that it can reach up to the patient's chin. Tuck the Bedding at the Foot End. Tuck in the top sheet, blanket, and bedspread together or separately. Create mitered corners at the foot of the bed. Leave the sides free or tucked in, based on hospital protocol.
- Place the Pillow. Insert the pillow into a clean pillowcase. Ensure the pillow does not touch your uniform while doing so. Position the pillow at the head of the bed, with the open end facing away from the entrance.

Final Steps in Bed Making and Unit Preparation

- Assisting the Client into Bed. Fold back one corner of the top linen to allow the client to get into bed comfortably. Help the client settle into a comfortable position. Cover the client with the top linen, ensuring warmth and comfort.
- Replacing Comfort Devices. If the client uses any comfort devices (such as pillows, positioning aids, or mobility supports), ensure they are correctly positioned.
- Ensuring a Clean and Organized Unit. Before leaving, make sure the entire unit is neat and clean by following these steps: Arrange beds in a general ward in a straight line. Remove, empty, clean, and return bedpans, urinals, sputum cups, kidney trays, and other equipment to their proper places. Dust windows and doors to maintain a dust-free environment. Dust and organize cupboards, ensuring all articles are neatly arranged based on their use. Wash and refill the water flask with clean water. Arrange and replace flower vases for a neat appearance. Ensure washing sinks, if available, are thoroughly cleaned.
- Handling Linen and Blankets. Send soiled linen to the laundry. If stains are present, remove them using the appropriate method before sending them. If blankets are used, place them in the sun to disinfect them before storing them in the cupboard.
- Cleaning and Disinfecting. Soak the duster in antiseptic lotion to disinfect it. Rinse the duster with clean water and leave it to dry.

Documenting Observations

- Record any observations made regarding the client's condition, comfort, and response to care in the appropriate documentation.

Geriatric Care Assistant Responsibility in Bed Making

Check the doctor's order for any specific requirements regarding the movement and positioning of the client;

Assess if the clients can perform self-care activities.

Check that the furniture and linen are adequate for the client's unit;

Assess the requirement for the number of clean linens and the articles needed for the comfort of the client, e.g., blankets, backrest, etc.;

Change the linen.

Activities

1. Practice preparing the bed in various comfortable styles.

Check Your Progress

A. Multiple Choice Questions

1. The purpose of bed making is to:
 - a) Enhance luxury
 - b) Increase money generation
 - c) Improve comfort, hygiene, and neat appearance
 - d) All of these
2. The basic principles to be considered while preparing a bed are:
 - a) Prevent sources of microorganisms
 - b) Provide a safe and comfortable bed
 - c) Follow body mechanism
 - d) All of these
3. The articles needed for a complete change of linen are:
 - a) Mattress cover and two sheets
 - b) Draw sheet and pillowcase
 - c) Counterpane
 - d) All of these

B. Short Answer Questions

1. What is the purpose of bed making?
2. What are the different types of beds?
3. Describe the responsibility of a Geriatric care assistant in bed making.
4. Enumerate the steps involved in making of open bed.

SESSION 3: INFORMING THE ELDERLY PERSON ABOUT THE PROCEDURES AND SERVICES

This session will make us aware of the procedures and services to be provided to the older adult as per the duties and responsibilities of geriatric care assistant.

Geriatric care assistant (GCA) provides care to older adults under the supervision of healthcare team. They get to spend more time with the elder adult than other healthcare providers. GCAs must be empathetic and have good communication and nursing skills to improve the overall health and wellness of senior people.



Fig.1.7: Geriatric Care Assistant

Essential Duties and Responsibilities

The essential duties of a Geriatric Care Assistant (GCA) include the following:

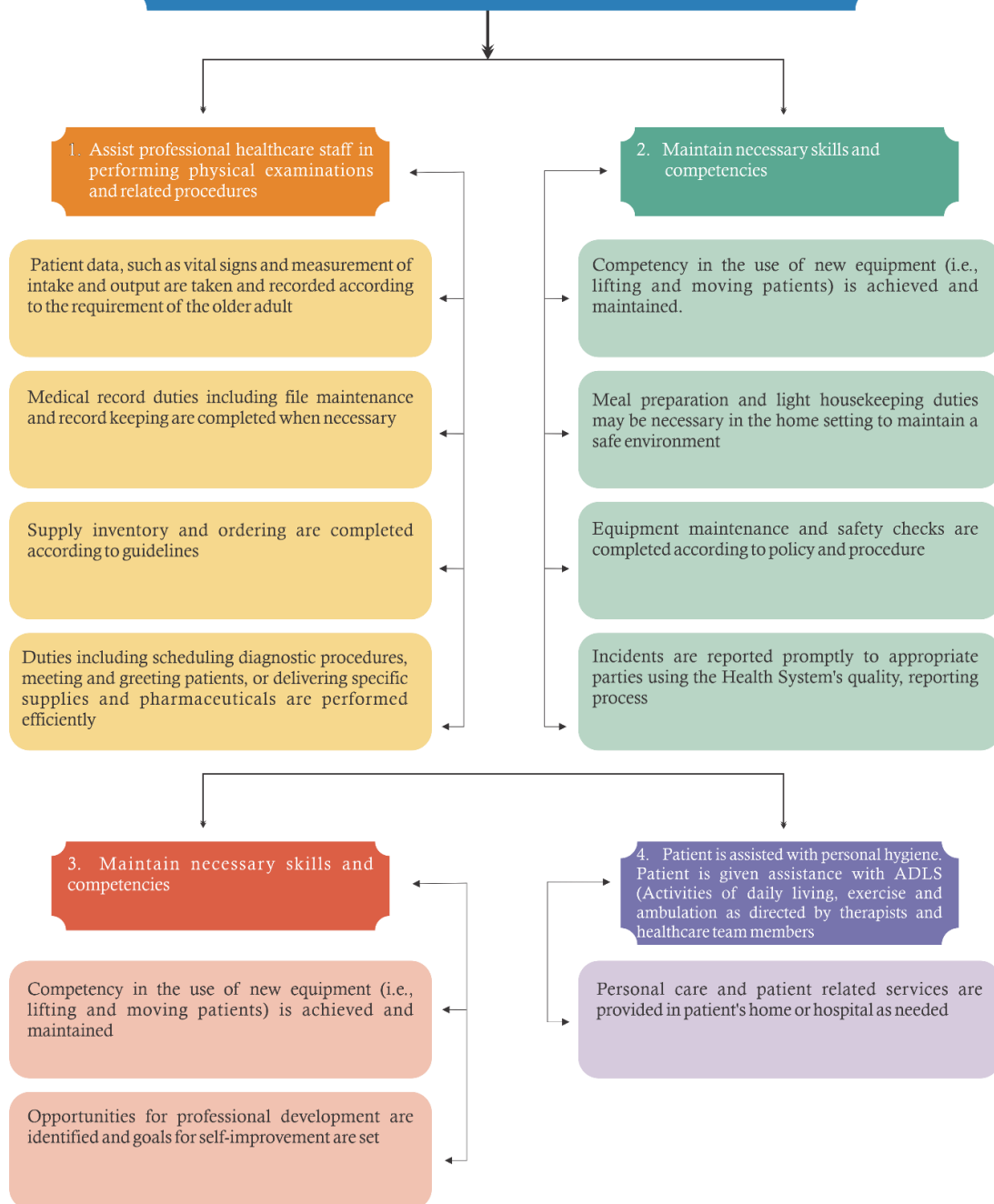
1. Assist professional healthcare staff in performing physical examinations and related procedures, which include measuring and recording vital signs and physiological input and output assessment.
 - Patient data, such as vital signs and measurement of intake and output are taken and recorded according to the requirement of the older adult.
 - Changes and abnormal findings in patient's data are communicated to the registered nurse and members of the team in a timely manner.
 - Patient is assisted with personal hygiene.
 - Patient is given assistance with ADLs (Activities of Daily Living), exercise and ambulation as directed by therapists and healthcare team members.
 - Personal care and patient-related services are provided in the patient's home or hospital as needed.
2. Maintain patient safety, assess the client's requirements, and apply suitable interventions.
 - The patient's environment including the patient's room, exam room, or treatment area is kept neat and clean.
 - Meal preparation and light housekeeping duties may be necessary in the home setting to maintain a safe environment.
 - Equipment maintenance and safety checks are completed according to policy and procedure.
 - Incidents are reported promptly to appropriate parties using the Health System's quality reporting process.



Fig.1.8: Geriatric Aide assisting doctor in physical examination
Courtesy: <https://goo.gl/SpnfXn>

3. Perform administrative support functions
 - Medical record duties, including file maintenance and recordkeeping, are completed when necessary.
 - Supply inventory and ordering are completed according to guidelines.
 - Duties, including scheduling diagnostic procedures, meeting and greeting patients, or delivering specific supplies and pharmaceuticals, are performed efficiently.
4. Maintain necessary skills and competencies
 - Competency in the use of new equipment (i.e., lifting and moving patients) is achieved and maintained.
 - Opportunities for professional development are identified and goals for self-improvement are set.
 - The education and development of others are fostered by sharing information learned through individual professional development.
 - A positive environment for the professional development of coworkers is encouraged.
 - Annual mandatory training activities and regulatory in-service hours requirements are completed within established time frames.

Essential Duties of a Geriatric Care Assistant (GCA)



Organizational Duties

- Communicates properly to maintain good interpersonal skills.
 - Positive professional qualities of an employee are reflected in his verbal and non-verbal communication.

- Information for patients and staff is provided in a supportive and timely manner.
- Interpersonal conflicts are resolved according to the organizational policies.
- Diverse perspectives in personal and social arenas are accommodated to nurture an inclusive work environment.
- A clear communication pattern is to be followed.

2. Service extended to internal and external customers

- Confidentiality for patient and employee information to be adhered to.

Factors to create a favorable environment for geriatric care are fewer distractions, and noise, avoiding anxious and fearful situations, and ensuring privacy. Older adults may be affected by sensory alterations or a slowed response time. They prefer addressing them by prefixing Mr, Ms, Sir, Madam, Shri, or Shrimati to their first names or as advised by them. You may clarify by asking permission to address them by their preferred names, which reflects respect for the individual by the caregiver.

Geriatric care is provided mostly in their home environment and hence sociocultural factors and maintaining the personal space and territoriality or boundary has to be considered while functioning.

- Appropriate resources are used consistently to meet customer needs.
- Relationships with staff are fostered to meet internal and external customer needs.
- Positive working relationships with peers, management, and customers are maintained at all times.
- Organizational values to be followed with respect, integrity, and excellence and should be evident in behavior.

3. Participate in performance improvement activities

- Initiative in an employee is demonstrated by trying to resolve problems of people around.
- Change is faced with positive and supportive behavior.

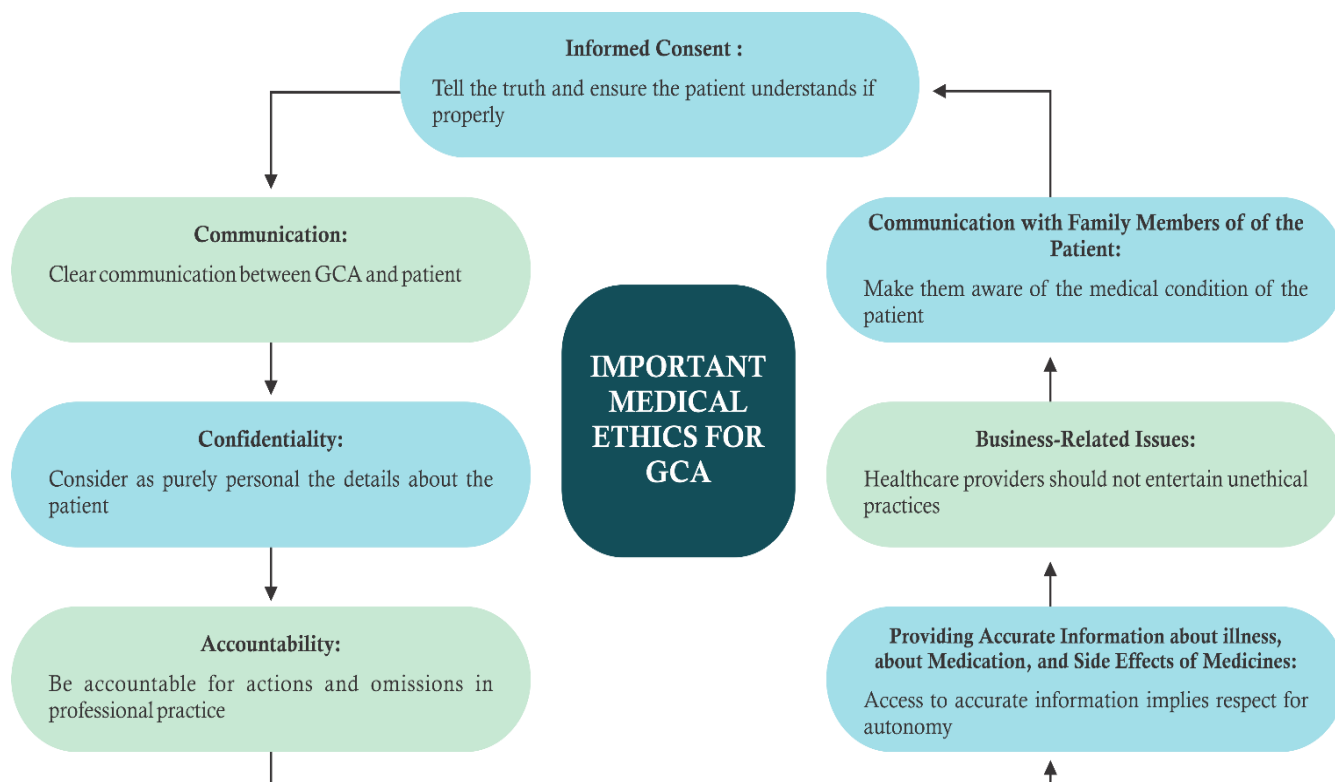
Code of Conduct for Geriatric Care Assistant

In this session, you will learn about qualities of a good Geriatric Care Assistant (GCA). Geriatric Care Assistant or Patient Care Assistant (PCA) works in a range of healthcare settings and makes valuable contributions in all areas of healthcare. They work under the supervision of nurse in the hospital. As per to the institutional guidelines, the Geriatric Care Assistant must have a good code of ethical conduct.

Medical Ethics

Some of the **important medical ethics** they should follow are listed below as per Indian Medical standards:

Informed consent: Tell the truth and ensure the patient understands it properly when they are obtaining the patient's consent to a procedure or treatment.



Confidentiality: The Geriatric Care Assistant should consider the details about his patients as purely personal between him and the patient. Except for professional reasons the details should not be discussed with others or in public.

Communication: Clear communication between the Geriatric Care Assistant and the patient is essential for successful treatment. Any doubt that the patient has should be dealt with carelessly and cleared at once in simple language that he/she understands.

Cultural concerns: Respect the cultural practices of the patient/client in any given circumstance e.g: Allowing practice of rituals before procedures.

Communication with family members of the patient: The Geriatric Care Assistant should understand the anxiety of the relatives of the patients and make them aware of the medical condition of the patient.

Business-related issues: Healthcare providers should not entertain unethical practices in the hospital.

Providing accurate information about illness, about medication, and side effects of medicines: Access to accurate information implies respect for autonomy – providing correct information enable the patient to make reasoned and informed choice.

Follow the guidelines of the hospital: The Geriatric Care Assistant should strictly follow the guidelines for hygiene, patient care, etc. This helps prevent hospital induced infections.

Accountability: As a professional, the Geriatric Care Assistant will be accountable for actions and omissions in his/her professional practice and justify the decisions.

Qualities of a Geriatric Care Assistant

Empathy

- The ability to identify with and understand another person's feelings, situation, and motives;
- Must have a sincere interest in working with people;
- Must care about others and be able to communicate and work with them;
- Understand needs and learn effective communication is one way to develop empathy.

Honesty

- Truthfulness and integrity;
- Willing to admit mistakes and to correct them.

Dependability

- Must accept the responsibility required by your position.
- Reporting to work on time and maintain a good attendance record;
- Must perform assigned tasks efficiently and on time.

Willingness to learn

- Must be able to learn and adapt to new changes that result from new inventions and many other factors;
- At times, additional education may be required to remain competent.

Patience

- GCA should be tolerant, understanding, and able to control temper.
- He or she should learn to deal with frustration and overcome obstacles.

Acceptance of criticism

- Must be willing to accept criticism.

- Patients, employers, and co-workers' criticism should be taken constructively to improve your work.

Enthusiasm

- Must enjoy work and display a positive attitude;
- Enthusiasm benefits oneself and others to improve team spirit.

Self-motivation

- Ability to initiate and persist with a task;
- Should be able to individually determine work on a priority basis and follow them.

Tact

- Ability to do the kindest or most fitting thing in a difficult situation;
- Avoid being judgmental about other's feelings and show consideration for the feelings of others;
- Requires constant practice.

Competence

- Capability to perform tasks efficiently;
- Follow instructions;
- Use approved procedures and try to maintain accuracy.
- Get guidance whenever necessary to confront personal limitations.

Discretion

- In any healthcare career, information should not be told to anyone without proper authorization;
- Patient is entitled to confidential care;
- Be discrete and make sure the patient's rights are not violated.

Team player

- Learn to work with others;
- Each member of a healthcare team will contribute to providing the patient with quality care;
- A team of workers can accomplish goals faster.

Personal Appearance

- Follow healthy appearance and health hygiene that inspires confidence and positive self-image;
- Should wear uniform as per to the place of employment;
- Wear the name badge with photo identification as per the norms of the place of employment.

Acceptable Professional Practices for Geriatric Care Assistants

- Politely enquire from the registered agency or instructor about all facets of the rotation.

- Follow laws and regulations that govern patient rights and responsibilities issued under the Clinical establishments (Registration and Regulation) Act 2010 in the appropriate manner and seek clarification, when needed.
- Master the routine tasks and specific procedures assigned by the healthcare agency to focus on competencies and skills specific to the rotation.
- Report to the assigned externship/internship site ON TIME and follow procedures to make up for the missed hours.

Practices to be avoided by Geriatric Care Assistant

- Advising patients, or another health professional without the authority of the preceptor.
- Accept or receive pay, either directly or indirectly, from the patient
- Requesting to be placed with someone you are related to.

- Request changes/withdrawals after rotation assignments are made.

Qualities of a Geriatric Care Assistant

Empathy

- The ability to identify with and understand another person's feelings, situation, and motives.
- Must have a sincere interest in working with people.
- Must care about others and be able to communicate and work with them.
- Understand needs and learn effective communication is one way to develop empathy.

Honesty

- Truthfulness and integrity.
- Willing to admit mistakes and to correct them.

Dependability

- Must accept the responsibility required by your position.
- Reporting to work on time and maintain a good attendance record.
- Must perform assigned tasks efficiently and on time.

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- Must be able to learn and adapt to new changes that result from new inventions and many other factors.
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- Follow healthy appearance and health hygiene that inspires confidence and positive self-image.
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Competence

- Capability to perform tasks efficiently;
- Follow instructions;
- Use approved procedures and try to maintain accuracy.
- Get guidance whenever necessary to confront personal limitations.

Self-motivation & Enthusiasm

- Must enjoy work and display a positive attitude.
- Enthusiasm benefits oneself and others to improve team spirit.
- Ability to initiate and persist with a task.
- Should be able to individually determine work on a priority basis and follow them.

Acceptance of criticism

- Must be willing to accept criticism.
- Patients, employers, and co-workers' criticism should be taken constructively to improve your work.

Activities

Debate and discuss:

1. As a Geriatric Care Assistant, following a self-motivated working style is more beneficial.

Check Your Progress

A. Fill in the Blanks

1. A _____ provides support to doctors, nurses, and other support staff to take personal care of the patient.
2. Services extended to customers include _____ for patient and employee information.

B. Multiple Choice Questions

1. Equipment maintenance and supply check follows:
 - a) Rules asserted by Geriatric Care Assistant
 - b) Policy-based procedures
 - c) Personal decisions
 - d) None of the above
2. _____ enhances interpersonal skills.
 - a) Positive communication
 - b) Negative interpersonal skill
 - c) Unclear speech
 - d) All of the above
3. The roles and responsibilities of GCA include:
 - a) Maintaining patient safety
 - b) Assisting healthcare staff
 - c) Good interpersonal skills
 - d) All of the above
4. As a Geriatric Care Assistant, if you notice abnormal breathing in a patient, what will you do?
 - a) Give him medicines
 - b) Report to the nurse or doctor
 - c) Take him to the ventilation room
 - d) Shift to the intensive care unit
5. A Geriatric Care Assistant named Manu was transporting a patient with a chronic illness. Manu understood the patient's anxiety and gave assuring answers to his queries. Which ability of Manu as an ideal GCA is reflected in this?
 - a) Distraction
 - b) Empathy
 - c) Indifferent

- d) None of the above
6. Geriatric Care Assistant should be able to work together in a _____ for the benefit of the patient.
- Individual manner
 - Team
 - Personal way
 - All of the above
7. Professional, legal, or ethical issues are followed and governed by _____ Act.
- Health Act
 - Patient rights and responsibilities under the Clinical Establishments (Registration and Regulation) Act, 2010
 - Personal Privacy Act
 - None of the above

C. Match the Following

1. Patient care procedure	a) Good interpersonal skills and managing customers
2. Administrative support Functions	b) Maintaining the patient's personal Hygiene
3. Organizational duties	c) Productive work habits
4. Teamwork	d) Medical record-keeping supply of Inventory

D. Short Answer Questions

- Write any two professional duties of a Geriatric Care Assistant that ensure safety.
- What are the core organizational duties of a Geriatric Care Assistant (any two)?
- How can Geriatric Care Assistants contribute to enhancing teamwork?
- Write any three qualities that a Geriatric Care Assistant should possess.
- Explain the importance of medical ethics and the need for following them.
- Practice to be avoided by Geriatric Care Assistants while performing duties?

SESSION 4: PERSONAL HYGIENE PRACTICES FOR GERIATRIC CARE ASSISTANT

Personal hygiene supplements good health. Neglect of cleanliness may be the reason for many infectious diseases, and hence, improving hygiene standards can prevent many epidemics globally. The contribution of every individual in maintaining personal and environmental hygiene influences the index of health standards of any society. Negligence of hygiene practices causes dandruff, bad breath, worm infestation, diarrhea, common cold, and a range of many infections. Indian cultural traditions focus on the value of maintaining personal hygiene. We follow a sequence of daily care activities like oral

hygiene, bathing, dressing, etc., which inculcate the habit of keeping our bodies clean. By understanding the contents of this unit, you will learn the methods of washing hands and personal grooming and their role in the maintenance of health.

Medical Hand Hygiene Practices

The session explains the importance of hand washing for good health. Hygiene is a set of routine personal cleaning practices performed for the preservation of health. Modern medical sciences follow certain standards of hygiene in various situations. The concept of hygiene varies among regions, cultures, genders, groups, and individuals. Some regular hygienic practices are considered good habits by most people in society, while the neglect of hygiene may be treated in a disgusting, disrespectful, or even threatening manner.

Hand washing is the act of cleaning one's hands with or without the use of water, another liquid, or soap to remove soil, dirt, and/or microorganisms. Medical hand hygiene pertains to the practices to be followed while applying medicine or providing other medical services that reduce or minimize the spreading of diseases. Hand washing with soap is useful to prevent diarrhea and acute respiratory infections (ARI). The purpose of hand washing is to clean the hands of disease-spreading microorganisms (including bacteria or viruses) and harmful chemicals. This should be followed strictly by people who work in the food preparation industry and medical field, as well as by all individuals. It serves to protect us from diseases transmitted through fecal-oral routes and direct physical contact (such as impetigo). Alcohol gel is another form of disinfectant helpful in killing bacteria, but its effectiveness is disputed as it may lead to antibiotic-resistant bacterial strains. It is a recommended good practice to clean hands after using the toilet, changing napkins, handling animals, and touching food. Use liquid soap and warm running water for at least 10 seconds to wash your hands.

Why is hand hygiene important?

The hands normally have a “resident” population of micro-organisms apart from those accumulated during everyday activities termed “transient” organisms. Most of the germs on our hands are harmless, but some cause colds, flu, skin infections, or diarrhea. Forgetting to wash our hands causes the spreading of these germs to other people; also infects us when we touch our eyes, mouths, or open cuts. Hand washing prevents the microorganisms from getting displaced to other surfaces, patients, or vulnerable areas on the patient.

Why is hand hygiene important in health care?

Patients are more vulnerable to infection from germs carried on their hands or other hospital people when brought into a healthcare environment. Patients, visitors, healthcare workers, nursing staff, and doctors can cut the risk of spreading infections by regularly cleaning their hands.

Advice to healthcare staff and patients

All health care staff should wash hands with soap or use alcohol gel:

Before and after direct patient contact;

Attending to the toilet needs of the patient.

After Medical procedures;

Wearing and removing gloves.

The temperature of hot water used for hand wash is not sufficient to kill bacteria. Bacteria grow much faster at body temperature (37°C). Warm water with soap is more effective than cold water for the removal of micro-organisms as flowing water helps to dissolve the soil and dirt from the hands easily.

A hand sanitizer or hand antiseptic is a non-water-based hand hygiene agent. Hand sanitizers are effective against bacteria but not for some viruses that commonly cause contagious gastroenteritis. Reduce touching wound dressings, stitches, catheters, or an intravenous line, unless it is unavoidable, as it may lead to the spreading of germs to other parts of the body. Medical hand-washing is ideally done for a minimum of 15 seconds, using soap and water or gel to lather and rub each part of the hands. Let us now practice the steps used for hand washing.

Initiate Small projects to create awareness in the society about hand washing practices (ICT-based or camps). Create a group of friends and demonstrate the steps of hand-washing.

Steps for Hand Washing



Fig.1.9: Stepwise procedure of hand washing

Personal Grooming Practices for Geriatric Care Assistants

Personal grooming (also called **titivating** and **preening**) involves cleaning body parts and trimming nails and hair to improve personal hygiene.

Importance of Personal Grooming

Personal grooming encourages the resident to maintain a pleasing and attractive appearance and develop a positive self-image.

It makes a person neat and personally appealing.

Grooming indicates the readiness of a person for work.

Basic Grooming

Basic grooming involves practices that are followed daily to keep healthy and to make effective presentations. Practices that can be followed regularly are:

Groom your facial hair. Facial hair should be groomed by avoiding a patchy beard, long black mustache, or chin pube goatee.

Brush your teeth twice daily and wash your hair regularly.

Wash your hair.

Take care of your skin.

- Keep your fingernails and toenails trimmed and clean.
- Wear deodorant.
- Pay attention to keep your ears and nose clean.
- Use clear communication skills while speaking to the patient and their relatives.
- Wear identity card and clean uniform

Basic Dressing

Common mistakes while dressing for work:

- White socks with dark shoes and vice versa can be better avoided.
- Wear T-shirts that are properly fitting.
- The same outfit should not be repeated for two days or more in a row.
- Avoid wearing faded clothes.
- Do not wear clothes that are overly wrinkled, dirtied, or stained.

Basic Appearance

- Get your hair looking good.
- Trim it in fashionable style.
- Ensure you wear glass frames appropriate to the situation.
- Maintain your physique by being involved in enjoyable activities like rock climbing, kickboxing, or dancing.
- Pick something you enjoy doing.

Personal Protective Devices

Personal protective devices (PPDs) play a vital role in ensuring the safety and well-being of both caregivers and elderly individuals during caregiving tasks. Gloves are essential for protecting against exposure to bodily fluids during hygiene, medical, or wound care activities. Face masks, such as surgical masks or N95 respirators, help prevent the spread of respiratory illnesses, while aprons or gowns shield caregivers from spills and soiled clothing. For tasks that involve splashes or fluids, eye protection like goggles or face shields is crucial. Non-slip shoes with rubber soles enhance caregiver stability, reducing the risk of falls, especially in wet environments like bathrooms. To prevent back strain or injuries during lifting or transferring older adults, back support belts are recommended. Maintaining hand hygiene with sanitizers and disinfectants is equally critical to preventing cross-contamination. Alcohol-based sanitizers (with at least 60% alcohol) are recommended for quick cleaning. In settings with heightened infection risks, infection-control kits that include gloves, masks, and aprons provide comprehensive protection. By using these PPDs, caregivers create a safer and more hygienic environment for themselves and the elderly individuals in their care.

Activities

1. Practice the steps of hand washing.
2. Perform activities to demonstrate good grooming habits.
3. Develop a project for creating awareness in your community about hand washing.

Check Your Progress

A. Fill in the Blanks

1. Personal grooming is otherwise called _____.
2. _____ is the process that makes you look neat and attractive.
3. Basic grooming enhances your _____.

B. Multiple Choice Questions

1. _____ is a set of practices performed for the preservation of health.
a) Hygiene
b) Health
c) Environment
d) Habits
2. Health education can _____.
a) Improve community hygiene
b) Prevent Illness
c) Inculcate positive health attitude
d) All the above
3. _____ is an important measure to prevent the spread of pathogens.
a) Unclean hands
b) Washing hands
c) Rubbing hands
d) None of these

C. Match the part of the body with hygiene practices

- | | |
|----------|-------------------------------------|
| 1. Hair | a) Drying and brushing hairs |
| 2. Skin | b) Brush teeth twice after meals |
| 3. Teeth | c) Wash hands with soap and dry |
| 4. Hands | d) Use soap and water while bathing |

D. Short Answer the following questions

1. What is hand hygiene?
2. Why do we need to practice good hand hygiene?
3. What is personal grooming?
4. Why grooming is important?

E. Whether the following sentences are true or false.

1. Grooming is not an essential part of GCA's work.
2. Clear communication skills are to be followed while conversing with patients and

their relatives.

3. Personal appearance makes you look professionally neat and appealing.

Module 2

SUPPORTING THE ACTIVITIES OF DAILY LIVING OF OLDER ADULTS.

Module Overview

India's ageing population is increasing rapidly, with older adults (aged 60 and above) constituting around 8.6% of the total population in 2011 and projected to reach approximately 20% by 2050. With the growing urbanization and the trend of nuclear families, the role of trained geriatric care assistants has become more important than ever. One of the most essential aspects of elder care is supporting Activities of Daily Living (ADLs), which include basic tasks such as bathing, dressing, toileting, grooming, eating, and mobility. These activities are critical to maintaining the health, dignity, and independence of older adults. Nutrition plays a vital role in healthy aging, as it supports bodily functions and helps prevent chronic diseases. As people age, their nutritional needs change due to physiological alterations such as reduced metabolism, changes in taste and smell, dental issues, and decreased digestive efficiency. Essential nutrients like carbohydrates, proteins, fats, vitamins, and minerals must be carefully balanced in the diets of older adults to maintain their health, immunity, and cognitive functions. During mealtimes, care begins with preparing the client, helping with hygiene, positioning them comfortably, and checking readiness to eat. Overall, meeting the nutritional needs of older adults is a fundamental part of daily care that directly influences their health, dignity, and quality of life. Mobility refers to an individual's ability to move freely and engage in purposeful activities. Geriatric care assistants can assist in ambulation by understanding that body mechanics is crucial for caregivers to prevent injury and deliver safe, effective care. Proper body mechanics involve using the body efficiently during tasks to avoid strain. This includes maintaining body alignment, ensuring balance through a stable base of support, and using coordinated movements. Utilizing tools like gait belts, transfer aids, and supportive equipment can further enhance safety.

Learning Outcomes

- Demonstrate procedures for assisting with bathing, grooming, dressing, oral care, eating, drinking and normal elimination
- Assist with supported mobility of older persons

Module Structure

Session 1: Essential Activities of Daily Living in Patient Care

Session 2: Meeting the nutritional needs of the older adults

Session 3: Mobility

SESSION 1: ESSENTIAL ACTIVITIES OF DAILY LIVING IN PATIENT CARE

Activities of Daily Living (ADLs)

Activities of daily living in healthcare refer to self-care activities that are to be performed by any individual routinely (e.g., feeding ourselves, bathing, dressing, grooming, homemaking, and leisure activities). Health professionals refer to the ability or inability to perform ADLs as an indicator of the functional status of a person, especially while referring to people with disabilities, younger children, and the elderly. Cleanliness is essential for maintaining the health and development of our bodies. While cleaning our body, particular attention should be given to the skin, hair, oral care, hands, legs, ears, eyes, nails, external genitals, etc.

Geriatric care assistant helping in bath procedures:

Personal hygiene measures are taken to promote physical and psychological well-being through personal cleanliness and grooming. It is essential to maintain personal hygiene as it is an indicator of general health. The geriatric aide is involved in helping the client to maintain self-care based on the instructions of nurses. Patients need help to perform ADLs in many situations such as inability to move their limbs, injuries, brain disorders, etc. The geriatric care assistant may be of help for the following self-care activities.

- Bathing and showering (washing the body)
- Bowel and bladder management (related to incontinence)
- Dressing
- Eating (difficulty in chewing and swallowing)
- Feeding (setting up food and bringing it to the mouth)
- Functional mobility (moving from one place to another while performing activities)
- Personal device care
- Personal hygiene and grooming (including washing hair)
- Toilet hygiene (completing the act of relieving oneself)



Fig. 2.1: Geriatric care assistant helping in bath

Daily Care Plan of Patients by Geriatric care assistant

One very helpful way of reducing the stress of a patient is to establish a routine for the day. This routine can be fine-tuned to ensure that the patient seems comfortable with it. Necessary tasks are all fitted into this routine so that the patient's day is regular and the patient can get used to it.

The daily routine should only be disrupted if it is very necessary. In addition to a daily routine, the environment around the patient needs to be relaxed and friendly. Also, the patient should have access to whatever is needed to perform activities easily. There should be enough things to keep the patient oriented about where he/ she is, and what the time is. Depending on the patient's likes and dislikes, various other means of keeping the patient comfortable and relaxed should be adopted. This could include pictures of happy days, incense, or music if these are helpful to the patient.

Baths are essential to maintaining cleanliness, and they stimulate the skin and soothe blood circulation. It makes us feel comfortable by reducing the body odor and provides stimulation of muscles. The bath should be taken during the early morning hours or in the middle of the day before taking a meal and not after immediate exhaustion. A good quality soap can wash away sweat and dirt and emulsify the sebaceous secretions of the skin or the skin oils thus rendering the cleansing of skin easier.

Baths are classified as 1. Cold bath 33°F to 65°F, 2. Tepid bath 80°F to 90°F, Warm bath 90°F to 98°F, Hot bath 98°F to 100°F, according to the temperature and purpose.

Cold bath: Cold bath acts as a stimulant to the heart and it contracts the peripheral blood vessels. A cold bath is recommended for young and healthy persons as it is more refreshing and improves the quality of the skin. Cold bath produces an initial chill and shock and constriction of blood vessels gradually followed by vessel dilation that induces a pleasant feeling. Such cold baths are encouraged by many cultures during rituals. It can relieve tension or even lower body temperature.

Tepid bath: For a tepid bath the water used is neither cold nor that it avoids sudden chilling and promotes slow cooling. Since the water is tepid and conforms to body

temperature, it reduces the chance of sudden temperature fluctuations. This bath is effective for reducing the body temperature of small children during fever.

Warm Bath: Warm water relieves muscle tension as the water temperature is slightly above the body temperature. It is mainly for cleaning the body and induces sleep if provided before bedtime.

Hot bath: A bath taken with the temperature of water above that of the body is a hot bath. Though it is not recommended much due to thermal exhaustion occurring during the sudden dilation of blood vessels causing hypothermia, for people with heart disease it is not recommended. Hot baths raise the temperature of the surface of the body, dilating the superficial blood vessels and stimulating the sweat glands. This induces excessive blood flow through the skin surfaces by withdrawing large amounts of blood from the interior organs. The body temperature drops suddenly due to the dilation of blood vessels causing chills and hence it is not advisable to go out in the cold following a hot water bath. This increases the blood circulation of the skin providing a feeling of glow and pleasantness. A hot bath relaxes the body and helps to manage difficulties in initiating sleep.

Baths can also be classified based on the purpose like cleaning baths, therapeutic baths, etc. A cleansing bath is a routine bath for maintaining personal hygiene and can be provided as a shower, tub bath, self-help bath, bed bath, complete bed bath, and partial bath. Therapeutic baths are provided upon direct instructions from the clinician. The bath plan will state the type of bath, the area to be treated, the temperature of the water, and the medication solution to be used. It can be a hot or warm bath, cold bath, soak bath, or Sitz bath. The geriatric caregiver should accompany the elderly patient during the bath procedure.

Procedure for bed bath:

Materials Required for Bed Bath:

Soap or antiseptic cleaning agent, flannel and disposable cloths, two towels, linen bag, toiletries, a bowl of water (hand hot), linens for bed making, Mackintosh, laundry bag, articles for grooming like comb, toothbrush lotion and toothpaste, tumbler of water and bowl receiver, mouth wash, deodorant, lotions.

Care procedures	Rationale
<p>Preparation:</p> <ul style="list-style-type: none">• Take permission from the client and ask for his/her level of participation in the procedures and preferences. Review the charts for any specific recommendations. A plastic apron may be worn by the geriatric aide. Two persons are required for the purpose.• Bring the bath requirements near the bedside stand. Remove the attached comfort devices if any and stockings from the lower part of the body. Close the room or curtains for privacy.• Offer a bedpan or urinal before bathing.• Wash hands.• Raise the client's bed to a high position. Lower the side rail between the client and the geriatric aide. Remove all top covers except the top sheet while allowing the client to place the bath blanket comfortably. Keep the linen on the chair for reuse, else put it in the laundry bag.• For oral care, place the client in a high Fowler's position. Help with toothpaste in the brush and assist the client in rinsing mouth. Brush the teeth in a vertical or circular motion and then back and forth. Help in rinsing and drying mouth.	<ul style="list-style-type: none">• Reassure the person about privacy and understand his preferences. For the convenience and comfort of the patient, bring the materials near the bedside stand. Regulate room temperature to a comfortable level by closing the curtains and door. Bathing with warm water may stimulate the urge to void, hence offer a bedpan or urinal before bath. Avoid the spreading of micro-organisms by using separate cloth for cleaning folds, anus and perineal care. Prevent unnecessary movements of muscles and limbs. Avoid cluttering of bed sheets for ease of doing procedures. Improve oral health, hygiene, appetite, and unpleasant odor by frequent brushing. While removing the dress and gown avoid discomfort to the person.• Assist the client with oral hygiene. Removes plaque and prevents gum disease. Check for any ulcerations in the oral cavity.

	<ul style="list-style-type: none"> Initially remove the sleeves of the gown worn by the patient from that side which does not have any tubes, in case the elderly person is on any intravenous line. Lower the intravenous container and pass the gown over the tube and container. Ensure that the flow of drip is resumed properly after the bath. 		
	<p>Bath procedures:</p> <ul style="list-style-type: none"> Fill in the basin with a sufficient amount of warm water (between 43 and 46 degrees). Change the water as necessary throughout the bath. Use the washcloth in a folded way like a mitten on your hand to avoid loose ends. Wipe one eye from the inner part to the outer. Rinse or turn the side of the cloth before washing the other eye. Avoid using soap while washing the face. Clean the neck and ears. Extend the forearm of the client and place the towel lengthwise under it. Using a firm stroke, wash the arm and axilla, rinse, and dry. Place a folded towel on the bed next to the client's hand and keep the basin on it. Soak the client's hand in the basin. Wash, rinse, and dry the hand. Repeat the procedures for the other side. Wash, rinse, and dry the chest, and abdomen, and pay attention to the skin folds. Lower the blanket to clean the perineal area. Ensure privacy and explain the steps to the patient. Follow procedures for perineal care. For females wash from front to back to avoid infection and for males cleanse the area and surrounding areas. Change the 	<ul style="list-style-type: none"> Prioritize the comfort of the patient, follow instructions from the nursing staff, and be mindful of contamination and spreading of micro-organisms. Keep the skin folds clean and dry as it may be source of odor and skin breakdown. While involving in perineal care encourage self-care to avoid discomfort and cleaning the area reduces the chance of infection. Hair care ensures thorough cleansing and scalp circulation. Prevents skin irritation and promotes a sense of well-being. Wash with firm strokes from ankle to groin as it promotes venous return. Supporting the client's foot and leg helps to reduce the strain and discomfort. Placing the client's feet in a basin of water is comfortable and relaxing as it allows for a thorough cleaning of the feet and the areas between the toes and under the nails. 	

	<p>water and use a towel judiciously to avoid contamination.</p> <ul style="list-style-type: none"> • Cleaning the Lower Body: Place a basin on a towel near the client's foot area and keep the client's foot in the basin. Support the ankle and heel in your hand and leg on the arm. While washing the back and buttocks, help the patient turn onto their side. Wash, rinse, and dry the back and buttocks. Apply lotion or moisturizer if the skin is dry. Apply fresh clothing or linens. Dress the patient in clean clothes or a gown. Replace bed linens as needed. • Hair Care: For bedridden older adults, the geriatric care assistant can help them in the bed using a plastic sheet and absorbent pad or towel to protect the bed, washcloth or hand towel, water pitcher, shampoo, shampoo board, wash basin, bath blanket. Position the patient close to one side of the bed with the board below the head and wash basin at the end of the spout. Obtain water in a pitcher at 43°C. Wet the hair completely apply shampoo and massage the scalp with fingertips. Rinse thoroughly using water. Wrap a towel around the patient's head and dry the face, neck, and shoulders. Comb hair and dry quickly. 		
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	<p>Aftercare:</p> <ul style="list-style-type: none"> • Dispose of the soiled linens and gloves properly. Clean and store reusable items. Re-ensure that the patient is comfortable, warm, and in a proper position. Document the procedure noting any abnormalities: redness, sores, or rashes, odor, color, texture, sensitivity, swelling, lesions, and overall cleanliness of the patient, and report them if necessary. Reposition the bed to a low position after the procedure. Side rails should be raised in case of elderly patients who are disoriented. Help them with grooming and clothing maintaining privacy and dignity. 	<ul style="list-style-type: none"> • Return of toiletries to its position for easy access and linens should be washed for reuse. • Ensure the comfort and safety of patients. • Enhances the overall well-being of the patient. 	
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Format for documenting the bath procedures:

Maintaining the record of bath procedures proves performance and communicates the quality of care provided. Bath is provided to clean the skin, apply medication, stimulate circulation, improve self-image, reduce body odors, promote movements, and demonstrate caring. The following is a sample format for charting the activities:

General tips for assisting in bathing of elder adults:

- Patients often misjudge the temperature of the water and may end up bathing with very hot or very cold water if not helped.
- A bathroom can be very unsafe for a patient if left alone, so stay with the patient. The use of

Date & Time	Activity performed	Rationale	Observations
12.10.2024 10 am	Oral care provided • Assisted with a bed bath, grooming, and dressing. • Assisted to bed and positioned laterally for 20 minutes • Applied moisturizing lotion. • Patted dry gently.	-Using toothpaste to improve hygiene. -Patient bedridden. -To reduce pressure impact. -Prevent dryness. -Improves blood circulation.	Red rashes without itching persist due to lying in the same position. Reported to RN.

rubber mats in the bathroom will provide grip on slippery surfaces. Patients may feel uncomfortable in the presence of a caregiver inside the bathroom. Handing them the soap and then turning their face away may give them back their sense of privacy.

- A thin towel can be used to cover private parts while the caregiver soaps the rest of the body.

- A bath stool may be needed so that the patient sits down comfortably for the bath. Grab rails near the bath stool may also be needed.
- Be careful to dry in the folds and dry areas between the toes.
- If bathing is difficult, reduce the frequency according to the weather and the needs of personal hygiene.
- Use the bath time to check the patient for injuries and sores.

Care of Oral Cavity

We maintain oral hygiene to improve the healthy state of the mouth, teeth, gums, and lips. Brushing teeth twice a day removes food particles, plaque, and bacteria and refreshes the oral cavity. It massages the gums and relieves discomfort, removes the unpleasant odor and taste, refreshes the cavity, and also stimulates appetite.



*Fig.2.3: Dental care of the patient
Courtesy: Dr. Vijay Anand Joshi*

Procedure:

- Assemble the articles required for flossing and brushing. Position the patient in a high Fowler's position. Wash your hands, put on gloves, and observe the oral cavity for any evidence of dryness, ulcers, sores, cracks, or bleeding using a torch. Note the presence of any halitosis. Check for difficulty in speech, chewing, or swallowing. Make sure to remove the dentures if any are used by the person and check for their condition: clean, stained, warped, or cracked. Place it in clean water. Apply toothpaste to a brush and brush the dentures either with cold water in the emesis basin or under running water.
- The patient may need help to brush properly. Offer toothpaste, an emesis basin (if bedside oral care is performed) water to rinse, and towel. Help the person to replace the dentures.

Materials Required

Towel and tissues, Toothbrush, Toothpaste/denture cleaning paste, Container for a denture, beaker of water and bowl or receiver, Mouthwash solution, Clinical waste bag.

- Assist the patient in rinsing, drying, and repositioning. Remove gloves, wash hands, and document care. Remember to sort the disposable waste and reusable objects separately.

- The geriatric care assistant will have to assist the patient in putting on and removing the dentures. The dentures are cleaned using a separate toothbrush and paste maintained for the purpose. Care should be taken to position the dentures in the mouth else it is kept in a container filled with water. The patient will get sores in the mouth if not positioned properly.

Grooming

Older adults may need assistance with grooming and putting on their clothes. It includes assistance in combing and shaving hair. The geriatric assistant should assess the condition of the patient, especially those with bleeding disorders, who are taking anticoagulants (use of medicines that increase bleeding), or who are prone to accidental injuries or self-injurious behavior. Patient's written consent is required before removing beard or mustache except in emergencies. Encourage the person to perform self-care functions independently and provide assistance only if the client is unable to complete his needs. Check for impaired skin integrity due to immobilization. Apply skin lotion to that area that becomes easily erythematous (abnormal redness of the skin).

- Patients may cut themselves while shaving with an ordinary razor and therefore switch to twin blade or electric razors. Caregivers may need to supervise this activity.
- Combing of hair is another activity that needs assistance.
- Fine coordination activities like nail cutting and filing also need help to perform.
- Even if the patients are unable to groom themselves, the caregiver needs to ensure the patient is presentable.

Dressing

- Clothing needs to be comfortable to wear as when coordination reduces it becomes difficult.
- When laying out the clothes for the patient to wear, lay them out in the sequence in which they have to be worn.
- Make sure clothes are not long to avoid falling. Replace the sari with a mid-length nightgown.
- Switch to clothes without many zippers or buttons.
- Instead of choosing a dress with strings, use elastic or Velcro straps.
- Use shoes with Velcro straps instead of shoes with laces.

Toileting

Assistance for voiding and bowel elimination of older persons who are confined to bed should be handled with maturity. Difficulty to move, pain, hesitation to ask for help and the fear of interruption can affect the normal elimination patterns. Bed-pan or urinal is required for the purpose.

- Incontinence occurs for reasons such as hurrying to reach the bathroom in time or sometimes disorientation. Use of signage that indicates the way, nightlights, grab rails for reaching the bathroom, and simple clothing that can be taken off easily.
- Charting the visits to the bathroom on a timely basis often reduces accidents.

- Be aware of signs of constipation and dehydration and change diet and water intake accordingly.
- If the patient shows signs of pain while passing urine or during bowel movements, consult with the doctor.
- Accidental falls may occur in the toilet; hence, it should be kept dry.
- Grab rails or toilet seats with rails may make the experience of sitting on the toilet seat less frightening for the patient.
- Watch the patient to ensure proper wiping and proper washing of hands.
- For visits outside, diapers may be a good option. Patients will need assistance in wearing and removing diapers.



Fig. 2.4: Toilet Support for Older Adults

Activities

1. Prepare a PowerPoint presentation to understand the ethical guidelines while assisting older adults in personal care.

Check Your Progress

A. Fill up the blanks:

1. _____ in healthcare refers to self-care activities which are to be performed by any individual routinely.

2. Two types of baths are _____ and _____.

Answers: 1. Activities of daily living 2. Cold bath 33°F to 65°F, Tepid bath 80°F to 90°F, Warm bath 90°F to 98°F, Hot bath 98°F to 100°F

B. Short Answer Questions:

1. Write a short answer on the procedure for 1. Bed bath 2. Grooming 3. Oral care activity for older adults.
2. Classification of baths for elder adults.

SESSION 2: MEETING THE NUTRITIONAL NEEDS OF THE OLDER ADULTS

Nutrients provide the essential elements for body functions. The body produces nutrients from the food that is consumed daily. Carbohydrates, proteins, fats, vitamins, and minerals are essential nutrients for the effective functioning of the body. Nutritional requirements change with advancing age. Focus on nutrition as a determinant of aging and the cause of chronic diseases revealed through various research primarily indicates the need for dietary changes to be adopted in our daily lives. The physiological changes occurring during old age affect food and nutrient intake, food preferences, and diet patterns. Aging affects body composition, body weight, bone health, immune functions, neurological and cognitive functions, and alterations in sensations. The main query regarding the nutritional requirements for older people is about the ideal diet. WHO and ICMR have provided the energy requirements and nutritional recommendations for older people with the focus to prevent deficiency states and chronic disorders. Diet therapy is the treatment of a disease or disorder with a purposeful diet. Many older adults with associated medical conditions are on dietary prescriptions for reasons such as supplements, treating various medical conditions, or for diagnostic purposes. The geriatric assistant can educate the elderly person or care providers regarding the need and rationale for adopting the diet. The dietary prescription is classified as nothing by mouth, standard diet, or special diet. Nothing by mouth status is a prescribed diet modification plan that often restricts food and fluid before surgery or certain diagnostic procedures to rest the GI tract or identify the client's nutritional problem. Standard diets are the plan followed by the patient after identifying the specific needs such as regular diet, soft diet, clear liquid, full liquid, mechanical soft diet, or pureed diet. Such diets are variations of the general diet that help to restore the client's nutritional status.

Nutritional needs during old age may be determined by assessing the requirements. Observe calorie needs, protein intake, micronutrient needs, healthy fats, hydration, and fiber for digestive health. Early at-risk detection and supplementation by nutrients support in healthy aging.



Fig. 2.5: Eating

Assisting the older adults with eating:

While assisting during meal time, the functions to be categorized are based on preparing the client, preparing the environment, serving the tray, and helping with eating skills. Prepare the client by ensuring readiness to eat by helping to wash hands, face, and mouth. Ask for bowel or bladder elimination needs. Seat the client into a comfortable position or as per requirements. The geriatric care assistant should also ensure the pleasantness of the mealtime atmosphere by cleaning and tidying the room. Before serving the tray, cross-check the diet provided as per the recommendation chart. Assist in eating if required.

Procedures to be followed during mealtime	Rationale
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<p>Preparation Procedures:</p> <ul style="list-style-type: none"> • Establish a positive situation and ask for the client's preferences for food. Keep a record of it. Match it with the recommended chart. Provide variations in the menu chart. • Match with the health records for any recommendations. A diabetic patient, heart patient, or person with kidney disease, etc, may have to follow a restricted diet. • Ensure cleanliness and hygiene by extending help to wash hands, face, and mouth. • Assist the client in sitting upright. • Check if the patient can chew and swallow to prevent choking and aspiration into the lungs. • Keep the table and surrounding ambience clutter-free. Remove sputum pot, urinals, bedside pan, etc. Make space for the food tray. Keep a towel to prevent the spilling of food over the client's dress. Position a chair for the care provider to sit on. The geriatric aide should wash their hands and wear an apron. Aprons with different colors or shades can be used according to the purpose. Green apron: Assisting in bath Lighter shades & clean apron: During mealtime Blue Apron: For cleaning purposes etc. 	<p>Preparation enables the person to position for having food. It prevents choking and aspiration. Cleanliness and ambience improve the pleasantness and appetite.</p>	
<p>Procedure to be followed during mealtime:</p> <ul style="list-style-type: none"> • Obtain the correct food and drink and keep the tray on the bedside table. • Check diet chart for amount, nutritional recommendations and restrictions and match it with the food provided. Follow and check the fluid chart. 	<p>Creating a positive feeling in the patient enhances well-being. Encourage the person to take sufficient food and fluids to maintain the dietary needs. Ensure the food served has carbs, proteins, greens and vegetables, milk, fats, fiber and hydration.</p>	

<ul style="list-style-type: none"> • Follow a comfortable pace for chewing and swallowing as per the client's need. • Use suitable cutlery for food and drinks. Help the client with serving only on request. Provide help to use glass and gently tip it to maintain the flow of water. Temperature of water should be comfortable. Do not force to eat extra portions if they indicate full stomach. 		
<p>After procedure:</p> <ul style="list-style-type: none"> • Assist the patient with hygienic needs to clean mouth, teeth, and hands. • Remove the tray, cutlery, crockery, apron and keep it in position after cleaning. • Clean and reset the table and surroundings. • Document the procedure and report: fluid balance & food chart, any abnormal occurrences such as vomiting, food refusal, diarrhea etc. • Measure and record weight, signs of dehydration, malnutrition, etc. 	<p>After the procedure, cleaning and resetting the space helps to ensure hygiene. Documentation of the procedure helps to correlate with the clinical findings.</p>	
<ul style="list-style-type: none"> • Ensure the patient is reminded of taking food by a caregiver if he/she is alone at home. • Eating becomes difficult, and patients may switch to eating with their hands. Food may need to be cut into smaller sizes to chew easily. • Patients may not mix food while eating; hence, caregivers may need to mix food or make combined dishes like <i>pulao</i>, <i>khichdi</i>, <i>bisi bele</i> bath, and curd rice. • Chewing becomes a problem over time, and food may need to be made softer and, finally, liquidized in a <i>Mixer</i>. • Consult doctors about diet supplements like calcium and vitamins, and also find out whether the patient needs to take a serving of balanced-diet. <p>General Instructions for Geriatric Care Assistants While Feeding Patients</p> <ul style="list-style-type: none"> • The diet of every patient in the hospital should be planned according to his needs, metabolic changes, food habits, and socioeconomic status. • Wash or ask the person to wash their hands and face. Give time for mouth care. Ask if the patient would like to use the bathroom, commode, urinal, or bedpan before eating the food. • Food and drink should be served at the correct temperature for patient preference and meet safety standards. • Create a pleasant environment for the patient before serving the food. Food should be presented appealingly. The room should be well-ventilated during the meals 		

- The patient should be undisturbed by treatments dressings, visitors, doctor's rounds, and loud cries of other patients during their meal times.
- Dressings and painful treatments are finished at least 1 hour before the meal is served.
- Strong emotions of fear, worry, anger, depression, homesickness, pain, etc., interfere with digestion by inhibiting the flow of saliva and gastric, and intestinal juices. Eating should be postponed until the strong emotion of excitement of the patient subsides.
- Playing a soft music adds to the pleasure of the patient and can serve as appetizer to the meals.
- The patient should be placed in a comfortable position in bed or out of bed.
- The bed patients should be able to see the food or they should be told what food is served. The patients on tube feeding may be given a chance to taste the food to arouse their appetite and for their satisfaction.
- Physical exhaustion can be relieved by allowing rest before a meal.
- If the geriatric care assistant sits near the patients and engages in conversation, it makes the meal a pleasurable experience for the patient.
- Meals should be served in clean and covered containers.
- Care is to be taken to prevent the transmission of diseases through food and drinks.
- Provision should be made to wash the hands and the face of the patient before and after meals.
- Remember that a sick person has a poor appetite and a poor liking for food. Small and frequent feeds are appreciated. Never force the food.
- The food should be cut into small pieces (mouth sized) and is served one piece at a time, one food after another.
- The patient should have time to chew and taste the food. Never make a hurry to the patient.
- The patient should be encouraged to eat a variety of foods.
- Fluid requirements should be met to prevent dehydration. Fluids are given at the end of a meal or in between meals.
- Keep the patient in a sitting position for at least 30 minutes after the meal so they do not choke.
- The quantity of food that is left in the tray, the food that is vomited, if any, and any signs of allergies developed after taking food should be reported to the Dietician by the geriatric care assistant so that appropriate and timely action can be taken. The geriatric care assistant should record and report the quantity of food the patient has eaten.

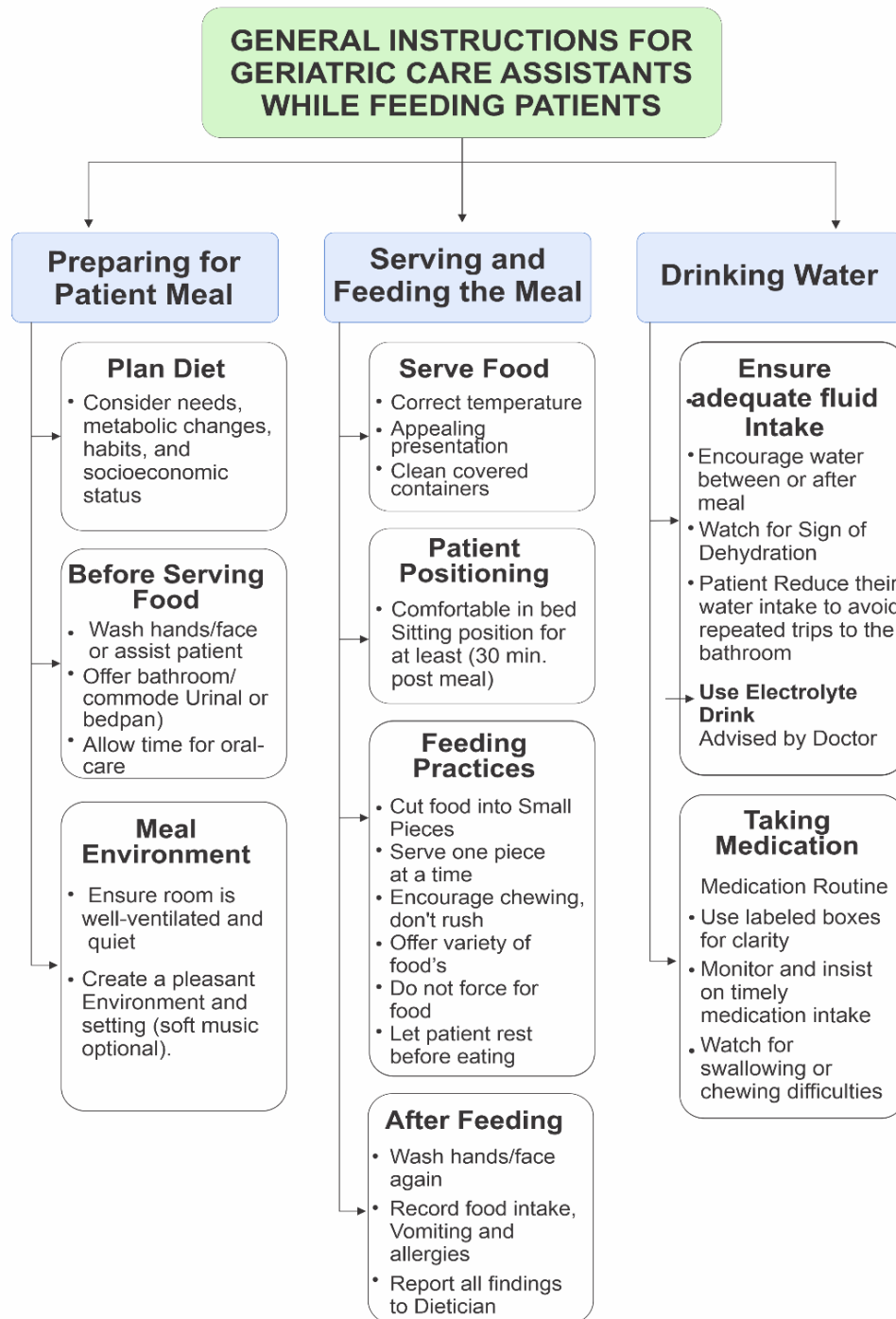
Drinking water

- Sometimes, patients reduce their water intake to avoid repeated trips to the bathroom.
- They may also forget to drink water.
- Caregivers need to make sure that patients are drinking enough water.
- Doctors may also ask patients to include electrolyte drinks in their daily routine if the patient is showing an electrolyte imbalance.

Taking Medication

- Initially, patients may find it difficult to keep track of their medicines. Using small labeled boxes for the medicines can help.

- Forgetting to take medication is a common problem. Patients cannot be depended on to take their medication as required, and hence caregivers should insist on this.
- The doctor should be consulted if the patient finds it difficult to chew or swallow.



Activities

1. Describe a daily care plan for an infant or an elderly person in your locality.

Check Your Progress

A. Fill in the blanks

1. _____ is the term used in healthcare to refer to daily self-care activities.
2. ADL is an indication of _____ status of a person.

B. Multiple Choice Questions

1. Daily care activities of the patient that require the help of an assistant include:
 - a) Bathing and showering
 - b) Bowel and bladder management
 - c) Dressing
 - d) All the above
2. The environment around the patient needs to be:
 - a) Hostile
 - b) Relaxed and friendly
 - c) Suspicious
 - d) All the above
3. Is personal grooming of the patient an essential indicator of health:
 - a) Yes
 - b) No
 - c) Doesn't know
 - d) Not at all
4. Measures while assisting a patient during toileting include:
 - a) Watch out for accidents
 - b) Report incontinence
 - c) Provide grab rails and toilet seats
 - d) All of the above
5. Supervising the patient while taking medicines prevent:
 - a) Over dosage
 - b) Forgetfulness in taking medicines
 - c) Patient from taking the exact dosage
 - d) Both a & b

C. Short Answer Questions:

1. List any 5 daily activities of a patient
2. What is the basic care to be provided while feeding a patient?
3. Prepare a sample chart for documentation of the daily care plan.

SESSION 3: MOBILITY

Mobility is the ability to move freely and engage in purposeful activities with ease. Immobility occurs when a person is unable to move their body at will due to certain conditions, such as illness, injury, or physical limitations. Individuals with an inactive lifestyle due to illness, injury, or aging are at higher risk of complications across body systems, especially the musculoskeletal system. Prolonged immobility leads to reduced muscle strength and agility and negative effects on the cardiovascular, respiratory, metabolic, urinary, gastrointestinal, integumentary, and neurological systems. Early ambulation and movement after illness or surgery are essential for recovery.

Body mechanics involves the efficient use of the body to prevent illness, promote health, and support effective functioning. Key concepts include:

- **Body alignment:** Proper positioning of joints, muscles, and ligaments in standing, sitting, or lying positions to minimize strain and enhance balance.
- **Body balance:** Maintained through a wide, stable base of support and alignment of the vertical line from the centre of gravity (located near the second sacral vertebra) within the base of support.
- **Coordinated movement:** Helps maintain posture, balance, and alignment during daily activities like lifting, bending, and moving.

Proper body mechanics are crucial for caregivers, especially when performing physical tasks, to maintain their health and ensure safe, effective care delivery. Patient care activities, such as bed-making and assisting with walking, lifting, and carrying equipment, require adherence to the principles of body mechanics to ensure safety and efficiency.

Principles of Body Mechanics

1. **Base of Support and Stability:** A wider base of support and a lower center of gravity increase stability.
2. **Equilibrium and Line of Gravity:** Stability depends on the line of gravity passing through the base of support.
3. **Utilizing Strong Muscle Groups:** Perform tasks using stronger muscle groups for safety and efficiency.
4. **Avoiding Spinal Twisting:** Face the direction of movement to prevent abnormal twisting of the spine.
5. **Balanced Effort:** Divide activities evenly between arms and legs to reduce strain and minimize back injuries.
6. **Leverage and Movement:** Rolling, turning, or pivoting requires less effort than lifting.

7. Proper Movements: Use correct techniques for pushing, pulling, stopping, carrying, and lifting.
8. Supportive Tools: Incorporate client transfer techniques, teamwork, and supportive equipment as needed.

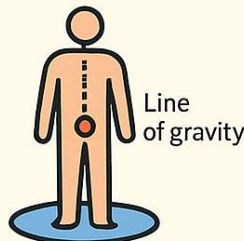
Following these principles ensures safety, efficiency, and a reduced risk of injury for both caregivers and clients.

Principles of Body Mechanics



Base of Support and Stability

A wider base of support and a lower center of gravity increase stability



Equilibrium and Line of Gravity

Stability depends on the line of gravity passing through the base of support



Utilizing Strong Muscle Groups

Perform tasks using stronger muscle groups for safety and efficiency



Avoiding Spinal Twisting

Face the direction of movement to prevent abnormal twisting of the spine



Balanced Effort

Divide activities evenly between arms and legs to reduce strain and minimize back injuries



Leverage and Movement

Rolling, turning, or pivoting requires less effort than lifting



Proper Movements

Use correct techniques for pushing, pulling, stopping, carrying and lifting



Supportive Tools

Incorporate client transfer techniques, teamwork, and support



Supportive Tools

Incorporate equipment as supportive equipment as needed

Procedures for using appropriate body mechanics.

Procedures	Rationale
1. Position your feet 6-8 inches apart.	Provides a wider base of support for stability.
2. Align and balance body weight on both feet	Distributes body weight evenly, reducing strain
3. Flex the knees slightly	Prevents hyperextension and reduces stress on joints.
4. Tilt the pelvis forward by pulling the buttocks inward.	Helps to straighten the curve of the spine
5. Hold the abdomen in and up.	Provides core support and reduces muscle strain.
6. Hold your chest up.	Promotes better lung expansion for improved breathing.
7. Keep the head erect	Maintains appropriate alignment of spine and balance
8. Use appropriate body mechanisms for activities like a. standing b. Sitting c. bending d. lifting	Ensures safe and efficient movements, preventing injury.

Patient Positioning for Comfort and Medical Procedures

Proper patient positioning is crucial in healthcare settings to ensure comfort, prevent strain or injury, and facilitate various medical procedures and examinations. The following illustrations highlight common patient positions used during daily activities, for comfort, and for specific medical assessments. These positions are carefully chosen to optimize patient well-being and minimize the risk of postural complications.

Key Objectives of Patient Positioning:

1. Ensure patient comfort.
2. Prevent strain and injury caused by incorrect posture.
3. Facilitate medical examinations and procedures.

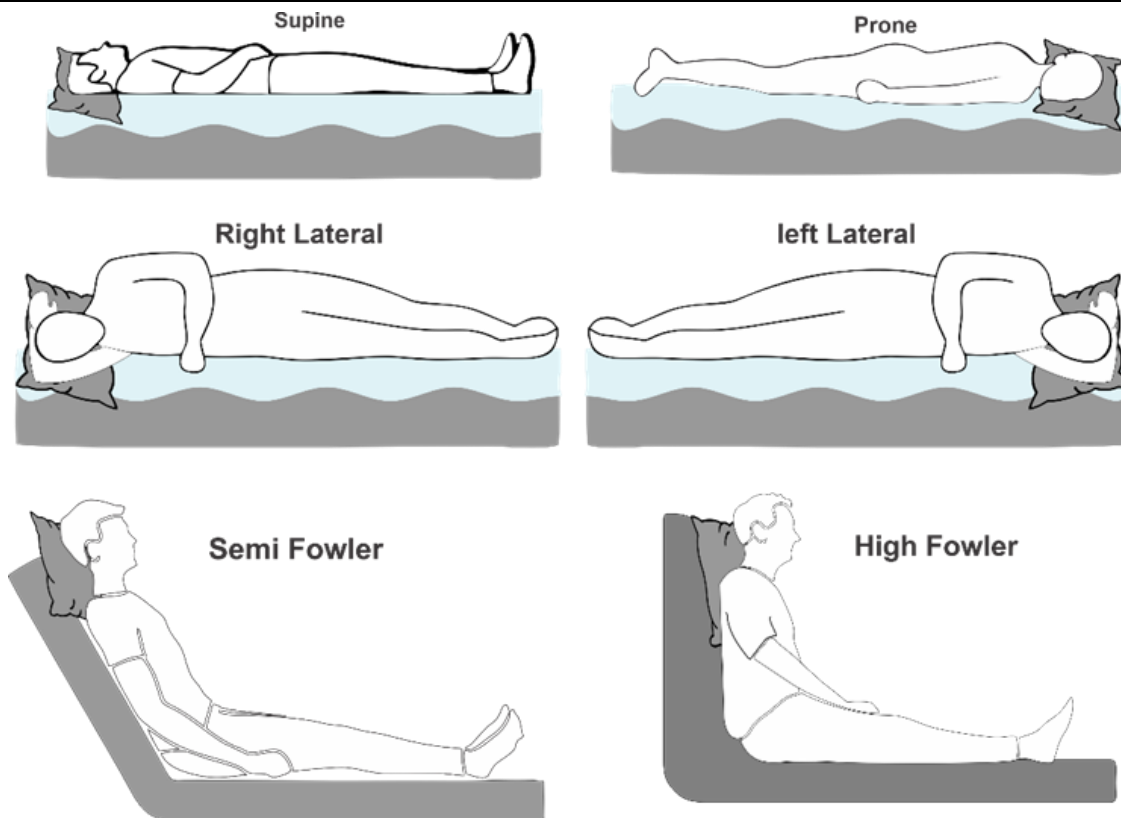


Fig.2.6: Patient Positioning for Comfort

Procedures for positioning the patient on the bed

Equipment and supplies needed: Pillows, Hand roles, Foot board, Restraints, Trochanter rolls, Side rails, Sand bags.

Procedures	Rationale
Assess the need for positioning the patient.	Determine the patient's need for movement.
Choose an appropriate position	Rotating positions prevents pressure points.
Gather the equipment and explain the procedure.	To gain the confidence of the older adult while ensuring privacy and organizing the supplies.
Wash your hands	Limits the spread of microorganisms.
Keep the bed in a flat position. Slide the patient towards the top of the bed while removing the pillow. Encourage the client to move independently.	Reposition the client without working against gravity. Use mechanics for proper body alignment.
For Fowler's Position: Head and Upper Body:	Increases personal comfort, eases breathing, socializes better, prevents flexion contractures of the cervical

<p>Elevate the head-end of the bed by an angle of 45° to 60°. Support the head with a small pillow or rest it directly on the mattress for alignment and comfort.</p> <p>Upper Limb Support: Use a pillow to support the client's arms and hands, especially for those with difficulty moving their upper limbs.</p> <p>Lower Back and Thigh Support: Place a pillow at the lower back to maintain spine alignment. Position a pillow or roll under the thighs to alleviate pressure.</p> <p>Ankle and Foot Support: Place a pillow or roll under the ankles and a footboard at the bottom of the feet to prevent foot drop and provide support.</p> <p>Final Check: Ensure proper spinal alignment and comfort. Monitor breathing if the position is used to aid respiratory function.</p>	<p>spine, arms, and wrists, supports lumbar vertebrae, decreases flexion of the vertebral column, and prevents hyperextension of knees. Prolonged pressure on heels from the mattress.</p> <p>Indications:</p> <ul style="list-style-type: none"> • Respiratory distress (e.g., pneumonia, COPD) • Post-surgical recovery (especially abdominal or thoracic) • To assist with eating, drinking, and communication <p>Precautions:</p> <ul style="list-style-type: none"> • Reposition regularly to avoid pressure ulcers. • Ensure proper limb support to prevent strain. 	
<p>For placing the patient in a supine position:</p> <p>Head and Upper Body: Position the patient flat on their back with the head of the bed in a neutral position. Place a small rolled towel under the lumbar area to support the lower back. Place a pillow under the upper shoulders, neck, and head to avoid contractures of the cervical vertebrae.</p> <p>Lower Limb Support: Place a trochanter roll or sandbags parallel to the lateral surface of the thighs to prevent external rotation of the hips. Position a small pillow or roll under the ankles to elevate the heels and reduce pressure on the feet.</p>	<p>Provides support for the lumbar spine, maintains correct alignment, and prevents flexion. Reduces extended rotation of the hip, alleviates pressure on the heels, and helps prevent pressure ulcers.</p> <p>Indications: Resting or sleeping for patients without mobility restrictions. Post-surgical positioning, especially for abdominal or spinal surgeries.</p> <p>Precautions: Reposition regularly to avoid pressure ulcers, especially in patients with limited mobility. Ensure no unnecessary strain on joints or limbs.</p>	

<p>Foot and Leg Positioning: Place footboards or soft pillows at the bottom of the feet to support the feet in a neutral position.</p> <p>Upper Limb and Hand Support: Position the forearms pronated (palms facing down) and place pillows underneath to maintain the arms parallel to the body. Place a hand roll in each hand to prevent contractures and support hand positioning.</p> <p>Final Check: Ensure the patient's spine, head, and limbs are properly aligned. Adjust pillows as needed for comfort and to prevent pressure points.</p>		
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Transferring an older person from bed to a wheelchair:

Engaging elderly person in routine activities improves their overall health and well-being. The transfer has to be performed after assessing the client's ability to assist and checking for the presence of cognitive sensory deficits. Planning for transfer, i.e., moving a person from bed to chair, wheelchair, stretcher, or commode, requires caution as it may cause injury due to pulling on or dislodging indwelling tubes or catheters. Care must be taken to anchor the tubes and catheter appropriately and to prevent injury due to falls during transfer.

Assess the Patient's Condition

- Evaluate patient's ability and noting any assists any cognitive or sensory Deficits



Prepare the Environment

- Ensure the Bed is locked in position
- Apply any Necessary Splints, Braces assistive device Securely on Patients feet



Prepare the Patient for Transfer

- Place one Arm under Patient's leg and there other arm behind their back
- Allowing Patient sit and dangle for 2 to 5 min's Providing Support as needed



Position to the wheelchair

- Place the Wheelchair close to Bed at 45 degree angle
- Lock the Wheelchair Brakes, Raised footpedals



Assist the Patient to Stand

- Stand close to and pivot the patient.
- Secure gait belt around the patient waist, or place your hands Below their axilla for support
- Gently lowering Patient



Ensure Proper Positioning

- Adjust the Patient's Posture to ensure they are sitting upright and Comfortably
- Provide additional Support to the weaker side if needed



Finalize the Transfer

- Secure the safety belt and the patient feet on the foot pedals.
- Release the wheelchair breaks before moving the chair.
- if the patient is sitted in a standard chair, provide a foot stool is available

1. **Assess the patient's condition:** Evaluate the patient's ability to assist with the transfer, noting any cognitive or sensory deficits that may affect the process.
2. **Prepare the environment:**
 - Ensure the bed is locked in position.
 - Apply any necessary splints, braces, or assistive devices.
 - Place shoes or non-slip footwear securely on the patient's feet.
3. **Position the bed:**
 - Lower the bed to its lowest height.
 - If the patient's condition allows, gradually raise the head of the bed to assist in positioning.
4. **Prepare the patient for transfer:**
 - Place one arm under the patient's legs and the other arm behind their back.
 - Gently pivot the patient so their legs are dangling over the side of the bed, ensuring they are in a seated position on the bed's edge.
 - Allow the patient to sit and "dangle" for 2 to 5 minutes, providing support as needed.
5. **Position the wheelchair:**
 - Place the wheelchair close to the bed at a 45-degree angle.
 - If the patient has a weaker side, position the wheelchair on the stronger side.
 - Lock the wheelchair brakes and raise the foot pedals. If using a chair, engage the brakes if available.
6. **Assist the patient to stand:**
 - Help the patient move to the edge of the bed so their feet are firmly on the floor and slightly apart.
 - Secure a gait belt around the patient's waist, or place your hands below their axilla for support.
 - Use a wide stance and bend your knees to lift, assisting the patient into a standing position.
7. **Pivot and seat the patient:**
 - Stand close to the patient and pivot them until their back is facing the wheelchair.
 - Instruct the patient to place their hands on the wheelchair armrests, or assist them in doing so.
 - Bend your knees and gently lower the patient into the wheelchair.
8. **Ensure proper positioning:**
 - Adjust the patient's posture to ensure they are sitting upright and comfortably.
 - Provide additional support, such as a pillow, to the weaker side if needed.
9. **Finalize the transfer:**
 - Secure the safety belt and place the patient's feet on the foot pedals.
 - Release the wheelchair brakes before moving the chair.
 - Ensure all tubes, lines, and the patient's arms and hands are free from obstruction or pressure.
 - If the patient is seated in a standard chair, provide a footstool if available.

Principles of Prevention of Pressure Ulcers:

Pressure ulcers can be prevented by controlling the combination of predisposing factors for each person and the generic risk factors previously established. Hence there are general as well as specific factors marked as essential in the prevention of pressure ulcers. A few general strategies that can be adopted are mentioned below:

The regular repositioning of the elderly person should preferably be done by adjusting position every 2 hours as per the requisite condition. The regimen should be followed more strictly while dealing with older adults by following a 24-hour turning chart.

Cautious positioning is necessary for relieving pressure while the person is in a lying or sitting position. Pressure occurs when the soft body tissue gets compressed between bony prominences and the hard surface of the mattress.

Passive and active exercise helps to maintain the movement of muscles and limits the impact of some of the predisposing factors.

Safe moving and Handling of elder adults prevent shear and friction. Shear occurs when the soft tissues and the skeleton move, but the skin does not. E.g., sliding down the bed. Friction occurs when two surfaces rub together, and the top layer of the skin is scraped off.

Nutrition and hydration status help to maintain healthy skin. Various nutrients have been associated with promoting pressure ulcer repair through their role in collagen formation and the development of connective tissue. Fluid intake supports the blood flow to wounded tissues which prevents additional breakdown of the skin.

A skin care routine has to be maintained along with hygiene care. Skin should ideally be kept dry and clean, especially if the person is incontinent, a high temperature or sweats excessively. For dry skin, emollients in the bath or creams are useful and barrier cream is recommended for moist skin.

Activities

1. Visit an older adult's residence in your locality and assist them in performing active and passive range of motion exercises.

Check your progress

1. Fill up the blanks

1. _____ is the ability to move freely and engage in purposeful activities with ease.
2. Key concepts of body mechanics include body alignment, _____ and _____.
3. _____ can be prevented by controlling the combination of predisposing factors for each person and the generic risk factors previously established.

4. Procedures for positioning the older person to Fowler's position indicates _____ and _____ needs.

2. Short Answers:

1. Define the principles of body mechanics.
2. Write down the steps for transferring a patient from bed to wheelchair.
3. Procedures for positioning the older adult in the bed.
4. Define the principles for the prevention of pressure ulcers.

Module 3

EXERCISES FOR A HEALTHY MIND AND BODY

Module Overview

This unit emphasizes the crucial role of exercise in maintaining and improving functional capacity in older adults, especially in mitigating the physiological effects of aging. Exercise enhances energy expenditure, oxygen consumption, and cellular growth, countering age-related declines in musculoskeletal and cardiovascular function. The four essential components of fitness identified—cardiorespiratory endurance, muscular strength, flexibility, and body composition—are vital for preserving independence and quality of life.

Exercise types are categorized based on their function. Range of motion (ROM) exercises maintain joint flexibility and are classified into passive, active, and active assistive forms. Passive ROM involves external assistance; active ROM is self-initiated; and active-assist ROM combines both. Strengthening exercises are further divided into isometric (static contraction), isotonic (dynamic movement), and isokinetic (machine-regulated motion), contributing to increased muscle mass, bone strength, and metabolic efficiency.

Cardiac rehabilitation exercises, including aerobic activities like walking and swimming, are integral for heart health, particularly in individuals with heart failure. Structured exercise programs must be tailored after medical evaluation, emphasizing proper warm-up, cool-down, and risk mitigation strategies.

Learning Outcomes

- Demonstrate the preparation, execution and aftercare for a range of motion and breathing exercises

Module Structure

Session 1: Preparation for Range of Motion Exercise

Session 2: Active Range of Motion Exercise

Session 3: Passive Range of Motion Exercise

Session 4: Breathing Exercises

SESSION 1: PREPARATION FOR RANGE OF MOTION EXERCISE

Exercises that improve the movements of specific joints are the range of motion exercises. These movements are influenced by the configuration of bone surfaces within the joints, joint capsules, ligaments, tendons, and muscles acting on the joints. Passive, active, and active assists are the three types of range of motion exercises. Passive range of motion movements are applied to a particular joint and the individual receiving exercise is completely relaxed while the body part is moved by an external source throughout the available range of joint movements. Conditions such as injury, surgery, or immobilization of a joint may affect the normal range of motion. Active range of motion is the exercise performed voluntarily by the individual himself controlling the joint movement without any outside force. Active assist range of motion is when joints are partially moved with assistance from an outside force, with the majority of motion being applied by an exerciser or by the person or persons assisting the individual.

Strengthening Exercise

Strengthening exercises aim to increase muscle strength and mass, bone strength, and metabolism, helping with weight management, body image, and self-esteem. They improve the ability to perform daily activities like walking and climbing stairs by enhancing muscle function. These exercises work by placing greater strain on muscles, stimulating protein growth for contraction. Strength training may be more effective than aerobic exercise for improving self-esteem and body image, offering visible progress in muscle growth and tone. Types of strengthening exercises include isometric, isotonic, and isokinetic exercises.

Isometric Exercise

Isometric exercises involve muscle contraction without joint movement, with muscle fibers maintaining a constant length. These exercises are performed against immovable objects, like pressing a hand against a wall. Isometric training effectively strengthens specific muscles or muscle groups, often used in rehabilitation to target muscle weakness at precise joint angles. It is a convenient and safe method for strengthening muscles, requiring no special equipment and posing minimal injury risk.

Isotonic Exercise

Isotonic exercises involve joint movement during muscle contraction, with muscles shortening and lengthening through a range of motion. Examples include weight training with dumbbells and barbells, as well as calisthenics like chin-ups, push-ups, and sit-ups, which use body weight as resistance.

Isokinetic Exercise

Isokinetic exercises use machines to control contraction speed through a range of motion, combining features of isometric and isotonic exercises. They provide consistent muscular overload at a preset speed, regardless of exertion. Examples include isokinetic stationary bicycles and specialized machines like Cybex and Biodex, often used in physical therapy.

Cardiac Rehabilitation

Exercise aids in preventing and rehabilitating cardiac disorders by improving overall fitness and reducing heart workload. For individuals with heart failure, safe exercise programs enhance muscle oxygen efficiency, reducing the heart's pumping demands. While the heart's condition may not directly improve, increased fitness and endurance promote a more active lifestyle. Aerobic activities like running, brisk walking, cycling, and swimming strengthen heart muscles and boost efficiency.

Preparation

- Physical examination before planning an exercise regime helps in identifying individual suitability. Any physical exercise should be done under supervision of trained professional.
- Stretching is recommended before exercise to prevent soft tissue injuries caused by tight muscles, tendons, ligaments, and joints.

Aftercare:

- A proper cool-down after exercise helps to reduce muscle spasms and the intensity of muscle stiffness.

Risks

- Improper warm-ups and overexertion without adequate rest can cause muscle strains and stress fractures, leading to pain and inactivity.
- Patient feels pain while doing an active range of motion exercises.

Normal Results

- Regular physical exercise has health benefits when performed under a trained professional.
- It prevents disease, enhances overall health, benefits people of all ages, and improves psychological well-being and quality of life.

Abnormal Results

- Exercise burnout can result from a lack of variety and insufficient rest between sessions.
- While muscle, joint, and cardiac issues may occur due to pre-existing conditions and elder adults must take advice from a physician as well as the trainer coach.

Activities

1. Make a power point presentation to demonstrate the precautionary measures before exercise.

Check Your Progress

A. Fill in the blanks:

1. _____ is used to improve health, maintain fitness, and also for physical rehabilitation.
2. _____ of motion exercise refers to activity aimed at improving the movement of a specific joint.
3. In _____ exercise, there is movement of joints during muscle contraction.

B. Short Answer type

1. How does exercise help in keeping the body fit and healthy?
2. What are the precautions to be taken while exercising?
3. What are the benefits of following strengthening exercises?
4. Describe cardiac rehabilitation, the preparation required, and its aftercare.

SESSION 2: ACTIVE RANGE OF MOTION EXERCISES

Neck Exercises

The patient may perform these exercises while sitting or standing, keeping the face forward. The shoulders should remain straight and relaxed throughout the movements. For head tilts forward and back, gently lower the head forward, trying to touch the chin to the chest. Raise the chin back to the starting position, then tilt the head back as far as possible, looking up at the ceiling. Return to the starting position. In head tilts, side to side, tilt the head to one side, bringing the ear toward the shoulder without lifting the shoulder. Return to the starting position and repeat on the other side. For head turns, slowly turn the head to look over one shoulder. Lower the chin slightly and try to touch it to the shoulder while keeping the shoulders relaxed. Avoid raising the shoulder to meet the chin. Return to the starting position and repeat on the other side. To finish, perform gentle shoulder rolls, first in one direction and then in the opposite direction, to release tension further and improve flexibility.

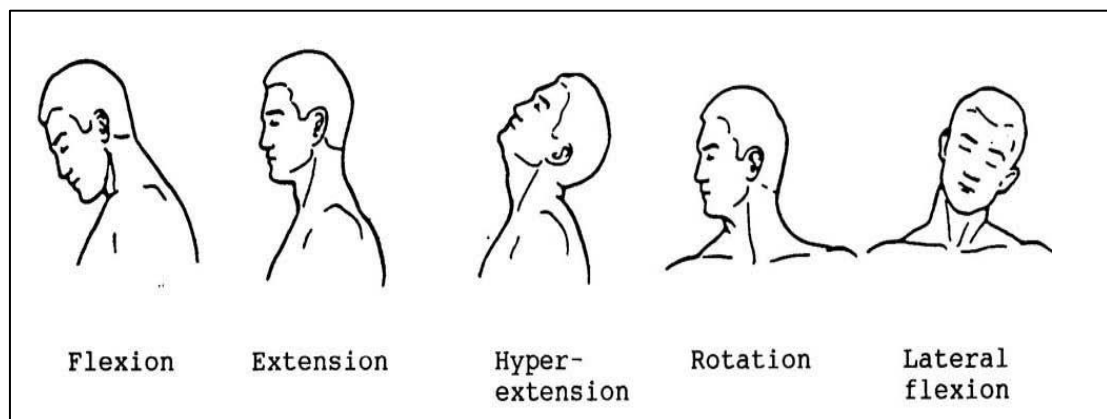


Fig. 3.1: Neck Exercises

Shoulder and Elbow Exercises

The patient can perform these exercises while standing or sitting. If seated, it is best to use a chair without arms. Begin with the arms straight down at the sides, ensuring the palms face inward toward the body.

For shoulder movement up and down, raise the arm forward and then up over the head, attempting to bring the inner arm close to the ear. Lower the arm back down to the side and extend it as far back as possible behind the body before returning to the starting position. In shoulder movement, side to side, lift the arm outward to the side and then raise it overhead as far as possible. Lower the arm back to the side, then move it across the front of the body, reaching for the opposite shoulder before returning to the starting position.

For shoulder rotation, raise both shoulders toward the ears as if shrugging, then lower them and relax. Pull the shoulders back and relax again. Perform smooth circular shoulder rolls in one direction, followed by rolling them in the opposite direction. These exercises help improve shoulder and elbow mobility, flexibility, and overall joint function.

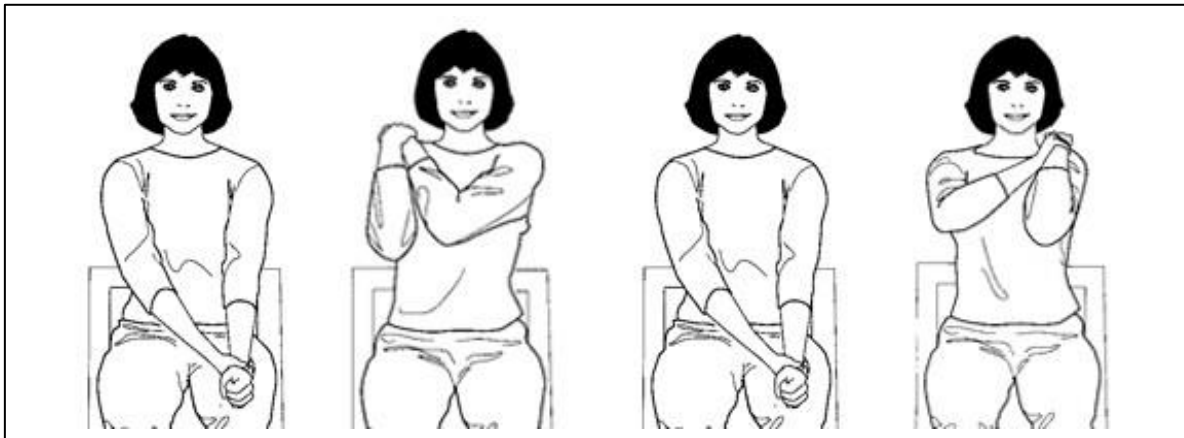


Fig. 3.2: Elbow and Wrist Exercises

Elbow, Arm, and Wrist Exercises

To perform elbow bends, start with the palm facing forward and bend the elbow, bringing the fingertips toward the shoulder. Then, return the arm to the starting position. For arm and wrist exercises, sit down and rest the forearm on a flat surface, such as a table or lap, ensuring that the wrist hangs loosely over the edge.

For a wrist bend, move the hand back toward the wrist so that the fingers point toward the ceiling, then bend the hand downward so the fingers point toward the floor. In wrist rotation, move the hand from side to side before rolling it in circular motions, first in one direction and then in the opposite direction. To perform palm up, palm down, keep the elbow bent and tucked against the side. Start with the palm facing downward, then rotate it upward toward the ceiling before turning it back down. These exercises help improve flexibility, strength, and range of motion in the elbow, wrist, and forearm.

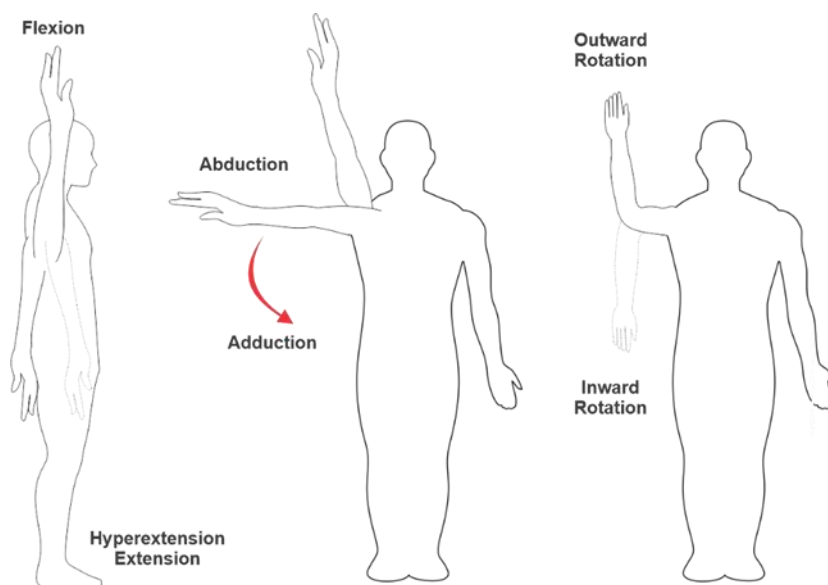


Fig.3.3: Hand Movements

Hand and Finger Exercises

The patient may perform these exercises while sitting or standing, with the hand extended in front. For finger bends, make a tight fist, then open the hand and relax the fingers. In finger spreads, stretch the fingers as far apart as possible before bringing them back together. For finger-to-thumb touches, touch each fingertip to the pad of the thumb one at a time. To perform thumb-to-palm stretches, move the thumb across the palm, rest it there briefly, and then move it back out to the side. These exercises help improve hand strength, flexibility, and dexterity.

Hip and Knee Exercises

Before performing hip exercises, patients with a history of hip injury or surgery should follow only those exercises prescribed by their caregiver. To begin, lie flat on the bed with legs extended straight. For hip and knee bends, point the toes and slowly bend the knee, bringing it as close to the chest as possible before straightening the leg and returning it to a flat position. In leg lifts, raise the leg 6 to 12 inches (15 to 31 centimetres) off the bed, hold it briefly, and then lower it back down. For side-to-side leg movement, keep the foot flexed with toes pointing toward the ceiling, move the leg outward as far as possible, and return it to the centre. During leg rotation in and out, keep the leg flat on the bed, roll it inward so the big toe touches the bed, then roll it outward, attempting to touch the smallest toe to the bed. In knee rotation in and out, lie on the back, bend the knee so the sole is flat on the bed, slide the heel toward the buttocks, and then return it to the starting position. These exercises help improve mobility, flexibility, and strength in the hip and knee joints.

Ankle and Foot Exercises

To begin these exercises, sit in a chair with both feet flat on the floor. For ankle bends, keep the toes on the floor and raise the heel as high as possible, then lower the heel. Next, keep the heel on the floor and raise the toes as high as possible. In ankle rotation, lift the foot slightly off the floor and roll the ankle in circles in one direction, then reverse and roll it in the opposite direction. For toe bends, curl the toes down toward the sole

(bottom) of the foot, then straighten them. Next, curl the toes up toward the ceiling and straighten them again. In toe spreads, spread the toes apart, then bring them back together. These exercises help improve ankle and foot mobility, strength, and flexibility.

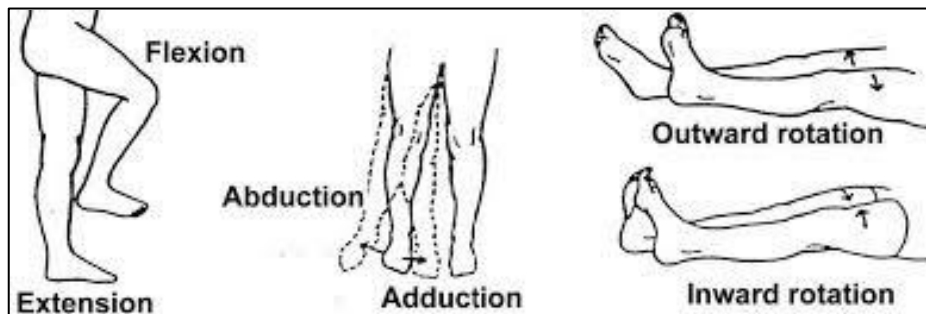


Fig.3.4: Ankle and Foot Exercise

Activities

1. Prepare videos for motivational training of elder adults to adopt an exercise routine.

Check Your Progress

A. Fill in the blanks

1. Neck exercises are performed in the _____ position.
2. _____ exercises help improve hand strength, flexibility, and dexterity.
3. _____ exercises help improve mobility, flexibility, and strength in the hip and knee joints.
4. For _____ bends, keep the toes on the floor and raise and lower the heel alternatively.

B. Short Answer Questions:

1. Describe the ways of performing the following active range of motion exercise:
a. Neck exercise b. Shoulder and Elbow exercise c. Hip and Knee exercise.
2. Explain the advantages of performing active range of motion exercises.

SESSION 3: PASSIVE RANGE OF MOTION EXERCISE

Passive range of motion exercises help keep a person's joints flexible, even if he or she cannot move by himself/herself. Range of motion is the farthest level the person's joints can be moved while in different directions. The exercises help the patient move all the person's joints through their full range of motion. The following are some important points to be kept in mind while giving passive exercises:

Regular movement helps prevent contractures (permanent shortening of a muscle or joint). Contractures are severely tightened joints and muscles. It develops when the stretchy (elastic) tissues are replaced by non-stretchy (inelastic) fiber-like tissues.

The patient may do the exercises in any order. The patient may spread the exercises out over the day. All the exercises may be done while the person lies in bed.

Move the person slowly, gently, and smoothly. Avoid fast or jerky motions.

Support the area near the joint, as shown by the person's caregiver. Move the person's body part with your other hand.

Each joint should be moved as far it will go. Move each joint to the point where patient feel some resistance. The person may feel discomfort, but do not push to where it hurts. Hold the position a few seconds, and then return the person to a resting position.

Perform the exercises on both sides. Perform each group of exercises on one side, and then do the same exercises on the other side.

Neck, Shoulder, and Elbow Exercises

To begin, support the person's head with your hands and gently return it to the middle, facing forward, after each exercise.

For head turns, turn the person's head to one side, then gently turn it to the other side.

In head tilts, tilt the person's head toward one shoulder, bringing the ear toward the shoulder, then tilt the head toward the other shoulder. For chin-to-chest, gently bow the person's head toward their chest, ensuring the movement is slow and controlled.

For shoulder and elbow exercises, support the person's elbow with one hand and hold their wrist with the other. For shoulder movement up and down, raise the person's arm forward and then up over their head, then bring the arm back down to the side. In shoulder movement, side to side, raise the person's arm to the side as far as it will go, then return the arm to the side. For elbow bends, place the person's arm at their side with the palm facing up, then gently bend and straighten their arm. These exercises help improve head, shoulder, and elbow mobility and strength.

Wrist and Hand Exercises

Support the person's wrist with one hand and hold their fingers with the other hand.

For wrist bends, gently bend the person's hand back toward the shoulder, so their fingers point toward the ceiling, then bend the hand downward so the fingers point toward the floor. In wrist rotation, rock the person's hand back and forth sideways, then gently roll the hand in circles in one direction and then in the opposite direction. For palm up, palm down, tuck the person's elbow against their side and turn the hand so the palm faces up toward the ceiling. Then, turn the palm so it faces down. These exercises help maintain flexibility and mobility in the wrist and hand.



Fig.3.5: Wrist and Hand Exercises

Hand and Finger Exercises

Hold the person's hand with both of your hands, extending the fingers out toward yourself.

For finger bends, curl the fingers into a fist, then straighten them again. Perform this action on each finger individually, curling and straightening them one at a time, and also curl and straightening the thumb. In finger spreads, spread the thumb and index finger apart, then bring them back together. Repeat this with the index and middle fingers, and continue for the remaining fingers.

For finger-to-thumb touches, gently touch the person's fingertips to the pad of their thumb, one finger at a time. In finger rotations, roll each finger in a circle in one direction, then reverse and roll each finger in the other direction. Repeat this motion with the thumb. These exercises help improve hand dexterity, strength, and flexibility.



Fig.3.6: Hand and Finger Exercises

Hip and Knee Exercises

Start by positioning the person's legs, placing one hand under the knee and holding the ankle with the other hand.

For hip and knee bends, slowly bend the person's knee toward the chest as close as possible, then gently straighten the leg. In leg movement side to side, move one leg out to the side, away from the other leg, then bring it back to the middle and cross it over the other leg. For leg rotation in and out, roll one of the person's legs toward the other leg, so the toes point inward. Then, roll the leg outward toward the side, so the toes point outward. These exercises help improve hip and knee mobility and flexibility.

Ankle and Foot Exercises

Begin by placing a rolled towel under the person's knee. For the ankle exercises, support the person's ankle with one hand and the toes with the other hand. For the toe exercises, allow the foot to relax on the bed and hold only the toes.

For ankle bends, gently bend the person's foot so the toes point toward the ceiling, then bend the foot in the opposite direction so the toes point downward. In ankle rotation, raise the person's foot slightly off the bed and roll it in circles in one direction, then reverse and roll it in the opposite direction. For ankle movement side to side, tilt the person's ankle so the sole of their foot points toward the opposite leg, then tilt the ankle outward so the sole points away from the opposite leg.

For toe bends, curl the person's toes down toward the sole, straighten them, then curl them up toward the ceiling and straighten them again. In toe spreads, gently spread the big toe and the second toe apart, then bring them back together. Repeat this action with the remaining toes. These exercises help improve ankle and toe flexibility, strength, and mobility.

Precautions

- Planning of any exercise program for older adults requires evaluation by a physician to rule out potential health risks.
- The individualized training program after assessment should be performed under the supervision of a trained professional.
- When exercise is performed as a form of rehabilitation, then training should be performed only under supervision.
- If the individual is presenting with any symptoms of dizziness, nausea, excessive shortness of breath, or chest pain during exercise, the activity should be stopped and re-evaluated by a physician.
- Exercise equipment must be checked for specifications regarding weight bearing while recommending a person.
- Individuals must be instructed about the proper use of exercise equipment to prevent injury.

Activities

Activity: "Personalized Mobility Plan for a Senior"

Scenario Selection (Individual): Each student will choose or be assigned a brief, hypothetical scenario of an older adult.

Plan Development (Independent Work): Based on their chosen scenario, each student will develop a personalized mobility plan that includes:

- **Client Profile:** A brief summary of the older adult's age, health status, activity level, and preferences based on the scenario.
- **Goals:** 2-3 realistic and specific goals for the mobility plan (e.g., improve morning stiffness, maintain current range of motion in wrists, improve balance for gardening).

- **Exercise Selection:** A list of specific exercises from the neck, shoulder, wrist, hand, finger, knee, hip, ankle, and foot categories that would be appropriate and beneficial for their assigned individual.
- **Modifications and Precautions:** Any necessary modifications to the exercises based on the individual's limitations or health conditions mentioned in the scenario. Include specific precautions to consider (e.g., "If any pain is felt in the knees, reduce the range of motion").

Progression: Ideas on how the exercises could be gradually progressed over time if the individual shows improvement (e.g., "If wrist mobility improves, consider adding gentle wrist stretches with a towel").

Documentation and Submission: Students will document their personalized mobility plan in a clear and organized format (e.g., a written report, a simple chart).

Check Your Progress

A. Short Answer Questions:

1. _____ is used to improve health, maintain fitness, and also for physical rehabilitation.
2. _____ of motion exercise refers to activity aimed at improving the movement of a specific joint.
3. In _____ exercise, there is movement of joints during muscle contraction.
4. _____ are severely tightened joints and muscles.
5. In the _____ neck exercise, the chin is bowed toward the chest.
6. Hand and finger exercises include _____ and _____.

B. Short Answer Questions:

1. How does exercise help in keeping the body fit and healthy?
2. What are the precautions to be taken while exercising?
3. Describe the active range of motion exercise
4. Describe the passive range of motion exercise
5. What are passive range of motion exercises?
6. Why is it important to do passive range of motion exercises?
7. What care is to be taken while giving passive exercise?

SESSION 4: BREATHING EXERCISES

In this session, you will learn about deep breathing and coughing exercises that can be recommended for older adults. You will also study the ways to perform pursed-lip breathing, diaphragmatic breathing, abdominal breathing, and belly breathing.

Breathing Exercise:

Breathing exercises involve shifting from quick, shallow breaths to slower, deeper ones. Yoga offers the most advanced techniques. These exercises boost circulation, calm nerves, and bring in essential, yet unspecified, substances typically not inhaled.

Deep breathing and coughing

Deep breathing and coughing exercises are crucial to reduce the risk of lung complications, especially after surgery. Lung tissue contains many air sacs (alveoli) that fully expand with normal breathing. After surgery, shallow breathing due to pain or limited movement can trap mucus in the lungs and cause the air sacs to collapse, leading to a condition called atelectasis.

Advantages of deep breathing exercises:

- Moves air down to the bottom areas of the lungs
- Opens air passages and moves mucous out (coughing is also easier)
- Helps the blood and oxygen supply to the lungs, boosting circulation
- Lowers the risk of lung complications such as pneumonia and infections

Coughing helps clear mucus from deep in the lungs. During breathing exercises, you might feel mucus in your throat or hear a rattling sound when you breathe. Make sure to cough when this happens.



Coughing Exercises

The best position for coughing is sitting upright. Hold a pillow or rolled-up blanket against your stitches or staples to make it easier. Relax your neck and shoulders and cough from your belly, not your throat. Bending your knees may help, too. Cough two or three times, then rest.

Deep-Breathing Exercises

After surgery, pain can make it hard to take deep breaths, causing mucus to build up in the lungs. Deep breathing helps clear this mucus and prevents it from collecting. Keep doing these exercises during your hospital stay.

The most comfortable position is lying on your back with the head of the bed slightly raised. Breathe in through your nose and out through your mouth. Do these exercises 10 times an hour while awake:

1. Place a hand on your abdomen between your stomach and chest. Your hand should rise like it's on an inflating balloon. Let the air out through your mouth by relaxing.
2. Place your hands on the sides of your chest. As you breathe deeply, try to spread your hands apart. Let the air out through your mouth by relaxing.
3. Use the Triflo (Flow Meter) if provided.

Using the Triflo

The Triflo has three blue balls inside a clear box. Suck air into your chest, like sipping through a straw, to lift the balls. The light blue ball will rise first, then the medium blue, and finally the dark blue. Try to hold up as many balls as possible before relaxing and letting them drop.

Pursed Lip Breathing (PLB)

PLB involves exhaling through tightly pressed, pursed lips. Doctors, physical therapists, and respiratory therapists teach this technique to help ease shortness of breath and encourage deep breathing (also known as abdominal or diaphragmatic breathing). The goal of PLB is to create back-pressure in the airways, keeping them open and reducing the effort needed to move air.

Spontaneous pursed-lip breathing, especially after exercise, is a common sign health workers look for to detect possible chronic obstructive pulmonary disease (COPD). For patients with COPD, shortness of breath can be a persistent challenge.

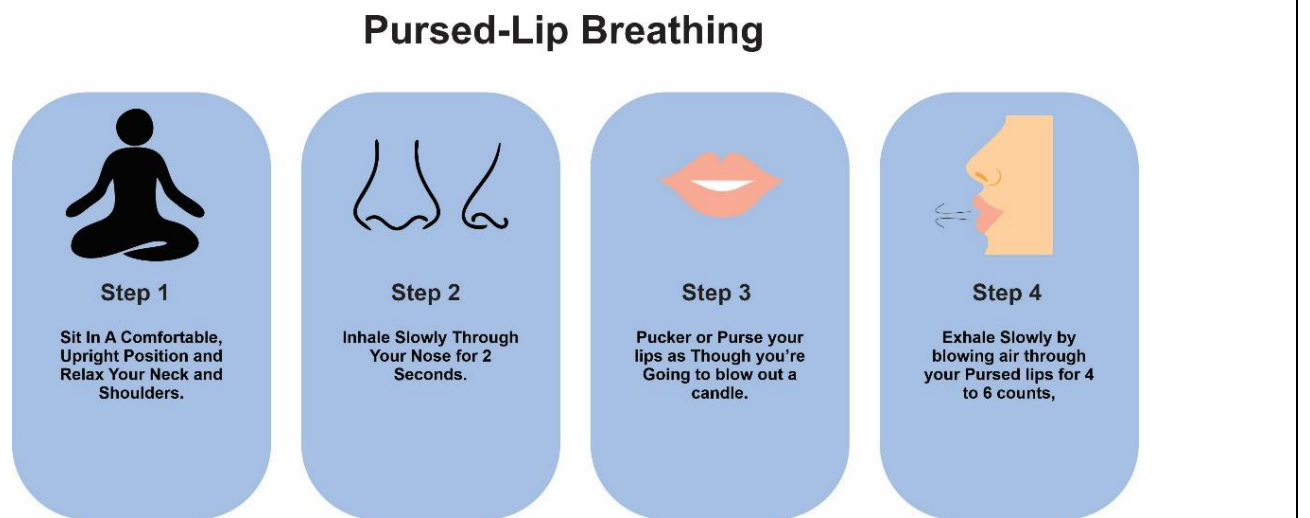


Fig. 3.7: Pursed-Lip Breathing

Relaxation Exercises for Neck and Shoulders

The Geriatric care assistant should help patients perform these exercises alongside PLB:

1. Sit comfortably with your back straight and feet flat on the floor.
2. Relax your shoulders, letting them drop naturally.
3. Slowly roll your shoulders forward in circles 5–10 times.
4. Reverse and roll your shoulders backward 5–10 times.
5. Tilt your head to one side, bringing your ear toward your shoulder. Hold for a few seconds, then repeat on the other side.
6. Rotate your head in a circular motion, first clockwise, then counterclockwise.
7. Take a deep breath through your nose and exhale slowly through pursed lips while relaxing your shoulders.

These exercises help ease tension and improve breathing.

Pursed-Lip Breathing Steps

1. Relax your neck and shoulder muscles.
2. Breathe in through your nose for 2 seconds with your mouth closed.
3. Breathe out through pursed lips for 4 seconds (or twice as long as you breathe in).
Adjust the time if needed.

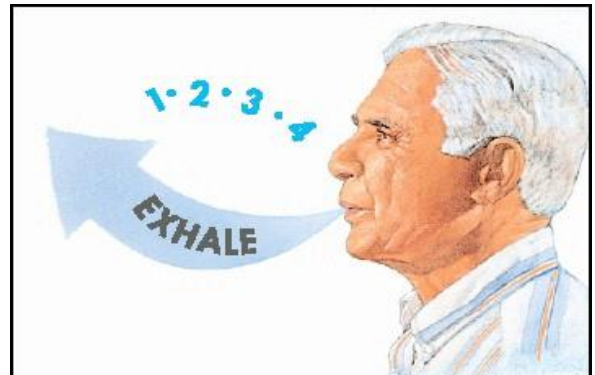
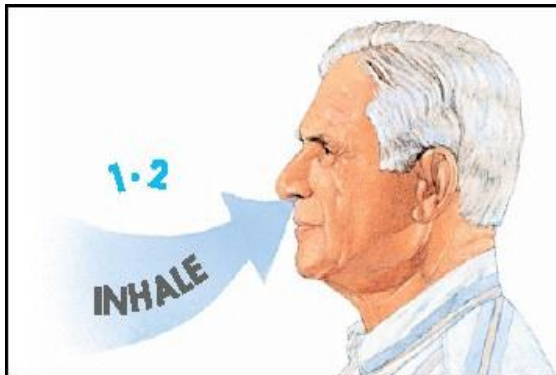


Fig. 3.8: Inhale-Exhale Breathing steps

Diaphragmatic Breathing (Abdominal Breathing, Belly Breathing, or Deep Breathing)

Diaphragmatic breathing is a technique that involves contracting the diaphragm, a muscle located horizontally between the chest and abdominal cavities. During this type of breathing, air enters the lungs, causing the abdomen to expand rather than the chest. It is often considered a healthier way to breathe and is recognized as a useful complementary and alternative treatment.

This form of breathing allows individuals to take normal breaths while maximizing the oxygen intake into the bloodstream. It also interrupts the body's "fight or flight" response, activating the relaxation response instead.

Deep breathing exercises are frequently used as a relaxation technique. When practiced regularly, they may help relieve or prevent stress-related symptoms such as high blood pressure, headaches, digestive issues, depression, anxiety, and more.

The term "deep breathing" refers to the expansion of the lower (inferior) parts of the lungs, while "shallow breathing" describes higher (superior) lung expansion that primarily involves the rib cage. The actual volume of air taken into the lungs can vary with both methods.

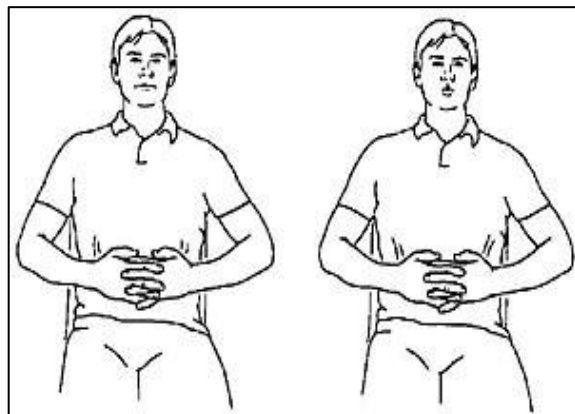


Fig. 3.9: Abdominal Breathing, Belly Breathing, or Deep Breathing steps

Activities

1. Gather a group of students to conduct a group discussion on “Advantages of following a routine physical exercise regimen for the elderly.

Check Your Progress

A. Fill in the blanks:

1. _____ and _____ exercises help to lower patient’s risk of lung complications after surgery.
2. The most comfortable position in which to cough is ____
3. The Triflo has _____ balls inside a clear plastic box
4. The purpose of PLB is to create inside airways to splint them open.
 1. The most refined breathing exercises are developed in _____.
 2. Deep breathing and coughing exercises are beneficial because _____.
 3. _____ is the act of exhaling through lightly pressed and pursed lips.

B. Short Answer Questions:

1. Describe the procedure of breathing exercise.

2. Describe the procedure of the coughing exercise.

C. Write the full form of the following abbreviations:

1. PLB:

2. COPD:

3. CAM:

Module 4

CARING FOR THE ELDERLY

Module Overview

Aging is a natural process that brings significant physiological and psychological changes. Common physical changes include fragile skin, hair thinning, reduced muscle mass, and weakened bones. Organ systems experience functional decline, leading to issues like reduced lung capacity, heart efficiency, digestion, and bladder control. The nervous system slows, affecting reflexes and memory, while sensory decline in vision, hearing, taste, and smell is common. Cognitive impairments like memory loss, depression, and anxiety may arise, influencing emotional well-being. Socially, older adults may face loneliness, financial dependency, and reduced support systems. Legal concerns like protection from abuse and maintaining dignity are also crucial. Comprehensive care for older adults should address these physical, cognitive, emotional, social, and legal needs. Promoting physical activity, emotional support, nutritional care, and safety measures can significantly enhance their independence and quality of life in old age.

Learning Outcomes

- Observe and report physical, emotional, and social needs and discuss common health issues in the elderly,

Module Structure

Session 1: Understanding the Needs of Older Adults

Session 2: Age-Related Changes in Older Adults

Session 3: Taking Care of the Problems of the Elderly

SESSION 1: UNDERSTANDING THE NEEDS OF OLDER ADULTS

Elderly care, also called aged care, refers to the support provided to meet the unique needs of older adults. This includes various services such as assisted living, adult day

care, long-term care, nursing homes (also known as residential care), hospice care, and home care.

Elderly care focuses on addressing the social and personal needs of senior citizens who may need help with daily activities and healthcare but still wish to age with dignity and respect. In the past, family members often took care of the elderly within the home. However, in modern times, care is increasingly provided by state programs, charitable organizations, and specialized facilities.

Why is Elderly Care Important?

Aging is a natural part of life. As people age, they may experience challenges like reduced physical ability or health concerns. This often means they need extra support at home or might move to a care facility.

Elderly care is not just about health—it also includes helping older adults stay independent and socially connected. Providing the right care can help seniors maintain their self-respect, mental well-being, and physical health.

In India, it is a long-standing tradition for children to care for their parents in old age. Respecting and honoring elders is an important part of Indian culture. With the rise in the elderly population, caring for older adults is becoming a bigger challenge. It is no longer just a matter of family support but a developmental issue that involves society as a whole.

Elderly care is often divided into two types:

Medical care – Provided by healthcare professionals for managing health conditions.

Non-medical care – Help with everyday activities, such as eating, dressing, or moving around, provided by caregivers who are not medical professionals.

Caregivers play a crucial role in promoting independence in older adults. They should encourage seniors to participate in self-care tasks as much as possible, even if supervision is needed. Maintaining independence gives seniors a sense of achievement and helps them stay active longer.

Take a moment to think about the elderly people in your life—perhaps a parent, grandparent, neighbor, or someone you care for. Are they all the same? Of course not! Each older person is unique.

Physical health: Some elderly people are very active, while others might face health problems.

Mental health: Not all older adults are confused or forgetful—many are sharp and engaged.

Social life: Some seniors enjoy spending time with friends and family, while others may feel isolated.

Financial status: Older people's financial situations can vary widely.

Spiritual needs: Just like younger people, seniors may have different beliefs and spiritual practices.

By understanding these differences, we can better support the elderly and help them live fulfilling and meaningful lives.

Use these words for these ages:

Age Groups	Age Span
Infant	Birth to 1 year
Toddler	1 to 3 years
Preschool child	3 to 5 years
School-age child	5 to 12 years
Adolescent	12 to 18 years
Young Adult	18 to 45 years
Middle Age Adult	45 to 65 years
Old Adult	Over 65

Many old people remain active and involved with family, friends and other friends. Some may enter a senior group home or an assisted living place with lots of activities. However, all old people need care and greater attention by their family members, friends and colleagues.

Activities

1. Many old people remain active and involved with family, friends, and other people. Some may enter a senior group home or an assisted living place with lots of activities. However, all old people need care and greater attention from their family members, friends, and colleagues. Gather your friends and spend quality time once a week with an older adult.

Check Your Progress

A. Short Answer Questions

1. _____ is an inevitable process of life.
2. Elderly care can be divided into _____ and _____ based on the professional services involved in the care.
3. _____ plays a crucial role in promoting independence in older adults.

B. Short Answer Questions

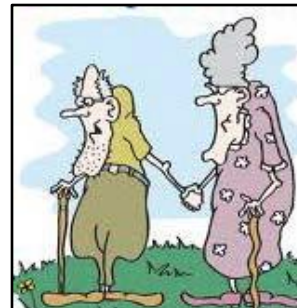
1. What are the measures that can be taken at the societal level to integrate older adults into society?
2. Why is elderly care important?

SESSION 2: AGE –RELATED CHANGES IN PEOPLE

Most age-related biological functions reach their peak at the age of 30 and thereafter decline linearly. The physical changes that take place with age are as follows:

Skin, Hair, and Nails

- Skin becomes more fragile
- Rashes are more common
- Skin may become paler
- “Age spots” or “liver spots” may appear
- Skin tags may appear, mostly on the neck
- Skin may become thinner. Wrinkles appear
- Dry skin may occur
- Hair gets gray and faded
- Hair thins on the head and under the arms
- Nose and ear hair becomes thicker and more visible
- Facial hair may appear
- Fingernails and toenails get thick
- The sweat glands in the skin slow down
- Red, purple, or brown spots may begin on the arms and legs



Muscles and Bones

- Bones lose calcium.
- Bones get weaker and thinner.
- Disks of the spine get smaller, so some will have a curve in the spine
- Joints get less flexible and less mobile.
- Muscle tone gets less.
- Muscle mass decreases, and fat builds up.



Respiratory System

- Nose gets drier.
- Vocal cords lose their elastic so the voice of the person may change.
- Lung capacity may decrease.
- Breath sounds decrease.

Cardiovascular System







- Loss of heart muscle tone.
- Increased size of the heart muscle.

- A larger left side of the heart.
- Less elasticity of the heart and blood vessels.
- Lower output from the heart.
- Greater deposits in the blood vessels.
- Lower pulse.
- The blood gets thicker.
- A small drop in the red blood cells and white blood cells.
- The thymocyte cells (T cells) get less effective.

Gastrointestinal System

- Gums pull back from the teeth so the teeth may get loose.

AGE-RELATED CHANGES IN OLDER PEOPLE

SKIN  <ul style="list-style-type: none"> • Becomes more-fragile • Rashes are more common • Skin may become paler • "Age spots" or "liver spots" may appear • Skin tags may appear, mostly on neck • Skin may become thinner, wrinkles appear • Dry skin occurs • Hair gets gray and thin • Hair thinning on the head and under arms • Nose and ear hair becomes thicker • Facial hair appearing • Fingernails and toenails get thick • The sweat glands in the skin slow down • Red, purple or brown spots begin on arms and legs. 	MUSCLES AND BONES <ul style="list-style-type: none"> • Bones lose calcium. • Bones get weaker and thinner • Disks of the spine get smaller so the collar have a curve in the spine. 	RESPIRATORY SYSTEM  <ul style="list-style-type: none"> • Nose gets drier. • Vocal cords lose their elasticity. • Lung capacity may decrease.
GASTROINTESTINAL SYSTEM  <ul style="list-style-type: none"> • Gums pull back from teeth so they get loose • Increase in the number of cavities • Less feeling of thirst • Less muscle tone at the end of esophagus to the stomach • Less saliva • Less digestion • Slower movement of the gastrointestinal tract • Smaller liver size • Lower stomach mucus production 	URINARY SYSTEM  <ul style="list-style-type: none"> • Kidneys get smaller • Brain weighs less. • Blood flow to the brain gets lower • Red blood cells get slower • A decrease in the number of red blood cells in the blood 	HEALTH-RELATED CHANGES  <ul style="list-style-type: none"> • Slowing down of mind and thinking ability • Slowing down of the person's coping.
TASTE AND SMELL  <ul style="list-style-type: none"> • Less nose buds • Less nose scent cells 	COGNITIVE AND EMOTIONAL CHANGES <ul style="list-style-type: none"> • Age associated memory impairments. • Depression • Stomatization: recovering concerns or physical symptoms. 	

- Increase in the number of cavities.
- Less feeling of thirst.

- Less muscle tone at the end of the esophagus to the stomach.
- Less saliva.
- Less digestion.
- Slower movement of the gastrointestinal tract.
- Smaller liver size.
- Lower stomach mucus production.

Urinary System

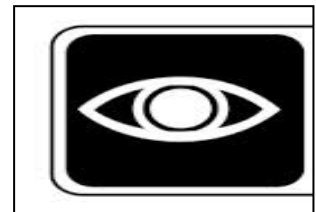
- Kidneys get smaller.
- Kidneys lose some of their function.
- Lower blood flow to the kidneys.
- Concentration of the urine decreases.
- Bladder gets smaller.
- Holding power of the bladder.
- Loss of bladder muscle tone.
- Loss of bladder elasticity.
- Slower and/or lower feeling of the need to void.
- More urine at night.
- The prostate in men gets larger.

Nervous System

- The brain gets smaller.
- Brain weighs less.
- Blood flow to the brain gets lower.
- Reflexes get slower.
- A decrease in the number of nerves in the brain and the entire body.

Eyes

- Less able to focus.
- The eyelids sag.
- Eyelashes get thin, short, and less.
- A gray area around the edges of the cornea.
- People get farsighted. They cannot see things that are close to them.
- Lower eye muscle tone.
- Fewer tears.
- Decrease in eye muscle elasticity, so things may be blurry to the person.



Ear

- Thinner ear membrane.
- Less able to hear higher tones as well as they did in the past.
- Less ear wax in the outer ear.
- The parts of the inner ear shrink.



Taste and Smell

- Less taste buds.
- Less nose scent cells.

Endocrine System

- Less growth hormone (less muscle mass).
- Lower thyroid function.
- Less insulin.
- Less parathyroid function.

Reproductive System

- Lower estrogen in women and lower testosterone in males.

Health-related Changes

- Slowing down of mind and thinking ability
- Slowing down of the body's physical function
- A slowing down of the person's coping
- Less social support
- Loss of loved ones (friends, husband, wife)
- Lower quality of life

Cognitive and Emotional Changes

- Age-associated memory impairments
- Depression
- Somatization: recurring concerns of physical symptoms, personal and social distress
- Insomnia
- Anxiety

Healthy mental aging may be considered as the absence of the common disabling mental health problems of the elderly, such as cognitive decline and depression. Modifiable effects of lifestyle are found to have a positive impact on mental aging. Participating in physical activities intellectually stimulating conversations and avoiding substance abuse are enriching environmental factors that reduce the chances of cognitive decline and mental illnesses.



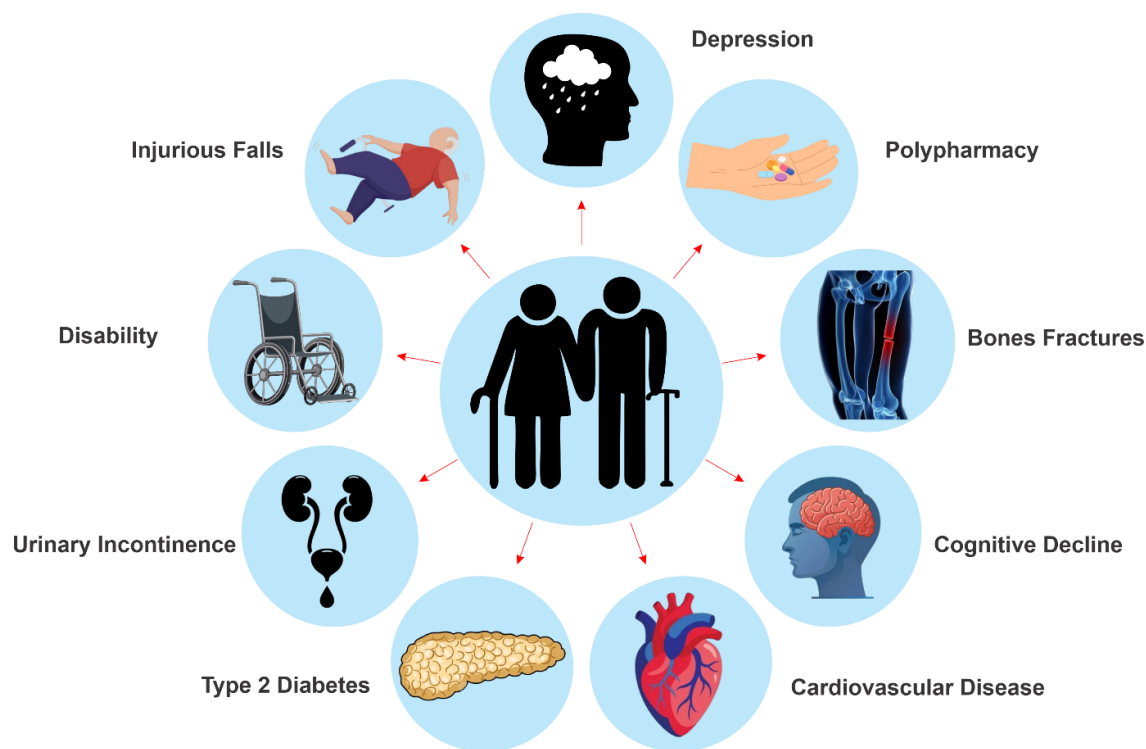
Social Changes and Needs

- Social insecurity due to lack of living arrangements, safety, presence of chronic illness, etc.
- Financial dependence.
- Loneliness and isolation.

Legal Needs

The elderly also have their own legal needs. Some of these special needs are:

- Maintaining rights and dignity
- Power of attorney/ other financial issues
- Prevention of being abused



- Prevention of violence

Fig.4.1: Physiological and Psychological changes in old age

Physiological and Psychological Changes in Older Adults

Aging is a natural biological process that brings about significant changes in both physical and mental health. Understanding these changes is essential for providing appropriate care to older adults and ensuring their overall well-being.

Changes in Appetite and Digestive Function

As the human body ages, metabolic activity decreases, resulting in a reduced need for caloric intake. Older adults often experience a decline in appetite, which may be further affected by diminished senses of taste and smell. These sensory changes can reduce the enjoyment of food and lead to poor nutritional intake.

Additionally, the digestive system slows down with age, leading to delayed gastric emptying and reduced efficiency in breaking down and absorbing nutrients. This slower metabolic rate also impacts the rate at which calories are burned, increasing the risk of unintentional weight changes.

Sensory Decline and Mobility Challenges

Age-related decline in vision and hearing is common. Older adults frequently require corrective devices such as eyeglasses or hearing aids to compensate for these impairments.

The musculoskeletal system also undergoes degenerative changes. Weakness in muscles, instability in joints, and a decline in balance are prevalent among older adults. These

physical changes significantly increase the risk of falls and injuries, such as fractures, which may lead to severe complications or mortality in some cases.

Chronic Health Conditions

Older adults are more susceptible to developing chronic conditions that require long-term management. Common illnesses include:

- Diabetes Mellitus
- Arthritis
- Alzheimer's Disease and other forms of dementia
- Cardiovascular Diseases
- Chronic Obstructive Pulmonary Disease (COPD)
- Chronic Kidney Disease (CKD)

The aging immune system, a condition known as immune-senescence, reduces the body's ability to fight infections. Consequently, older adults face an increased risk of contracting illnesses such as pneumonia and urinary tract infections (UTIs).

Dermatological and Thermoregulatory Changes

The skin of older adults undergoes significant structural and functional changes, becoming thinner, drier, and more fragile. These changes increase susceptibility to skin tears, pressure injuries, and infections.

Thermoregulatory mechanisms are also less effective in older adults, making them more sensitive to extreme temperatures. This can lead to an increased risk of hypothermia or hyperthermia in extreme weather conditions.

Cognitive and Psychological Changes

Cognitive function may decline in older adults due to aging or underlying neurological conditions. These changes can manifest as:

Memory Loss: Difficulty recalling recent events or information.

Disorientation: Confusion about time, location, or personal identity.

Impaired Judgment: Reduced ability to make sound decisions.

In addition, conditions such as delirium, dementia, and depression are prevalent in older populations and significantly affect their quality of life. These mental health challenges require careful assessment and management to ensure optimal care.

Implications for Care

The physiological and psychological changes associated with aging require a multidisciplinary approach to care. Caregivers must focus on promoting functional independence, preventing complications such as falls and infections, and addressing the emotional and social needs of older adults. By tailoring interventions to meet the unique needs of this population, health professionals can enhance the quality of life for older adults and support healthy aging.

Activities

1. Assistive devices are used by people with special needs. Older adults may need spectacles, hearing aids or walker that requires cleaning and servicing. What are the common services to maintain various devices? Make a list of the maintenance requirements.

Check Your Progress

A. Short Answer Questions:

1. Enlist the common health problems that older people may have?
2. Why do elderly people require special care?
3. State any five changes that occur in the body during old age?

SESSION 3: TAKING CARE OF THE PROBLEMS OF THE ELDERLY

This session will cover common health issues in elderly individuals and procedures to provide effective care.

Skin and Nail Care

Aging causes thinner, drier, and more fragile skin, increasing risks of:

- Skin tears, rashes, infections, and pressure ulcers.
- Sunburns and skin cancer due to reduced pigmentation.
- Temperature sensitivity from fewer sweat glands and fat layers.

Care Guidelines:

- Use mild soaps and moisturizers; avoid alcohol-based products.
- Reposition of immobile patients every 2 hours to prevent pressure ulcers.
- Maintain clean, dry skin and promptly change soiled clothing.
- Perform gentle nail care, ensuring nails are clean and smooth.

Bone Health

Aging weakens bones, leading to osteoporosis, arthritis, and fractures.

Care Guidelines:

- Encourage a calcium- and vitamin D-rich diet.
- Promote exercise to maintain bone strength and flexibility.
- Prevent falls by ensuring a safe environment and using assistive devices.

Muscle Care

Muscles lose strength and flexibility with age.

Care Guidelines:

- Encourage range-of-motion and strengthening exercises.
- Assist with walking and ensure safe mobility practices.

Respiratory Care

The respiratory system weakens with age, increasing risks for COPD, pneumonia, and lung cancer.

Care Guidelines:

- Promote deep breathing exercises and adequate fluid intake.
- Monitor for coughing, chest pain, or blood in sputum and report abnormalities.
- Provide a nutritious diet and ensure comfort.

Heart Health

Aging affects cardiovascular function, increasing risks for hypertension and heart disease.

Care Guidelines:

- Encourage mild exercise and a heart-healthy diet.
- Monitor and report symptoms like chest pain or shortness of breath.
- Ensure adherence to prescribed medications.

Digestive System Care

Aging slows digestion and increases the risk of constipation and incontinence.

Care Guidelines:

- Provide small, frequent meals with high fiber and adequate fluids.

Taking Care of the Problems of the Elderly

Skin and Nail Care:- Care Guidelines:

- Use mild soaps and moisturizers
- Reposition of immobile patients every 2 hours
- Maintain clean, dry skin
- Perform gentle nail care

Bone Health:- Care Guidelines:

- Encourage a calcium- and vitamin D-rich diet.
- Promote exercise to maintain bone strength.

Muscle Care: Care Guidelines:

- Encourage range-of-motion and strengthening exercises.
- Assist with walking and ensure safe mobility practices.

Eye and Ear Care: Care Guidelines:

- Encourage regular eye exams and ensure proper use of eyeglasses or hearing aids
- Speak clearly and face the person to aid communication.

Nervous System Care: Care Guidelines:

- Create a safe, uncluttered environment.
- Use calendars and clocks to aid orientation.
- Encourage independence in daily activities

Heart Health:- Care Guidelines:

- Encourage mild exercise and a heart-healthy diet.
- Monitor and report symptoms like chest pain or shortness of breath.
- Ensure adherence to prescribed medications.

Respiratory Care :Care Guidelines:

- Promote deep breathing exercises and adequate fluid intake.
- Provide a nutritious diet and ensure comfort.

Urinary System Care :- Care Guidelines:

- Encourage hydration and good hygiene.
- Monitor for signs of infection, such as painful urination.
- Assist with bladder training if needed.

Digestive System Care:- Care Guidelines:

- Provide small, frequent meals with high fiber and adequate fluids.
- Keep patients upright after meals to improve digestion
- Maintain hygiene for incontinence care and prevent skin breakdown.

- Keep patients upright after meals to improve digestion.
- Maintain hygiene for incontinence care and prevent skin breakdown.

Urinary System Care

Aging increases the risks of incontinence and urinary tract infections.

Care Guidelines:

Encourage hydration and good hygiene.

Monitor for signs of infection, such as painful urination.

Assist with bladder training if needed.

Nervous System Care

Aging affects mobility, memory, and cognitive functions.

Care Guidelines:

Create a safe, uncluttered environment.

Use calendars and clocks to aid orientation.

Encourage independence in daily activities and monitor fall risks.

Eye and Ear Care

Vision and hearing decline with age, affecting safety and communication.

Care Guidelines:

Encourage regular eye exams and ensure proper use of eyeglasses or hearing aids.

Speak clearly and face the person to aid communication.

Provide tools for low vision, like magnifiers or large-print materials.

By following these care guidelines, healthcare providers can support the health, safety, and quality of life of elderly patients.

Activities

1. Try to find out the traditional Indian practices followed by people to maintain health and life span.

Check Your Progress

A. Fill in the blanks

1. _____ is important to maintain and improve muscle function in the elderly.
2. The geriatric aide must maintain safety and ensure good _____ to support elderly patients suffering from diseases.

B. Short Answer Questions

1. Enlist the common problems of skin and nails in the elderly
2. Enumerate the common problems related to sensory organs in old age

3. Describe the activities to be performed by HHA in providing care to the elderly for the following:

- (i) Long nails:
- (ii) Dry skin
- (iii) Wax in ears
- (iv) Pressure ulcer

Module 5

FIRST AID

Module Overview

This unit provides a systematic framework for the rapid assessment and management of workplace health emergencies. First Aid refers to the immediate assistance or treatment provided to a person who is injured or suffering from a sudden illness before professional medical help is available. This vital intervention can be carried out by any trained individual, including paramedical staff, at any point in time. The primary goal of administering first aid is to prevent the patient's condition from worsening until qualified medical assistance arrives. This section aims to guide you in understanding the principles and rules of first aid. It will cover identifying the necessary facilities, equipment, and materials for first aid and explain the role of a first aider in cases of fever, heat strokes, back pain, asthma, foodborne illness, and accidental falls.

Learning Outcomes

- Demonstrate the principles, facilities equipment and duties to perform first responder duties in medical emergencies.

Module Structure

Session 1: Principles and Rules of First Aid

Session 2: Identify Facilities, Equipment and Materials for First Aid

Session 3: Role of First Aider in Fever, Heat Stroke, Back Pain, Asthma and Food-Borne Illness

SESSION 1: PRINCIPLES AND RULES OF FIRST AID

In this session, you will learn about the essential principles and rules that govern first aid. First Aid involves initiating life-supporting treatment for individuals suffering from injuries or sudden illnesses. It is vital to recognize that while first aid is crucial, it cannot replace professional medical treatment. Proper first aid can save lives by stabilizing the patient until expert medical care is available. The internationally recognized symbol for first aid is a white cross on a green background, as specified by ISO.

Purpose of First Aid

The primary objective of first aid is to sustain life until a qualified medical professional arrives, reduce the victim's pain and discomfort, help facilitate early recovery, and prevent the condition from worsening.

Principles of First Aid

The basic principles of first aid are as follows:

1. **Preserve Life:** This includes preserving both the casualty's and the rescuer's life.
2. **Ensure Protection from Further Harm:** The environment should be safe, and there should be no additional risks to the casualty or others around them.
3. **Provide Pain Relief:** This could involve using ice packs or applying a sling to help alleviate pain.
4. **Prevent the Condition from Worsening:** It is crucial to ensure that first aid measures do not inadvertently make the patient's condition worse.

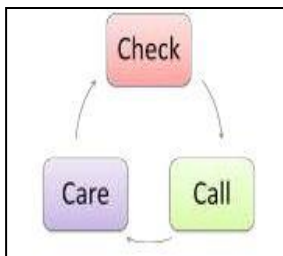


Fig.5.1: First aid symbol
Courtesy: <https://goo.gl/tc1kik>

Rules of First Aid

The following rules are important when performing first aid:

- **Check:** First, assess the situation to understand what has happened and identify the patient's issues. Offer comfort to the victim and provide shelter as necessary.
- **Call:** Ensure that professional medical help is contacted as soon as possible.
- **Care:** Provide help to the victim, ensuring minimal movement and maintaining their safety while waiting for further medical assistance.



By following these fundamental principles and rules, first aid can be administered effectively, ensuring the patient's well-being until professional medical treatment is available.

Health Emergency

A situation in which the health of a person is in danger because of sudden illness or accident, and immediate help is required to “save a life” is a health emergency. The ill or injured person should be given immediate attention and first aid in case of emergency before medical help arrives. The various situations that require immediate medical care are: (i) electric shock, (ii) breathing difficulty (iii) burns, (iv) bleeding, (iv) injury, (v) fracture, (vi) heart attack, etc.

The Human Body

The human body works together continuously to perform countless tasks. The body by adulthood consists of close to 100 trillion cells, the basic unit of life. These cells are organized systematically to form the whole body with various body systems. A newborn baby has over 300 bones at birth, whereas an adult human has 206 bones. The body includes the musculoskeletal system, cardiovascular system, digestive system, endocrine system, integumentary system, urinary system, lymphatic system, immune system, respiratory system, and reproductive system. We will now understand two vital aspects of life from the point of First Aid.

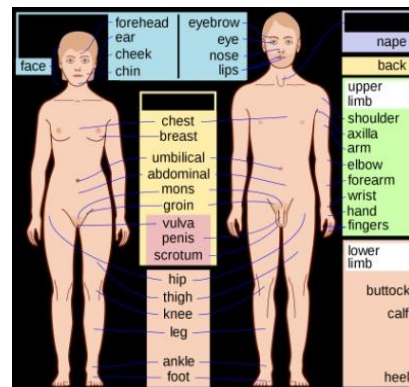


Fig.5.2: Human body
 Courtesy: <https://goo.gl/5UWYPD>

Breathing

Breathing is vital to life; a person breathes about 20,000 times daily. The breathing process is assisted by the respiratory system, which includes the nose, throat, voice box, windpipe, and lungs. We inhale air through the nose or mouth, which meets together at

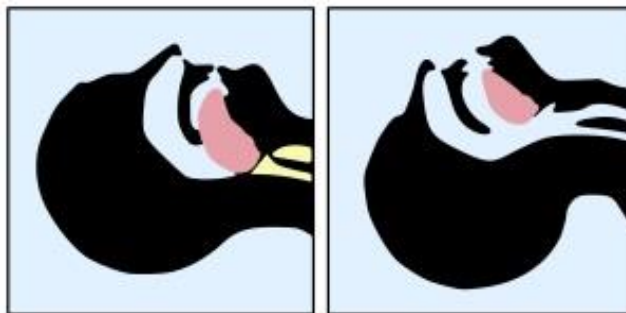


Fig.5.3: First aid for Breathing problem

Courtesy: <https://goo.gl/9C4jfP>

In case of tongue fallen backwards, blocking the airway, it is necessary to hyperextend the head and pull up the chin, so that the tongue lifts and clears the airway.

the pharynx or throat, at the back of the nose and mouth. The diaphragm that separates the chest from the abdomen moves up and down when we inhale and exhale. When we breathe in, the diaphragm moves down to enlarge the chest cavity to fill in maximum air. When we breathe out or exhale, the diaphragm moves up, forcing the chest cavity to push the gases in the lungs out through the nose and mouth.

Blood circulation

Blood is composed of plasma and cells suspended in a viscous medium. The blood consists of plasma, red blood cells, white blood cells, and platelets. The heart is the main pumping organ of the circulatory system and is made of muscles, which are located between the two lungs and are slightly inclined towards the left side. Each time the heart beats, the pointed tip at the bottom of the heart touches the front wall of the chest, creating the lub-dub sound. While the heart contracts, it pushes the blood out into two major loops or cycles, the systemic loop and the pulmonary loop.

The blood reaches the body's systems by circulating oxygen to all its organs, structures, and tissues and collecting carbon dioxide waste through the systemic cycle. The pulmonary loop helps in the oxygenation of blood. It circulates blood to and from the lungs, to release the carbon dioxide and pick up oxygen. The systemic cycle controls the left side of the heart and the pulmonary cycle controls the right side of the heart.

Health and safety risks at the workplace: The probability of a person experiencing an adverse health effect if exposed to a hazard is considered the risk factor at work. Let us now learn about the various types of hazards and their cause. This helps to identify the various hazards that you may encounter at the workplace.

Types of Hazards

Biological – Biological hazards are caused by living organisms like bacteria, viruses,

insects, plants, birds, animals, and humans etc.

- **Chemical** – Chemical hazards, which include acids, poisons, cleaning agents, etc. depend on the chemical's physical, chemical, and toxic properties. The severity of the hazard depends on the toxic properties of the chemical.
- **Radiation** – Radiation hazards are related to exposure to radiation from radioactive substances.
- **Ergonomic** – Ergonomic hazards are caused due to the same posture and movements, improper layout of the workstation (e.g., computer workstation, workstation for repair of electrical gadgets, etc.), faulty designed chairs, tools and equipment, wrong postures, etc. Wrong postures also induce physical fatigue and/or bodily harm, including back pain and discomfort in the shoulders and lower limbs.
- **Physical** – Physical hazards are caused mostly due to slippery surfaces, falling objects, manual handling (lifting, pushing, carrying), sharp tools and equipment, radiation, magnetic fields, extreme pressure (high pressure or vacuum), excessively loud and prolonged noise, and bullying (abnormal, repeated behavior directed against a worker or group of workers which results in a risk to health and safety). It may result in stress, depression, loss of self-esteem, feelings of guilt, phobias, sleep, and eating disorders, sexual harassment (a situation in which unwanted behavior with a sexual connotation, expressed physically, verbally, or non-verbally takes place), verbal threat, abusing, use of weapons, etc.
- **Psychosocial** – Psychosocial hazards are caused due to violence, excessive pressure or stress at the workplace for meeting deadlines, conflicts at the workplace, etc. It also includes hazards due to discrimination on the grounds of caste, race, skin color, ethnic origin, sex, religion, etc.
- **Safety** – Safety hazards at the workplace include slipping or tripping, inappropriate machine guarding, collision, bumps, road accidents, fire accidents, equipment malfunctions or breakdown, and electrical accidents (it could result in skin burns affecting the areas that are in contact with the electrical current or electric shock due to electrical discharge).



Fig.5.4: Types of hazards
Courtesy: <https://goo.gl/XtzLYd>

Activities

1. Simulate situations of injury due to fall and how do you manage the situation applying the rules and principles of first aid.

Check Your Progress

A. Fill in the Blanks

1. The medical attention given at the first instance is called _____.
2. The ISO-specified symbol for the first aid is _____ on a green background.
3. Blood is a viscous fluid composed of _____.
4. The process of breathing in is _____ and breathing out is _____.

B. Short Answer the following questions

1. What is the purpose of First Aid?
2. State the principles of First Aid.
3. What is a Health Emergency? Describe various emergencies.
4. Explain the Rules of First Aid.

SESSION 2: IDENTIFY FACILITIES, EQUIPMENT, AND MATERIALS FOR FIRST AID

This session explains the various facilities, equipment, and materials used for First Aid. First Aid facilities should be easily available and located at points convenient to workers. An ambulance should also be made available at the workplace to meet any emergency.

An ambulance is a transport vehicle to shift critically sick or injured people to a medical facility. Ambulances are motor vehicles, that may be helicopters, airplanes, or even boats. The interior of an ambulance accommodates one or more patients and several emergency medical personnel.

It consists of supplies and equipment to stabilize the patient's condition en route. The head of the organization or the employer provides first aid facilities, such as a First Aid room, a First Aid kit, a health center, and First Aid equipment on the premises to meet any emergency.

Once the employer has set up First Aid facilities, one or two persons should be nominated as First Aiders. They should be trained in First Aid facilities and services at the workplace. Now let us understand the facilities and the important aspects that we need to keep in mind when arranging these facilities.

First Aid Room

It is the place where equipment and materials are made available and systematically arranged for providing first aid services. It should have the following:

- A nameplate with the symbol of FIRST AID.
- Proper lighting and ventilation.
- Toilets, which should be friendly for differently abled persons (Persons with disability). Facilities for easy movement of a person on a stretcher or a wheelchair.

The facilities at the First Aid Room should include:

- Table and chairs
- Telephone
- Directory of emergency telephone numbers. (For example, in India telephone number for a fire service station is 101, for police, it is 100 and for emergency services/Ambulance it is 108)
- First Aid kit
- Examination lamp
- Medical examination couch with blankets and pillows
- A portable screen
- Container for sharp equipment like surgical knives, etc.
- Sink and wash basin with hot and cold running water
- Sterilizer
- Stretcher
- Workbench or dressing trolley
- Oxygen cylinder
- Sphygmomanometer – a blood pressure measuring instrument
- Resuscitation equipment
- Cupboards for storing medicines, dressings, first-aid
- Electric power points
- Suitable seating
- Container for soiled dressings
- Medical waste containers.

First Aid Kit

The First Aid Kit consists of mainly contents for providing first aid in case of bleeding, bone fractures, and burns. The first aid kit could also be made industry/organization specific (nature of the job being undertaken at the industry/organization). For example, in casting and forging industries, a medicine used in burns and scalds should be kept in the First Aid kit. A basic first-aid kit should include the following:

- Band-Aids of all sizes.
- 4" by 4" gauze pads - for cleaning wounds.
- 4" by 4" dressing bandages - for wounds, cuts, and abrasions.
- 2" dressing rolls or crepe bandage - for covering and bandaging injuries.
- Medical tape.
- Cotton balls.
- Safety pins.
- Alcohol pads or isopropyl alcohol for cleaning wounds.
- Antimicrobial hand wipes - placed in a sealed plastic bag to keep them moist.

pneumonia. If ailments persist, then the patient should immediately consult a doctor.

Some of the common ailments and the drugs generally prescribed are given in the table below:

Drugs for Ailments

Ailments	Drugs
Allergies	Tablet Cetirizine
Headache	Tablet Saridon, Aspirin (Aspirin is also used in case of chest pain)
Heartburn/ Acidity	Tablet/Syrup Digene
Nasal Congestion	Vaporub for rubbing on nose and chest
Cough and Cold	Tablet for cough and cold or syrup
Fever/Flu	Paracetamol (also used as a General painkiller)
Constipation	Isabgol Husk (with hot milk/water)
Sprains and Strains	Tablet Flexon/Combiflam (used as an anti-inflammatory painkiller)
Dehydration	Oral Rehydration Salt (ORS)

Activities

1. Collect materials for school first aid box and set up a first aid room under supervision.

Check Your Progress

A. Fill in the Blanks

1. _____ is a vehicle specifically designed to transport critically sick or injured people to a medical facility.
2. _____ is an electronic device that administers an electric shock of preset voltage to the heart.
3. _____ is a bandage used to support an injured forearm.
4. A _____, _____ is someone who takes charge of an emergency scene and gives first aid.
5. ORS stands for _____ salt.
6. _____ is the place where equipment and materials are made available and systematically arranged for first aid services.
7. The contents of the _____ kit are mainly meant for providing first aid.

B. Answer the following Questions

1. Describe the First aid room and the facilities at the first aid room.
2. Describe the First aid kit and enlist the contents of the first aid kit.
3. What are the drugs for common ailments? Enlist the drugs.

SESSION 3: ROLE OF FIRST AIDER IN FEVER, HEAT STROKE, BACK PAIN, ASTHMA AND FOOD-BORNE ILLNESS

This session will make you understand the role of a first aider in handling persons who suffered heat stroke, back pain, asthma, and foodborne illness. A First aid is a person who undertakes an emergency and gives first aid. Often, the first aider at an emergency scene is a passerby who is willing to help. A parent who helps his/her child, a firefighter attending to an injured pedestrian, or an employee who provides care are all providing first aid. A First Aider does not diagnose or treat injuries and illnesses but offers help to the person in need.

This session describes how to give first aid to a casualty with fever, heat stroke, back pain, asthma, and foodborne illness. As a First Aider, the first thing is to manage the situation and stay in charge until the arrival of the medical help or ambulance. While in charge, many other people may offer to help and crowd the place. In an emergency, where there is confusion and fear, a well-trained and effective First aid giver reassures everyone and can make the whole experience less traumatic. Besides giving First Aid, one should ensure the following:

- Manage unnecessary crowd.
- Protect the casualty's belongings

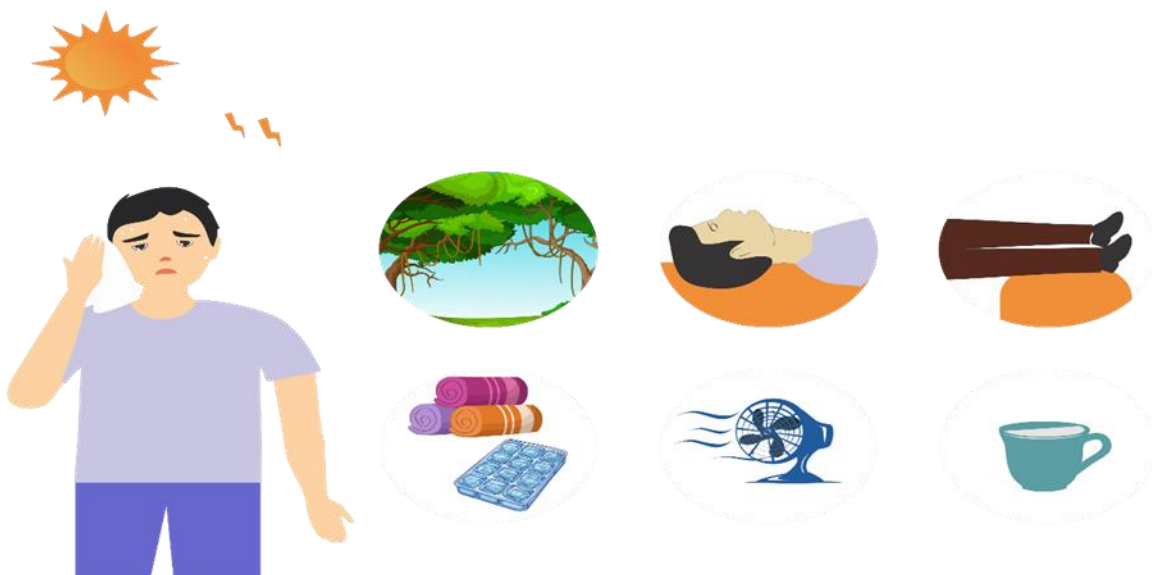


Fig. 5.6: Heat Stroke First Aid

General Considerations and Rules

The elementary lifesaving procedures are head tilt, First Aid for choking, and recovery position.

Step 1: Initially check for bleeding. Apply direct pressure on the wound site to stop bleeding.

Step 2: Check for head, neck, and spinal injury. If any of these are suspected, immobilize the victim to prevent further injury. Moving a victim will often increase the impact of spinal injuries.

Step 3: Determine responsiveness: If a person is unconscious, try to arouse by gently shaking and speaking.

Do not give the victim cannot swallow and could suffocate. Look for the victim's chest movements and listen for sounds of breathing (place your ear near the nose and mouth and feel for breath on your cheek). If the victim is not breathing, then mouth-to-mouth resuscitation is to be given. If you are not trained to do that, then call for medical help at the earliest.

If the victim is breathing, but unconscious, roll the casualty on one side, keeping the head and neck aligned with the body. This will help drain the mouth and prevent the tongue or vomit from blocking the airway if the person remains unresponsive, carefully roll the casualty on the back and open the airway.

- Keep head and neck aligned.
- Cautiously roll onto the back while holding the head.
- Open the airway by lifting the chin.

Observe ABC as follows:

A – Airway
B – Breathing
C – Circulation
D – Disability
E – Exposure

Basic Lifesaving Steps

Ref: AFH 36-2218, Vol 1, Vol 2

Use extreme care when treating injuries in a contaminated environment—different rules may apply!



Head tilt, chin lift.

Immediate Steps

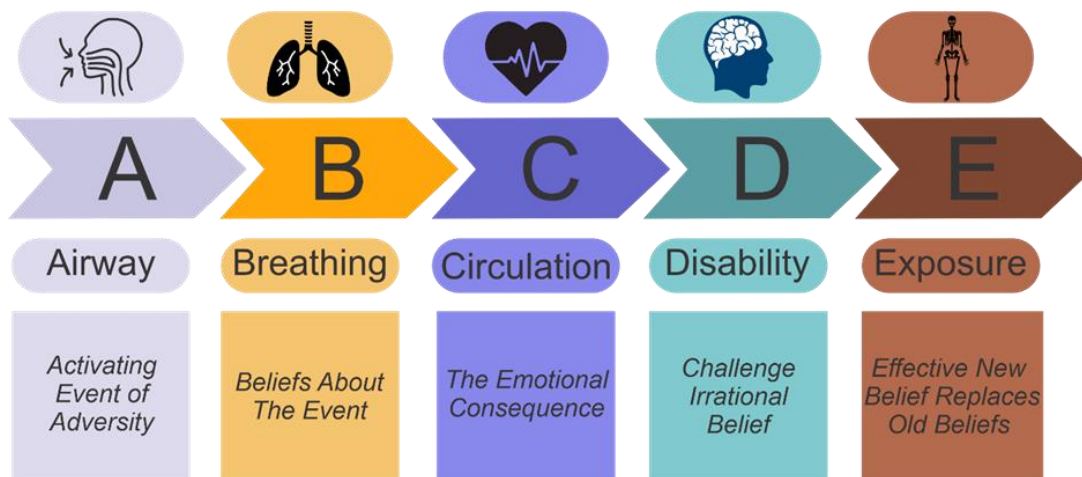
When a person is injured:

- Establish an open **Airway**
(If possible neck injury, ensure airway opened using the jaw thrust maneuver, do not turn head)
- Ensure **Breathing**
- Stop bleeding to support **Circulation**
- Prevent further **Disability**
 - Immobilize neck injuries
 - Place dressings over open wound
 - Splint obvious limb deformities
- Minimize further **Exposure** to adverse weather

A Airway
B Breathing
C Circulation
D Disability
E Exposure

Fig.5.7: Basic life-saving steps

Courtesy: <https://goo.gl/xDzoQr>



Airway: Ensure that the tongue or any foreign body does not obstruct the airway.

Breathing: Make sure the victim is breathing. If you are trained to give mouth-to-mouth respiration, then facilitate breathing.

Circulation: Check for the pulse to ensure that the heart is beating properly. Check heartbeat/pulse of the victim. If there is no pulse and if you are trained to do Cardio Pulmonary Resuscitation (CPR), then begin CPR immediately.

(**Note:** CPR is administered when both heart and lungs have ceased to function)



Fig.5.8: CPR first aid

Courtesy: <https://goo.gl/fHMMcG>

Step 4: Call Emergency Services: Call for help or tell someone else to call for help as soon

as possible. If you are alone, try to establish breathing before calling for help, and do not leave the victim unattended for an extensive amount of time. Stay calm and don't give up. Continue to aid the victim until medical help arrives.

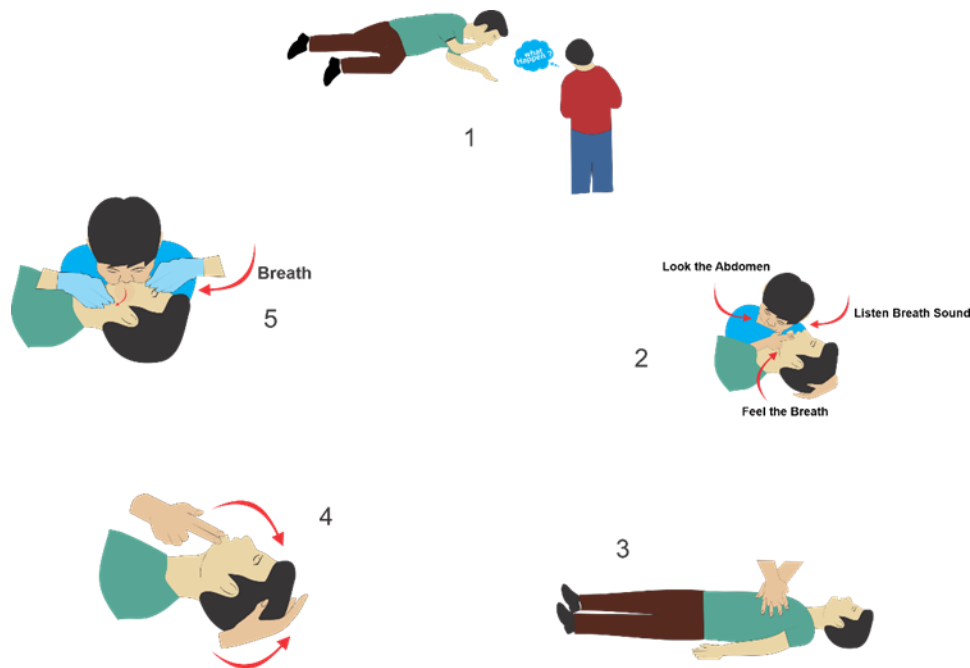


Fig. 5.9: Steps of CPR

Let us now learn about the basic first aid practices that may be utilized by the first aider to provide first aid to people working in various occupations, with special reference to the health sector. Considering your age and body strength, we will take up only those first aid practices that you can easily perform.

Fever

Fever is a higher-than-normal human body temperature (normal body temperature is 37⁰ Celsius or 98.6⁰ Fahrenheit). Body temperature is a good indicator of your health. Fever is a symptom and not a disease. Fever can be categorized as given below:

- Low fever: 98.8⁰ F to 100.8⁰ F
- Mild to moderate: 101⁰ F to 103⁰ F
- High fever: 104⁰ F and above. If the temperature is high, then it is a sign that the body is fighting illness.

Causes: Fever may be caused due to hot weather, bacterial or viral infection, spending too much time under the sun or allergy to medication or food/water.

Symptom: Symptoms may include a hot flushed face, nausea, vomiting, head and body ache, constipation, diarrhea.

First Aid: Monitor temperature using a digital thermometer. Remove the excess clothing to reduce entrapment of air near the skin that reduces the body temperature. Shift the

person to a cool place and provide sponge bath in tap water. Give plenty of fluids and prescribed dose of tablet paracetamol.

Taking body temperature

In the case of fever, the body temperature is measured using a thermometer. Let us now learn how to take body temperature.

Step 1– Prepare: Wash the tip of the digital thermometer with clean water and wipe it with a clean cloth. Wipe it with a paper tissue after cleaning the surface. This will remove certain germs on the surface.

Step 2– Switch On: Check the power button by switching the button on the digital thermometer to ensure it is working properly. The LCD screen should read "0". If the screen remains blank, replace the battery. Read the instructions given in the manual to replace the battery. Use the thermometer when the initial reading is correct.

Step 3– Position: Place the thermometer in the mouth of the person by laying the tip on a middle point at the back of the tongue before asking the patient to close the lips around it to hold the length of it.

Step 4– Take Temperature. This can take a few seconds to a few minutes after pressing the button. Remove the thermometer from the mouth and read the temperature.

Step 5– Store: After you have finished using the thermometer, switch off the thermometer and clean the tip with water and wipe with tissue paper or dry cloth. Keep the thermometer in its protective case and store it at safe place, away from the reach of children.

Heat Stroke

Heat stroke is a severe heat-related condition. It could be life threatening. It is caused when the body's cooling mechanism fails due to excessive heat and humidity. Impairment in sweat gland function may be another cause of heat stroke.

Symptoms: Body temperature greater than 104°F. Fever may cause headache, dizziness, fatigue, fluctuating blood pressure and irritability.

First Aid: Shift the person to a shady place. Cool the person by sponging with wet towel. Apply ice packs in armpits and groin. Give luke warm water with electrolyte.

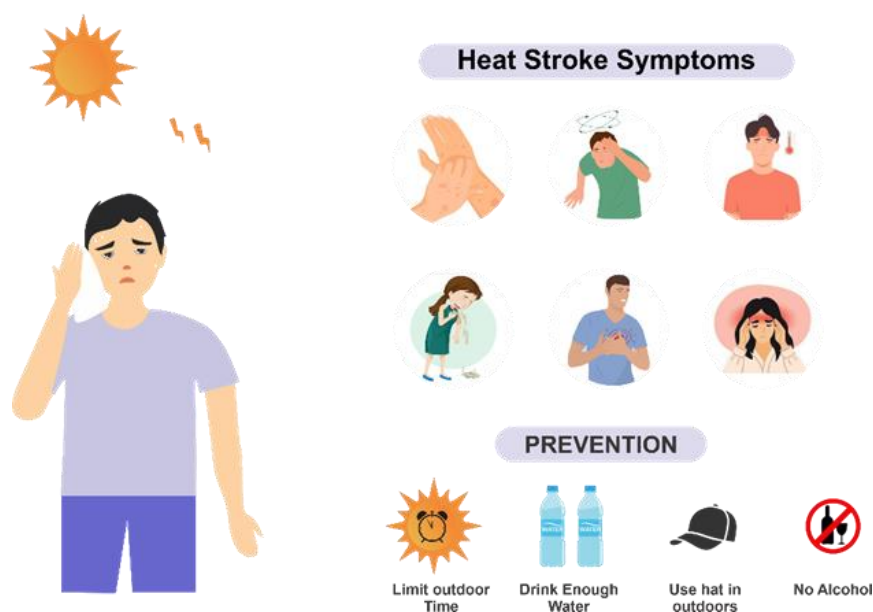


Fig.5.10: Heat stroke Symptoms

Back Pain

Back pain is a short-term acute pain in the back of the body. It indicates that the body is under stress. It is caused due to problems in bones, ligaments and muscles of spine and nerves.

Triggering Factors: Back pain may be aggravated due to poor posture, inappropriate footwear, incorrect walking habits, prolonged sitting, sleeping on soft mattresses, kidney, and bladder prostate disorders, constipation, stress, etc.

First Aid: Massage with hot/cold packs and use painkillers or relaxants for pain relief.

Asthma

Asthma is a chronic inflammatory lung disease that causes airways to tighten and narrow. It creates narrowing of air passages of the lung and therefore produces difficulty in breathing.

Symptoms: Symptoms may include wheezing, cough and cold, tightness in the chest, sticky mucus, disturbed sleep, and breathlessness.

Causes: It is believed that heredity factors are the main cause of asthma. Environmental factors like dust, mite, pollen and occupational exposure to irritants aggravate asthma. Cold, viruses, cigarette smoking, scent, pollution, change in weather, etc. are the triggering factors.

First Aid: In case of an asthmatic attack, use asthma inhalers. Asthma inhalers are hand-held portable devices that deliver medication to the lungs. Asthma inhalers are available to help control asthma symptoms in adults and children.

Foodborne Illness

Foodborne illnesses occur by eating unhygienic food and water. Bacteria are the common cause of food contamination.

Symptoms: Common symptoms include diarrhea, which may be bloody, nausea, abdominal cramps, vomiting, fever, dehydration, shallow breath, rapid pulse, pale skin, and chest pain.

First Aid: Oral Rehydration Salt (ORS) should be given with luke warm water. In severe cases, the patient needs hospitalization immediately. Recipe for making a 1 litre ORS solution using Sugar, Salt, and Water.

- Clean Water - 1 litre - 5 cupfuls (each cup about 200 ml.)
- Sugar - Six level teaspoons
- Salt - Half level teaspoon
- Stir the mixture till the sugar dissolves.

Activities

1. Simulate situations of various symptoms discussed in the unit and respond as a first aider.

Check Your Progress

A. Fill in the Blanks

1. A person suffering from a fever ranging from 98.8° F – 100.8° F is said to be suffering from _____ fever.
2. A person suffering from a temperature of 104° F and above is said to be suffering from _____ fever.
3. In high fever, a person should be kept _____ by sponging with a wet towel or applying ice packs to armpits.
4. _____ is a chronic lung disease that tightens and narrows airways.
5. Back _____ is caused by problems in the ligaments and muscles of the spine.
6. Bronchodilators are used in case of _____ attacks.
7. _____ are the microorganisms that are said to be the most common cause of food contamination.
8. _____ is a person who takes charge of an emergency scene and gives first aid.
9. _____ is a symptom and not a disease.
10. _____ (ORS) should be given with lukewarm water.

B. Answer the following Questions

1. Who is the first aider? Describe the role of the first aider.
2. Describe the steps to take body temperature.
3. What is ORS? Describe the recipe for making 1 liter ORS solution.

SESSION 4: FIRST RESPONDER DURING ACCIDENTAL FALL

Falls are a common cause of injuries among the aged population. Timely aid can impact the recovery time of the victim and save lives. After a fall, immediately assess and treat the victim for any injuries.

First Assessment and Response

When a fall is observed, immediately assess the victim's condition based on consciousness level. An unconscious victim found in not breathing condition and bleeding profusely should be immediately taken to the emergency casualty. Call 108 immediately. Ask aloud if the victim is Okay and can move. If the victim is not okay, try to calm them while waiting for medical assistance. Start CPR (Cardiopulmonary resuscitation) if the victim is unconscious. If breathing is normal, then place them in a comfortable position and check for any visible injuries. The victim must undergo a detailed medical evaluation after a fall.

Call Out for Help

A severely injured or unconscious person needs immediate medical help. Dial emergency services and request a professional trained for emergency services to accompany the ambulance. Provide the exact location and detail of the victim's condition.

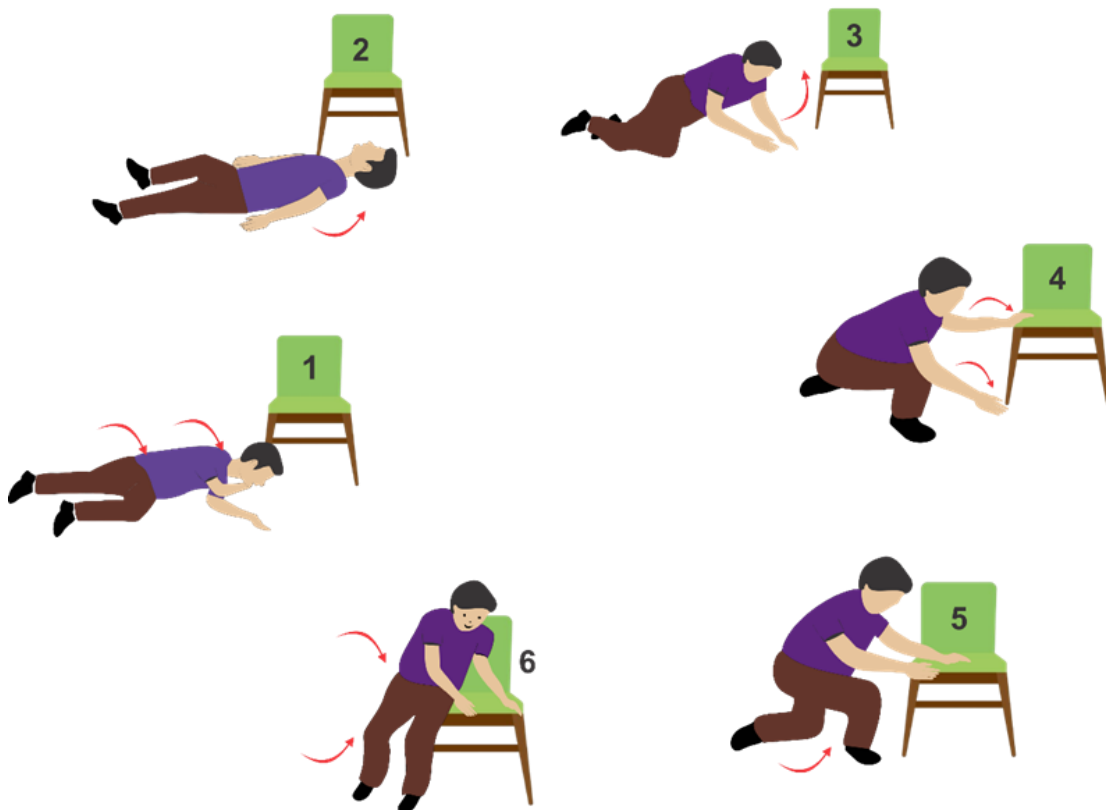


Fig. 5.11: Fall condition of Adult

Attend to the Bleeding

Apply pressure using clean cloth or bandage on the bleeding site. Tourniquet is used to control severe bleeding until the medical aid reaches the site.

Checking for Head and Neck Injuries

Head and neck injuries resulting from falls may be fatal if not immediately attended. In case of any complaints about neck or back pain, immobilize the part completely. Check for visible injuries or any signs of trauma, such as bleeding or swelling. Place the victim in a stable position until the arrival of medical aid.

Watch for signs of hypothermia.

In older adults, falls can result in shock that may be life-threatening. Shock occurs when the blood circulation is affected. Cover the victim by using blankets or warm cloth that helps to prevent hypothermia.

Monitor vital signs

Continuously monitor the pulse, breathing and blood pressure of the victim. Record the vitals until the professionals arrive so that accurate information can be conveyed.

Treating the injuries, fractures, and sprains

Injuries, fractures and sprains of the wrist, ankle and hip can result from fall. Immobilize the affected body part using splint or bandage, if the victim complains of severe pain, swelling, or inability to move. Apply cold compress or ice pack to reduce swelling and pain of bruises and sprain. Analgesics for pain relief can be provided. Elevate the injured area above the heart level to reduce swelling. Avoid moving the fractured area or dislocation until the medical team arrives.

Injury	Symptoms	Treatment
Wound	Bleeding, Pain	Clean the wound with antiseptic lotion and cover with a bandage.
Bruises	Swelling, discoloration	A cold compress or ice pack.
Sprains	Swelling/pain and limited movement	Elevate the injured area and apply a cold compress.
Fractures	Severe pain, swelling, and deformity	Immobilize the area. Call for medical assistance.
Dislocations	Severe pain, deformity, swelling, and limitation to move	Immobilize, and reach for medical assistance.

Prevention of Falls in the elderly

- Remove all obstacles, including rugs or any other objects from the floor that could cause a fall.
- Install handrails on staircases, bathrooms, and other slippery areas.
- Use side rails on the bed if there is a chance of falling.
- Use a walker while walking on uneven surfaces.
- Wear appropriate footwear

- In case of a fall due to incontinence, respect the person's privacy and use an adult diaper.
- Most of the falls happen while responding to the urgency of needs. Keep a walker for support and react calmly. Call for help when necessary.

Activities

1. Perform mock drill sessions as a first responder during an accidental fall.
2. Prepare charts and videos to educate older adults about preventive measures for accidental falls.

Check Your Progress

A. Fill up the Blanks

1. When a fall is observed, immediately assess the victim's condition based on.....
2. If the victim is not okay and unconscious, start

B. Short Answer Questions

1. Write a short note on first aid procedures during accidental falls of the elderly.

ANSWERS

Module 1: Prioritizing the safety of Older Adults

Session 1: Safety of Older Adults

A. Fill in the Blanks

1. Gerontology
2. Maturity of body structure and functioning
3. Professional nurse
4. Care not performed
5. Professional laws
6. Instrumental activities of daily living
7. Restraints

B. Multiple Choice Questions

1. d. Developmental disorders
2. a. Active decision makers
3. b. Injury from fall

Session 2: Basic Components of Patient Comfort

A. Multiple Choice Questions

Session 3: Informing the Elderly Person about the procedures and services

A. Fill in the Blanks

B. Multiple Choice Questions

C. Match the Following

Session 4: Personal Hygiene Practices for Geriatric Care Assistant

A. Fill in the Blanks

B. Multiple Choice Questions

C. Match the part of the Body with Hygiene Practices

E. Whether the following sentences are true or false.

Module 2: Supporting the activities of daily living of older adults

Session 1: Essential Activities of Daily Living in Patient Care

A. Fill in the Blanks

1. Activities of daily living
2. Cold bath 33 °C to 35 °C, Tepid bath 38 °C to 40 °C, Warm bath 40 °C to 42 °C, Hot bath 42 °C to 45 °C

Session 2: Meeting the nutritional needs of the older adults

A. Fill in the blanks

B. Multiple Choice Questions

Session 3: Mobility

A. Fill in the Blanks

1. Mobility
2. Body balance and coordinated movements.
3. Pressure ulcers
4. Respiratory distress (e.g., pneumonia, COPD), Post-surgical recovery (especially abdominal or thoracic), to assist with eating, drinking, and communication.

Module 3: Exercises for a healthy mind and body

Session 1: Preparation for Range of Motion Exercise

A. Fill in the blanks

1. Exercise
2. Range
3. Isotonic

Session 2: Active Range of Motion Exercises

A. Fill in the blanks

1. Sitting or standing
2. Hand and Finger
3. Hip and Knee
4. ankle

Session 3: Passive Range of Motion Exercise

A. Fill in the blanks

1. Contracture
2. Chin-to-chest
3. Finger bends and finger spreads

Session 4: Breathing Exercises

A. Fill in the Blanks

1. Deep breathing and coughing
2. Sitting upright
3. Three blue
4. Back pressure
5. Yoga
6. It reduces lung complications
7. Pursed lip breathing

Module 4: Caring for the Elderly

Session 1: Understanding the needs of Older adults

A. Fill in the Blanks

1. Aging

2. Medical & non-medical care
3. Caregivers

Session 3: Taking care of the Problems of the Elderly

A. Fill in the Blanks

1. Regular exercise
2. nutrition

Module 5: First Aid

Session 1: Principles and Rules of First Aid

A. Fill in the Blanks

Session 2: Identify Facilities, Equipment and Materials for First Aid

A. Fill in the Blanks

Session 3: Role of First Aider in Fever, Heat Stroke, Back Pain, Asthma and Food-Borne Illness

A. Fill in the Blanks

Session 4: First responder during Accidental Fall

A. Fill in the blanks

1. Consciousness level
2. CPR.



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