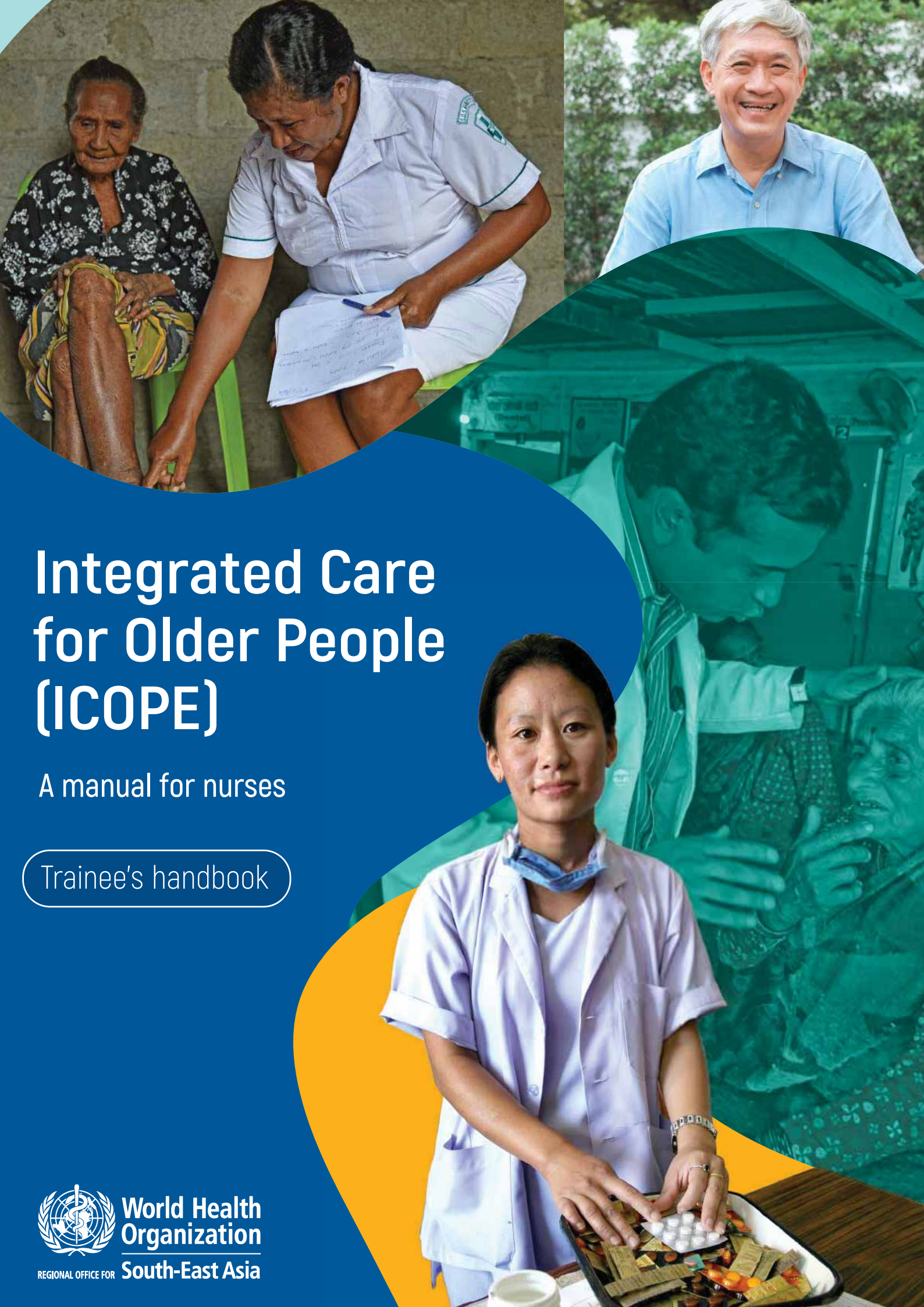

Integrated Care for Older People (ICOPE)

A manual for nurses

Trainee's handbook

World Health Organization
REGIONAL OFFICE FOR South-East Asia

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Contents

Foreword

Populations across the WHO South-East Asia Region are ageing. Whereas in 2010 older people accounted for 8% of the Region's population, by 2017 they accounted for 9.8%. This number will continue to rise, with older people expected to make up 13.7% of the population by 2030 – or 289 million people – and a significant 20.3% by 2050. Though the proportion of older people in the Region is projected to remain below global levels, the speed of the Region's demographic transition is faster.

Nurses are crucial to ensuring all older people can access integrated person-centred health care. Nurses are not only care providers and care coordinators, they are often the first point of contact in managing the health problems of older people and the family members they live with. It is of the utmost importance that nurses are adequately trained in geriatric-specific physical and social care. Although geriatric nursing is included in the pre-service nursing curriculum of many countries, gaps in training remain, particularly with regard to the provision of integrated care. While strengthening geriatric nursing programme in pre-service education, health leaders must also improve and expand in-service training for nurses in care of older people.

This manual is designed to help nurses in the Region provide the integrated care older people need. The manual has 11 modules and is aligned with the ICOPE (Integrated Care for Older People) approach to old age care, which proposes evidence-based recommendations for health care professionals to prevent, slow or reverse declines in the physical and mental capacities of older people.

By adopting and implementing the manual, policymakers and administrators will help ensure nurses in the Region can meet the challenges of today and prepare for the challenges of tomorrow. WHO stands committed to supporting Member States in the Region as together we strive to achieve health for all at all ages.

Dr Poonam Khetrapal Singh
Regional Director
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Preface

An increase in the number and proportion of older people has a significant impact on all dimensions of society. The demographic transition that we are observing in recent times is mainly due to a decline in premature mortality, medical innovations, including vaccination and discovery of antibiotics, and improvements in sanitation, housing and nutrition. Simultaneously, there has been an increase in the availability, accessibility and affordability of quality health care. With the advancement of age, there is often a general physical decline and people become less active. Further, due to the loss of loved ones, health problems, trouble in socializing and keeping oneself economically active or other reasons, many older people feel lonely, sad and stressed.

An increasing number and proportion of older people in the population, with their specific health problems and health-care demands, presents a challenging situation on a global scale. There is an urgent need to integrate geriatric care services in our health-care delivery system. Geriatric care focuses on the quality of life, control of disease and other distressing symptoms, and provides attention to the psychosocial, emotional and spiritual needs of geriatric patients and their families.

Nurses are regarded as the backbone of the health-care system. Moreover, the provision of holistic care, apart from system-specific treatments (with medicines or surgery), forms an integral component of the care of older patients.

WHO South-East Asia Region, aligning itself with the mission of the Decade of Healthy Ageing (2020–2030), has developed this manual with the objective of filling the vacuum between the demand and availability of geriatric nursing. This manual contains the vital aspects of nursing in the care of older people. It will serve as useful reference material for nurses dealing with the care of older people, directly or indirectly. It will also contribute as a reference material for trainees in geriatric nursing training. This manual will aid in building the capacity of nurses with clinical knowledge of the unique needs, complex health problems, common geriatric syndromes, and principles of care of older people. It will also enable them to acquire the skills necessary to perform an in-depth multidimensional geriatric assessment. This manual will go a long way in establishing effective geriatric care services and improving the awareness of nurses regarding the various aspects of geriatric care in the WHO South-East Asia Region.

Introduction: Nursing care of older people

Learning objectives

- To understand the concept of geriatric nursing
- To understand the important aspects of geriatric care
- To describe the role of geriatric nurses

1. Introduction

Geriatric nursing is the specialty that is concerned with the provision of nursing services to geriatric or older people. It is defined as specialized nursing care of older people in any setting in which nurses use their knowledge, expertise and caring abilities to promote optimal functioning of older people.

Nurses are crucial to ensure integrated person-centred health care for older people as direct care providers and care coordinators. They play a key role in deterring ageism and promoting active ageing through improvement in health literacy.

2. Responsibilities of geriatric nurses

- To provide comprehensive and holistic care to older people
- To promote and maintain the functional status of older people
- To provide emotional and psychological support to older people and caregivers
- To provide palliative care and home-based care to older people
- To maintain the dignity and functional autonomy of older people
- To develop competency in identifying specific age-related problems and refer for further evaluation, when needed
- To identify the needs and problems of older people and their caregivers

Role of a geriatric nurse

Teacher and care provider

A specialist who helps older patients recover from illness or injury by providing practical and patient-centric care plans

Evidence-based care

Actively participates in updating and maintaining knowledge through continuous professional development, ongoing educational programmes and research activities to provide evidence-based care

Counsellor

Provides guidance and counselling services to older people, family members and other caregivers in the areas of need

Advocate

Advocates for and with older people and/or families to maintain their quality of life and, at the end of their lives, to experience a peaceful and dignified death

Manager

Supervises care delivered by other staff and the overall management of the hospital/home environment

3. Characteristics of a geriatric nurse

- Patient (as older patients can get quickly irritated due to their complex health problems and psychosocial issues)
- Compassionate
- Strong attention to detail
- Creative
- Consistent

4. Competencies of a geriatric nurse

- Incorporate professional attitudes, values and expectations about physical and mental ageing in the provision of patient-centred care for older people and their families.
- Practice within a framework of professional accountability and responsibility.
- Assess barriers for older people in receiving and understanding the relevant health and rights-related information.
- Communicate effectively, respectfully and compassionately with older people and their families.
- Use valid and reliable assessment tools to guide nursing practices for older people.
- Conduct a systematic holistic assessment of the needs of older people, based on nursing theory and evidence-based practice, and identify their needs for nursing care.

- Assess the living environment as it relates to the functional, physical, cognitive, psychological and social needs of older people.
- Intervene to assist older people and their support network in achieving personal goals, based on the analysis of the living environment and availability of community resources.
- Identify actual or potential mistreatment (physical, mental, or financial abuse, and/or self-neglect) in older people and discuss with the medical team accordingly.
- Implement strategies to prevent and/or identify and manage geriatric syndromes.
- Facilitate ethical, non-coercive decision-making by older people and/or families/caregivers for maintaining an everyday schedule, receiving treatment, initiating advance directives, and implementing end-of-life care.
- Plan patient-centred care with the older patient and, where appropriate, the family, taking into consideration the therapeutic regimes of all members of the interdisciplinary team.
- Evaluate progress towards expected outcomes and review plans in accordance with evaluation data, in consultation with the older patient or family.
- Advocate for timely and appropriate palliative and hospice care for older people with physical and cognitive impairments.
- Implement and monitor strategies to prevent risk and promote quality and safety (e.g. prevention of falls, medication mismanagement, pressure ulcers) in the care of older patients.
- Utilize resources/programmes to promote functional, physical and mental wellness in older people.
- Apply ethical and legal principles to the complex issues that arise in the care of older people. The ethical principles of autonomy, beneficence, non-maleficence, justice, fairness, truth-telling and confidentiality are all integrated into the provision of nursing care.
- Use technology to enhance functional ability, independence, and safety of older people.
- Facilitate safe and effective transitions across different levels of care, including acute, community-based, and long-term care (e.g. home, assisted living, hospice, nursing homes) for older people and their families.

MODULE

1

Communication with older people

Learning objectives

- To understand the special considerations for communicating with older clients
- To understand the barriers to effective communication and ways to address them
- To understand the strategies for person-centred communication
- To understand ways for communicating with confused patients

1. Introduction

Effective communication is central to the development of a therapeutic relationship between the nurse and the older patient. Ineffective communication can lead to older people feeling inadequate, disempowered and helpless. Though effective communication can sometimes be difficult to achieve because of ageing, nurses can overcome some barriers through thoughtful interventions. It is important to treat older people as individuals and to monitor and adapt communication accordingly. By ensuring that older people feel empowered and respected, nurses will be able to influence them to adopt preventive health behaviours and self-manage chronic conditions to maintain their functional independence.

Therapeutic communication can be described as a person-centred interaction that involves a nurse using:

- eye contact
- open body language
- active listening
- affectionate touch.

Empathy, silence and respect for the other person are important aspects of therapeutic communication.

2. Special considerations for communicating with older people

- Older people are part of a heterogeneous population with a wide range of life experiences and varied perceptions of illness. They are often unable to communicate with health-care professionals.
- Changes in vision and hearing with age may pose difficulties in communication.

- Undiagnosed vision, hearing and cognitive impairments, low mood, low self-esteem and pain are a few common barriers to communication for older people.
- Some older people may find it difficult to express their pain in ways others can understand.
- Older patients may also be afraid or hindered by organizational barriers, such as time and place of care, which can affect communication.
- Similarly, factors such as bereavement, retirement and ill health can be associated with feelings of anxiety and distress, which may act as a hindrance in effective communication.
- Being vigilant about stereotypes associated with ageing and perceiving everyone as an individual can enhance communication so that it is truly effective.

Table 1.1: Barriers to effective communication with older patients

Form of barrier	Components
Environmental	Interruptions Lack of privacy Limited physical access Presence of medical equipment Noise Poor lighting Uncomfortable room temperature Unfamiliar environment Untidy or unhygienic environment
Organizational	Inflexible appointment systems Lack of staff training Mode of communication, such as telephone instead of face-to-face consultations Short appointments Staff shortages
Staff-related	Ageist attitudes Elderspeak Giving too much information at once Interrupting older people when they are talking Lack of professional knowledge Medical jargon Misuse of power Poor eye contact Poor listening skills Speaking too quickly Unfriendly or disrespectful attitudes

3. Person-centred communication strategies

Nurses should use the following strategies for effective communication with older people:

- Get to know the person.
  a. What are their wishes and preferences for care?
  b. What are their values, beliefs and cultural norms?
- Focus on the older patient's needs rather than the needs of the service.
- Identify the perceived barriers to communication and modify them as much as possible.
- Be self-aware so that personal barriers can be addressed.
- Use appropriate communication methods to make them participate.
- Be prepared to negotiate and compromise.
- Avoid assumptions about the older patient's capacity to communicate effectively.
- Make appropriate adjustments to accommodate any physical or cognitive changes that can affect meaningful communication.
- Prioritize the older patient's safety, comfort and well-being.
- For older people who lack capacity, engage with trusted family and friends.

Figure 1.1: Enhancing communication in practice

1) Tips to communicate with a hearing-impaired patient:

- sit face-to-face with the patient;
- allow extra time;
- minimize visual and auditory distractions;
- speak slowly, clearly and loudly;
- use short, simple words and sentences;
- use charts, models and pictures to illustrate your message;
- simplify and write down your instructions;
- make sure that light sources are not shining on your face, and that your face is clearly visible without shadows.

2) Tips to communicate with a confused patient (dementia/delirium):

- address the patient directly;
- gain the person's attention;
- help to orient the patient;
- speak distinctly and at a natural speed;
- use simple, direct sentences. Present one question, instruction, or statement at a time;
- if the patient hears you but does not understand you, rephrase your statement;
- provide written instructions.

(**Source:** https://www.nia.nih.gov/health/tips-communicating-confused-patient)

MODULE

2

Common health problems of older people

Learning objectives

- To understand the concept of age-related changes and health problems during old age
- To understand the clinical implications and nursing interventions for age-related changes
- To understand the differences between geriatric care and general care
- To understand the concept of age-friendly environment and health services

1. Introduction

- Disease in older people leads to an abrupt decline in the functioning of body organs. Thus, underreporting of symptoms would lead to late recognition of illness and delayed intervention, leading to a poor outcome.
- Older people and their caregivers often fail to recognize certain symptoms as abnormal. Diseases manifest themselves at an earlier stage because of impaired physiological reserve in older patients.
- Multiple pathology or concurrence of diseases is common. In older patients, multiple symptoms are usually due to multiple diseases and the use of multiple medicines. The usual practice of explaining all symptoms and signs by a single pathology (law of parsimony) used for younger patients does not hold good in geriatric practice. Multiple pathological states may result in symptoms such as falls, syncope, dizziness, hip fracture, incontinence and delirium. Hence, extensive investigation for a unifying diagnosis is often non-productive.
- Functional loss is a common final pathway for most clinical problems in older patients, especially those over the age of 75 years. The lesson for physicians, nurses and caregivers is that functional loss (impairment in activities of daily living), especially if abrupt, is a reliable sign of disease and the only appropriate clinical response is a rapid and comprehensive evaluation and appropriate referral.
- Older patients often present non-specific problems that may, in fact, be due to some underlying organ-specific problems. Heart failure, pneumonia, urinary tract infection may present with confusion or delirium.
- Atypical presentation of disease is another challenge with older patients. For instance, fever, which is one of the cardinal features of pneumonia in young or adult patients, may be absent in older people with severe pneumonia.
- Multiple small abnormalities in many organ systems produce significant clinical abnormality and, when corrected, the overall effect is gratifying. For example, confusion in a patient with

dementia may be due to deafness, poor vision, heart failure, infection or electrolyte imbalance, all of which, when corrected, produce significant improvement in cognition.

» Adverse consequences of diseases are more frequent in older patients. Prevention and early treatment of diseases are thus much more productive.

2. Age-related changes during old age

Physiological changes

a) Vision changes:

» flattening of the cornea, causing an irregular curvature of the eye;

» smaller pupil probably due to atrophy and increased rigidity of iris;

» discolouration of the lens and loss of elasticity;

» alteration of lens transparency;

» visible floater that may move with the older patient's eye motion;

» decreased focus on near objects and light adaptation: presbyopia;

» a decrease in dark adaptation and visual field.

Common health problems:

» impairment of visual acuity and near vision – need for glasses;

» impaired night vision and decreased ability to adjust to dark/light changes;

» diminished perception of colour;

» prone to develop cataract – need surgery;

» reduced peripheral vision – should be careful while driving;

» a decrease in lacrimal secretion – dryness of eyes.

Nursing interventions:

» Identify and assess visual disturbance.

» Orient the older person to a new environment.

» Provide a safe environment.

» Educate the older person/family regarding safety.

» Educate on the need for regular eye check-ups and facilitate the same.

» Artificial tears may be needed in case of dryness of the eyes.

» Advocate cataract surgery if diagnosed by a specialist.

b) Hearing changes:

- thickening of ear drums;
- loss of high-frequency hearing acuity: presbycusis;
- decreased ability of hair fibres in the ear canal to help with earwax removal and protect the canal;

Common health problems/disorders:

- sensory neural hearing loss – due to damage in inner ear or auditory nerve – need hearing aid in consultation with ENT surgeon
- conductive hearing loss – sometimes due to ear wax and fluid – mostly reversible

Nursing interventions:

- Identify and assess hearing difficulties.
- Speak clearly in a normal tone of voice.
- Face the patient when talking.
- Build breaks into your conversation.
- Reduce distraction.
- Advise routine ear examination.
- Check for impacted cerumen and clean if present, or refer the patient to an ear, nose and throat (ENT) doctor.
- Promote the use of hearing aids when needed.

c) Changes in mouth, sense of taste and smell:

- loss of teeth;
- decrease in mastication strength;
- decrease in the number of taste buds;
- decrease in saliva production;
- decreased sense of smell.

Common health problems/disorders:

- dry mouth (which can be quite disturbing at times);
- loss of taste;
- difficulty in chewing with reduced ability to eat hard food items;
- maintenance of oral hygiene and use of artificial denture if needed
- difficulty in swallowing;
- poor appetite, decreased absorption, anorexia.
- small frequent and easily digestible food

Nursing interventions:

- Encourage the use of dentures.
- Maintain dental hygiene.
- Encourage adequate nutritional intake with supplementation, if necessary.
- Provide adequate time for eating.

d) Oropharyngeal, gastrointestinal and hepatobiliary changes:

- delayed oesophageal emptying;
- decreased relaxation of sphincter muscles;
- decreased gall bladder functioning.
- decreased Vit D and calcium absorption
- reduced motility of stomach
- changes in liver:
  - more susceptible to medicine and alcohol related injury
  - more incidence of adverse event

Common health problems/disorders:

- indigestion/flatulence;
- hiatus hernia;
- atrophic gastritis;
- increased risk of osteoporesis – need to Elements calcium and vit D

- carcinoma of oesophagus, stomach or rectum;
- watch for alarm signs;
- constipation;
- a decline in the absorption of nutrients;
- increased osteoporosis risk.

Nursing interventions:

- Maintain a comfortable, clean and odour-free environment, along with comfortable positioning.
- Provide meals aligned with individual needs.
- Place bed-bound patients in semi-Fowler's position (head and trunk raised between 15 and 45 degrees) and avoid heavy activity after eating.
- Manage constipation – promote a high fibre diet, plenty of vegetables and adequate water intake.

e) Cardiovascular changes:

- thickening and stiffening of cardiac tissue;
- loss of cardiac conduction system cells;
- impaired homeostatic responses;
- hypertrophy of the cardiac muscle.

Common health problems:

- hypertension;
- coronary artery disease (CAD) and acute coronary syndromes (ACS);
- cardiomyopathies;
- degenerative valvular heart disease;
- heart failure;
- arrhythmias – heart block;
- anaemia.

Nursing interventions:

- Supervise the activity level of the patient as permitted and suggested by the doctor and the physiotherapist.
- Prevent or minimize oedema by proper positioning, maintaining fluid balance, and ensuring adherence to the prescribed dietary regimen.
- Avoid restrictive clothing.
- Maintain fluid balance, i.e. avoid overloading the cardiovascular system with intravenous or oral intake.
- Work with others on the interdisciplinary team to carry out a comprehensive teaching and rehabilitation programme for the cardiac patient.
- Advocate for a healthy diet with a restriction on salt intake (< 5 gm/day).
- Educate the patient and family about the side-effects of commonly prescribed medicines and management through digitalis, vasodilators, diuretics and anticoagulants.

f) Respiratory changes:

- progressive deterioration of respiratory function;
- decreased muscle strength and a stiffer chest wall with reduced compliance;
- less ciliary activity in the respiratory tract;
- decrease in the alveolar surface and production of surfactant.

Common health problems:

- pneumonia;
- tuberculosis;
- chronic obstructive pulmonary disease (COPD);
- lung cancer.

Nursing interventions:

- Maintain adequate rest and exercise.
- Advise the cessation of smoking and avoiding smokers.
- Prevent exposure to indoor and outdoor pollution.

- Maintain fluid and electrolyte balance in the body.
- Ensure influenza and pneumonia vaccination.
- Ensure early treatment of respiratory infection.
- Perform/demonstrate deep breathing and coughing exercises.

g) Endocrine changes:

- decreased insulin production;
- increased insulin tolerance in peripheral tissues;
- gradual atrophy of the thyroid gland.

Common health problems:

- diabetes mellitus;
- hypothyroidism/hyperthyroidism (clinical and sub-clinical).

Nursing interventions:

- Educate older people on various aspects of the health problem, such as diet, medication, foot care, general hygiene, follow-up visits, etc.
- Encourage physical activity.

h) Musculoskeletal changes:

- sarcopenia: loss of muscle mass as well as strength, accelerated by physical inactivity and malnutrition;
- replacement of lean body mass by fat and fibrous tissue;
- osteoporosis in both sexes, especially accelerated bone loss in women for 5–7 years after menopause;
- cartilage destruction in joints.

Common health problems:

- sarcopenia increases the risk of falls and disability, while also causing unstable gait and need for assistive devices;
- increased weakness and fatigue and reduced exercise tolerance;
- susceptibility to vertebral compression fractures and osteoporosis;

- reduced ability to withstand mechanical stress of obesity, activity, osteoarthritis and gait changes;
- risk of injury, activity intolerance.

Nursing interventions:

- Preserve joint mobility and muscle strength of the patient with exercise, in consultation with the physiotherapist.
- Maintain proper body alignment to preserve function and prevent deformity.
- Avoid fatigue through a balance of exercise and rest.
- Provide a diet rich in calcium and vitamins (e.g. milk, yogurt, almond butter, orange juice, soy milk, cereals, cheese, nuts, legumes, etc.).
- Maintain optimal body weight.
- Provide a safe environment to prevent trauma and injuries.
- Use appropriate assistive and adaptive devices to promote and maintain mobility.
- Ensure calcium and vitamin-D supplementation as per physician's advice.
- Ensure regular follow-up and routine bone density screening (if available) as per physician's advice.

i) Nervous system changes:

- decreased blood flow to the brain;
- fewer cerebral neurons leading to cerebral atrophy with the greatest effect in the frontal aspects;
- decrease in neurotransmitters, e.g. acetylcholine;
- decrease in conduction nerve impulses in both sensory and motor neurons, with the resultant decrease in efficiency when responding to complicated impulses;
- impairment in proprioception resulting in disturbances of balance and coordination;
- slower and weaker reflex responses;
- progressive loss of peripheral neurons.

Common health problems:

- slow coordinated movements and increase in response time can affect balance, gait and agility, and can lead to functional status decline;
- increased risk of sleep disorders and delirium during hospitalization;

» increased incidence of peripheral neuropathy. It may affect sleep (due to paraesthesias), balance and mobility as well.

Nursing interventions:

» Allow the patient adequate time to carry out activities, especially those requiring coordination.

» Provide a safe, calm and unhurried environment.

» Encourage habit patterns that have been part of the patient's lifestyle.

» Work with the team to provide appropriate therapies, e.g. reality orientation, re-motivation, occupational/speech/physical therapies and psychologist's intervention for cognitive stimulation.

» Assist the patient/ family /caregiver to accept the patient's limitations.

» Encourage self-care and independence.

» Provide privacy and personal space.

j) Renal and genitourinary changes:

» decreased kidney mass and glomerular filtration rate (GFR). A 10% drop in GFR occurs in each decade after the age of 30 years;

» reduced bladder elasticity, muscle tone and capacity;

» weakening of the pelvic floor muscles;

» enlargement of the prostate in males;

» reduced renal functional reserve

» decreased medicine clearance

Common health problems:

» benign prostatic hypertrophy (BPH);

» urinary tract infection (UTI);

» urinary incontinence;

» senile vaginitis;

» genitourinary prolapse: cystocele, rectocele, uterine prolapse;

» malignancy: cervical, uterine, ovarian, prostate.

Nursing interventions:

- Educate the patient about maintaining perineal hygiene.
- Provide adequate fluid during the day time and limit fluid intake in the evening.
- Avoid unnecessary use of urinary catheters.
- Ensure cleanliness of the bedpan.
- Refer for surgical correction in case of genital prolapse.
- Educate and instruct the patient to do Kegel exercises (pelvic floor exercise – 5-second contraction, followed by 10-second relaxation of pelvic muscles with 30–80 repetitions daily). Refer to a physiotherapist.

Psychosocial changes:

Neuropsychiatric:

- Older people take longer to learn new material, but complete learning still occurs.
- Verbal ability is maintained with age.
- Psychomotor speed declines.
- Short-term memory seems to deteriorate with age; long-term memory is preserved.
- Time taken for memory scanning is longer for both recent and remote memory.
- Tasks requiring shifting attention are performed with difficulty.
- Intellectual functioning remains constant over the lifetime.
- Learning ability is not diminished with age.
- Reaction time slows with age.

Common health problems:

- prone to develop anxiety disorder
- depression
- dementia

Implications and nursing interventions:

- Assist hearing, visual and tactile functions of older patient.
- Use a variety of teaching methods, including visual aids.
- Teach the importance of health maintenance, as healthy older people maintain general intellectual functions.
- Give attention to memory abilities.
- Teach the older patient to use a variety of associative and memory strategies to enhance recall.
- Let the patient set their own pace to enhance learning and memory.
- Teach relaxation techniques to reduce anxiety about memory and enhance attention, rehearsal, motivation and general functioning.
- Give the patient adequate time to recall.
- Encourage the patient to do cognitive stimulation activities.
- Provide a pleasing environment and opportunity.
- Encourage the patient to remain active in the family and community.
- Do not consider a slower response to be the same as confusion or dementia.
- Teach the importance of continuing cognitive function.
- Engage the patient in goal-setting and problem-solving.
- Refer to a physician if there is suspicion of cognitive impairment as per the integrated care for older people (ICOPE) screening tool.

MODULE

3

Assessment of the intrinsic capacity and functional status of older people

Learning objectives

- To understand the ICOPE assessment strategies
- To perform the intrinsic capacity assessment for older people
- To perform the functional assessment for older people

1. Introduction

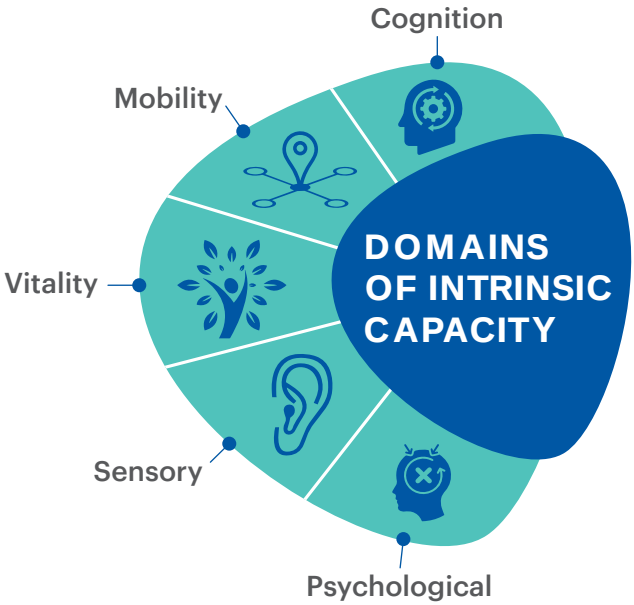
The changes in normal physiological processes and various environmental factors lead to several health problems in old age. These include difficulties in sensory systems such as hearing and vision, decline in memory, mobility or in performing daily and social activities and are associated with a decline in the intrinsic capacity with ageing. Maintaining functional independence in later life is one of the key factors to achieve successful ageing. However, the existing health care system is focused on the management of medical conditions instead of a comprehensive approach. The ICOPE approach, introduced by the World Health Organization (WHO), assesses the intrinsic capacity of older people. Intrinsic capacity (IC) is the composite of all physical and mental capacities that an individual can draw upon during the course of life. Assessment of IC helps to ensure a comprehensive assessment of individuals. This approach can also help to minimize unnecessary treatments, polypharmacy, side-effects as well as caregiver burden.

ICOPE proposes an approach based on the assessment of individual needs, preferences and goals. Such an approach facilitates the development of a comprehensive care plan that includes multiple interventions to manage losses in the intrinsic capacity and coordination of available services, to maintain the intrinsic capacity and functional ability of an individual as much as possible through primary and community-based care.

2. Intrinsic capacity

It is very difficult to measure the intrinsic capacity of an older person, but the multiple domains that contribute to this totality can be assessed. The five key domains of IC are: cognitive capacity; sensory capacity (vision and hearing); vitality (nutrition); locomotor capacity; and psychological capacity (mood and cognition).

Figure 3.1: Domains of intrinsic capacity



The WHO ICOPE screening tool (Table 3.1) consists of certain assessment techniques that measure the intrinsic capacity in the above domains. Nurses can assess IC independently.

Table 3.1: WHO ICOPE screening tool

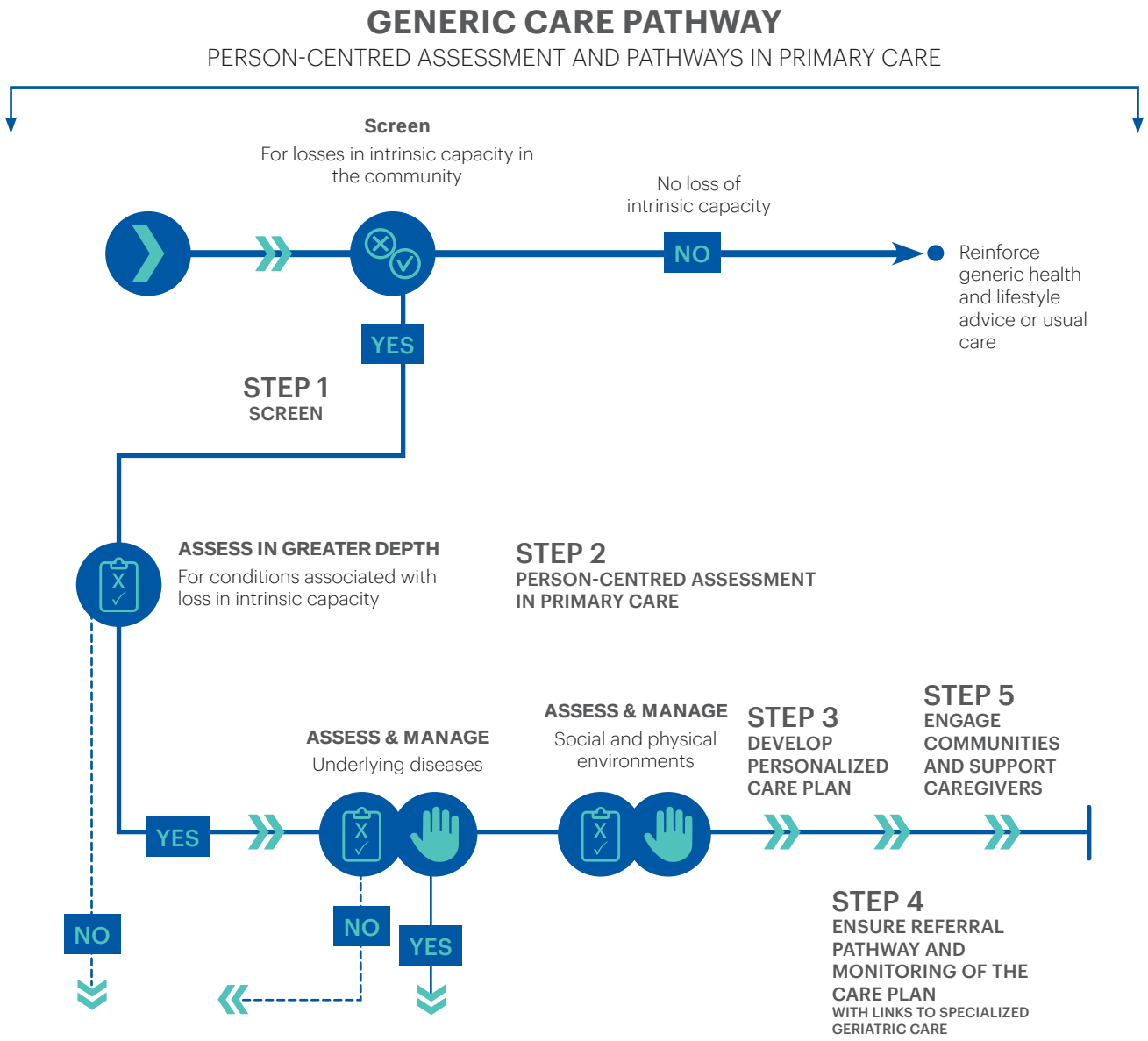
The domain of intrinsic capacity	Tests	Full assessment needed	Full assessment not needed
Locomotive capacity	Chair-rise test: rise from a chair five times without using arms. Did the person complete five chair rises within 14 seconds?	No	Yes
Vitality	Weight loss: have you unintentionally lost more than 3 kg over the last 3 months? Appetite loss: have you experienced a loss of appetite?	Yes Yes	No No
Sensory capacity: vision	Do you have any problems with your eyes: difficulties in seeing far, reading, eye diseases? Or Are you currently under medical treatment (e.g. for diabetes, high blood pressure)?	Fail	Pass
Sensory capacity: hearing	Hears whispers (whisper test) Or Screening audiometry result is 35 dB or less Or Passes automated app-based digits-in-noise test	No	Yes
Cognitive capacity	Ask the person to remember three words	(Not scored)	
	Orientation in time and space: what is the full date today? Where are you now (home, clinic, etc.)?	Wrong or does not know	Answers correctly
	Recalls the three words?	Can't recall all three words	Recalls all three words
Psychological capacity	Over the past two weeks, have you been bothered by: feeling down, depressed or hopeless? little interest or pleasure in doing things?	Yes	No

The ICOPE approach is based at the community or primary care level, where it can be accessible to the greatest number of people. At the same time, this approach calls for strong links with the specialized and tertiary levels of care for those who need it. Those identified with limitations in domains of intrinsic capacity are referred to a primary health-care clinic for a full assessment.

In the primary health-care clinic, a comprehensive assessment is undertaken, which informs the development of a comprehensive care plan for the individual. A comprehensive assessment evaluates all the domains of intrinsic capacity plus the underlying conditions, functional ability and the need for social care and support. The care plan may include multiple interventions to manage declines in intrinsic capacity and optimize functional abilities, such as physical exercises, oral supplemental nutrition, cognitive stimulation and home adaptations to prevent falls.

Based on this preliminary assessment, a detailed assessment of the domain with a deficit needs to be done. Accordingly, the management plan is prepared and executed based on available resources, as mentioned in Figure 2.

Figure 3.2: ICOPE generic care pathway



Source: ICOPE. Guidance on person-centred assessment and pathways in primary care (ICOPE Handbook). WHO, Geneva, 2019.

3. Functional status

Functional status is a measure of the overall impact on the health of older people in the context of their environment and social support network. It reflects the ability of an individual to perform the physical and social tasks necessary for their usual activities and roles in daily life. The most commonly used measures of functional ability evaluate the following three levels of activities of daily living (ADL):

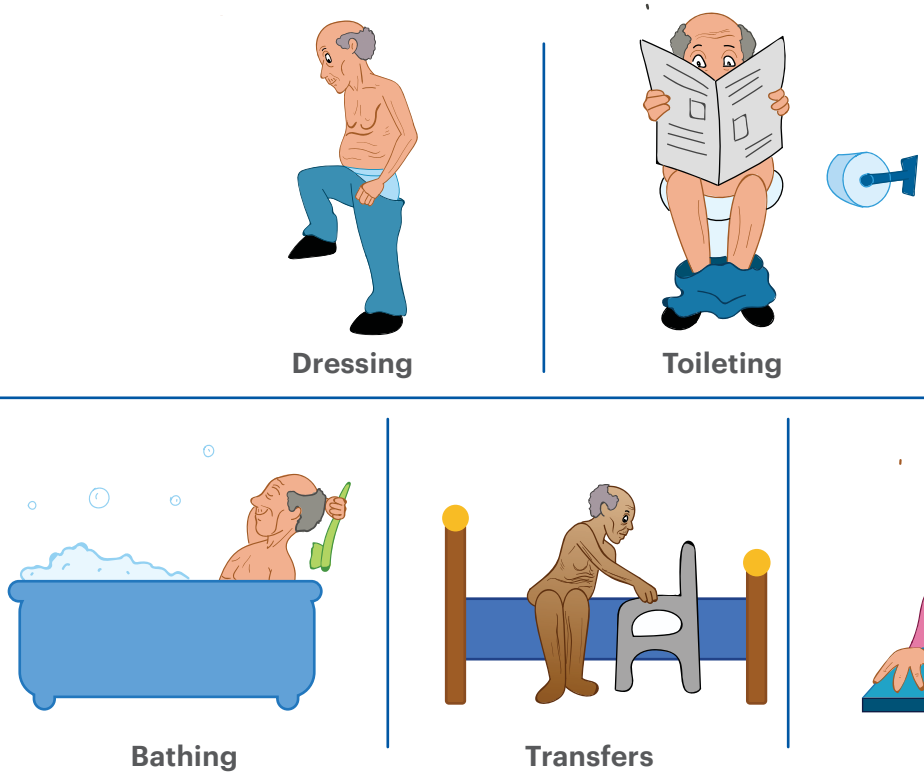
- basic activities of daily living (BADLs)
- instrumental activities of daily living (IADLs)
- advanced activities of daily living (AADLs)

a) Basic activities of daily living: BADLs are self-care activities that are independent of culture and education. They include:

- bathing
- dressing
- toileting
- transferring
- continence
- feeding

The inability to perform even one of these activities independently may indicate the need for supportive services.

Figure 3.3: Basic activities of daily living

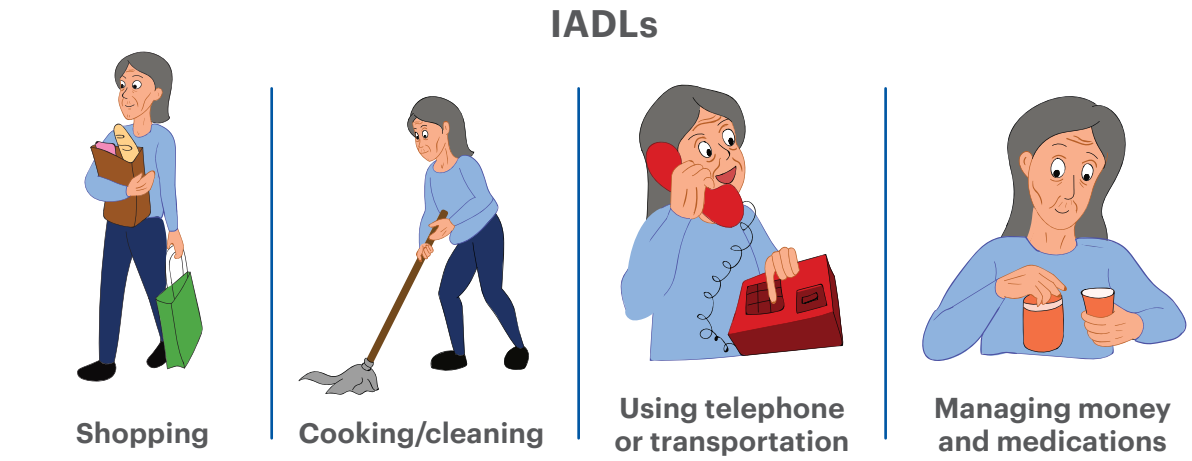


b) Instrumental activities of daily living: IADLs are higher-level activities that individuals must perform to remain independent in their homes. They depend on the individual's culture and socioeconomic status, such as:

- using the telephone
- shopping
- preparing meals
- housekeeping
- using public transport
- taking medication
- handling money
- using cell phones and computers

The evaluation of IADLs provides a basis for considering the type of services necessary for the patient to maintain personal independence.

Figure 3.4: Instrumental activities of daily living



c) Advanced activities of daily living: AADLs are dependent on the individual's culture, socioeconomic status and past profession. They include recreational, occupational and community activities. AADLs are optional activities that are personal and can change with time for health reasons or simply because of personal preferences.

4. Rationale for the assessment of functional status

- Functional assessment should be part of the evaluation of a geriatric patient.
- A functional assessment can provide valuable prognostic information to direct the necessary diagnostic evaluation, treatment plans and discussions on goals.

- An assessment of the BADLs and IADLs provides an insight into the patient's abilities and the effects of illness.
- Understanding the baseline function allows one to set appropriate expectations and goals with respect to medical therapy.
- Measuring functional status is an excellent way to follow the progress of a patient with chronic disabilities and acute illness.
- A practical approach to collecting information on ADLs and IADLs consists of administering a pre-visit questionnaire that the patient or caregiver can complete. These self-administered questionnaires also allow for the identification of those who can help when assistance is needed.
- While evaluating their functional status, individuals tend to over-report whereas their family members may under-report their abilities.
- A functional assessment can help guide rehabilitation goals and care needs.

5. Clinical implications of functional impairment

Functional impairment is defined as the difficulty in performing, or requiring the assistance of another person to perform, one or more of the following ADLs.

Clinical implication of functional impairment in older people

- Functional loss is a final common pathway for most clinical problems in older people, especially after the age of 75 years. Impaired functional status can often be the first sign of the onset of disease, deconditioning or inadequate social support.
- Functional impairment affects the targets of disease management in older people.
- Impairment of ADLs is a stronger predictor of hospital outcomes (functional decline, length of stay, institutionalization and death) than diagnoses at admission and other physiological indices of the burden of illness.
- Impairment of ADLs is also a risk factor for long-term care, emergency room visits and death among community-dwelling people.
- Impairment in the domains of the BADLs results in an inability to perform even the basic elements of self-care independently and may indicate a need for supportive services or long-term care.
- Impairment in the domains of the IADLs is associated with a loss of independence and a dwindling social role in the community. Such impairment provides a basis on which to decide the type of services necessary to maintain independence.

6. Scales for functional status assessment

A few of the commonly used scales used for functional assessment are as follows:

- Modified Barthel ADL Index (Table 3.2)
- Katz Index *(Refer Annex 4 for details)*
- Lawton IADL scale *(Refer Annex 3 for details)*

Modified Barthel ADL Index

Instructions: Choose the scoring point for the statement that most closely corresponds to the patient's current level of ability for each of the following 10 items. Record actual, not potential, functioning. Information can be obtained from the patient's self-report, from a separate party who is familiar with the patient's abilities (such as a relative), or from observation. Refer to the section on guidelines for detailed information on scoring and interpretation.

Table 3.2: Modified Barthel Index

Bowels
0 = Incontinent or needs enemas
1 = Occasional accident (1x/wk)
2 = Continent
Bladder
0 = Incontinent
1 = Occasional accident (1x/wk)
2 = Continent
Grooming
0 = Needs help with personal care
1 = Independent (including face, hair, teeth, shaving)
Toilet Use
0 = Dependent
1 = Needs some help
2 = Independent
Feeding
0 = Unable
1 = Needs help, e.g. cutting
2 = Independent

Transfer (bed to chair and back)
0 = Unable, no sitting balance
1 = Major help (1 or 2 adults), can sit
2 = Minor help (verbal or physical)
3 = Independent
Mobility
0 = Immobile
1 = Wheelchair independent (including corners)
2 = Walks with the help of 1 person (physical or verbal help)
3 = Independent (may use aid)
Dressing
0 = Dependent
1 = Needs help – can do ~ ½ unaided
2 = Independent (including buttons, zips, laces, etc.)
Stairs
0 = Unable
1 = Needs help (verbal or physical)
2 = Independent
Bathing
0 = Dependent
1 = Independent (bath or shower)

Source: Oxford Handbook of General Practice. 4th Edition. Oxford University Press, March 2014.

Score interpretation:

BADL total score	Interpretation
<15	Moderate disability
<10	Severe disability

- Lower the score, higher is the disability which is proportional to the amount of care demanded by the patient.
- Lower the premorbid score, poorer are the outcomes of the patient.

MODULE

4

Health promotion and disease prevention in old age

Learning objectives

- Assess the status of older people in terms of health promotion
- Enumerate the strategies for health promotion in older people
- Enumerate the strategies for disease prevention in older people

1. Introduction

It has been a well-accepted fact that ageing typically starts very early in fetal life and then continues through childhood, adolescence, young adult period and middle age. Functional capabilities related to every bodily system increase over childhood and adolescence to peak in early adulthood and subsequently decline as a person ages. The rate of decline is largely determined by individual factors related to the adult lifestyle, which can be potentially slowed down with interventions such as healthy diets, physical activity, and cessation of consumption of tobacco products and alcohol. There is scope for interventions for reducing the risk factors of poor health and increasing functionality throughout the life process.

2. Health promotion strategies

a) Nutrition

Ageing is associated with an increased incidence of weight loss, being underweight and protein-energy malnutrition. Undernutrition leads to sarcopenia, frailty, physical dependence and premature death, in addition to impairment of the immune system, increased risk of infection and poor wound healing. Overnutrition causes obesity and is associated with hypertension, ischemic heart disease (IHD) and diabetes, which are among the most common health problems in old age.

The energy requirement declines with age due to a reduction in body mass, body metabolism and physical activity. Yet, older people are at a high risk of undernutrition due to several reasons, such as:

- food being less palatable due to changes in taste and smell;
- lack of teeth, gum problems and ill-fitting dentures making eating painful;
- reduced appetite due to lack of exercise, loneliness, depression, chronic debilitating disease, confusion, forgetfulness, side-effects of medicines, alcohol and smoking;
- common nutritional deficiencies, including of iron, fibre, folic acid, vitamin C, Vitamin D, Vitamin B12, calcium, zinc, riboflavin and vitamin A.

Figure 4.1: Role of nurses in nutritional management

1. Screen for vitality/malnutrition using ICOPE screening questionnaire:

a. Have you unintentionally lost more than 3 kg over the last 3 months? Yes/ No

b. Have you experienced loss of appetite? Yes/No

If the answer to either of the questions is "Yes"

2. Detailed Assessment of the nutritional status using one of the following tools:

- Mini-nutritional assessment (MNA)®
- Determine nutritional risk assessment
- Malnutrition universal screening tool (MUST)
- Seniors in the community risk evaluation for eating and nutrition questionnaire (SCREEN)
- Short nutritional assessment questionnaire 65+ (SNAQ65+)
- Subjective global assessment (SGA)
- Nutrition screening initiative (NSI)

Among the various risk assessment tools, (MNA)® is widely used. Among the various forms of MNA, MNA-Short form is quite convenient for use by primary care physicians. *(Refer Annex 8 for details)*

3. Management of the older patient as per the result of MNA score (Annex 8)

Table 4.1: MNA score and its interpretation

MNA score	Interpretation	Management strategy
12–14	Normal nutritional status	Reinforce generic health and lifestyle advice or usual care
8–11	At the risk of malnutrition	Offer dietary advice Consider oral supplemental nutrition (OSN) if unable to improve food intake Monitor weight closely Consider multimodal exercise
0–7	Malnourished	Refer to a doctor/nutritionist, if available Nutritional intervention necessary Give OSN with increased protein intake (400–600 kcal/day) Offer dietary advice Monitor weight closely

Note: Oral supplemental nutrition (OSN) is defined by the WHO guidelines as the provision of additional high-quality protein, calories and adequate amounts of vitamins and minerals tailored to the individual's needs, as assessed by a trained health-care professional.

Source: ICOPE. Guidance on person-centred assessment and pathways in primary care (ICOPE Handbook). WHO, Geneva, 2019..

b) Dietary advice

- Meals should be small and frequent, and prolonged fasting should be avoided.
- Older people should eat a nutritious and easily digestible diet and should have access to food that is tasty and easy to prepare. A prudent diet, that not only restricts total and saturated fat but also avoids excessive carbohydrate and caloric intake, is recommended.
- A healthy diet varies widely, depending on the availability and cultural acceptability of foods. Most traditional diets are now considered to be close to being ideal, at least for adults and older people. However, older people need more protein, vegetables and fruits as compared to adults.

Table 4.2: Protein requirements for older people:

Condition	Protein requirement
Healthy older people	1–1.2 g/kg/day
Recovering from weight loss, acute illness or injury	Up to 1.5 g/kg/day
Older patients with pressure sores	Very high protein diet (that contains 25% of calories as protein)

- Physical activity should be advised, which helps in better utilization of protein for building muscle.
- Intake of complex carbohydrates and fibres (fruits, vegetables and greens) should be increased. High fibre foods help to lower cholesterol, blood pressure and glucose intolerance and prevent constipation.
- Salt intake should be limited to not more than half a teaspoon every day.
- Certain foods with antioxidant properties (green, yellow and orange vegetables and fruits such as carrots, sweet potatoes, spinach, tomato and orange) should be encouraged.
- Routine prescription of multivitamin supplements is not indicated in older people.
- Calcium and vitamin D in the form of milk, curd, cheese, small fish and certain green vegetables should be increased to compensate for osteoporotic changes.
- Encourage exposure to sunlight to make the skin produce vitamin D. The vitamin D in food is not enough for older people to maintain optimal levels. A blood test is necessary to measure whether a person's vitamin D level is adequate. (Supplementation of Vitamin D is explained in detail in Module 8).
- Vitamin B12 supplementation is required in vegetarians but after biochemical assessment.

c) Exercise

Ageing causes a progressive decline in power, strength and endurance of skeletal and cardiac musculature. A sedentary lifestyle and lack of physical activity accelerate this decline and are associated with a higher risk of morbidity and mortality. In adults aged 65 years and above, physical activity includes leisure-time physical activity (e.g. walking, dancing, gardening, hiking, swimming), transport-related activity (e.g. walking or cycling), occupational activity (if the person is still engaged in work), household chores, play, games, sports or planned exercise, in the context of daily, family, and community activities.

Evidence suggests that compared to less active men and women, older people who are physically active have lower rates of all-cause mortality, coronary artery disease, high blood pressure, stroke, type 2 diabetes, colon cancer and breast cancer. They also have a higher level of cardiorespiratory and muscular fitness, healthier body mass and composition.

Exercise also has favourable effects on bone health and functional (both physical and cognitive) independence.

Exercise recommendations for older people

- Older people should do at least 150 minutes of moderate-intensity aerobic physical activity or at least 75 minutes of vigorous-intensity aerobic physical activity throughout the week, or an equivalent combination of moderate- and vigorous-intensity activity.
- Aerobic activity (e.g. walking, running, cycling) should be performed in bouts of at least 10 minutes' duration.
- Muscle-strengthening activities, involving major muscle groups, should be done on two or more days a week.

- Older people, with poor mobility, should perform physical activity to enhance balance and prevent falls on three or more days per week.
- When older people cannot do the recommended level of physical activity due to health conditions, they should be as physically active as their abilities and conditions allow.
- While suggesting physical exercise, the nurse must evaluate the risks of exercise, the potential for falls and accidents, medication, nutritional adequacy and motivation. Advise the older person on self-monitoring of IHD symptoms, including when to stop if IHD symptoms appear.
- Before recommending physical exercise, the nursing officer should discuss with the team of doctors and physicians.
- The approach should be to motivate older people to exercise as per their capacity and increase it as per their end-user goals.

d) Social support and social interaction

- Nurses should evaluate and promote social interactions for older people.
- Social support, including family and community strengths and abilities, is important for health promotion, prevention and treatment of disease and disability.
- Social networks and interactions of older people help to promote mental health and prevent mental ill-health.
- Strong and supportive social relationships are related to the health of persons who live within such social contexts.
- People who are isolated are at an increased mortality risk from several causes. For example, social support is particularly related to survival after myocardial infarction.
- For social support to be health promoting, it must provide a sense of belonging and intimacy and help people to be more competent and self-efficacious.
- Strengthening social support, establishing social networks, preventing loneliness and enriching friendships promote health in older people.

3. Disease prevention strategies

a) Prevention of smoking and tobacco chewing

Why smoking is dangerous

- Smoking is the leading preventable cause of morbidity and mortality in old age.
- Smoking is responsible for most of the respiratory problems in older people.
- Smoking causes a variety of cancers like lung, oesophagus, larynx, mouth, throat, kidney, bladder, liver, pancreas, stomach, cervix, colon, and rectum.
- Smoking is an important cause of IHD and stroke. It is also associated with osteoporosis.
- Smoking is one of the three determinants of functional disability in old age (the other two are obesity and lack of physical activity).
- Despite having knowledge about the advantages of smoking cessation, most smokers have difficulty in quitting due to withdrawal symptoms (such as nicotine craving, irritation, frustration, anxiety, restlessness and difficulty in concentrating) and lack of motivation.

Benefits of quitting smoking and chewing tobacco in old age

- Quitting smoking at any time improves health.
- Chewing tobacco, which has a higher prevalence in India as compared to smoking, leads to cancer of the buccal cavity. This is the most common concern of older people, that too mostly in villages.
- Tobacco cessation programmes should be promoted in all institutions, including primary care centres, old-age homes, long-term care centres, etc.

- The key point is, the nurse should make older smokers understand that the benefits of quitting smoking are the same for older people as for younger people. Older people should be counselled about the benefits of quitting smoking even in late life. Attempts must be made to eliminate smoking. However, if a person is not able to quit smoking, it should at least be cut down.
- Refer persons who are ready to quit smoking to a smoking-cessation support team or a psychiatrist.
- Nicotine replacement is one of the effective pharmacological interventions to help smoking cessation. The nicotine in tobacco leads to actual physical dependence. This can cause unpleasant withdrawal symptoms when a person tries to quit. Nicotine replacement therapy (NRT) delivers nicotine – in the form of gum, patches, sprays, inhalers, or lozenges – but not the other harmful chemicals in tobacco. NRT can help relieve some of the physical withdrawal symptoms so that the person can focus on the psychological (emotional) aspects of quitting. Many studies have shown that using NRT can nearly double the chances of quitting smoking. It has not been studied as much for quitting smokeless tobacco, but NRT lozenges may help.

Signs of severe dependence are:

- smoking more than one pack a day
- smoking within 5 minutes of waking up
- smoking even while sick
- waking up at night to smoke
- smoking to ease symptoms of withdrawal

The more of these that apply, the more serious the dependence.

b) Prevention of alcoholism

Alcohol intake in excess increases the potential for diseases such as cardiomyopathy, cirrhosis of the liver, atrophic gastritis, chronic pancreatitis, peripheral neuropathy; dementia; falls and accidents; malnutrition; immune-suppression; and social isolation.

- Age-related physiological changes
- Presence of chronic disease
- Effects of medication
- Alteration in lifestyle after retirement
- Denial by the patient and family.

Effects of alcohol abuse in older people

Alcohol increases the depressant effects of neuroleptic medicines, analgesics and central nervous system (CNS) depressants such as sedatives, tricyclic antidepressants, anxiolytics and benzodiazepines. In old age, intoxication from alcohol can occur with relatively small amounts due to decreased metabolism because of an increase in body fat, slowing down of liver metabolism, and increased sensitivity of the brain to the effect of alcohol.

Symptoms of intoxication and withdrawal can be easily mistaken for diseases and age-related physical changes. Be mindful of the fact that several features of alcohol abuse, such as memory loss, poor balance, frequent falls and ill-health, may be ignored as consequences of ageing.

Drinking problems can be found out by direct questioning as well as indirect questions on the history of falls, accidents, episodes of confusion, symptoms of self-neglect (such as weight loss or poor hygiene), or lack of attention to usual activities. The family should also be used as a source of information.

Nurses should refer the older people to a specialized centre/psychiatrist for the management of alcoholism. Management of alcoholism requires specialized efforts by a multidisciplinary team through hospitalization. Nutritional support, treatment of withdrawal symptoms, psychiatric support and group therapy are some of the measures that are a part of the management of chronic alcoholism.

c) Screening for disease prevention

Early detection and treatment is an important step in the secondary prevention of disease and disability. Regular screening for common, life-threatening and disabling diseases is important for health promotion. Nurses can follow a systematic strategy for screening of important health problems.

Screening for hypertension, diabetes and hypercholesterolemia should be carried out at least once a year. The vision, hearing, teeth, and feet of older people should be inspected periodically.

The American Cancer Society recommends that people at increased or high risk of colorectal cancer might need to start colorectal cancer screening before the age of 45 years, be screened more often, and/or get specific tests. This includes people with:

i. a strong family history of colorectal cancer or certain types of polyps;

ii. a personal history of colorectal cancer or certain types of polyps;

iii. a personal history of inflammatory bowel disease (ulcerative colitis or Crohn's disease);

iv. a known family history of a hereditary colorectal cancer syndrome, such as familial adenomatous polyposis (FAP) or Lynch syndrome (also known as hereditary non-polyposis colon cancer or HNPCC);

v. a personal history of radiation to the abdomen (belly) or pelvic area to treat prior cancer.

Table 4.3: Prevention and early diagnosis of cancer in older people

Cancer screening	Recommendation	When not to screen
Breast cancer screening	For women between 50–69 years of age, screening for breast cancer with mammography should be done every two years. If mammography is not available, women may be advised and taught to carry out self-examination of the breast at regular intervals.	No recommendation for breast cancer screening after 70 years of age.
Cervical cancer screening	Screening should be performed at least once for every woman in the target age group (30–49 years). See WHO Guidelines.	
Prostate cancer screening		There is no consensus on regular blood examination for prostate-specific antigen and rectal examination for cancer of prostate. However, older patients must be informed about the availability of such screening.
Colorectal cancer screening	People who are in good health and with a life expectancy of more than 10 years should continue regular colorectal cancer screening through the age of 75 years. For people aged 76–85 years, the decision to be screened should be based on the person's preferences, life expectancy, overall health, and prior screening history.	People over 85 years should no longer get colorectal cancer screening.

MODULE

5

Geriatric syndromes

Learning objectives

- To understand the definition and implications of geriatric syndromes
- To learn the details of fall risk assessment
- To identify strategies for prevention of falls in different settings
- To identify the role of nurses in managing and preventing syncope in older people
- To know various types of urinary incontinence
- Nursing recommendations for managing urinary incontinence

1. Introduction

Geriatric syndromes are common clinical conditions that do not fit into specific disease categories but have substantial implications for functionality and life satisfaction in older people (Table 5.1).

Besides leading to increased mortality and disability, decreased financial and personal resources, and longer hospitalizations, these conditions can substantially diminish the quality of life.

Table 5.1: Geriatric syndromes

Classical geriatric syndromes	Extended geriatric syndromes
Delirium	Dementia
Falls	Syncope
Urinary incontinence	Malnutrition
Pressure ulcer	Polypharmacy
Functional decline	Frailty and sarcopenia

2. Clinical implications of geriatric syndromes

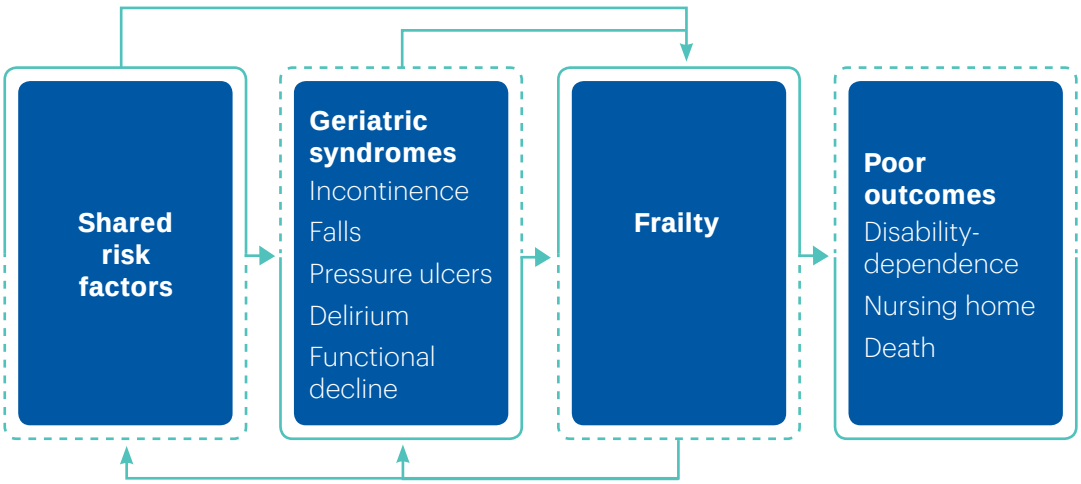
The implications of geriatric syndromes are as follows:

- increased complexity and cost of care;
- impact on mobility, autonomy and independence;
- impaired quality of life;
- the added burden of care and caregiver stress.

3. Shared risk factors for geriatric syndromes

Geriatric syndromes are often defined by isolating the shared risk factors associated with them, including old age, cognitive or functional impairment and impaired mobility.

Figure 5.1: Shared risk factors for geriatric syndrome



4. Types of geriatric syndromes

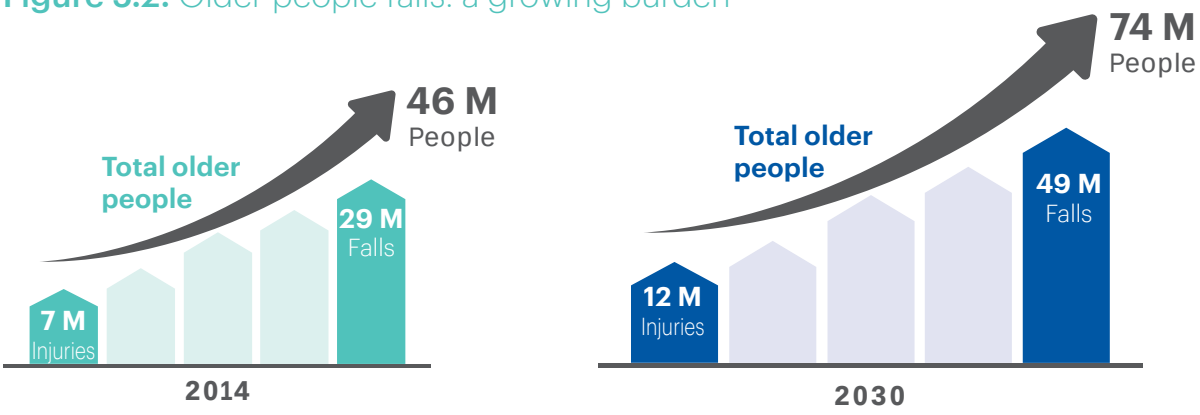
In this module, we will discuss falls, syncope and urinary incontinence in detail.

a) Falls

A fall is defined as an event that results in a person coming to rest inadvertently on the ground or floor or other lower level. (Centers for Disease Control and Prevention, United States).

- Falls and fall-related injuries are a common and serious problem for older people.
- Falls are potentially life-threatening events and may simply be the first sign of a single problem.
- More than 90% of hip fractures occur because of falls, with most of these fractures occurring in persons over 70 years of age. It leads to hospitalization, increased cost and burden on society, and even death. This risk increases to about 75% for long-term care home residents.

Figure 5.2: Older people falls: a growing burden



Source: Agency for Healthcare Research and Quality, US Department of Health and Human Services

» The quality of life is significantly impacted following a fall-related injury.

» Falls are usually linked with significant morbidity.

In-hospital falls:

» Falls are a common and devastating complication of hospital care and long-term care facilities, particularly in older patients.

» Falls occur at a rate of 3–5 per 1000 bed-days.

Risk Factors:

A few of the factors that may be related to risk for falls in hospitals and should be considered by nurses during risk evaluation are as follows:

Figure 5.3: Role of nurses in fall risk evaluation and management

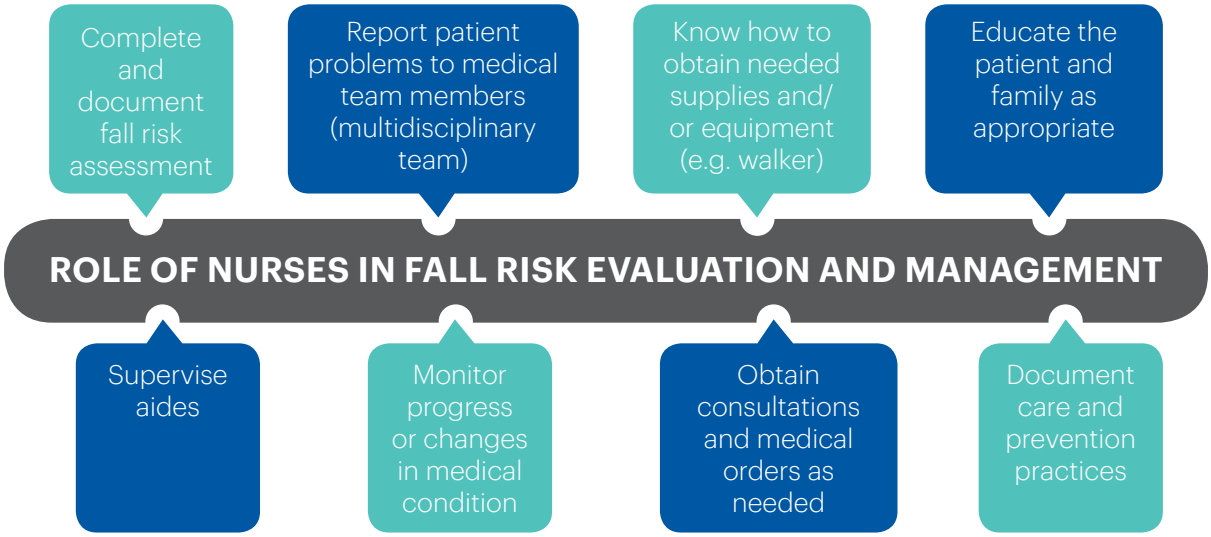
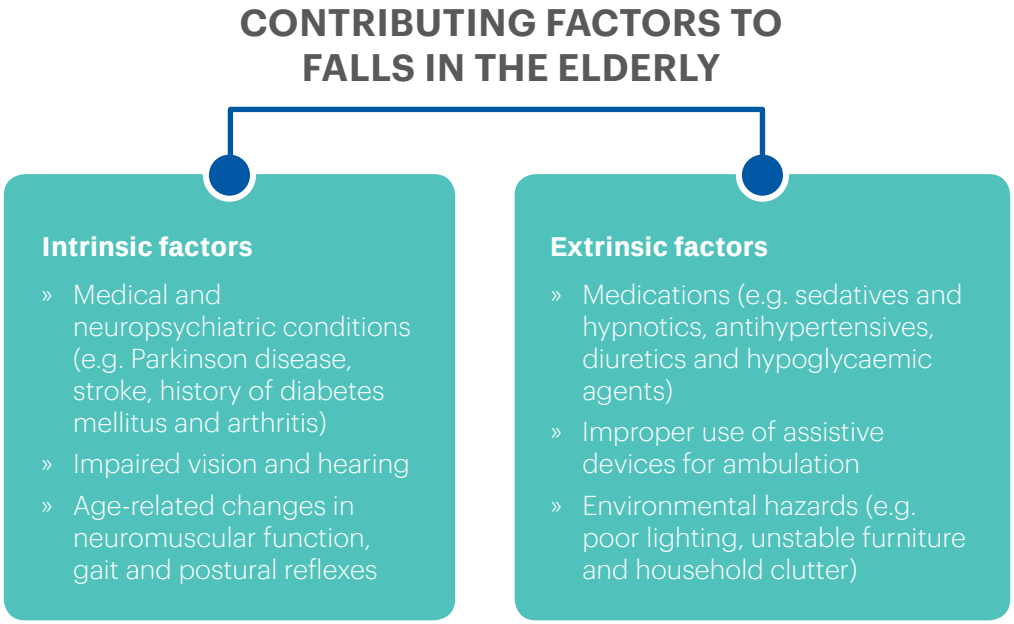
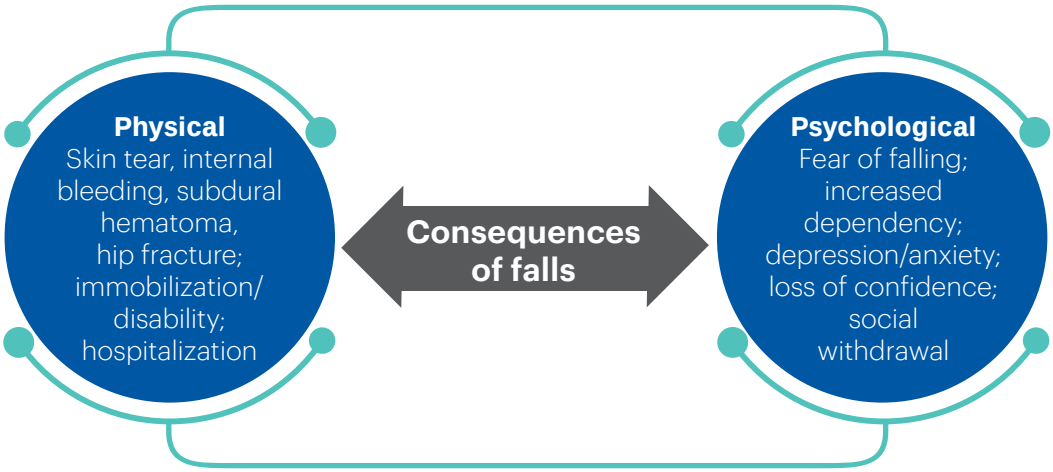


Figure 5.4: Factors leading to fall in elderly



Note: Adapted from Murphy DP et al. Consultant. 2006.

Figure 5.5: Consequences of fall



Approach to person with fall by nurse:

1) Ask questions related to falls and balance:

- Do you feel unsteady when standing or walking?
- Are you worried about falling?
- Have you fallen in the past year? (if yes: frequency, any injury)

2) Measure orthostatic blood pressure.

3) Identify medications being taken by the patient that increase the risk of falls (American Geriatric Society. Modified Beers Criteria, 2019. *Refer Annex 5 for details*). Consult with the medical team and decide about the continuation of such medications.

4) Check visual acuity (WHO simple eye chart).

5) Assess feet/footwear.

6) Fall risk assessment: Morse Fall Scale.

Medication fall risk score:

Point value (risk level)	Comments
3 (High)	Sedation, dizziness, postural disturbances, altered gait and balance, impaired cognition
2 (Medium)	Induced orthostasis, impaired cerebral perfusion, poor health status
1 (Low)	Increased ambulation, induced orthostasis
Score ≥ 6	**Higher risk for fall; evaluate patient**

Situational (personal, environmental):

- history of falls;
- inadequate lighting;
- environmental conditions (wet floors, while crossing roads, while climbing steps);
- cluttered environment;
- improper footwear;
- slippery bathrooms.

Table 5.2: Morse fall scale

Component	Scale	Score
1. History of falling (immediate or within previous 3 months)	No Yes	0 25
2. Secondary diagnosis	No Yes	0 25
3. Ambulatory aid	Bed rest/nurse assist Crutches/cane/walker Furniture	0 15 30
4. IV/heparin lock	No Yes	0 25
5. Gait/transferring	Normal/bed rest/immobile Weak Impaired	0 10 20
6. Mental status	Oriented Forgets limitations	0 15
Total score:		
Interpretation: 0–24: Low risk	25–50: Moderate risk	≥ 51 High risk

Risk of fall	Intervention
Low	Good basic nursing care
Moderate	Implement standard fall prevention interventions
High	Implement high-risk fall prevention interventions

7) Evaluate gait, strength and balance (in stable patients or after stabilization)

Perform Short Physical Performance Battery (SPPB)

SPPB (Short Physical Performance Battery)

Describe each test and ask if the person feels able to do it. If not, score accordingly and move to the next step.

1. **Balance tests:**

   Stand for 10 seconds with feet in each of the three positions. Use the sum of the score of each of the three positions (side-by-side stand, semi-tandem stand, tandem stand).

2. **Gait speed test:** Time to walk 4 metres (if the patient uses a cane or walking aid and needs it to walk a short distance, you may allow its use).

3. **Chair rise test:** Time to rise from a chair five times.

Balance test

A. Side-by-side stand	
Held for 10 sec.	1 points
Not held for 10 sec.	0 points
Not attempted	0 points
If not attempted, end balance tests.	
B. Semi-tandem stand	
Held for 10 sec.	1 point
Not held for 10 sec.	0 points
Not attempted	0 points
If not attempted, end balance tests.	
C. Tandem stand	
Held for 10 sec.	2 points
Held for 3 to 9.99 sec.	1 point
Held for < than 3 sec.	0 points
Not attempted	0 points

Chair rise test

Unable to complete/>60 sec.	0 point
16.7–59.9 sec.	1 point
13.7–16.69 sec.	2 points
11.2–13.69 sec.	3 points
<11.19 sec.	4 points

Gait speed test

>8.70 sec.	1 point
6.21–8.70 sec.	2 points
4.82–6.20 sec.	3 points
<4.82 sec.	4 points

Total SPPB score is the sum of each of the three tests.

Source: ICOPE. Guidance on person-centred assessment and pathways in primary care (ICOPE Handbook). WHO, Geneva, 2019.

8) Management:

Table 5.3: Management based on SPPB score

SPPB score	Interpretation	Recommendation
10–12	Normal locomotor capacity	Recommend multimodal exercise at home
7–9	Mild loss of locomotor capacity	Recommend multimodal exercise programme Provide dietary advice
0–6	Moderate to severe loss of locomotor capacity	Provide multimodal exercise under supervision Consider referring to rehabilitation services Consider increasing protein intake

Table 5.4: Exercise to prevent fall

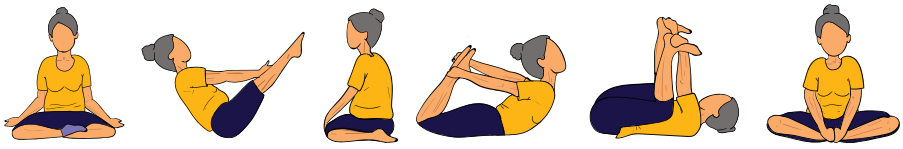
Component	Exercises
Strength/ resistance training	Squats, lunges, sit-to-stand exercises 
Aerobic/ cardiovascular training	Fast walking, cycling 
Balance training	Standing on one leg at a time, walking heel-to-toe in a straight line 
Flexibility training	Stretching exercises, yoga 

Figure 5.6: Age-friendly bathroom

Source: http://citywideplumbingpros.com/blog/handicap-accessible-bathroom/

Universal fall precautions:

Nurses should ensure that the following components are followed as a part of the routine protocol:

1. Familiarize the older patient with the environment.
2. Maintain a bedside light within reach.
3. Ensure that the older patient's personal possessions are within the patient's safe reach.

4. Get sturdy handrails fixed in the patient's bathroom, room, hallway and on the stairs.
5. Place the bed in a low position when the patient is resting in bed; raise the bed to a comfortable height when the person is transferring out of bed.
6. Stabilize the legs of the bed.
7. Keep the wheel-locks on the wheelchair in the locked position when stationary.
8. Ensure nonslip, comfortable, well-fitting footwear is worn by the person.
9. Use night lights or supplemental lighting.
10. Ensure that the floor surfaces are clean and dry.
11. Ensure that all the spills are cleaned up promptly.
12. Ensure that the older patient's care areas are uncluttered.
13. Follow safe patient handling practices.
14. Also, prevent fear of fall after someone develops it.

Figure 5.7: Age friendly stairs

Source: AHRQ 2013

b) Syncope

Syncope is described as "a temporary and sudden loss of consciousness, typically due to transient cerebral hypoperfusion or a decline in blood flow to the brain." It can be caused by a decrease in cardiac output, high blood pressure, a sudden drop in blood pressure or other neurologic factors.

Conditions such as orthostatic hypotension, cardiac arrhythmias, the cardiopulmonary or cerebrovascular disease may be factors underlying syncope. Other cardiac conditions associated with syncope and/or falls include heart murmurs, angina, heart failure and myocardial infarction.

Causes of syncope in older people:

a. Cardiac syncope accounts for up to 15% of cases of syncope in older people. It is caused by impaired cardiac output due to arrhythmia or structural heart disease with outflow obstruction.

b. Reflex or neurally mediated syncope is a heterogeneous group of conditions, including vasovagal syncope, situational syncope and carotid sinus syndrome. It is the most frequent cause of syncope in older people (44% of cases).

i. **Vasovagal syncope** is the most common form of reflex syncope and is mediated by the vasovagal reflex. The most common triggers in older people are prolonged standing or sitting and the use of vasodilator medicines. The classic prodromal features (pallor, diaphoresis, nausea and warmth) are less prominent in older people.

ii. **Situational syncope** occurs in conditions that trigger the Valsalva manoeuvre, such as urination, defecation, coughing and swallowing.

iii. **Carotid sinus hypersensitivity** (CSH) may be precipitated by sudden head-turning and wearing tight clothing around the neck. CSH is regarded as a significant cause of syncope and unexplained falls in older people.

iv. **Orthostatic hypotension** (OH) is prevalent in older people and in those who are frail, affecting up to 18% of people aged 65 years or older and up to 52% of institutionalized older patients. It is defined as a sustained reduction in systolic blood pressure of at least 20 mm Hg or diastolic blood pressure of 10 mm Hg, within 3 minutes of standing. Repeated blood pressure measurement is needed—preferably in the morning—to diagnose OH. The occurrence of OH is significantly related to the number of comorbidities and potentially causative medications.

Precipitating Agents for Orthostatic Hypotension

- Angiotensin-converting enzyme inhibitors
- Angiotensin receptor blockers
- -Blockers
- -Blockers
- Calcium channel blockers
- Diuretics
- Nitrates
- Sildenafil citrate
- Phenothiazines
- Opiates
- Tricyclic antidepressants
- Ethanol
- Bromocriptine

Consequences of syncope:

Syncope independently increases the risk of overall or cardiac mortality in older people.

Nursing interventions and care plan:

Evaluate the detailed history, assessment of postural drop, any obvious cause of syncope and need for referral to the physician. Look for obvious signs of syncope, which could be nausea, vomiting, blurring vision, loss of consciousness, arrhythmias, hypotension, bradycardia and confusional state.

1. Prevent injury to the patient (non-skid socks, always assisted while walking, bed in the lowest locked position, necessary items within reach, call bell within reach, and side rails up x3).
    - Sudden loss of consciousness puts patients at a higher risk for falls and injury. Therefore, it would be prudent to be with the patient.
2. Educate the patient to change positions slowly.
    - This enables the blood pressure to adapt to position changes and hopefully prevent future episodes.
3. Re-evaluate medications and review any that may cause syncope.
    - Blood pressure (BP) medicines may need to be spaced out, or dosages may need to be adjusted. Facilitate discussion.
4. Monitor for changes in the level of consciousness.
    - Monitor appropriately and notify the doctor.
5. Promote adequate fluid intake.
    - Prevent worsening of hypotension.

c) Urinary incontinence

Urinary incontinence (UI) is defined as the involuntary loss of urine in sufficient amounts or frequency to be a social and/or health problem.

» It is a common, potentially disabling problem, which is often curable when identified.

» The prevalence of UI is higher among women than men and increases with ageing and disability. In the community, the prevalence varies from 15–20% above the age of 70 years and reaches 50% in older people placed in long-term care facilities.

» Unfortunately, UI is often neglected by the patient as well as the medical team, leading to under-reporting and under-treatment.

- Specific and direct questioning on incontinence should be a part of geriatric screening and history-taking so that this potentially treatable medical and social problem can be identified.
- Adequate mobility, normal cognition and effective functioning of the lower urinary tract are essential to maintain continence. Incontinence can occur due to an underlying problem with any of these functions.

Risk Factors:

- advanced age;
- medicines;
- urinary tract infection;
- metabolic: hyperglycaemia, hypercalcemia;
- delirium;
- excess fluid intake;
- constipation;
- postprostatectomy;
- atrophic vaginitis/urethritis.

Incontinence can be acute and chronic:

A. Acute and transient incontinence

B. Chronic and established incontinence

Acute and transient incontinence:

- Acute and transient UI is very common among older people in acute care settings.
- Incontinence that is sudden in onset is usually related to acute illness, such as delirium, caused by infection or metabolic abnormality.
- Faecal impaction is a common problem that can cause mechanical obstruction of the bladder outlet, resulting in overflow incontinence.
- Inflammation of the lower urinary tract due to atrophic vaginitis and urethritis can contribute to incontinence.
- Hyperglycaemia, fluid overload and cardiac failure can lead to transient incontinence.
- An iatrogenic cause of incontinence is medications, which commonly include diuretics, anticholinergics and psychotropics. Identifying and treating the underlying problem resolves the incontinence.

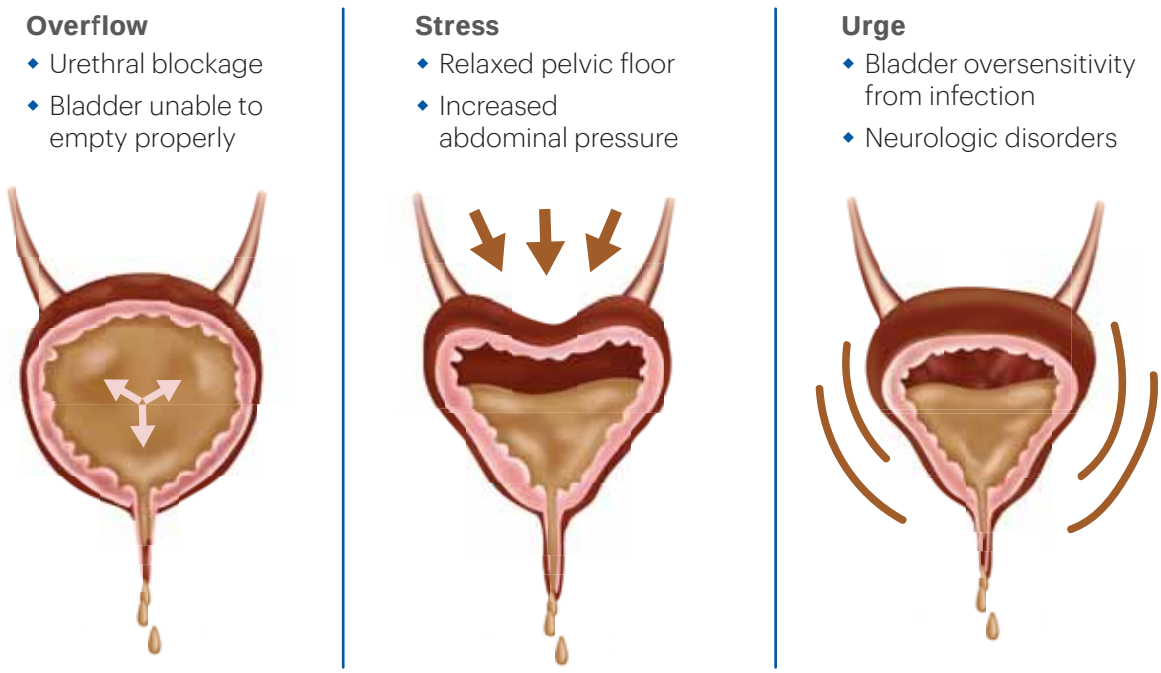
Chronic and established incontinence:

Table 5.5: Type of incontinence

Type of incontinence	Characteristics
Stress incontinence	It is an involuntary loss of urine due to increased intra-abdominal pressure during coughing, sneezing, laughing or other activities that increase intra-abdominal pressure.
Urge incontinence	It is the involuntary loss of urine associated with a strong desire or need to urinate. It is usually associated with premature detrusor muscle contractions. It may be the result of a sudden, involuntary bladder contraction caused by inflammation or irritation within the bladder, due to calculi, malignancy, infection or atrophic vaginitis-urethritis. Urge incontinence is the most common type of incontinence in older people with BPH.
Mixed incontinence	It is a combination of both stress and urge incontinence. It is most common in older women.
Overflow incontinence	It is the involuntary loss of urine resulting from an over-distended bladder. It may have a variety of presentations, including frequent or constant dribbling, or urge or stress incontinence symptoms. Overflow may be caused by an inactive or acontractile detrusor, bladder outlet or urethral obstruction secondary to medicines, neurologic conditions such as diabetic neuropathy, low spinal cord injury, or radical pelvic surgery that interrupts the motor innervation of the detrusor muscle.
Transient incontinence	It is the result of a reversible medical condition. The patients may be suffering from delirium, urinary tract infection, atrophic vaginitis, psychological problems (such as depression), an endocrine disorder, impaired immobility and/or stool impaction. It may be due to medicines such as diuretics and sedatives.
Functional incontinence	It is caused by factors outside the lower urinary tract, such as impairment of physical or cognitive functioning, or both. It is important to note that immobile and cognitively-impaired individuals may also have other types and causes of UI.

Source: Nursing Management of Patients with Urinary Incontinence. Singapore MOH Nursing clinical practice guidelines 1/2003; 2003.

Figure 5.8: Type of incontinence



Source: Gwen Shockey/Science Source

Medications:

Several medicines have been tried to treat UI:

- anticholinergics such as oxybutynin;
- alpha-blockers such as tamsulosin, alfuzosin, silodosin, terazosin and doxazosin for men;
- topical estrogen such as vaginal cream, ring or patch to rejuvenate the tissues in the urethra and vaginal areas of women, as this may reduce some of the symptoms of incontinence.

Medical devices:

Several devices have been designed to treat women with incontinence. These include urethral inserts and pessaries.

Absorbent pads and catheters:

When the measures mentioned above fail to control incontinence completely, the patient can be advised to:

- use pads and protective garments
- opt for self-catheterization.

In many cases, the treatment strategies mentioned above may not suffice and the patient may require referral for an invasive intervention with electrical stimulation, interventional therapies or pelvic surgery. However, these modalities are available only in tertiary care centres.

The nurse should facilitate the following steps when suspecting a case of urinary incontinence

1. History taking

   Take a medical history from the person identified to have UI.

2. Physical examination

   - Conduct systematic physical examination to identify abnormalities that have a bearing on the incontinence.
   - Assess skin condition around the genital-perineal region and check for excoriation.
   - Assess intrinsic capacity using the WHO ICOPE Guidelines.

3. Direct observation of leakage

   Instruct the patient to cough forcefully when the bladder is full and observe for urine leakage.

4. Urinalysis

   Send a sample of urine for urinalysis and culture.

5. Measurement of residual volume

   Measure post voided residual (PVR) volume by in-out catheterization or bladder scanning within a few minutes after voiding.

6. Bladder chart/ intake-and-output chart

   Record frequency, timing and amount of fluid intake and voiding for a few days.

7. Timed voiding/ scheduled toileting

   Timed voiding/scheduled toileting is recommended throughout the day for a patient who needs assistance in toileting.

8. Habit training

   Habit training is recommended for patients in whom a natural voiding pattern can be determined.

9. Prompted voiding

   Prompted voiding is recommended for patients who can learn to recognize some degree of bladder fullness or the need to void, or who can ask for assistance or respond when prompted to void. In this approach, the patient is asked at regular intervals, regardless of whether voiding is required, and is assisted to the toilet if the response is positive.

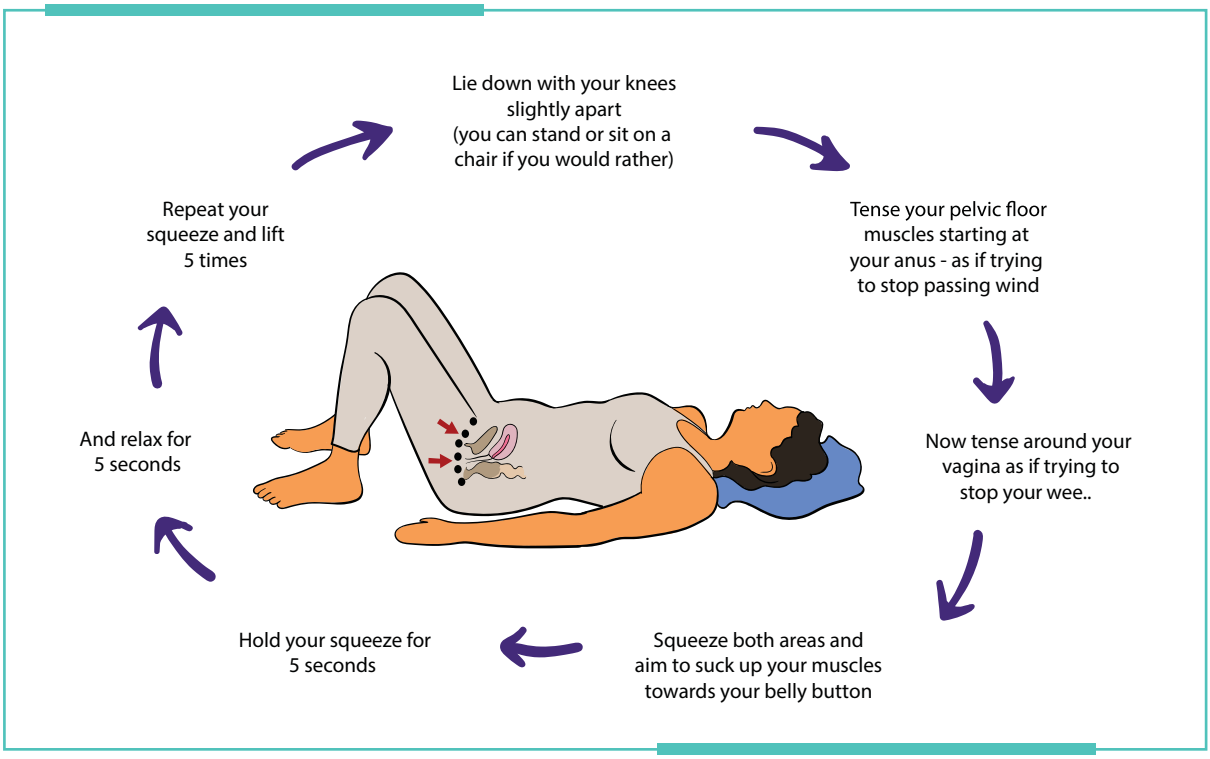
10. Bladder training/bladder re-education

    Bladder training is strongly recommended for management of urge UI and recommended for management of stress UI.

11. Pelvic floor muscle exercise

    Pelvic floor muscle exercise is beneficial to women with stress incontinence. Sustain a contraction of the perivaginal muscles or anal sphincter for at least 10 seconds, followed by an equal period of relaxation. Exercise 30 to 80 times a day for at least 8 weeks.

Figure 5.9: Pelvic floor muscle exercise



Source: Kegel8.co.uk

12. Intermittent urinary catheterization

Intermittent catheterization is recommended as a supportive measure for patients with spinal cord injury, persistent UI, and chronic urinary retention due to under-active or partially obstructed bladder.

13. Indwelling urinary catheterization

- An indwelling catheter is recommended for patients with an obstructive cause where other interventions are not feasible.
- It is also useful for patients who are terminally ill, or suffering from pressure ulcers, in the absence of a caregiver.
- The patient is assessed periodically for voiding trials or bladder training.

14. Absorbent products

Uro-sheaths are recommended for incontinent men who have adequate bladder emptying and intact genital skin, and for whom other therapies have failed or are not appropriate.

15. Skincare

- Inspect genital-perineal area daily. Identify signs of contact dermatitis and skin excoriation.
- Cleanse skin immediately after urine leakage.
- Use appropriate skin cleansers (e.g. Aloe Vesta Perineal Skin Cleanser is alcohol-free, enriched with aloe vera and emollients).

16. Dietary and fluid management

Encourage adequate fluid and fibre intake. Reduce caffeine intake (e.g. coffee, tea, colas).

MODULE

6

Care of hospitalized older people

Learning objectives

- To understand and perform the various components of care for hospitalized older people, such as oral care, perineal care, back care, care for the nasogastric (NG) tube, cleaning wounds and applying sterile dressings
- To understand the complications arising from prolonged hospital stays, like pressure ulcers and delirium
- To learn the techniques of proper shifting of bed-bound older people and administering NG tube feeding
- To apply all the above components in the nursing care plan

1. Introduction

A patient who is hospitalized and bed-bound usually needs full-time care and attention. There are various medical and surgical conditions when a patient might remain bed-bound for days, weeks or indefinitely. Bed-bound status increases the demand as well as the requirement of resources for care. Similarly, there is a range of complications that may arise in a bed-bound patient.

The following conditions may lead a patient to a bed-bound status:

- advanced dementia with concurrent illness;
- advanced parkinsonism with concurrent illness;
- stroke;
- head injury;
- acute illness requiring hospitalization;
- deconditioning after hospitalization;
- road accidents, polytrauma, fractures;
- delirium;
- paraplegia for various reasons;
- coma for various reasons;
- post-surgical status;
- frailty and sarcopenia;
- poor patient party/caregiver support.

2. Care components for a hospitalized/bed-bound patient:

a) Promptly identifying and managing the deterioration in the clinical condition of the patient using local protocols, e.g. early warning system *(refer annex 7 for details)*

b) Collaborating with health team/multidisciplinary team for the management of patients

c) Maintaining personal hygiene

d) Maintaining skin integrity

Steps to follow:

- observe skin for evidence of skin breakdown;
- change the position frequently (every 2–4 hours);
- provide back massage/oil massaging on bony prominent area regularly;
- use air-mattress to prevent pressure on bony prominences;
- keep nails short to prevent scratching;
- provide skincare regularly;
- maintain adequate nutrition;
- perform passive exercises;
- assist in ambulation.

e) Managing nutritional needs

Steps to follow:

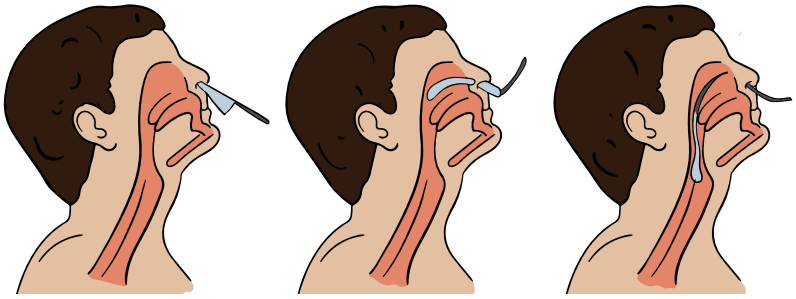
- assess hydration status;
- assist with oral feeding;
- get the meals prepared according to the patient's physical abilities;
- give plenty of liquid diet;
- administer NG tube or percutaneous endoscopic gastrostomy (PEG) tube feeding if the patient cannot ingest orally. For this, position the patient with the head of the bed elevated at an angle between 30–45 degrees;
- Discuss with the team to choose the method that will effectively address the need of the patient; such as intermittent or bolus feeding, using a feeding bag or a syringe;

» provide mouth care by brushing teeth or cleaning with a mouth wash after feeding;

» start parenteral feeding (e.g. total parenteral nutrition or TPN) if needed;

» assess for any food allergy.

Figure 6.1: Nasogastric tube insertion



Source: NOAA Diving medical technician 2015

f) Providing respiratory care

Steps to follow:

» provide deep breathing and coughing exercises;

» provide incentive spirometer as appropriate for the patient;

Figure 6.2: Spirometer

Source: mskcc.org

» maintain a comfortable position for ease to breathe (semi-Fowler's position);

» give nebulization as needed;

» provide oxygen therapy as per the need;

» engage a physical therapist as required.

g) Providing oral care

Steps to follow:

- assist the patient with oral care;
- inspect the oral cavity;
- instruct the patient to brush teeth. If the patient cannot tolerate a toothbrush, foam swabs or cotton balls can be used. Rinse the oral cavity;
- oral care for the unconscious patients requires suction apparatus and should be performed at least every four hours.

h) Providing back care

Steps to follow:

- back care means cleaning and massaging the back of the patient, paying special attention to pressure points;
- turn the patient to one side and put a mackintosh, covered by a big towel, under the patient's body;
- expose the patient's back fully and observe for any abnormalities;
- lather soap with a sponge towel;
- wipe the soap and rinse with plain warm water;
- put some lotion or oil into your palms;
- apply the lotion or the oil and massage for at least 3–5 minutes from sacral region to neck and from upper shoulder to the lowest parts of buttocks with your palms.

i) Providing perineal care

Proper assessment and care of the perineal area requires professional clinical judgement.

Steps to follow:

- perform hand hygiene and wear gloves;
- make a mitt with the sponge cloth;
- cleanse the patient's upper thighs and groin area with soap and water. Rinse and dry. Wash the genital area next;
- cleanse the anal area;
- apply skincare products (from Caroline Bunker Rosdabl: Textbook of Basic Nursing, 1999, p.591)

j) Bowel and bladder care/preventing urinary retention

Steps to follow:

- palpate for a full bladder frequently;
- offer bedpan frequently;
- prevent constipation;
- insert an indwelling catheter if needed;
- provide perineal care as needed.

k) Managing pain

As per the protocol and discussion with the team.

l) Positioning

Steps to follow:

- pay attention to good body alignment so as to prevent contractures, foot and wrist drop, muscle strain, joint injury and interference with circulation and chest expansion;
- care needs to be taken to ensure that the head and neck are aligned with the spine.

m) Promoting sleep in older patients

Steps to follow:

- depending on the illness, older patients should be provided enough undisturbed sleep hours;
- disturbing noises, alarms and beeps should be minimal during night hours;
- ear-plugs/eye-masks should be provided, depending on the comfort of the patients;
- staff–patient interactions should be minimal during night hours;
- voiding should be assisted before scheduled sleep hours;
- increase daytime light exposure to improve sleep at night;
- oral fluid administration should be minimal for a few hours before sleep.

n) Appropriate physical therapy and rehabilitation

Steps to follow:

- as older people lose the ability to walk, to climb stairs, and to rise from a chair during hospitalization, they progressively become dependent leading to a condition known as 'deconditioning';
- immobility leads to gradual wasting of muscle mass (sarcopenia) and osteoporosis;
- nurses should involve physical and occupational therapists for enhancing mobility and providing appropriate physical therapy to patients.

o) Communicating

Steps to follow:

- communicate and provide emotional support to older patients. This will help to ease feelings of sadness or loneliness;
- small activities may be comforting, such as reading, watching TV or listening to music;
- encourage and accept the expression of feelings by older people;
- listen actively to what is said and be alert for non-verbal cues;
- respond to non-verbal cues with appropriate touch and eye contact;
- Older patients, as well as family members, may benefit from counselling.

p) Psychological care

Steps to follow:

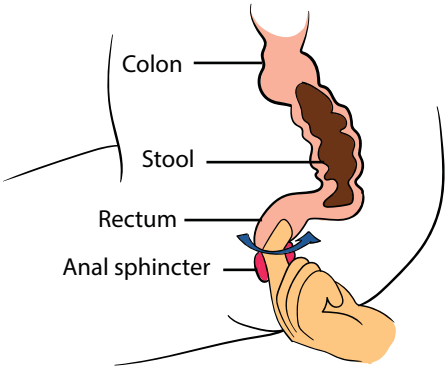
- respect the older patient's wishes, beliefs and religious sentiments;
- facilitate family/relatives to visit the older patient regularly;
- provide maximum time to vent feelings;
- keep the patient company to make the patient feel secure;
- ensure adequate privacy when needed;
- involve in patient-engaging activities;
- handle gently with love;
- handle the patient with aggressive behaviour.

q) Bowel habit and incontinence care

Steps to follow:

- record and evaluate the patient's faecal elimination pattern/stool type;
- establish a consistent time to toilet, based on pattern;
- position the patient in the best physiologic position for defecation, such as sitting with normal posture;
- have the patient lean forward or prop feet on a stool to increase intra-abdominal pressure;
- instruct the patient to bear down and attempt to defecate;
- encourage the patient to drink water normally: 6–8 glasses a day (i.e. around 1.5–2 litres). In case of special comorbidities of the heart/kidneys, water intake may be tailored according to the doctor's prescription;

Figure 6.3: Digital stimulation for bowel movement



Source: http://www.spinalcordessentials.ca/handouts/digital-stimulation/

- minimize consumption of caffeine;
- increase intake of fiber containing diet;
- use adult diapers as per the need;
- perform manual evacuation for impacted hard stool, if needed *(refer Annex 9 for details*.

3. Complications of immobilization and prolonged bed-bound status

Table 6.1: Physical and psychological complication of immobilization

Physical complications	Psychological complications
Orthostatic hypotension	Depression
Skeletal muscle atrophy and weakness	Delirium
Osteoporosis	
Joint contractures	
Thromboembolic disease (deep vein thrombosis)	
Insulin resistance	
Microvascular dysfunction	
Systemic inflammation	
Aspiration	
Atelectasis	
Pressure ulcers	

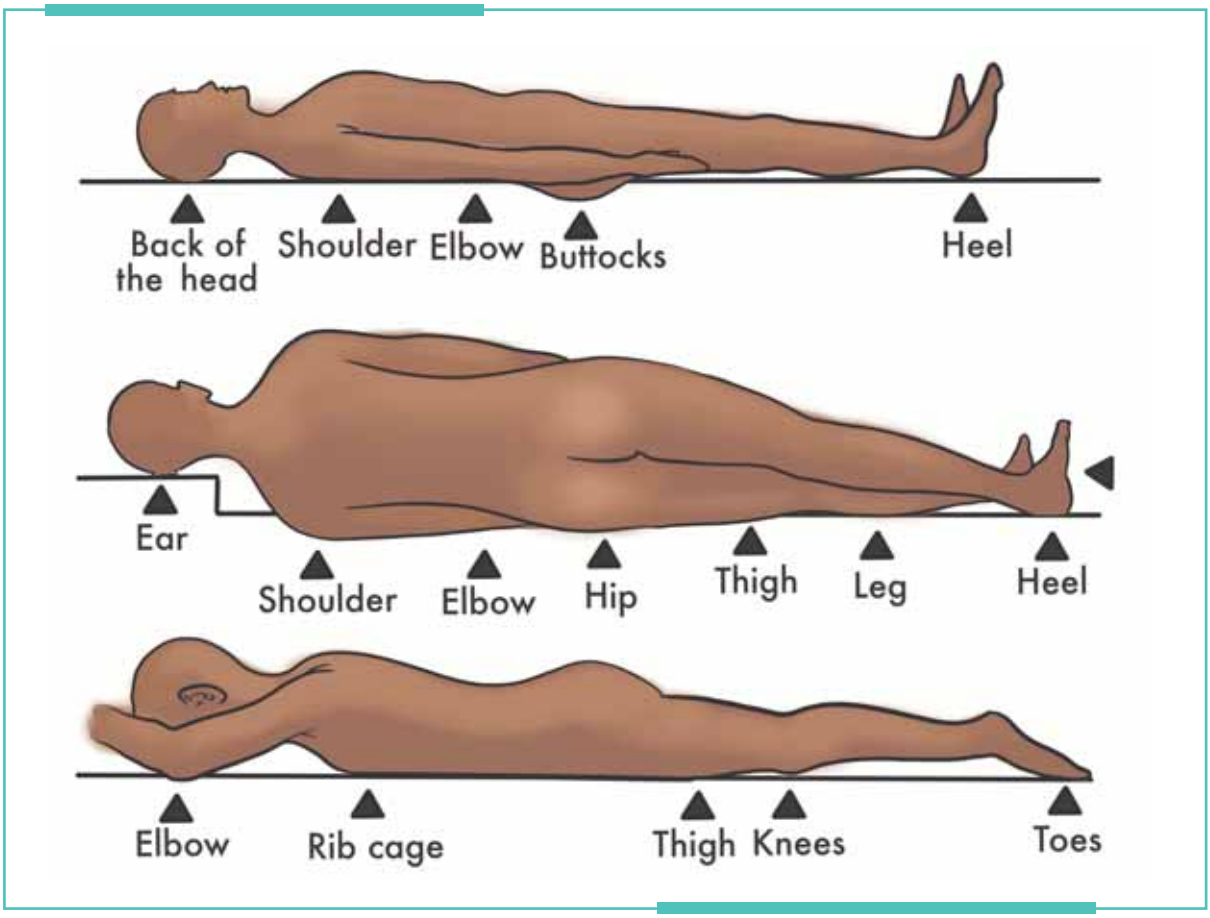
a) Pressure ulcers

- Pressure ulcers are considered to be the third most expensive disorder after cancer and cardiovascular diseases.
- Although the prevention of pressure ulcers is a multidisciplinary responsibility, nurses play a major role.
- The incidence of pressure ulcers is different in each clinical setting. Incidence rates of as low as 0.4% to as high as 38% have been reported in the inpatient department, while prevalence has been reported as 3.5% to 69%.

Table 6.2: Risk factors for pressure ulcers

Intrinsic factors	Extrinsic factors
Altered consciousness	Undue and prolonged pressure
Peripheral neuropathy	Shear
Malnutrition	Friction
Anaemia	Moisture
Oedema	Abnormal posture
Atherosclerosis	Impaired mobility
Age-related skin changes	Bed of the patient
Smoking	Prolonged hospital stays
Medications	Prolonged surgical duration

Figure 6.4: Common sites of pressure ulcers



Source: NHS. Pressure ulcer prevention and management best practice guideline, 2019

Prevention and management of pressure ulcers

Prevention:

1. pressure ulcer risk assessment;
2. prompt identification of the reddened skin;
3. skincare;
4. documentation (initial and ongoing assessment);
5. prevention of pressure damage;
6. positioning and repositioning;
7. mobilization;
8. nutritional support.

Risk assessment: Waterlow Ulcer Risk Assessment Scale *(refer Annex 6 for details)*

- Assessment of risk is fundamental to pressure ulcer prevention.
- This assessment should be done within 6 hours of admission and should be documented in the nursing care plan.

- Risk assessment should be repeated depending on the patient's level of risk and co-morbidities.
- Pressure areas should be checked daily.
- Risk assessment should also be undertaken if there is any change in the patient's condition.
- Both patients and nurses should be fully aware of the level of risk.

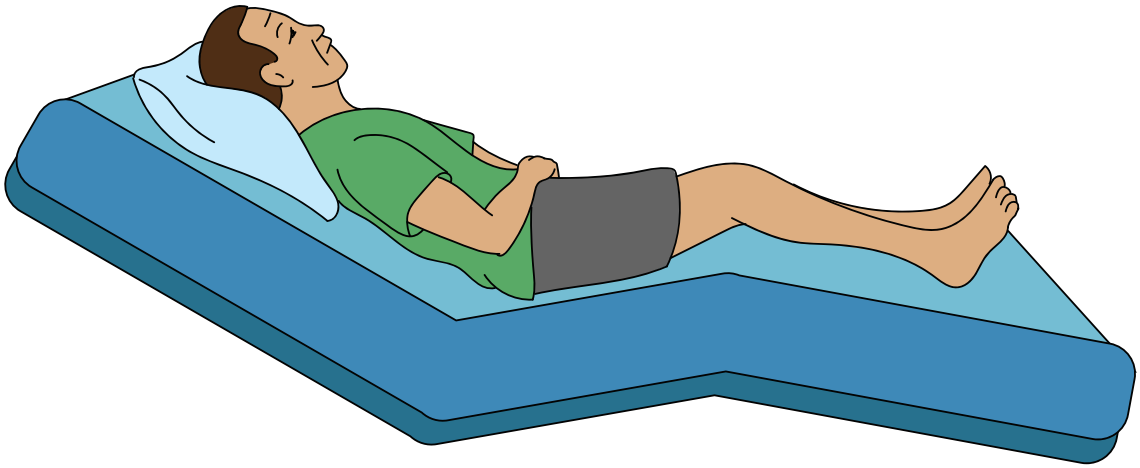
Warning signs of skin damage:

- skin redness (earliest sign);
- discomfort/pain at the site to the patient;
- persistent erythema;
- non-blanching hyperemia;
- blisters (superficial);
- warm to touch;
- localized edema;
- induration;
- purplish/bluish localized areas in those with dark skin.

Table 6.3: Prevention of pressure damage

Dos	Don'ts
Ensure 24-hour accessibility of pressure redistribution/ relieving equipment (e.g. air mattress) to all older patients who are 'at risk' of pressure sore development.	Position the patient on existing pressure ulcer damage or over bony prominences, particularly hips.
Encourage patients to stand, mobilize, be positioned and repositioned, either with support or independently, every 2–6 hours, or whenever possible.	Turn the patient onto a body surface that remains reddened from a previous positioning.
Restrict seating time to less than 4 hours per session for those with intact skin and 2 hours with broken skin. Pay attention to the heel and elbow position whilst seated.	Passive movements should always be considered for patients with pressure ulcers who have compromised mobility.
When using transfer aids to reduce friction and shear, take care to lift and not drag the patient while repositioning.	Position the patient directly onto medical devices, such as tubes or drainage systems.
Repositioning should be undertaken using the 30-degree semi-Fowler's position or the prone position and the 30 degree-tilted side-lying position (alternately right side, back, left side) if the patient can tolerate this position and the patient's medical condition allows it.	

Figure 6.5: Semi-Fowler's position



Management of existent pressure damage:

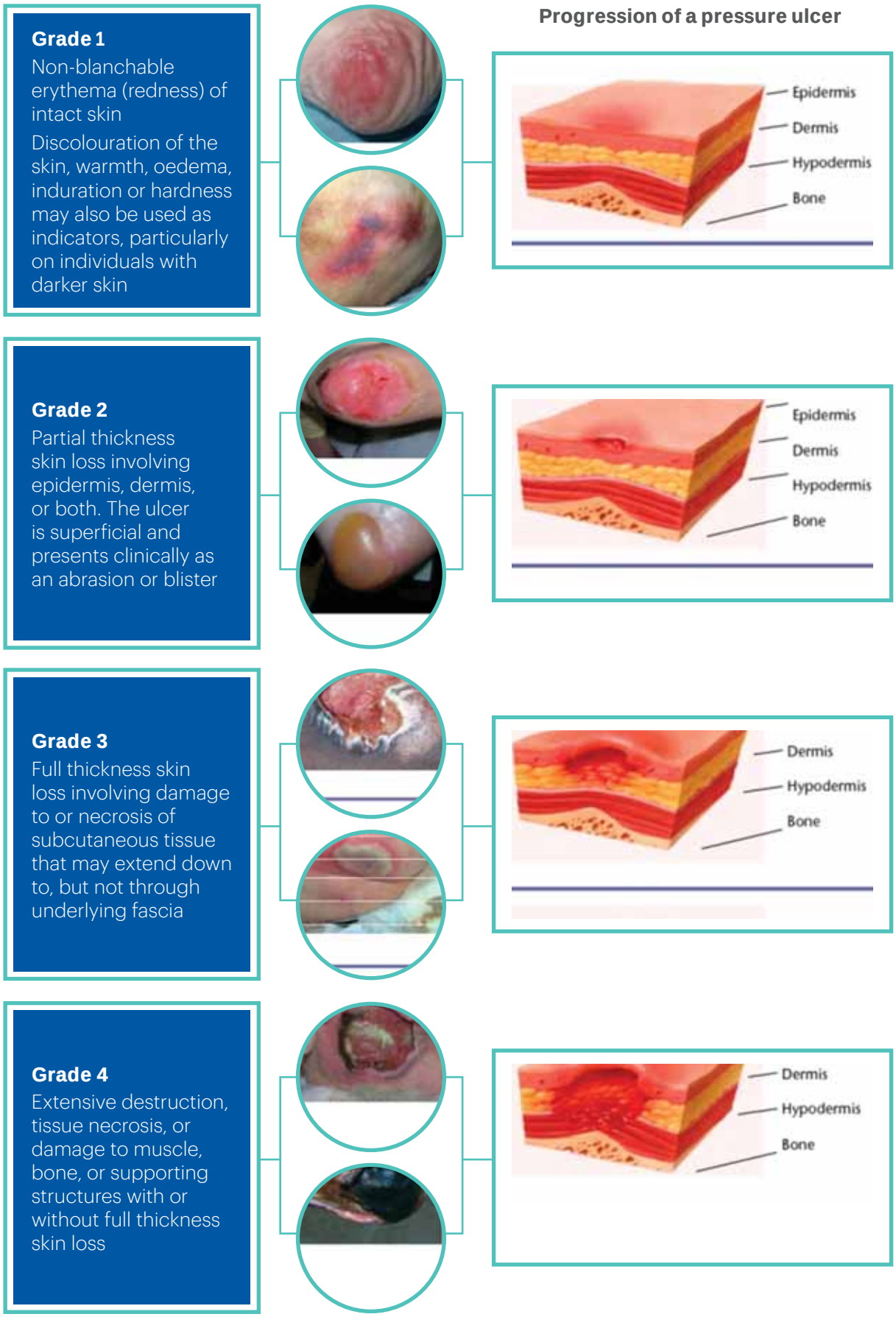
i. Assessment of the pressure sore:

- site/location;
- grading;
- pain;
- exudate amount and type;
- local signs of infection;
- peri-wound/surrounding skin;
- consider undermining, tracking, sinus or fistula;
- size – length, width and depth.

ii. Use baseline photographs for serial monitoring of the healing process (using phone-camera).

iii. Wound-dressing and debridement (for grade 3, 4 ulcers).

Figure 6.6: Grading of pressure ulcers



Source: European Pressure Ulcer Advisory Panel (EUPAP) grading tool.

Wound dressing

Steps to follow:

- cleanse most pressure ulcers with normal saline;
- a non-infected ulcer should not be cleaned with an antimicrobial solution as that will delay the healing process;
- a hydrocolloid dressing molds to the pressure ulcer and promotes healing and skin growth. These dressings can stay on for several days at a time.

Wound-debridement:

Nurses should consult and discuss with the team regarding the necessity of wound debridement. The pressure ulcer needs debridement in the following situations:

Figure 6.7: Pressure ulcer

- presence of devitalized tissue within the wound bed or edge of pressure ulcers;
- presence of biofilm is suspected or confirmed in the wound bed (presence of biofilm is suspected when the wound has delayed healing ≥ 4 weeks and fails to respond to standard wound care and/or antimicrobial therapy);
- presence of local infection in the ulcer.

Have a high index of suspicion of local infection in a pressure ulcer in the presence of:

- lack of signs of healing for two weeks;
- friable granulation tissue;
- malodour;
- increased pain in the ulcer;
- increased heat in the tissue around the ulcer;
- increased drainage from the wound;
- an ominous change in the nature of the wound drainage (e.g. new onset of bloody drainage, purulent drainage);
- increased necrotic tissue in the wound bed;
- pocketing or bridging in the wound bed.

b) Delirium

Delirium is a common, serious and often unrecognized neuropsychiatric disturbance in older patients.

Cardinal feature of delirium

Acute onset, varying levels of alertness and inattention are cardinal features of delirium, and obtaining historical details from a close family member or friend is critical in making a correct diagnosis of delirium.

Delirium is commonly encountered in older people in various clinical settings and is associated with significant morbidity and mortality, especially in intensive care units, inpatient settings and nursing homes, and following major medical illnesses or surgery.

It is commonly unrecognized in up to 70% of older patients and can lead to long-term functional and cognitive deficits.

The pathophysiology of delirium is currently unclear but posited to be the result of multiple pathogenic pathways eventually culminating in the dysfunction of various neurotransmitters and major brain networks.

Delirium commonly occurs due to multiple causes, and the most effective treatment strategy is to identify and address as many predisposing and precipitating factors as possible.

Dementia is the underlying risk factor in almost 75% of cases of delirium and must be suspected in patients with slowly progressive cognitive and functional deficits.

Etiology of delirium:

Advanced age, frailty, dementia and sensory impairment (hearing and vision) are the major risk factors for delirium. There are various precipitating factors for the development of delirium, which are summarized in the table below:

Table 6.4: Precipitating factors for the development of delirium

Precipitants of delirium	Examples
Geriatric conditions	Polypharmacy Urinary retention Faecal impaction Use of NG tubes, catheters or physical restraints Poor sleep Loss of visual or hearing aid Change of physical environment in patients with dementia
Medicines and toxins	Prescription medications (e.g. opioids, sedative-hypnotics, antipsychotics, lithium, skeletal muscle relaxers) Steroids Nonprescription medications (e.g. antihistamines) Alcohol intoxication and withdrawal Atypical alcohols (ethylene glycol, methanol) Medication side-effects (e.g. hyperammonemia from valproic acid, confusion from quinolones, serotonin syndrome) Medication with anti-cholinergic potential (e.g. amitriptyline, tizanidine, clozapine)
Infection	Sepsis, UTI, pneumonia, fever
Metabolic derangements	Electrolyte disturbance (elevated or depressed): sodium, calcium, magnesium, phosphate Endocrine disturbance (depressed or increased): thyroid, parathyroid, pancreas, pituitary, adrenal Hyperglycemia and hypoglycemia Hypercarbia, hypoxia Hyperosmolar and hypoosmolar states Nutritional: Wernicke encephalopathy, vitamin B12 deficiency, possibly folate and niacin deficiencies
Brain disorders	Stroke CNS infections: encephalitis, meningitis, brain or epidural abscess Epileptic seizures, especially non-convulsive status epilepticus Traumatic brain injury Hypertensive encephalopathy
Systemic organ failure	Cardiac failure Hematologic: thrombocytosis, hypereosinophilia, leukemic blast cell crisis, polycythemia Liver failure: acute, chronic Pulmonary disease Uremia
Physical disorders	Burns Electrocution Hypothermia, hyperthermia

Nursing management of delirium:

Nonpharmacologic strategies are the preferred treatment for delirium in older patients. Nurses can play a vital role in detecting delirium early and promoting comfort for older people with this condition. In some cases, it can be prevented by identifying risk factors and initiating evidence-based nonpharmacologic measures. These measures include:

Non pharmacological strategies for delirium

- providing a therapeutic environment;
- orienting the patient frequently;
- anticipating the patient's needs;
- ensuring that hearing aids and eyeglasses are available if the patient uses them;
- observing the patient's response to medications;
- checking laboratory tests;
- informing family members about the patient's delirium status and comforting them.

Following are the crucial strategies to follow for hospitalized older people who have delirium or are at risk for delirium:

i. Anticipate patient's needs:

- review prescribed medicines for adverse effects;
- reassess for pain and provide analgesic if required, with consultation from the treating doctor;
- monitor fluctuation in vital signs;
- provide orientation to the patient;
- encourage mobility;
- provide sensory aids as appropriate.

ii. Provide a therapeutic environment:

- reduce noise;
- provide adequate light;
- maintain consistency and continuity of nursing staff;
- avoid patient relocation or transfer, if possible;
- orient the patient to time, place and person as well as self;
- provide a soothing atmosphere;
- avoid sleep-disturbing environment;

- ensure adequate food and fluid intake to prevent dehydration;
- prevent constipation by medicine review or dietary modification;
- ensure prompt identification of urinary retention.

iii. Teach family members:

- provide education about signs, symptoms and causes of delirium;
- suggest ways the family can work with the patient to reduce symptoms;
- encourage family visits;
- encourage family members to bring diversional activities the patient enjoys, such as newspapers, magazines, photo albums, etc.;
- ask family members to contact the nurses if their loved one tries to get out of bed without assistance, pulls at tubes or dressings or needs pain medication.

c) Transferring techniques for bed-bound older people

Proper techniques should be followed for the efficient and safe transfer of a bed-bound patient in and out of the bed. These techniques will also help nurses and caregivers to prevent mechanical stress in their back and other parts of the body. The caregiver must consider the following points for the transfer of a bed-bound patient:

» Be aware of your physical capacity before planning any transfer or positioning activity.

» Seek appropriate help.

» Encourage the patient to be as independent as possible.

» Do not let the patient put their arms around your neck or grab you.

» Use a transfer belt to balance and support the patient.

» Keep the transfer surfaces, e.g. wheelchair and bed as close together as possible.

» Check the wheelchair position and lock the brakes. Keep the armrests and footrests swung out of the way.

» Let the patient look at the place where they are being transferred.

» If the patient can move, place the patient's hands on the bed or chair and assist in the movement. If the patient has had a stroke or is afraid, tell them to hold their hands close to the chest.

» Ask the patient to push and not pull on the bed rails, the chair, or you.

» Avoid sudden jerking motions.

» Never pull on the patient's arms or shoulders or neck.

» Get the patient to wear non-slip shoes during transfers.

Moving the patient out of bed to a chair/wheelchair:

- Place the chair at a 45-degree angle to the bed in such a way that the chair is aligned with the stronger side of the patient.
- Place the patient at the edge of the bed and allow to rest for a while if the patient feels dizzy.
- Tell the patient to push away from the bed with both hands.
- Position your knee between the patient's knees.
- Face the patient and support the patient's weak knee against one or both of your knees as needed.
- Place your arms around the patient's waist or use a transfer belt.
- Keep your back in a neutral position.
- Count "1-2-3" and tell the patient to stand up while pulling them towards you and pushing your knees into their knee, if needed.
- Once a patient is upright, get them to keep knees straight in a locked position.
- Support and help the patient to stay balanced.
- Get the patient to feel the chair with the back of their legs.
- Get the patient to reach back to the chair's arm-rests with both hands and sit down slowly.

Figure 6.8: Transferring technique

The nurse should use a transfer belt if the patient needs a lot of support during the transfer.

Moving the patient out of wheelchair to a bed:

- If possible, try to adjust the bed and chair to the same height.
- Place the chair at a 45-degree angle to the bed in such a way that it is aligned to the patient's stronger side. Lock the wheels.
- Follow in reverse order the steps given in 'moving the patient out of bed to a chair/wheelchair'.
- Support and guide the patient as needed.
- Position the patient as appropriate.

Nurse can make use of a transfer-board for this process.

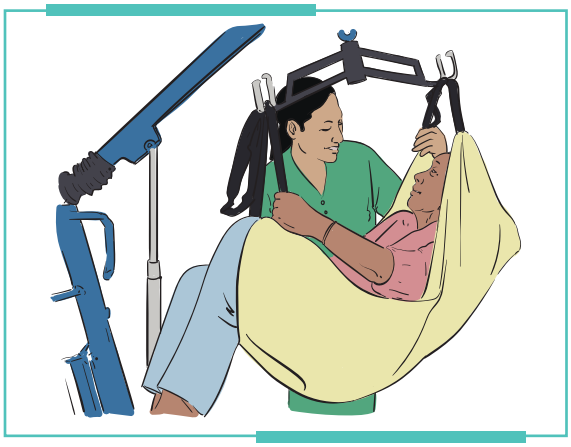
Figure 6.9: Transferring elderly

Assistive devices:

In case it is still difficult to transfer the patient with the above methods, there are various assistive devices to ease the transfers, such as:

1. transfer out of bed: transfer belt/transfer sling;
2. transfer into bed: transfer belts, transfer-boards, transfer-slides;
3. patient lifter;
4. ceiling hoist.

Figure 6.10: Transfer sling



MODULE
7

Care of older people with mental health issues

Learning objectives

- To understand the various forms of mental illness in older people
- To understand the aspects of care of older people with depression and dementia

1. Introduction

Older people are no less prone to mental health problems than younger adults, although such difficulties often manifest differently in old age. Over 20% of adults aged 60 years and above suffer from mental or neurological disorders (excluding headache disorders). Moreover, 6.6% of all disability (disability-adjusted life years or DALYs) among people above 60 years is attributed to mental and neurological disorders. These disorders in older people account for 17.4% of years lived with disability (YLDs).

The most common mental and neurological disorders in this age group are dementia and depression, which affect approximately 5% and 7% of the world's older population, respectively. Anxiety disorders affect 3.8%, while substance use problems affect almost 1% of the older population. Around a quarter of all deaths from self-harm occur among people aged 60 years and above. Substance abuse problems among older people are often overlooked or misdiagnosed.

Mental health problems are under-identified by health-care professionals and older people themselves, and the stigma surrounding these conditions makes people reluctant to seek help.

Older people experience life stressors that are more common in later life, like a significant ongoing loss in capacities, decline in functional ability, social isolation and bereavement due to the loss of spouse.

Elder abuse may be another hidden confounding factor that precipitates long-lasting psychological consequences, including depression and anxiety.

(Source: WHO. Mental health of older adults.)

2. Symptoms of mental illness in older people

Following are some of the symptoms of mental health issues in older people:

- sad or depressed mood lasting longer than two weeks;
- social withdrawal; loss of interest in things that used to be enjoyable;
- unexplained fatigue, energy loss or sleep changes;
- confusion, disorientation, problems with concentration or decision-making;

(Continued)

- increase or decrease in appetite; changes in weight;
- memory loss, especially recent or short-term memory problems;
- feelings of worthlessness, inappropriate guilt, helplessness; thoughts of suicide;
- physical symptoms that cannot otherwise be explained: aches, constipation, etc;
- changes in appearance or dress, or problems maintaining the home or yard;
- trouble handling finances or working with numbers.

3. Common mental health issues in older people

- Depression and suicide
- Dementia including Alzheimer's disease
- Substance use disorders
- Schizophrenia
- Delusional disorders
- Anxiety disorders: panic disorder, phobias, obsessive-compulsive disorder (OCD), generalized anxiety disorder (GAD), acute stress disorder, post-traumatic stress disorder (PTSD)
- Somatoform disorder
- Hypochondriasis
- Sleep disorders

This module will focus on the two most common disorders in older people: depression and dementia, which affect approximately 5% and 7% of the world's older population, respectively.

a. Depression and suicide in older people:

Depression and suicide are two causes of death that are increasing in prevalence even in older people. Depression in later life is a public health problem. If left untreated, it causes considerable distress and disability, affecting the individual, family and society. Diagnostically, it poses a challenge to the primary-care physician because of the atypical symptoms and comorbid conditions.

7% older population suffers from depression and it accounts for 5.7% of years lived with disability (YLDs) among those over 60 years old.

The suicide rate related to depression has increased more than ever in this population.

More older suicide victims are widowed and fewer are single, separated or divorced.

> Most older people who commit suicide communicate their suicidal thoughts to family or friends before the act of suicide. Older people with major medical illnesses or a recent loss should be evaluated for depressive symptomatology and suicidal ideation or plans.
>
> There should be no reluctance to question patients about suicide because no evidence indicates that such questions increase the likelihood of suicidal behaviour.

Management of depression in older people:

Depression is treatable. Depending on the severity and exact nature of an older person's depression, there are several things friends, caregivers and family members can do to ease a loved one's feelings of despair and emotional 'heaviness'.

Medication to the patient should be given in consultation with the doctor only. Selective serotonin reuptake inhibitors (SSRIs) are very effective for the management of depression in older people.

Nursing management for depression in older people:

Five main first-line interventions can be performed by nurses with any level of professional preparation.

1. **Communicate caring:** Nurses must be sensitive to the feelings of depressed older people and recognize the stigma attached to mental illness. They should express care about older people and their values. They should ask their older patients 'how they feel and think' and should encourage them to talk about happenings in their lives. Following this, the nurse should try to understand the situation from each patient's point of view.
2. **Help older people if you realize they are unusually sad or blue:** Nurses can help depressed patients by asking questions that help them to identify the things that they feel sad about, such as any losses that they may have suffered or are grieving over.
3. **Provide information about depression:** Depressed older people need to understand that their symptoms are part of this illness. Nurses may need to remind older people that they have lived a long life, have had valuable experiences, and have survived many difficulties that can help them to cope with the current problem.
4. **Modify the physical and social environment:** Increasing sensory input by turning on lights, increasing touch and giving a massage (with their permission), helps to increase an older person's sense of being loved, accepted and needed. Setting limits on the behaviour of older people only when necessary and doing things for them only when they really cannot do those activities for themselves helps to prevent dependency.

5. **Teach older people to be assertive and encourage them to tell the staff whatever is on their minds:** Opportunities should be created for meaningful interaction with others, including staff, other patients, family and friends.

b. Dementia:

- Dementia is a geriatric syndrome, usually of a chronic or progressive nature, in which there is deterioration in cognitive functions and the ability to perform everyday activities.
- It affects memory, thinking, orientation, comprehension, calculation, learning capacity, language and judgment. Consciousness is not affected.
- The impairment in cognitive function is commonly accompanied and occasionally preceded by deterioration in emotional control, social behaviour or motivation.

Difference between normal age-related memory change and dementia:

The primary difference between age-related memory loss and dementia is that the former is not disabling. The memory lapses have little impact on a person's daily performance and the ability to do what they want to do. Dementia, on the other hand, is marked by a persistent, disabling decline in two or more intellectual abilities, such as memory, language, judgment and abstract thinking.

Age-related memory loss and dementia:

Age-related memory loss and dementia are very different conditions, though they may share some overlap in symptoms. However, normal forgetfulness is often caused by a lack of focus and it never progresses into serious territory. Dementia, on the other hand, gets worse over time.

Transience and absentmindedness: Transience is when the brain forgets some memories over time. According to Harvard Medical School, this could be a means of removing unused memories to make room for new ones. Absentmindedness is similar, in that it relates to the brain's focus. For instance, forgetting an appointment might happen simply because the person was not preoccupied with the thought of it.

Potential signs of dementia:

Unlike normal age-related forgetfulness, memory loss linked to dementia is progressive and gets steadily worse. The patient eventually becomes dependent for ADL.

- **Forgetting important information:**
  i. forgetting names of friends and loved ones;
  ii. inability to remember some words.

When an older person shows these signs of extreme forgetfulness, it is a good idea to schedule a visit to the doctor.

- **Personality change:** People with dementia might experience major changes in personality. For example, an older person in the middle stages of dementia could suddenly be more prone to aggressive behaviour, paranoia or impulsiveness. Often, this is the hardest part of the disease for caregivers to deal with.

» **Disorientation:** Another common symptom of dementia is the tendency to become disoriented in new environments. If an older person with dementia moves to a different location, the unfamiliar stimuli may induce a feeling of insecurity. They might appear lost to onlookers and become easily aggressive with their caregivers.

Table 7.1: Typical age-related changes and dementia warning symptoms

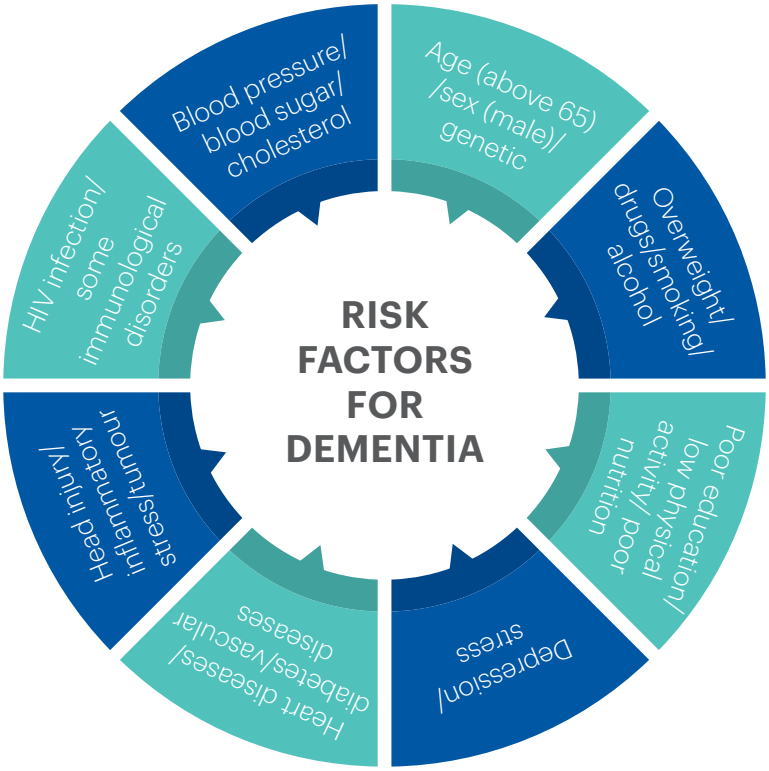
Typical age-related changes	Dementia warning symptoms
Forgets but remembers later (e.g. forgets where the vehicle was parked but remembers in seconds)	Experiences memory loss that interferes with daily routine (e.g. forgets how to make tea or wash clothes)
Experiences occasional gaps in memory (e.g. forgets some formula aspect of a math problem but remembers it later)	Has challenges solving problems performed for years (e.g. mathematical statistician now takes much longer to solve problems)
Occasionally needs help (e.g. needs help writing the grocery list)	Has difficulty accomplishing usual activities (e.g. no memory of the location of the market visited for years)
Occasionally forgets (e.g. forgets daughter's birthday but remembers it later)	Has confusion about a specific or usual place (e.g. does not know home address despite having lived in the home for years)
Experiences visual changes related to ageing (e.g. cataracts that affect vision)	Has trouble understanding visual images (e.g. difficulty determining whether seeing a bus or a truck)

Etiology of Dementia:

Dementia is a cluster of symptoms that occurs due to a decline in brain function. It affects a person's ADL by disrupting domains of memory, thinking and social abilities. The most common causes of dementia in individuals older than 65 years of age are (1) Alzheimer's disease; (2) vascular dementia; and (3) mixed vascular and Alzheimer's dementia.

There are a few reversible causes of dementia like metabolic abnormalities (e.g. hypothyroidism), nutritional deficiencies (e.g. vitamin B12 or folate deficiencies) or dementia syndrome caused by depression.

Figure 7.1: Risk factors for dementia



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Stages of Dementia:

The magnitude of care demanded by a patient with dementia depends on the stage of the disease. Following are the various stages of dementia with their clinical characteristics:

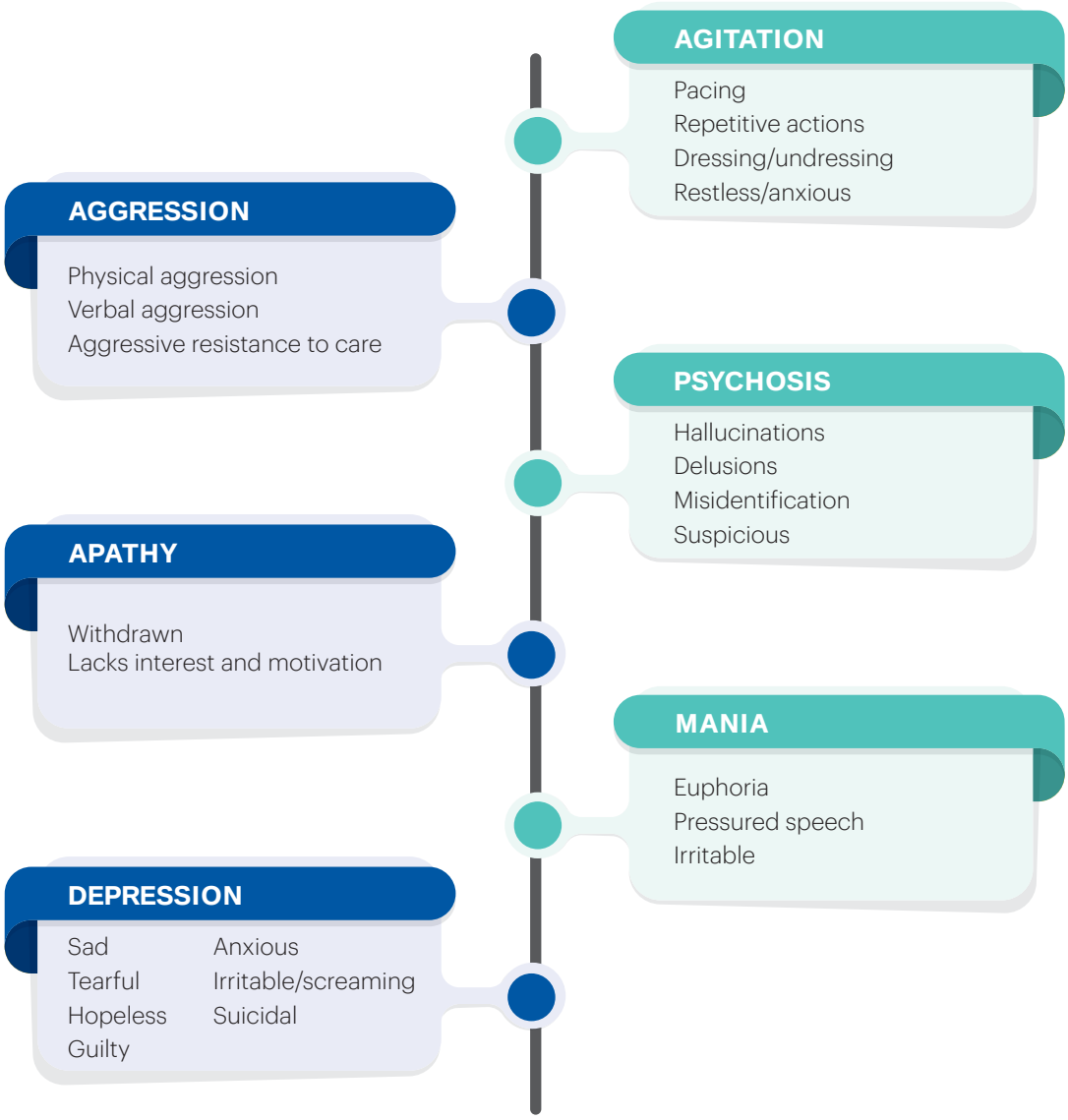
Table 7.2: Assessment of dementia care needs

Typical age-related changes	Dementia warning symptoms
Physical assessment	» Respiration » Urine » Bowel » Pain » Input and output (dehydration and hunger) » Medication review (polypharmacy and medicines that can precipitate delirium)
Psychological assessment	» Mood (anger outbursts, hopelessness, etc.) » Perception (hallucinations) » Behaviour (sleep, diet, sexual behaviour, self-harming)
Environmental assessment	» People and culture » Financial and legal requirements » Mobility - inside and outside the home Patients need to feel safe and comfortable in their environment.
Sociocultural assessment	» Living arrangements » Support network Find out how the patient's family is organized and the patient's role within it. Remember that this may change with the progression of dementia.

Non-pharmacological management of dementia:

Behavioural and psychological symptoms of dementia (BPSD): It is a heterogeneous range of psychological reactions, psychiatric symptoms and behaviours occurring in people with dementia of any etiology. Of all patients affected by dementia, 90% will experience BPSD that are severe enough to be labelled as a problem during their illness.

Figure 7.2: BPSD symptoms



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Nursing practices for management of BPSD:

Reduced stress-threshold model (Cohen-Mansfield): Persons with dementia progressively lose their coping abilities and therefore perceive their environment as more and more stressful. An environment of reduced stimulation is supposed to limit the stress experienced and thereby reduce the level of inappropriate behaviour.

Relaxation will reduce stress and decrease the undesirable behaviour.

Massage and touch are among the interventions used in dementia care that aim at reducing depression, anxiety, aggression and other related psychological and behavioural manifestations.

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Non-pharmacological management also includes cognitive/emotion-oriented interventions, such as reminiscing therapy, aromatherapy, light therapy, music therapy, animal-assisted therapy, etc.

- Reminiscence therapy involves the discussion of past activities, events and experiences with another person or group of people.
- Bright light therapy is an attempt to improve fluctuations in diurnal rhythms that may account for night-time disturbances and 'sundown syndrome'. This is used as older people with dementia experience a reduction in sensory input because they are visually less sensitive to light and have less exposure to bright environmental light.
- Aromatherapy is a form of alternative medicine that uses volatile plant materials, known as essential oils, and other aromatic compounds to alter a person's mind, mood, cognitive function or health.
- Music and art therapy are used as people with dementia may retain the ability to sing old songs. Therefore, music therapy can potentially enhance cognitive skills as well as social/emotional skills in older people and may also serve as an alternative to medication for managing behavioural symptoms of Alzheimer's disease. Art therapy has been recommended as a treatment for people with dementia, as it has the potential to provide meaningful stimulation, improve social interaction and improve levels of self-esteem.
- Animal-assisted therapy (AAT) is a goal-directed intervention in which an animal is an integral part of the treatment process. There are many different types of therapy animals, though dogs, cats and horses are most commonly seen. AAT reduces aggression and agitation and also promotes social behaviour in people with dementia.

Communication ability in older people with dementia

Dementia may affect a person's ability to communicate and this may fluctuate from day-to-day. As the disease progresses, it may become increasingly difficult to communicate with the person. In patients with dementia, sensory perception may be limited and, frequently, the ability to communicate with the caregiver may be impaired.

Table 7.3: Communication techniques for dementia patient

Attention	» Say the name, gain eye contact and speak directly to the person. » Use appropriate gestures, such as gently touching the person's arm.
Verbal techniques	» Use short simple sentences: speak slowly and clearly with easy-to-understand sentences. » Repeat sentences or change words with ones with the same meaning if the person does not seem to understand. » Be specific. » Do not say 'don't you remember?' » Offer simple choices – closed questions. » Give instructions one step at a time.
Non-verbal techniques	» Use labels that can be words or pictures. » Use signals – touching an arm, pointing to things, body language (smiling, frowning, etc.). » Listen – use reflection and paraphrasing. » Give time for the person to answer. » Reduce distractions.

Table 7.4: Dos and don'ts of dementia care

Dos	Don'ts
Talk in short, simple sentences of seven words or less.	Do not ask too many questions. Keep it to minimal choices: "Would you like coffee or juice?"
Smile, but not in a mocking way. Facial expression is important.	Calmly wait for a response. Do not talk, and let the patient think.
If the patient is hard of hearing, lower your tone of voice as you talk louder and speak clearly. Our voice tones tend to get higher when we talk louder, which makes it harder for older people to hear, or they may think you are yelling at them.	Do not stand over the patient in dominance. Instead, talk at eye level.
Offer food, drinks and activities according to the patient's liking.	Do not invade the patient's space, but also do not be afraid to touch. A light hand over the patient's hand is reassuring.
Reminisce with a patient.	Do not disagree, argue or correct.

Dementia-friendly home:

The design of the home and its layout can have a profound effect on people with dementia. Depending upon the stage of dementia, patients might forget where they are, where things are, and how things work.

Nurses should offer the following aspects of home-environment modification that will help patients as well as caregivers:

Table 7.5: Modifications of home environment

Better lighting	» It helps in avoiding confusion as well as minimizes the risk of falls. » Adequate lighting is required around stairs and toilets. » Regular eye-check helps in the assessment of visual acuity and correction if required.
Reduction of excess noise	» It helps in reducing confusion and promotes quality sleep. » Make sure to switch off the radio or television when not in use. » Ensure regular ear check-ups.
Safer flooring	» Shiny or reflective flooring may be perceived as being wet and the person with dementia may find it difficult to walk over it. So, avoid it. » The colour of the mat on the floor must contrast with the walls.
Labels and signs	» On cupboards, doors, toilet door, ensure labels in contrasting colour to the background. » See-through doors can help.
Outside space/ bathroom modification	» Ensure a flat walking surface to prevent falls. » Avoid slippery rugs/mattress on the floor. » Secure the outside space with a fence to prevent wandering off. » Bathrooms should have non-slippery floors.
Additional arrangements	» Install large LCD clocks in the room which display time, date as well as day/month/year. » Use reminder devices, e.g. for medications.

Table 7.6: Principles of dementia care

» Know the early signs of dementia.
» Early diagnosis of dementia helps people receive information, support and treatment at the earliest possible stage.
» Communicate sensitively to support meaningful interaction.
» Promote independence and encourage activity.
» Recognize the signs of distress resulting from confusion, and respond by diffusing a person's anxiety and supporting their understanding of the events they experience.
» Family members and other caregivers are valued, respected and supported, just like those they care for, and are helped to gain access to dementia care advice.
» Managers need to take responsibility to ensure members of their team are trained and well-supported to meet the needs of people with dementia.
» Nurses need to work as part of a disciplinary team to support the person with dementia.

Table 7.7: Medication used in Alzheimer's dementia and adverse events

Medication	Adverse reaction	Special precaution
Acetylcholinesterase inhibitors Donepezil, Rivastigmine	Insomnia (more common with Donepezil) Nausea, loose motion	Must be used cautiously in patients with conditions leading to QT prolongation

Other mental health disorders in older people:

» **Schizophrenia**

This is a disorder that affects a person's ability to think, feel and behave clearly. Its signs and symptoms include emotional blunting, social withdrawal, eccentric behaviour and illogical thinking. Delusions and hallucinations are common. Consult a psychiatrist if symptoms are severe.

» **Delusional disorders**

Delusional disorders can occur under physical or psychological stress and can be precipitated by the death of spouse, loss of job, retirement, social isolation, adverse financial circumstances, debilitating medical illness or surgery, visual impairment and deafness. Delusions can also accompany other disorders, such as Alzheimer's dementia, alcohol-use disorders, schizophrenia, depressive disorders, and bipolar disorder, which need to be ruled out.

» **Anxiety disorders**

Anxiety disorders are the most common and pervasive mental disorders. The term 'anxiety disorder' refers to specific psychiatric disorders that involve extreme fear or worry, and include generalized anxiety disorder (GAD), panic disorder and panic attacks, agoraphobia, social anxiety disorder, selective mutism, separation anxiety, and specific phobias. Signs and symptoms of anxiety include feeling nervous, irritable or on edge, panic or doom, having an increased heart rate, breathing rapidly (hyperventilation), sweating, and/or trembling, feeling weak or tired, difficulty concentrating, trouble in sleeping and experiencing gastrointestinal (GI) problems.

» **Somatoform disorders**

These disorders are characterized by physical symptoms resembling medical diseases and are relevant to geriatric psychiatry because somatic complaints are common among older people. More than 80% of people over 65 years of age have at least one chronic disease, usually related to arthritis or cardiovascular problems. After the age of 75 years, 20% have diabetes and an average of four diagnosable chronic illnesses that require medical attention.

» **Hypochondriasis**

It is common in people over 60 years of age, although the peak incidence is in those aged 40–50 years. The disorder usually is chronic, and the prognosis guarded. Repeated physical examinations help reassure patients that they do not have a fatal illness. Invasive and high-risk diagnostic procedures should be avoided unless medically indicated.

» Sleep disorders

Advanced age is the single most important factor associated with the increased prevalence of sleep disorders. Sleep-related phenomena reported more frequently by older people are sleeping problems, daytime sleepiness, daytime napping and the use of hypnotic medicines. In addition to altered regulatory and physiological systems, the causes of sleep disturbances in older people include primary sleep disorders, other mental disorders, general medical disorders, and social and environmental factors.

The lack of a daily structure and social or vocational responsibilities contributes to poor sleep. Because of the decreased length of their daily sleep-wake cycle, older people without daily routines may experience an advanced sleep phase, in which they go to sleep early and awaken during the night.

Many older people use alcohol, hypnotics, and other CNS depressants to help them fall asleep. Nurses must monitor older people who have been prescribed sedative-hypnotic medicines for sleep issues, for unwanted cognitive, behavioural and psychomotor effects, including memory impairment, residual sedation, rebound insomnia, daytime withdrawal, and unsteady gait.

Sleep hygiene for older people:

Nurses should educate older people as well as caregivers about following the rules of sleep hygiene:

Table 7.8: Sleep hygiene practices

Limiting daytime naps to 30 minutes	Napping does not make up for adequate nighttime sleep. However, a short nap of 20–30 minutes can help to improve mood, alertness and performance.
Avoiding stimulants such as caffeine and nicotine close to bedtime	While alcohol is well-known to help people fall asleep faster, excessive intake closer to bedtime can disrupt sleep in the second half of the night, as the body begins to process the alcohol.
Exercising to promote good quality sleep	As little as 10 minutes of aerobic exercises, such as walking or cycling, can improve nighttime sleep quality.
Steering clear of foods that can disrupt sleep	Heavy or rich foods, fatty or fried meals, spicy dishes, citrus fruits and carbonated drinks can trigger indigestion in some people. When this occurs close to bedtime, it can lead to painful heartburn that disrupts sleep.
Ensuring adequate exposure to natural light	This is particularly important for individuals who may not venture outside frequently. Exposure to sunlight during the day, as well as darkness at night, helps to maintain a healthy sleep-wake cycle.
Establishing a regular relaxing bedtime routine	A regular nightly routine helps the body recognize that it is bedtime. This could include taking warm shower or bath, reading a book, or light stretches. Encourage patients to avoid emotionally upsetting conversations and activities before attempting to sleep.
Making sure the sleep environment is pleasant	Mattress and pillows should be comfortable. The bedroom should be cool – between 60 and 67 degrees – for optimal sleep. Bright light from lamps, cell phone and TV screens can make it difficult to fall asleep; lights should be turned off or adjusted when possible. Consider introducing your patient to blackout curtains, eye shades, ear plugs, 'white noise' machines, humidifiers, fans and other devices that can make the bedroom more relaxing.

MODULE

8

Palliative care and end-of-life care

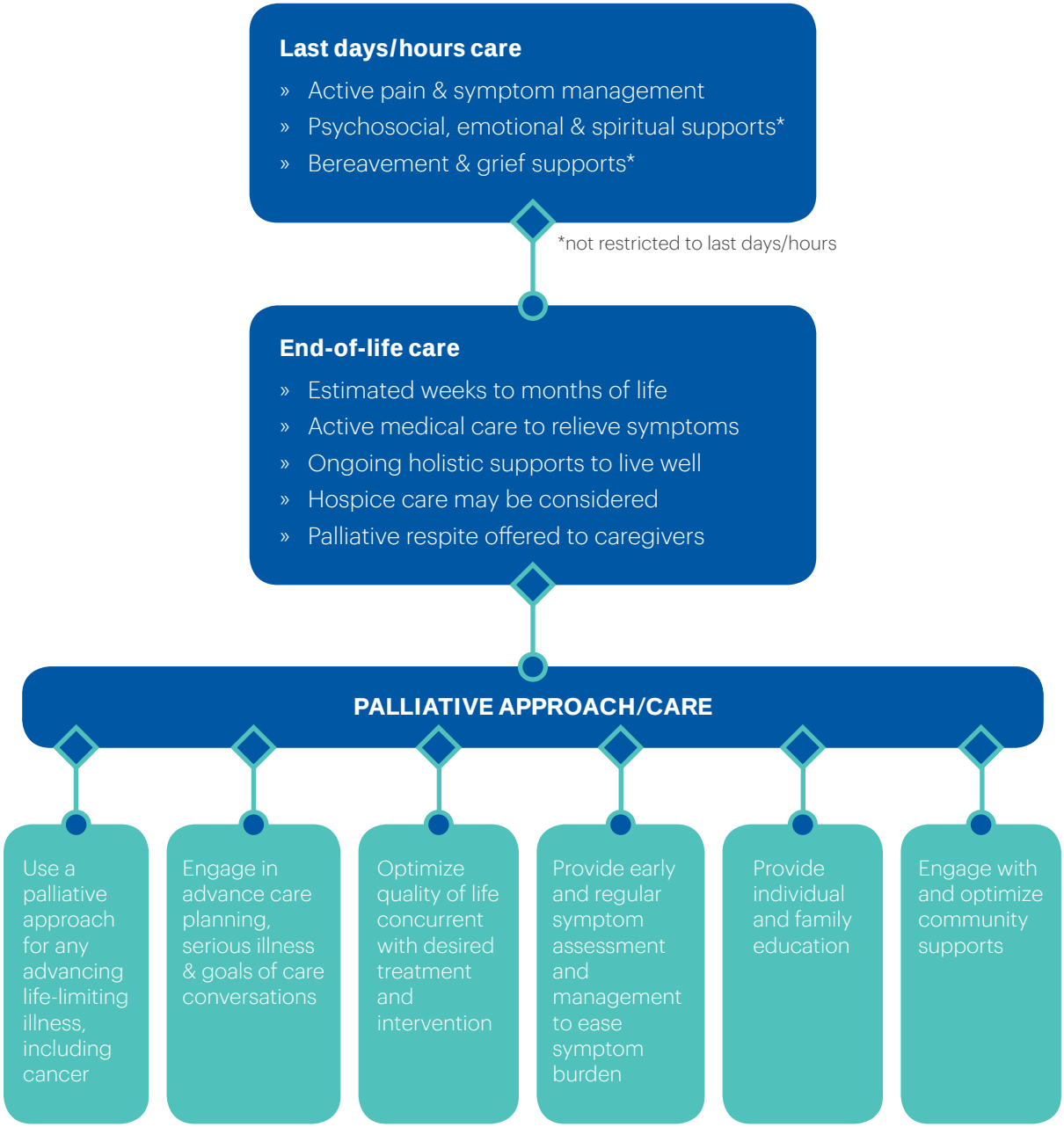
Learning objectives

- To understand the assessment of common symptoms related to the terminal stage
- To understand the management of those common symptoms
- To understand the role of nurses in nutritional care
- To understand the concept of 'good death'

1. Introduction

- As per WHO 2018 , Palliative care is an approach that improves the quality of life of patients (adults and children) and their families who are facing problems associated with life-threatening illness. It prevents and relieves suffering through the early identification, correct assessment and treatment of pain and other problems, whether physical, psychosocial or spiritual.
- The goal of palliative care is to promote the best possible quality of life (QOL) for patients and their families.
- Principles of palliative care
  - Symptom management
  - Psychological and spiritual care
  - Multidisciplinary team approach
  - Patient and family care decision
- End-of-life care is a component of palliative care.
- People are considered to be approaching the end of life when they are likely to die within the next 12 months, although this is not always possible to predict. This includes people whose death is imminent, as well as people who:
  - have an advanced incurable illness, such as cancer, dementia, motor neuron disease, end-stage renal failure, COPD, heart failure, etc;
  - have existing medical conditions, if they are at the risk of dying from a crisis in their condition, e.g. heart failure, COPD, etc.
  - have a life-threatening acute condition caused by a sudden catastrophic event, such as an accident, complicated alcohol withdrawal syndrome or stroke.

Figure 8.1: Palliative care approach



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2. Role of a nurse in palliative care

Palliative care nurses address the complexity of patient and family needs and serve as cost-effective health care coordinators for patients and families with both chronic and life-limiting illnesses. They strive to reduce suffering and improve the quality of living and dying across the lifespan.

To ensure the quality of care to the patient, the nurse acts as a link in:

» different levels of health care;

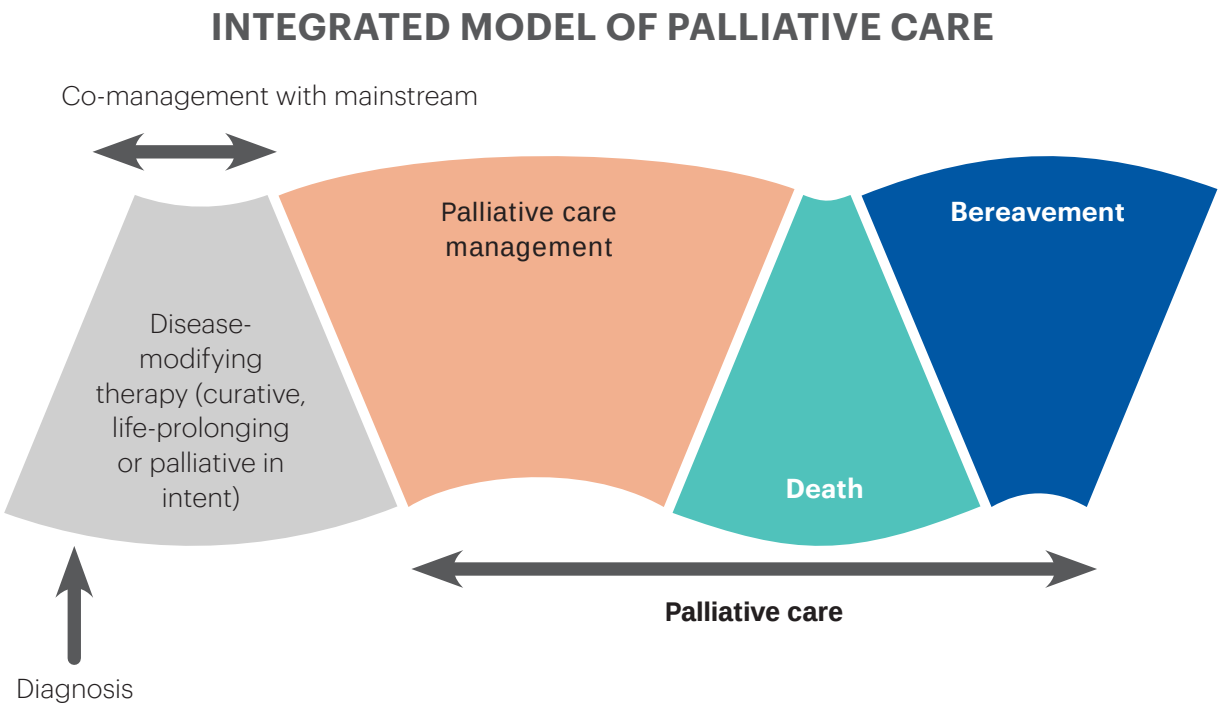
» different professions;

» patient and family.

Importance of palliative care:

- provides relief from pain and other distressing symptoms;
- affirms life and regards dying as a normal process;
- intends neither to hasten nor to postpone death;
- integrates the psychological, spiritual and social aspects of patient care;
- offers a support system to help patients live as actively as possible until death;
- offers a support system to help the family cope during the patient's illness and in their bereavement;
- uses a team approach to address the needs of patients and their families, including bereavement counselling, if indicated;
- enhances QOL, and may also positively influence the course of illness;
- includes the investigations needed to better understand and manage distressing clinical complications.

Figure 8.2: Integrated model of palliative care



Source: Adapted from "Introducing palliative care", 4th edition, 2002 by Robert Twycross

3. Common physical symptoms that cause distress at the end of life:

- breathlessness;
- nausea and vomiting;
- pain;
- fatigue;
- anxiety and restlessness;
- delirium.

a) Management of breathlessness:

For some patients, particularly those with cancer, breathlessness can be frightening and a signal of a severe deterioration in their health and also, perhaps, of their hopes. Similarly, anxiety itself can exacerbate feelings of breathlessness.

1. Reassure the patient that you are there to help.
2. Carry out an initial assessment: vital sign plus oxygen saturation measurement by a pulse oximeter.
3. If the patient is hypoxic (SpO2 <92%), administer oxygen through appropriate delivery devices.
4. Initiate urgent consultation with the team if the onset is acute.
5. Ensure optimal positioning as it is important when some of the lung-expanding capacity may be compromised. Make sure your patient has a good supportive chair or position in bed to comfortably expand their chest cavity, as it can help to reduce some feelings of breathlessness.
6. The availability of fresh air either through the use of doors and windows or by using a fan/ hand-held fan may also improve the feeling of breathlessness.
7. Use palliative care medicines in consultation with the treating doctor:
   - use of morphine, either through the oral or parenteral route, can be particularly beneficial in patients with breathlessness at the end of life;
   - use of a low dose of morphine can help to reduce the sensation of breathlessness;
   - in case the symptom is not under control, the dose of morphine may be titrated upwards;
   - sometimes it is also useful to add in a benzodiazepine.

b) Management of pain:

Nurses should assess the pain, follow the nursing care plan and accordingly intervene. WHO has developed **three principles** that are useful to consider when using palliative care medicines to manage pain.

Management of pain by WHO Principle

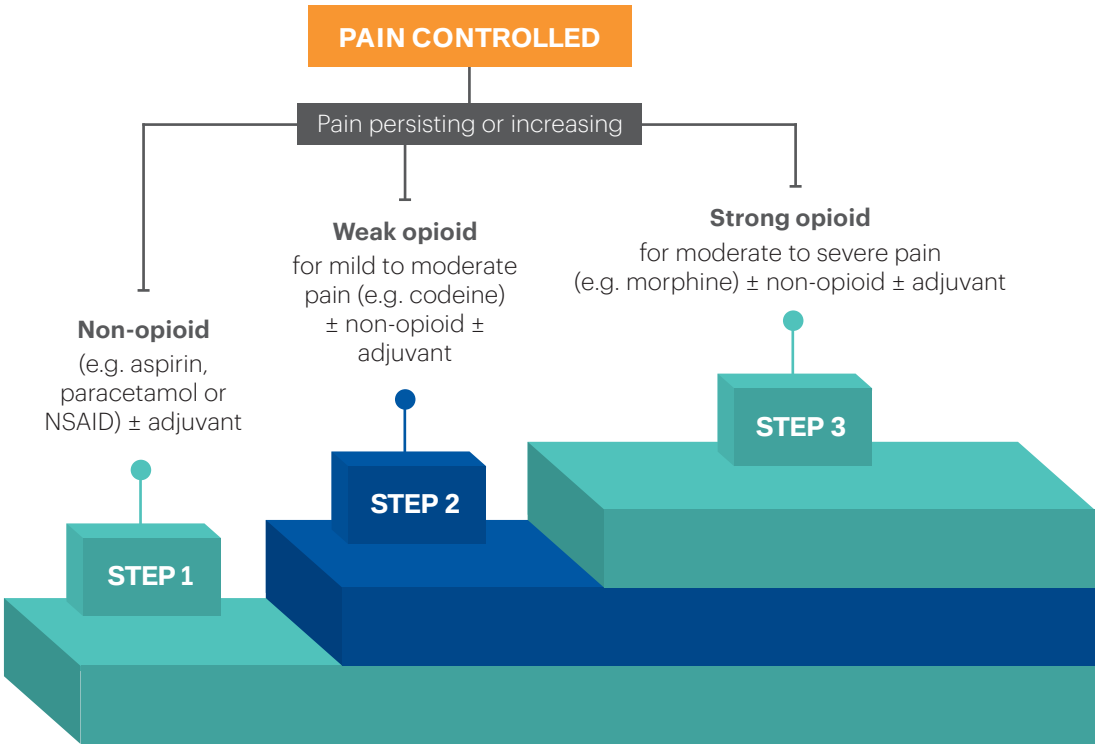
Principle 1: By the mouth: where possible, the oral route should always be used. Try to avoid intramuscular or intravenous routes unless specifically indicated.

Principle 2: By the clock: Doses of analgesic should be given at the appropriate fixed intervals of time. The dose should be increased gradually until the patient is comfortable. The next dose should be given before the effect of the previous dose has worn off.

Principle 3: By the ladder: This refers to the three-step WHO analgesic ladder. If pain occurs, there should be prompt administration of medicines in the following order:

- non-opioids (e.g. acetaminophen)
- as necessary, mild opioids (e.g. codeine)
- then strong opioids (morphine) until the patient is free of pain.

Figure 8.3: Step-wise approach recommended by the WHO analgesia ladder



Source: 5 https://images.app.goo.gl/8e9iStYePu1sGHQ88

Morphine for pain relief:

Nurses should consider the following when administering morphine to their patients:

Table 8.1: Special precautions while administering morphine

Adverse reactions	Special precautions
1. Central nervous system: drowsiness, headache 2. Gastrointestinal: constipation, nausea, vomiting (usually resolves spontaneously within 1-2 weeks)	» Monitor closely for respiratory depression, especially during initiation or dose escalation » May cause constipation which may be problematic in patients with unstable angina and patients with post-myocardial infarction » May cause severe hypotension (including orthostatic hypotension and syncope) in susceptible individuals

c) Fatigue and its management:

Fatigue associated with advanced disease is described as an excessive sense of tiredness that is not relieved through rest. Many patients find that fatigue results in severely impairing their lives, as they become debilitatingly tired after only a short time or after undertaking even a simple regular action, such as having a bath.

According to the European Association for Palliative Care (EAPC et al., 2008), all patients with palliative care needs should be screened with a question such as **'Do you feel unusually tired or weak?'** If the response is positive, further assessment should be undertaken.

Table 8.2: Fatigue Severity Scale: Using Visual Analogue Scale (0–7)

Components	Score
1. My motivation is lower when I am fatigued. (0–7)	
2. Exercise brings on my fatigue. (0–7)	
3. I am easily fatigued. (0–7)	
4. Fatigue interferes with my physical functioning. (0–7)	
5. Fatigue causes frequent problems for me. (0–7)	
6. My fatigue prevents sustained physical functioning. (0–7)	
7. Fatigue interferes with carrying out certain duties and responsibilities. (0–7)	
8. Fatigue is among my three most disabling symptoms. (0–7)	
9. Fatigue interferes with my work, family or social life. (0–7)	
Total score:	
Mean score:	

(Reference: Mean score for normal healthy adults: 2.3)

Scores higher than 2.3 indicate the severity of the patient's symptoms. This scale also allows for a longitudinal assessment of the patient's symptoms to be made and to examine the patient's experience of the symptom over time.

Fatigue remains a complex symptom to manage effectively. The guiding priority has to be to remember that people often have very little energy left to care for themselves and achieve the things that are important to them.

Helping someone to ***complete the basic care requirements of hygiene, nutrition and elimination*** can preserve valuable energy as well as enable them to feel more able to look forward and make plans.

Management plans involve acknowledging the symptom and assessing it and then helping the patient to set small achievable goals. It also necessitates exploring their energy patterns and prioritizing actions to enable them to do the things they want to do the most.

4. Nutritional support in palliative care

A common feature in palliative care is reduced oral intake. Patients may require additional support to ensure they receive adequate nutrition and hydration. However, the decisions concerning nutrition should always be person-centred, individualized and open to change in line with any change in condition.

As the disease progresses, there would be a progressive deterioration in symptoms due to multiple factors like fatigability, muscular weakness and dysphagia. A poor nutritional intake would impact patients not only physically but also psychologically. Nutritional deterioration maintained as weight loss and change in body image.

The aim of nutritional support changes with disease progression. ***Aggressive feeding may not be appropriate***, especially if eating and drinking cause discomfort or anxiety to the patient. **Meaningful interactions between the patient, caregivers, and the medical team are important to** fulfil each patient's specific needs and thus improve the QOL.

Patient must relive for/nutrition but the **emphasis is on QOL and the relief of symptoms**, rather than taking to nutritional therapy.

a) Barriers to eating and ways to handle:

Difficulty chewing/swallowing	→	Adapt consistency of food
Nausea/vomiting	→	Clear liquids
Anorexia/early satiety	{	Food preferences, small
Overwhelmed by portion size	{	frequent meals, kcal foods and supplements
Xerostomia	→	Candy, ice chips, stews, sauces
Taste and smell changes	→	Lukewarm bland foods

b) Hydration:

Signs of dehydration should be checked everyday and help should be given to keep the patient's mouth and lips moist.

People who want to drink fluids should be given help to carry on drinking if they can still swallow. While they are drinking, they must be checked for problems with swallowing.

Some people may not want to drink in the last days of their life, and swallowing may become difficult.

Artificial hydration may be suggested (fluids through a drip or tube) if it could make the patient more comfortable. However, for a person who is already at the end of their life, it will not necessarily help them live longer, and it might not be the best option for everyone.

Some people consider that simple measures, such as attention to oral hygiene, are sufficient to prevent discomfort, and intravenous hydration at the end-stage is unnecessarily invasive.

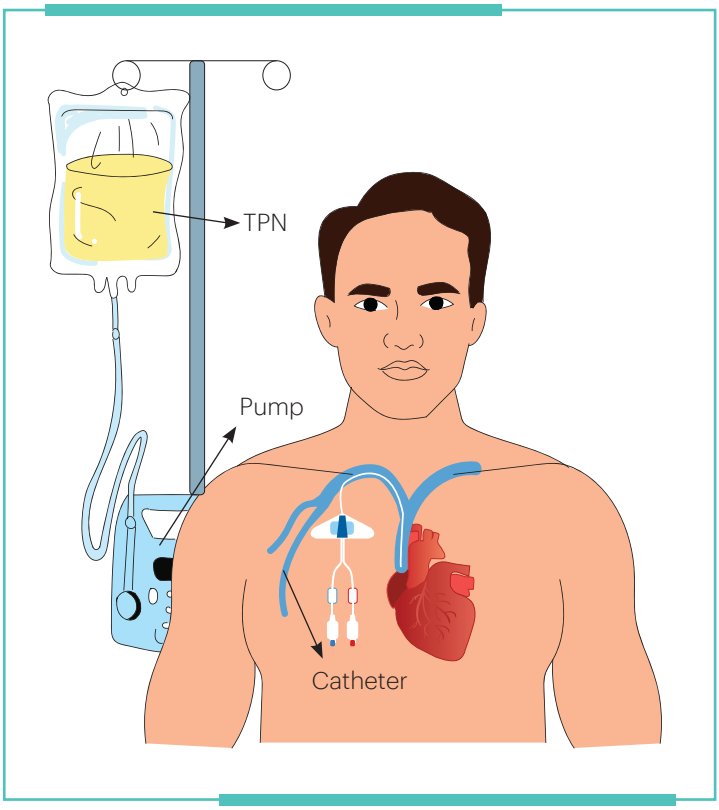
c) Oral supplementation:

- Increase energy intake by:
  - increased protein intake;
  - frequent bolus;
  - reduced volume;
  - easy ingestion.
- Decrease thirst by:
  - keeping the mouth wet;
  - keeping lips lubricated;
  - good oral care;
  - small sips of liquids;
  - sucking iced water or fruits.

d) Artificial nutrition

There are ways to ensure a person's **comfort** at the **end of life** by treating dry lips and mouth. Legally, **artificial nutrition** and **hydration** are considered medical treatments that may be refused at the **end of life** by patients/families.

Figure 8.4: Total parenteral nutrition



Source: https://www.mountnittany.org/articles/healthsheets/2904

Best practices to follow when considering artificial or parenteral nutrition in end-of-life care:

- full expert medical assessment, preferably by physician with interest in nutrition support;
- assess mental capacity for informed consent process;
- maintain good communication with patient, relatives and advocates;
- take into account advanced directive if available;
- language should be clear and unambiguous;
- give enough time for discussion and decision-making;
- coordinate all skills required through a nutrition team;
- consider trial of treatment with clear objectives over agreed duration;
- anticipate decline in cognitive function and discuss advanced decisions;
- good nursing care of mouth, attention to oral nutrition and hydration in and out of hospital;
- NG tube passage must be performed safely and secured with nasal halter if necessary;
- SALT assessment;
- use oral fluids whenever possible, with altered consistency when needed;
- tube feeding is always the last resort;
- what is technically possible is not always in patient's best interests;
- PEG placement should be by operator involved and in agreement with consent process.

SALT= speech and language therapist

5. Managing a patient in the last 48 hours of life

a) **Pain management:** opioids and benzodiazepines are used for this purpose, and also help to reduce anxiety and breathlessness.

b) **Medication review:**

- Medicine for primary prevention (e.g. statins) may be discontinued.
- Similarly, when reviewing medication at this stage of a patient's life, only medication aimed at preventing distressing symptoms (e.g. analgesics, antiemetics, anxiolytics, anti-secretary) should be continued.

c) **Oral care:** being less able to take oral fluids, the patients become dehydrated. It leads to dry mouth with cracks and fissures. The mouth becomes harder to clean and the tongue gets coated with a white film. The whitish coat of mouth can also be secondary to oral candidiasis. Oral care protocol needs to be followed.

d) **Terminal restlessness management:** This is a difficult symptom, both to observe and to manage with the patient and family. It occurs in 85-90% of the patients at the very end of life. It can be very distressing and exhausting to observe and leaves caregivers in the position of being unable to meet the needs of the patient, especially at home. A few of the causes leading to such patient distress may be blocked urinary catheters or poor pain control. Appropriate pharmacological therapy can alleviate this problem to a great extent.

e) **Noisy breathing management:** This can be one of the most distressing symptoms for caregivers to witness at the end of life, as the dying person can no longer clear the airways.

Some of the steps that can alleviate this distressing stage are:

a. repositioning the patient using the bed-back or pillows;

b. turning the patient;

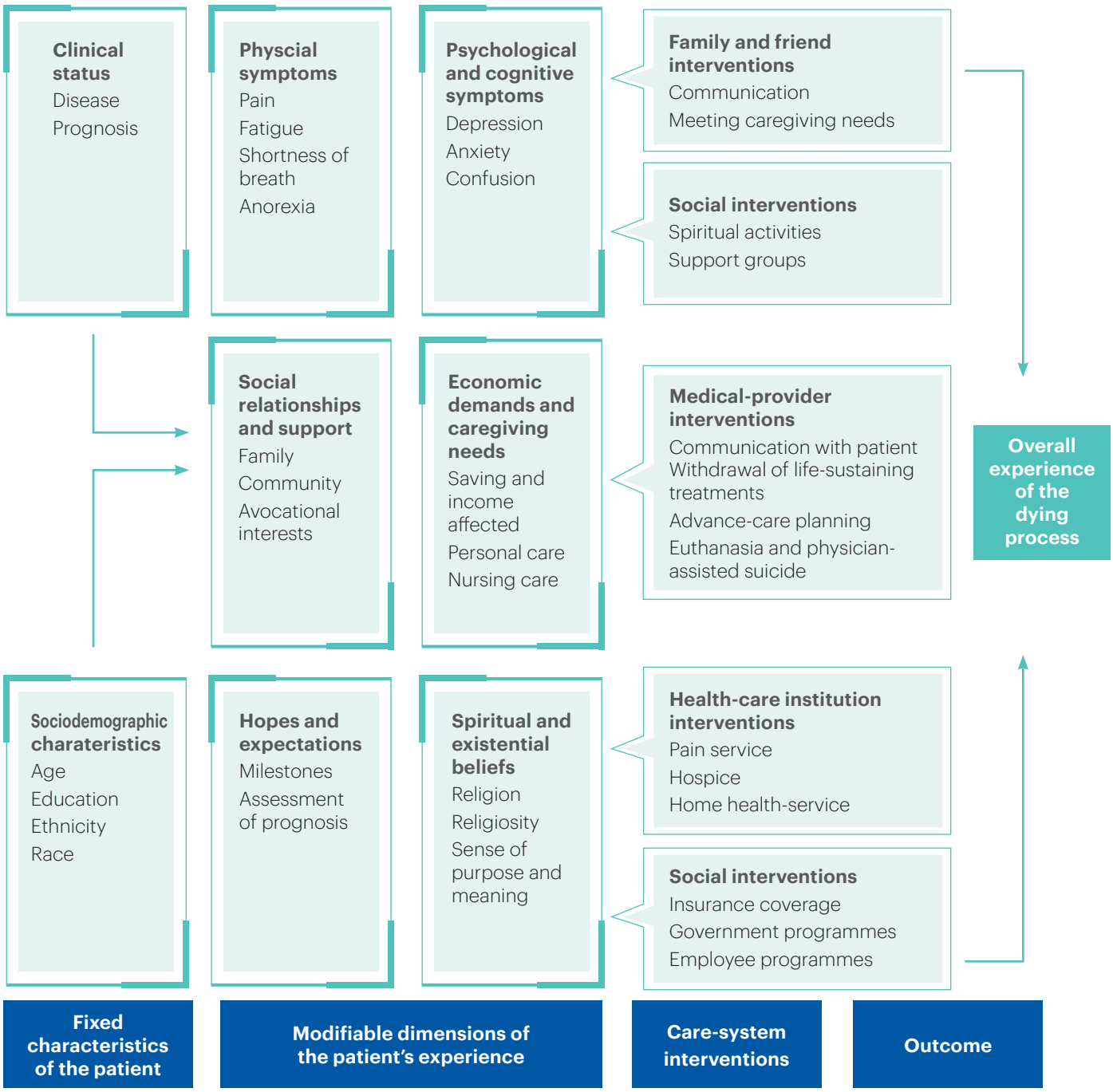
c. gentle suctioning;

d. medication: medicines like hyoscine butyl-bromide can be used to reduce oral secretions.

6. Good death

Institute of Medicine defines 'good death' as "death that is: free from avoidable distress and suffering for patients, families, and caregivers; in general accord with patients' and families' wishes; and reasonably consistent with clinical, cultural, and ethical standards".

Figure 8.5: Dying experience



Source: E.J. Emanuel, L.L. Emanuel. The promise of a good death. Lancet, 351 (1998)

7. Supporting the family members of a dying person

Nurses should consider the following aspects while supporting the family members of a dying person:

- understand the family, the relationships within it and some of the loss-related behaviours exhibited by them;
- encourage open communication between all family members;
- make the family members aware of the formal as well as informal processes they might need to go through;
- help to expedite the process of transfer from the inpatient ward to the appropriate place, e.g. mortuary;
- the family members might have misconceptions regarding the illness and the quality of care the deceased received. So, always ensure clear and open communication between families, patients and health-care professionals.

MODULE

9

Abuse of older people

Learning objectives

- To understand the concept and health consequences of abuse of older people
- To understand measures to prevent the abuse of older people

1. Introduction

WHO defines elder abuse/abuse of older people as "a single, or repeated act, or lack of appropriate action, occurring within any relationship where there is an expectation of trust which causes harm or distress to an older person".

Based on available evidence, WHO estimates that 15.7% of people 60 years and older are subjected to abuse. These prevalence rates are likely to be under-estimates, as many cases of elder abuse are not reported. Globally, the numbers of people affected are predicted to increase in the coming years, with significant increase in ageing populations.

Health effects of abuse include traumatic injury and pain, as well as depression, stress and anxiety. Abuse of older people can lead to an increased risk of long-term care placement, use of emergency services, hospitalization and death.

2. Types of abuse of older people

Table 9.1: Types of abuse in older people

Type of abuse	Examples
Psychological/emotional: the infliction of anguish, pain or distress through verbal or non-verbal acts.	Verbal assaults, insults, threats, intimidation, humiliation, harassment (from family, friends, or regular activities), giving an older person the 'silent treatment', forced social isolation
Neglect: the refusal or failure to fulfil the basic requirements of an older person	Refusal or failure to provide an older person with: food, water, clothing, shelter, personal hygiene, medicine, personal safety, other essential needs, either implied or agreed
Abandonment: desertion by an individual who has assumed responsibility for providing care and support to an older person	Desertion of an older person at a hospital, a nursing care facility, or other similar institutions; desertion of an older person at a shopping centre or other public location; an older person's report of being abandoned
Physical: the wilful infliction of physical pain, injury or impairment	Striking (with or without an object), hitting, beating, pushing and shoving, shaking, slapping, kicking, pinching, burning, inappropriate use of medicines and physical restraints, force-feeding, and physical punishment of any kind
Sexual: non-consensual sexual contact of any kind with an older person	Rape, unwanted touching, all types of sexual advances, or innuendos
Financial: illegal or improper use of an older person's finances, property or assets	Cashing an older person's cheques without authorization or permission; forging an older person's signature; misusing or stealing an older person's money or possessions; coercing or deceiving an older person into signing any document (e.g. contracts or will) and improper use of conservatorship, guardianship or power of attorney
Spiritual: when a person in religious authority or with a unique spiritual practice misleads and maltreats another person in the name of God	Unreasonable control of a person's basic right to choose in spiritual matters; prevention from practising faith; isolation or separation from family and friends due to religious affiliation

3. Risk factors for abuse

Older people who are commonly abused include the following: those with dementia, poor educational status, physical disabilities, depression, loneliness or lack of social support; those who abuse alcohol or other substances; those who are verbally or physically combative with the caregiver; those who have a shared living situation; and those facing social isolation, mental impairment or dependent on their care providers.

Places of abuse of older people and common perpetrators

Older people are commonly abused at home, workplaces, public places, public transport, crowded places and health-care centres. Common abusers are family members, spouses, neighbours, caregivers, health-care providers, colleagues, society and strangers.

4. Signs and symptoms of abuse

Nurses should consider the following information if they suspect abuse of an older person:

- bruises, pressure marks, abrasions, scars, untreated ulcers, bedsores, burns, weight loss, dehydration, and malnutrition may be an indication of physical abuse, neglect or mistreatment;
- fracture of bones other than the usual sites like hip, vertebra or wrist, e.g. rib fracture;
- poor foot care;
- unexplained withdrawal from normal activities, a sudden change in alertness, and unusual depression may be indicators of emotional abuse;
- bruises around the breasts or genital area can occur from sexual abuse;
- sudden changes in financial situations may be the result of exploitation;
- bedsores/pressure ulcers, unattended medical needs, poor hygiene and unusual weight loss are indicators of possible neglect;
- belittling behaviour, threats and other uses of power and control by spouses are indicators of verbal or emotional abuse;
- strained or tense relationships, frequent arguments between the caregiver and the older person are also signs;
- changes in personality or behaviour of the older person.

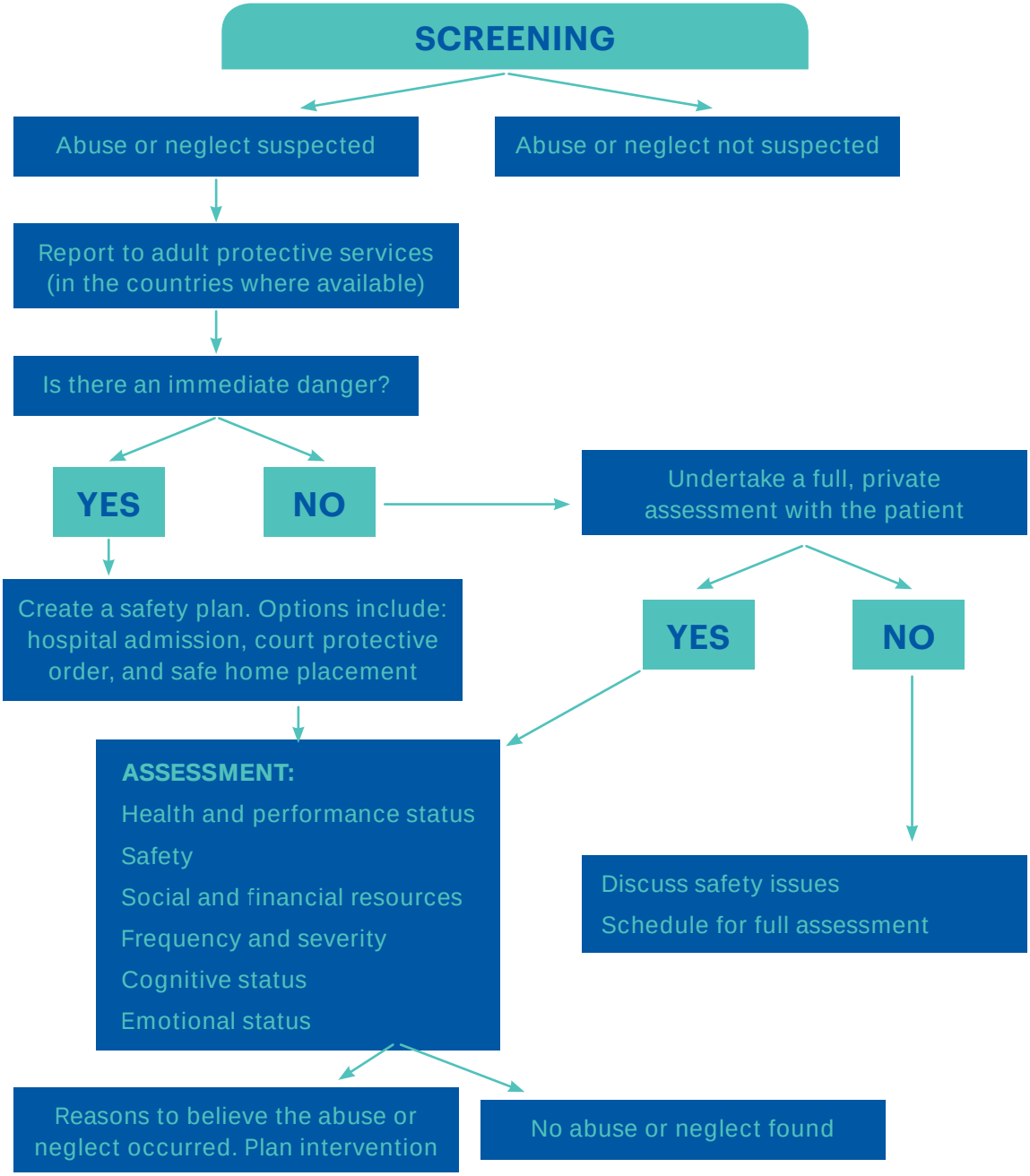
5. Management and prevention of abuse

Management of abuse of older people requires the involvement of several professionals. Nurses should use tact and discretion while dealing with abuse.

The steps involved are:

- assessment of the older person's physical and mental capacity, the general quality of care, relationship with the abuser at home or institution, assessment of the abuser's problem;
- counselling of the perpetrator;
- documentation, liaison and interaction with other professionals (police, social worker) when the victim is incapable of self-care or does not want to accept help;
- involvement of other family members, relatives and community leaders; and admission to sheltered accommodation, such as old-age home or nursing home, if abuse cannot be prevented with the above means.

Figure 9.1: Management and prevention of abuse



Ref.: American Medical Association: Diagnostic and treatment guidelines on elder abuse and neglect. Chicago, 1992, p.13; A global response to elder abuse and neglect: Building primary health care capacity to deal with the problem worldwide. Main report. World Health Organization, 2008.

The following two case vignettes would help to understand the problem of elder abuse.

Case 1

Mr. Sharma, aged 75 years, is an engineer superannuated from government service about 10 years ago. Today, during his morning walk, he met his friend, Mr. Gupta, a lawyer, after a long time. They both had a conversation over a cup of tea at a nearby restaurant. After the demise of his wife, Mr. Sharma's son, daughter-in-law and grandson, moved in with him from Mumbai. At present, he is staying with his son's family in a house owned by him. Mr. Sharma is an early riser and prefers to go to bed early. He told Mr. Gupta that after his wife's death, he has been experiencing some issues in his day-to-day routine. For example, he has to compromise on his sleep pattern as the meals are served very late. Further, the meals that he gets are neither home-made nor suitable for his age. His son and daughter-in-law keep him away from all important discussions in the family and never ask for his suggestions. Mr. Sharma's grandson often forces him to sign blank cheques and withdraws money from his bank account. Mr Sharma even suggested to his son and his family to look for separate accommodation but they did not pay heed.

Mr Gupta conveyed to Mr. Sharma that he is being subjected to neglect and abuse by his family members. He advised him to speak up about his concerns and lodge a complaint to the civic bodies.

Case 2

Mr. Tin Myint, a 68-year-old gentleman, was admitted in the orthopaedic ward of a hospital with multiple fractures. He was accompanied by his daughter and son-in-law. They told hospital staff that Mr. Tin Myint had slipped and fallen in the bathroom. However, upon examination, the nurse observed multiple bruises on his body and he was found to be cachectic. On further probing, his daughter revealed that her husband often beat Mr. Tin Myint, forcing him to transfer all his properties in their names, which Mr. Tin Myint had refused to do.

MODULE
10

Long-term care nursing

Learning objectives

- To understand the concept of long-term care
- To understand the role of the nurse in long-term care of older people

1. Introduction

As age advances, there is a decline in the physical function, making older people susceptible to both acute and chronic health problems. It makes them frequent users of health-care services and eventual consumers of long-term care.

Long-term care covers activities undertaken by others to ensure that people with or at risk of a significant ongoing loss of intrinsic capacity can maintain a level of functional ability consistent with their basic rights.

Long term care services include traditional medical services, social services and housing. Other than nurses, most long-term care is provided by family members, friends and volunteers. Such people need to be supported, educated and trained adequately to provide long-term care services.

2. Indications for long-term care

Table 10.1: Indications for long-term care

Type-1: Permanent long-term care	Type-2: Temporary long-term care
» Permanent disabilities » Chronic severe pain » Chronic medical conditions » Need for supervision » Need for assistance with ADLs » Cognitive impairment, such as that caused by brain injury, Alzheimer's disease or dementia	» Rehabilitation after a hospital stay » Rehabilitation after a surgical procedure » Recovery from an injury or illness » End-of-life medical services

3. Role of nurses in long-term care of older people

The goal of the organized framework through which nurses deliver care is to ensure awareness of the possible complications of diseases and the required treatments while providing care to older people. Nurses need to assess the older patient's physical, mental and cognitive skills; understand the patient's acute and chronic health issues; and the common health concerns, such as falls, incontinence, changing sleep patterns, etc. Various functions of nurses that can contribute to the optimum health and overall wellbeing of older people include:

- Supportive role: the 'supportive' role includes psychosocial and emotional support, enhancing lifestyles and relationships, facilitating self-expression and ensuring cultural sensitivity.
- Restorative role: the 'restorative' functions include maximizing independence and functional ability, preventing further deterioration and/or disability, and enhancing the quality of life. This is ensured through a focus on rehabilitation that maximizes the older patient's potential for independence and includes assessment skills and undertaking essential care elements, such as washing, dressing, etc.
- Educative role: the 'educative' role includes teaching self-care activities to older patients, such as self-medication, continence promotion and health screening. By focusing on the management of chronic medical conditions, nurses can help improve the QOL of their patients. Nurses can teach older people about the importance of weight management, physical activities and stress management, thus reducing risks for diseases such as heart attack, stroke, cancer, etc. By learning to manage their health, older patients can retain more independence and possibly lessen the need for medical treatment. Similarly, nurses can assist family members, friends, and others to receive the knowledge and skills related to the care of older people, including safety, disease prevention and adherence to medication, among others.
- Life-enhancing role: 'life-enhancing' activities are aimed at enhancing the daily living experiences of older people, including relieving pain and ensuring adequate nutrition.
- Managerial role: the 'managerial' role of nurses includes the supervision of care delivered by other staff and the overall management of the home environment.
- Guidance and support for patients and families at the end of life: nursing care includes not only disease management but also attention to physical comfort, and the recognition that a patient's well-being also comprises psychological, interpersonal, and spiritual dimensions. Nurses should have the knowledge and skills to manage pain and other distressing symptoms for patients with a severe or life-limiting illness and to work with patients and their families in palliative and end-of-life care decision-making.
- Being a nurse leader: The geriatric nurses at the bedside are accountable for and oversee the completion of patient care, in addition to directly leading and managing the provision of safe patient care. They are the change agents who transform the patient experience. The nurse leader in long-term care settings should have critical thinking and strong communication skills, along with conflict resolution ability. The nurse leader should also possess other essential skills, such as thorough patient assessment, adequate knowledge, patient advocacy, the delegation of work and the ability to overcome emotional exhaustion.

4. Skills required by long-term care providers

Long-term care providers need the following skills to discharge their duties effectively:

- the ability to initiate or take part in conversations about death and dying;
- the ability to assess patient needs, in partnership with the patients and those who are part of their lives, discuss those needs with everyone involved, and make sure the result is written down and shared;

- to ensure that all the care and treatment needs and wishes of the patient who is dying are shared with everyone who might have contact with them;
- competency to provide compassionate and sensitive end-of-life care with the support of the wider multidisciplinary team.

5. Considerations in long-term care of older people

- Consider the individuality of older patients. Do not attempt to alter lifelong character and behaviours.
- Handle them gently and maintain privacy while providing care.
- Communicate effectively. Make sure they can hear you.
- Encourage independence as far as possible.
- Assist in achieving emotional stability.
- Support them during their periods of anxiety.
- Give them time to express their feelings.
- Praise them even for minimal achievements.
- Encourage contact with other people.
- Protect them from injuries, falls and accidents with proper instructions/arrangements.
- Follow strategies to reduce the risk of pressure ulcers.
- Ensure adequate hydration and nutrition.
- Encourage older people to do an active range of motion exercises.
- Maintain body alignment, posture and mobility.
- Help them to establish a good sleeping pattern.
- Try to engage them in certain activities during daytime, so that they can sleep well during the night.
- Caution them about self-use of medicines, especially analgesics and narcotics. Because of poor eyesight and forgetfulness, they may not be able to understand the instructions or the importance of medication treatment. So, reinforce verbal instructions with written instructions about their medicines. Explain the side-effects and watch out for them.

Arrange a medication schedule coinciding with the regular activity pattern. This helps older patients to remember to take medicines. Alternatively, alarms may be set on their mobiles or available medication reminders may be used. Monitor the medication dosage strength. End-of-life care is a vital and integral part of clinical practice. When older people are at the end of their lives, nurses can make a difference for them and their families by creating and facilitating a therapeutic environment that addresses their physical, psychological, social, cultural and spiritual needs.

MODULE

11

Caring for the caregiver

Learning objectives

- To understand the concept of caregiving and caregiver
- To understand and assess 'caregiver syndrome' and caregiver stress
- To identify and apply methods of caregiver support to the real situation

1. Introduction

Caregiving means providing help with the daily needs of loved ones or others. Caregiving is most commonly used to address impairments related to old age, disability, disease or mental disorder.

A caregiver or carer is an unpaid or paid member of a person's social network who extends required help with ADLs. Typical duties of a caregiver might include one or all of the following: taking care of a person who has a chronic illness or disease; managing medications or talking to doctors and nurses on a person's behalf; helping to bathe or dress a person who is frail or disabled; and taking care of household chores or meals for a person who cannot do these things alone.

With an increasingly ageing population in all developed societies, the role of the caregiver has been growingly recognized as an important one, both functionally and economically. Nowadays, the caregiver role is even more demanding in developing countries, due to the increasing longevity of people with disabilities and chronic diseases.

The caregiver is usually the 'hidden patient'. Therefore, nurses and other health professionals must direct some attention towards the needs of caregivers. The prolonged stress of caring ultimately affects the well-being and living conditions of the older person. In most societies of the WHO South-East Asia region, family (especially female members) provides care to older members.

2. Types of caregiver

Caregivers can be classified into the following categories:

- Family caregivers: a family caregiver is someone who provides emotional, financial, nursing, social, homemaking, and other services on a daily or intermittent basis for a family member or a friend.
- Long-distance caregivers: those who provide care for someone who does not live nearby, e.g. children living in other cities.
- Professional caregivers: professional caregivers are hired to provide care for the care receiver. These caregivers can provide medical or non-medical care at home or a care facility.

3. Symptoms of caregiver syndrome

Table 11.1: Symptoms of caregiver syndrome

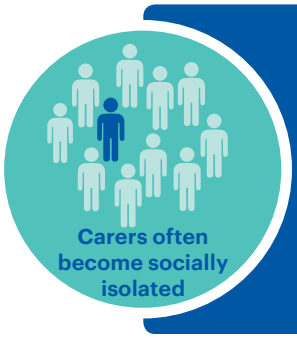
Anxiety, depression, irritability	New or worsening health problems
Feeling tired and run down	Neglecting responsibilities
Difficulty in sleeping	Cutting back on leisure activities
Overreacting to minor nuisances	Drinking, smoking or eating more
Trouble in concentrating	Feeling increasingly resentful
Chronic stress leading to hypertension, diabetes	Chronic stress leading to a compromised immune system

4. Causes of stress in caregivers

Figure 11.1: Causes of caregiver stress

PHYSICAL MORBIDITY

Dementia caregivers are at an increased risk of various health problems, including cardiovascular problems, lower immunity, a poorer immune response to vaccines, slower wound healing, higher levels of chronic conditions (such as diabetes, arthritis, ulcers and anaemia).

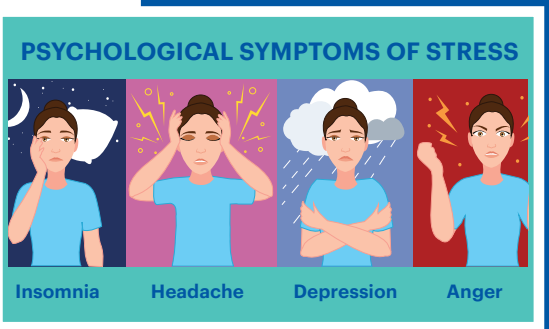


SOCIAL ISOLATION

Caregivers often lack social contact and support and experience feelings of social isolation. They tend to sacrifice their leisure pursuits and hobbies, restrict time with friends and family, and give up or reduce employment.

FINANCIAL

Costs of dementia are high. Direct costs include medical consultations, investigations, pharmaceutical provisions of personal and nursing care, and often residential care in the later stages. When money is limited, many family members have to assist with the cost of care, causing financial burdens on all family members.



EMOTIONAL

Caregiving is often a long-term challenge; the emotional impact can snowball over time. It can be particularly disheartening when there is no hope that the family member will get better despite the caregiver's best efforts. These kinds of stress can lead to sleeplessness, headaches, frustration, irritation and boredom.

5. Assessment of caregiver burden

Nurses should consider the following aspects while assessing the burden of caregivers:

- the capability of the older person for self-care; independence in ADLs and IADLs;
- type of care required by the older person (feeding, dressing, bathing, toileting);
- extra time the caregiver needs to spend in caring for the older person;
- arrangements for rest and relaxation for the caregiver;
- resources and support systems available for the caregiver;
- quantification of caregiver burden using the appropriate scale (Table 11.2).

Table 11.2: Burden Scale for Family Caregivers (BSFC)

S. No.	Component	Strongly agree (3)	Agree (2)	Disagree (1)	Strongly disagree (0)
1.	My life satisfaction has suffered because of the care.				
2.	I often feel physically exhausted.				
3.	From time to time I wish I could "run away" from the situation I am in.				
4.	Sometimes I don't really feel like "myself" as before.				
5.	Since I have been a caregiver my financial situation has decreased.				
6.	My health is affected by the care situation.				
7.	The care takes a lot of my own strength.				
8.	I feel torn between the demands of my environment (such as family) and the demands of the care.				
9.	I am worried about my future because of the care I give.				
10.	My relationships with other family members, relatives, friends and acquaintances are suffering as a result of the care.				

Interpretation of scores (0–30): Higher the score, higher the caregiver burden and the risk of psychosomatic symptoms in the caregiver.

6. Support for caregivers

Support for caregivers is needed to:

» maintain the physical and mental health of caregivers;

» avoid the development of an abusive situation;

» reduce the risk of institutionalization;

» promote good QOL for the entire family.

Some methods of caregiver support are:

a) Strengthening caregiver competence:

- Caregivers who feel prepared to deliver care (i.e. have the required knowledge and skills) have less burden.

- Nurses should teach the caregivers various patient-care skills (physical care, administering medicines, etc.) .
- The caregivers should also be provided basic education on the patient's present condition and ways to promptly diagnose possible emergency conditions.

b) Nurses should be aware of the following services to support caregivers and prevent 'caregiver syndrome':

- day hospitals, day-care centres and centres for older people that provide engagement and food;
- respite care which is aimed at sharing the burden of care with family and other informal caregivers;
- home-based nursing services;
- home-based caregiver services.

c) Nurses should suggest the idea of finding community resources that might be helpful to caregivers. For example, the caregiver may employ a homemaker to carry out household chores.

d) Nurses should suggest the following measures to caregivers for maintaining their health:

- follow a regular meal pattern;
- eat a balanced diet;
- get enough rest/sleep;
- allow leisure time;
- get physically active;
- avoid destructive behaviours like over-eating, using alcohol, illicit drugs or smoking.

e) Nurses should suggest that the caregivers turn to other family members, friends, professional counsellors or a caregiver support group for help and support.

f) The caregiver needs to be encouraged to pursue activities and social contacts outside the home.

g) Nurses should link the caregivers to resources throughout the disease trajectory. This is important because caregivers are often unaware that there are support services available to help them.

Figure 11.2: Ways to reduce caregiver stress

Source: 6https://images.app.goo.gl/pjFBAu4URNTJZYYQ7

Annexes & references

Annex 1: Ageing scenario in WHO South-East Asia Region

Table 1: Total estimated population aged 60 years and older in the SEA Region Member States: 2030 and 2050

Country	Estimated population aged 60 years and older (thousands)	
	2030	2050
Bangladesh	21 681	44 501
Bhutan	103	235
DPR Korea	5 347	6 963
India	189 137	316 759
Indonesia	38 241	61 729
Maldives	57	164
Myanmar	7 732	11 544
Nepal	3 577	6 510
Sri Lanka	4 543	5 984
Thailand	18 687	22 954
Timor-Leste	107	162
SEAR – total	289 212	477 505
Global	1 402 405	2 080 459

Table 2: Percentage distribution of the population by age groups 60 years and older and 80 years and older in the SEA Region Member States: 2017 and 2050

Country	Distribution of older people in total population (%)			
	2017		2050	
	60+ years	80+ years	60+ years	80+ years
Bangladesh	7.3	1.1	22.0	3.9
Bhutan	7.3	1.0	23.7	3.7
DPR Korea	13.5	1.5	26.0	5.3
India	9.4	0.9	19.1	2.6
Indonesia	8.6	0.7	19.2	2.3
Maldives	6.3	0.8	28.4	3.9
Myanmar	9.4	0.8	18.5	2.0
Nepal	8.8	0.7	18	2.3
Sri Lanka	14.9	1.6	28.8	6.8
Thailand	16.9	2.4	35.1	10.2
Timor-Leste	5.4	0.4	6.7	1.0
SEAR	9.8	1.0	20.3	3.1

Table 3: Life expectancy at birth and at age 60 years for males and females in the SEA Region Member States: 2010–2015

Country	2010–2015			
	Life expectancy at birth (years)		Life expectancy at age 60 (years)	
	Female	Male	Female	Male
Bangladesh	72.9	69.8	20.3	18.2
Bhutan	68.9	68.6	20.1	20.2
DPR Korea	74.1	67.2	19.9	14.3
India	69.1	66.2	18.5	17.0
Indonesia	70.7	66.6	17.8	15.2
Maldives	77.4	75.4	20.1	18.9
Myanmar	68.3	63.7	17.7	15.7
Nepal	70.4	67.4	18.1	16.4
Sri Lanka	78.0	71.2	21.6	19.1
Thailand	78.4	70.8	23.1	20.0
Timor-Leste	69.5	66.1	17.7	16.1
SEAR	70.4	66.4	18.9	17.0
Global	73.1	68.6	21.6	18.8

Note: SEAR values are weighted means calculated using WPP2017.

Sources for Tables 1,2 &3: i) World Population Ageing, 2017 Report. ii) United Nations Department of Economic and Social Affairs, Population Division, World Population Prospects, 2017 Revision.

Annex 2: Age-friendly environment (hospital-based health service facilities)

Nurses should work in close coordination with the management of the health facility to ensure that the overall infrastructure and the ward itself are geriatric-friendly. Following arrangements need to be considered for creating a more friendly ward for geriatric in-patients:

1) **In-patient beds:**
   - height of the bed should not be more than 18–20 inches (45–48 cm) (preferably adjustable height);
   - pressure-relieving mattress;
   - provision of side-rails but avoid side railings that fold down to the floor.
2) **Bed-side tables:** should be fixed; not on wheels.
3) **Chairs:**
   - seat: 18–19 inches high (18–20 inches with a firm cushion);
   - arms extended to the front edge of the chair, 10 inches (25 cm) above the seat height;
   - lumbar support;
   - non-slip, easy-to-clean fabric;
   - clearance under the front of the seat to allow feet under the front edge;
   - stable/tip-free;
   - minimal back recline and backwards seat tilt.
4) **Tables:**
   - steady four-legged; should not be on wheels
   - rounded corners.
5) **Light switches:** near the bed; large in size with labels.
6) **Signages:**
   - uncluttered with a simple message: avoid too much information on one sign;
   - strong contrast to distinguish the print from the sign background and the sign from the environment;
   - preferably write in dark-brown or black with 'white background' in busy environment;
   - non-glare finish.

7) **Orientation maintenance:** large clocks, calendars, windows.

8) **Lighting:**

- older people require 30% more light for equivalent vision, and up to five times brighter light in areas for reading and task completion;
- ensure no glares;
- avoid pooled lighting and shadows (e.g. table lamps);
- provide adequate night lighting in patient washrooms;
- ensure focused light on signs and way-finding cues around the facility.

9) **Noise/sound: High noise levels can lead to anxiety, confusion and fatigue from over stimulation in older people and difficulty in hearing what is being spoken. Background noise can create misinterpretations of what is happening in the environment. To address this problem:**

- reduce the use of the public-address system as much as possible and turn it off in the wards or patient bedrooms;
- install a visual display that scrolls slowly to inform patients in a waiting area;
- reduce background ambient noise (e.g. monitoring systems, radio).

10) **Floor:** non-slippery; even colour with no bold patterns that can cause visual perception disturbances.

11) **Toilet:**

- Commode toilet with grab bars is preferred over pan toilet.
- It should have adequate lighting.
- The floor should not be slippery.
- There should be enough rails for holding.

Annex 3: The Lawton IADL Scale

Scoring: For each category, circle the item description that most closely resembles the patient's highest functional level (either 0 or 1).

I. Ability to use the telephone		**V. Laundry**	
1. Operates telephone on own initiative; looks up and dials numbers	1	1. Does all his/her personal laundry work	1
2. Dials a few well-known numbers	1	2. Launders small items, rinses socks, stockings, etc.	1
3. Answers telephone, but does not dial	1	3. All laundry must be done by others	0
4. Does not use a telephone at all	0		
II. Shopping		**VI. Mode of transport**	
1. Takes care of all shopping needs independently	1	1. Travels independently on public transport or drives own car	1
2. Shops independently for small purchases	0	2. Arranges own travel via taxi but does not otherwise use public transport	1
3. Needs to be accompanied on any shopping trip	0	3. Uses public transport when assisted or accompanied by another	1
4. Completely unable to shop	0	4. Travel limited to taxi or automobile with the assistance of another person	0
III. Food preparation		5. Does not travel at all	0
1. Plans, prepares and serves adequate meals independently	1	**VII. Responsibility for own medications**	
2. Prepares adequate meals if supplied with ingredients	0	1. Is responsible for taking medication in correct doses at the correct time	1
3. Heats and serves prepared meals or prepares meals but does not maintain an adequate diet	0	2. Takes responsibility if medication is kept in separate dosages in advance	0
4. Needs to have meals prepared and served	0	3. Is not capable of dispensing own medication	0
IV. Housekeeping		**VIII. Ability to handle finances**	
1. Maintains house alone with occasional assistance (heavy work)	1	1. Manages financial matters independently (makes budgets, writes cheques, pays rentand bills, goes to the bank), collects and keeps track of income	1
2. Performs light daily tasks, such as washing dishes and making beds	1	2. Manages day-to-day purchases, but needs help with banking, major purchases, etc.	1
3. Performs light daily tasks, but cannot maintain an acceptable level of cleanliness	1	3. Incapable of handling money	0
4. Needs help with all home maintenance tasks	1	**Total score:**	
5. Does not participate in any housekeeping tasks	0		

Annex 4: Katz Index of ADL

Activity points (1 or 0)	Independence: 1 point (No supervision, direction or personal assistance)	Dependence: 0 points (With supervision, direction, personal assistance or total care)
Bathing	Bathes self completely or needs help in bathing only a single part of the body such as the back, genital area or disabled extremity.	Needs help with bathing more than one part of the body, getting in or out of the tub or shower.
Dressing	Gets clothes from closets and drawers and puts on clothes and outer garments complete with fasteners. May need help tying shoes.	Needs help with dressing self or needs to be completely dressed.
Toileting	Goes to the toilet, gets on and off, arranges clothes, cleans genital area without help.	Needs help transferring to the toilet, cleaning self or uses a bedpan or commode.
Transferring	Moves in and out of bed or chair unassisted. Mechanical transferring aides are acceptable.	Needs help in moving from a bed to a chair or requires a complete transfer.
Continence	Exercises complete self-control over urination and defecation.	Is partially or totally incontinent of bowel or bladder.
Feeding	Gets food from a plate into the mouth without help. The preparation of food may be done by another person.	Needs partial or total help with feeding or requires parenteral feeding.

Total points = _____, 6 = High (patient independent), 0 = Low (patient very dependent)

Annex 5: American Geriatrics Society Modified Beers criteria

According to the American Geriatrics Society (AGS) Modified Beers criteria, a few classes of medications are potentially inappropriate for prescribing to older patients.

Medicine/class of medicine	Recommendation	Rationale
First-generation anti-histaminic: Diphenhydramine, Promethazine, Hydroxyzine	Avoid	Constipation
Benzhexol/Trihexyphenidyl for parkinsonism	Avoid	Risk of confusion, dry mouth
Antispasmodic: Dicyclomine	Avoid	Highly anticholinergic
Antibiotic: Nitrofurantoin	Avoid when creatine clearance is <30.	Potential for pulmonary toxicity, hepatotoxicity and peripheral neuropathy
Non-selective alpha-blockers: Prazosin, Alfuzosin	Avoid use in patients with other antihypertensives	High risk of orthostatic hypotension
Central alpha-blockers: Clonidine, Methyldopa	Avoid	High risk of adverse CNS effects, bradycardia and orthostatic hypotension
Digoxin	Avoid dosage exceeding 0.125 mg/day	Use in atrial fibrillation: may increase mortality Use in heart failure: higher dosage is not associated with additional benefit and may increase toxicity
Amiodarone	Avoid as first line for atrial fibrillation unless the patient has heart failure or substantial left ventricular hypertrophy	Higher toxicities as compared to other antiarrhythmics
Antidepressants: Amitriptyline, Imipramine, Nortriptyline, Paroxetine	Avoid	Highly anticholinergic, sedating and cause orthostatic hypotension
Anti-psychotics (conventional and atypical)	Avoid in patients with dementia	Increased risk of cerebrovascular accident, greater risk of cognitive decline and mortality in patients with dementia
Benzodiazepines (BZD)-short/intermediate-acting): Lorazepam	Avoid	Increased risk of cognitive decline, delirium, falls, fractures and motor-vehicle crashes

Medicine/class of medicine	Recommendation	Rationale
Benzodiazepines (BZD)-long-acting: Clonazepam	May be appropriate for seizure disorder, rapid eye movement (REM) sleep disorders, severe generalized anxiety disorder and periprocedural anaesthesia	Increased risk of cognitive decline, delirium, falls, fractures and motor-vehicle crashes
Non-BZD hypnotics, e.g. Zolpidem	Avoid	Increased risk of delirium, falls and fractures. Minimal improvement in sleep latency and duration
Insulin sliding scale	Avoid	Higher risk of hypoglycaemia without improvement in hyperglycaemia management, regardless of care setting
Metoclopramide	Avoid unless for gastroparesis	Increased risk of extrapyramidal side-effects in frail older people
Proton pump inhibitors	Avoid scheduled use for more than 8 weeks unless for high-risk patients	Increased risk of *C. difficile* infection, bone loss and fractures
Non-COX selective nonsteroidal anti-inflammatory drugs (NSAIDs): Aspirin >325mg/day Diclofenac Ibuprofen Naproxen	Try to avoid chronic use	Increased risk of gastrointestinal bleeding in high-risk groups
Skeletal muscle relaxants	Avoid	Poorly tolerated due to sedation, anticholinergic side-effects and increased risk of fractures
Concurrent use of opioids with either benzodiazepines or gabapentinoids	Avoid	Increased risk of overdose and severe sedation-related adverse events, such as respiratory depression and death.
Trimethoprim-sulfamethoxazole in patients who are taking an angiotensin-converting enzyme (ACE) inhibitor or angiotensin II receptor blocker (ARB)	Avoid	Serious hyperkalaemia can occur
H2-receptor antagonists	Avoid in delirium	H2 blockers can precipitate delirium
Aspirin for primary prevention of cardiovascular disease or colorectal cancer	Cautious use in patients aged 70 years or older	Increased risk of bleeding
Serotonin-norepinephrine reuptake inhibitors (SNRIs), e.g. Duloxetine, Venlafaxine	Avoid in older patients with a history of falls or fractures	Increased risk of falls, fractures and mortality

Annex 6: Waterlow Ulcer Risk Assessment Scale

Domains				Score
Body mass index (BMI) (kg/m^2)	20–24.9			0
	25–29.9			1
	>30			2
	<20			3
Skin type visual risk areas	Healthy			0
	Tissue paper			1
	Dry			1
	Oedematous			1
	Clammy/pyrexia			1
	Discoloured (grade 1)			2
	Broken/spots (grade 2–4)			3
Gender	Male			1
	Female			2
Age (years)	14–49			1
	50–64			2
	65–74			3
	75–80			4
	80+			5
Weight loss/loss of appetite	A. Has the patient lost weight recently?	Yes No Unsure	Go to B Go to C Go to C	- - 2
	B. Weight loss score	0.5–5 kg 5–10 kg 10–15 kg >15 kg unsure		1 2 3 4 2
	C. Loss of appetite	No Yes		0 1

Domains		Score
Continence	Complete/catheterized	0
	Urine incontinent	1
	Faecal incontinent	2
	Double incontinent	3
Mobility	Fully mobile	0
	Restless/fidgety	1
	Apathic	2
	Restricted	3
	Bed-bound	4
	Chair-bound	5
Tissue malnutrition	Terminal cachexia	8
	Multiple organ failure	8
	Single organ failure	5
	Peripheral vascular disease	5
	Anaemia (Hb < 8)	2
	Smoking	1
Neurological deficit	Diabetes, multiple sclerosis (MS), cerebrovascular accident (CVA)	4–6
	Motor/sensory	4–6
	Paraplegia	4–6
Major surgery or trauma	Orthopaedic/spinal	5
	On table > 2 hours	5
	On table > 6 hours	8
Medications (Max score of 4)	Cytotoxics	1
	Long-term/high-dose steroids	1
	Anti-inflammatory	1
Total score:		
Interpretation:	At risk: 10+ High risk: 15+ Very high risk: 20+	

Annex 7: Modified Early Warning System (MEWS)

	3	2	1	0	1	2	3
Respiratory rate (/min)		<8		9–14	15–20	21–29	>30
Heart rate (/min)		<40	40–50	51–100	101–110	111–129	>129
Systolic BP (mmHg)	<70	71-80	81–100	101–199		>200	
Consciousness (AVPU)	Unresponsive	Responds to pain	Responds to voice	Alert	New agitation, confusion		
Temperature (°C)		<35.0	35.1–36.0	36.1–38.0	38.1–38.5	>38.6	
Hourly urine for 2 hours (ml/hr)	<10	<30	<45				

Interpretation of scores: If the score of the patient is 4 or more, record observations at least 1–2 hourly. Ensure medical advice is sought and contact the outreach team.

Annex 8: Mini-Nutritional Assessment

Mini Nutritional Assessment
MNA®

Last name: First name:

Sex: Age: Weight, kg: Height, cm: Date:

Complete the screen by filling in the boxes with the appropriate numbers. Total the numbers for the final screening score.

Screening

A Has food intake declined over the past 3 months due to loss of appetite, digestive problems, chewing or swallowing difficulties?
0 = severe decrease in food intake
1 = moderate decrease in food intake
2 = no decrease in food intake ☐

B Weight loss during the last 3 months
0 = weight loss greater than 3 kg (6.6 lbs)
1 = does not know
2 = weight loss between 1 and 3 kg (2.2 and 6.6 lbs)
3 = no weight loss ☐

C Mobility
0 = bed or chair bound
1 = able to get out of bed / chair but does not go out
2 = goes out ☐

D Has suffered psychological stress or acute disease in the past 3 months?
0 = yes 2 = no ☐

E Neuropsychological problems
0 = severe dementia or depression
1 = mild dementia
2 = no psychological problems ☐

F1 Body Mass Index (BMI) (weight in kg) / (height in m)^2
0 = BMI less than 19
1 = BMI 19 to less than 21
2 = BMI 21 to less than 23
3 = BMI 23 or greater ☐

IF BMI IS NOT AVAILABLE, REPLACE QUESTION F1 WITH QUESTION F2.
DO NOT ANSWER QUESTION F2 IF QUESTION F1 IS ALREADY COMPLETED.

F2 Calf circumference (CC) in cm
0 = CC less than 31
3 = CC 31 or greater ☐

Screening score (max. 14 points)

12 - 14 points: Normal nutritional status
8 - 11 points: At risk of malnutrition
0 - 7 points: Malnourished ☐☐

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For more information: www.mna-elderly.com

Annex 9: Manual evacuation of stool by nurses

Indications:

- faecal impaction/loading;
- incomplete defecation;
- inability to defecate;
- other bowel emptying techniques have failed;
- in patients with spinal injury, as part of a bowel management programme.

Contraindications:

- consent has not been obtained;
- the patient's doctor has given specific instructions that these procedures should not take place;
- the patient has recently undergone rectal/anal surgery or trauma (seek medical advice);
- the patient gains sexual satisfaction from this procedure (open discussion between doctor and patient is advised and a chaperone facility offered);
- they do not feel competent to perform the procedure (NMC 2015).

Precautions:

- the patient has a known history of abuse;
- active inflammation of the bowel, including Crohn's disease, ulcerative colitis and diverticulitis;
- recent radiotherapy to the pelvic area;
- rectal/anal pain.

Requirements:

- disposable apron;
- non-sterile disposable gloves;
- lubricating jelly;
- procedure pad;
- receptacle for faeces;
- paper tissue;
- disposal bag as per National Infection Prevention and Control Manual.

Procedure for digital removal of faeces (DRF):

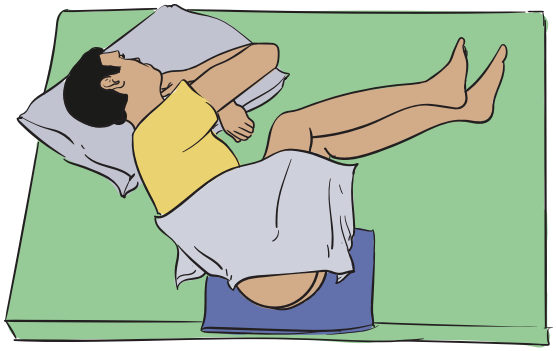
- Before examination: explain the procedure to the patient.
- Obtain informed consent and document.
- Ask the patient if a chaperone needs to be present, as per nursing notes.
- Allow the patient to empty the bladder, as a full bladder may cause discomfort during the procedure.
- Ensure patient's privacy and dignity is maintained at all times.
- A bedpan, commode or toilet should be readily available.
- Ask the patient to remove clothing from the waist down. Offer assistance if required.
- Ask the patient to lie in the left lateral position with knees flexed (if possible) so that the anal area can be easily visualized.
- Wash your hands (refer to hand hygiene in National Infection Prevention and Control Manual). Place a protective pad under the patient's hips and buttocks.
- Wash your hands again, put on a disposable apron and gloves.

Examination:

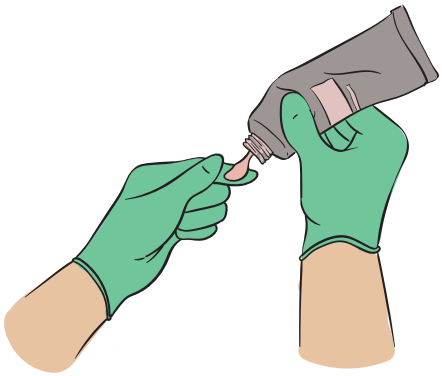
- Lubricate one gloved finger with plain lubricating gel. Insert the lubricated gloved finger slowly into the patient's rectum.
- If the stool is a solid mass, push a finger into the centre, split it and remove small sections until none remain. If the stool is in small separate hard lumps, remove a lump at a time
- Using a hooked finger can lead to scratching or scoring of the mucosa and should be avoided.
- If the rectum is full of soft stool, a continuous gentle circling of the finger may be used to remove stool. This is still the digital removal of faeces.
- During the procedure, the person delivering care may carry out an abdominal massage.
- Once the rectum is empty on examination, conduct a final digital check of the rectum after five minutes to ensure that evacuation is complete.

Figure A 1.1:

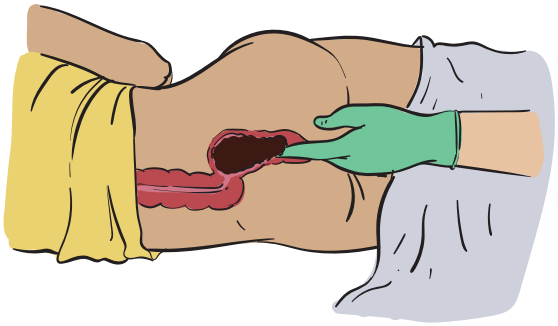
Step 1



Step 2



Step 3



Step 4

Source: Nursing Standard. 30, 40, 36–39. doi: 10.7748/ns.30.40.36.s43

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World Health Organization

REGIONAL OFFICE FOR South-East Asia