LECTURE NOTES

DOC UP

SUMMARY

UNIT 1 – CRITICAL CARE SKILLS

1.1 LEARNING OUTCOMES

At the end of Unit 1, the learner will:
- Know more about diseases such as dementia and disability of physical, mental and social functions;
- Know more about the principles of nutrition and fluids that patients need based on their nutritional requirements;
- How to clean and care for wounds and knowing the different types of dressings;
- How to provide mobilization and ambulation support;
- Know more patient body hygiene in the bathroom and in bed in the case of a recumbent patient.

1.2 DISEASES SUCH AS DEMENTIA AND DISABILITY OF PHYSICAL, MENTAL AND SOCIAL FUNCTION

Dementia is a result of damage or disease to those parts of the brain responsible for thought processes, memory and logical thinking. Dementia is not a condition in itself. It appears as a syndrome of symptoms, caused by other disease disorders. The **factors responsible** for the disease process are:

- sclerosis, neurological conditions such as Alzheimer's, Parkinson's, Huntington's
- vascular diseases, associated with abnormal cerebral perfusion
- mechanical brain damage resulting from injuries, contusions, strokes, accidents
- CNS infections-HIV infections, Creutzfeldt-Jakob disease, meningitis
- consumption of alcohol, drugs, legal highs

Symptoms of dementia are:

- impaired memory: loss of ability to remember new information, forgetting events, repeating the same things over and over again, losing things;
- difficulty in understanding and solving problems, lack of decisiveness, inability to assess risks, to classify danger and to count;

- impaired cognitive processes, failure to recognise familiar faces, forgetting names of things and their functions, problems with orientation to place, time and space;

- impaired language functions, speech, writing, reading disorders;

- personality disorders;

- changes in behaviour, from overexcitability to apathy, lack of motivation and willingness to act.

Depending on the **severity of the disease**, we can recognize **mild, mild-moderate and deep dementia. The key to diagnosing the disease and determining its severity** are those close to the patient, residing and caring for the patient on a daily basis. We can determine the stage of dementia using two methods:

- The **first method** is based on an interview with the patient involving a relative who participates in the patient's daily life. Based on observation and the data obtained, the rate of progression of the disease process can be assessed.

- The **second method** requires a visit to a specialist who, by using tests and neuropsychological examinations, assesses the degree of impairment of cognitive functions, understanding, thinking and remembering.

Dementia is an incurable illness. The changes taking place in the brain are irremovable. Pharmacotherapy lifestyle - healthy eating, adequate sleep, proper diet, regular physical activity - can alleviate the course of the disease and make the patient's daily life easier. People with dementia need special care adapted to their individual needs. The vast majority of patients are cared for in the home environment. Only in cases of moderate to severe dementia the assistance of a care centre is indicated. Caring for a patient with dementia includes:

- striving to maintain independence/ability to cope in complex life activities

- maintaining/improving quality of life

- forming relationships with the patient within the social group (acceptance of personality, providing direct care)

- maintenance of communication, expression of feelings

- stabilisation and continuity of daily life

- activation of the patient, participation in therapeutic activities

- relieving the patient's relatives

1.3 THE NUTRITION AND FLUIDS FOR PATIENT'S NEEDS BASED ON THEIR NUTRITIONAL REQUIREMENTS

Based on nutritional status, we can assess a person's overall health. Proper diet is especially important for the elderly. Older people are particularly at risk of undernutrition. The effects of **undernutrition** in this social group are far more difficult to compensate for. The physiological changes in old age affect the reduction in energy requirements. The reduction in caloric requirements is due to:

- a reduction in mobility and dexterity

- a reduction in the body's water content

- a reduction in bone mass

- decreased muscle mass

- increase in body fat

- decrease your taste buds by approx. 65% and therefore your appetite

Despite a **reduction in energy** requirements in older people, the **need for minerals and vitamins remains the same**. Older people require a much poorer energy intake, but one that is rich in nutrients. **Nutritional pyramid** of the elderly includes:

- **Carbohydrates** - 50-60%; a source of energy; found in all plant products; cereals, potatoes, legumes, fruit, vegetables, as well as animal dairy products;

- **Protein** - 10-25%; a source of building blocks; found in meat and fish, eggs, milk, plant products - legumes (beans, soya, lentils);

- **Fats** - 25-30%; a source of energy; found in vegetable and animal fats; involved in the binding of certain vitamins (vit. A, D, E, K);

- **Fibre**- prevents constipation and intestinal disease, influences cholesterol levels; daily requirement for the elderly is approx. 30g; source whole grain products, fruit and vegetables;

- **Vitamins**- are involved in metabolic processes and must be supplied with food as the body cannot produce them on its own;

- **Minerals** - are involved in metabolic processes;

- **Micronutrients** - found in marginal quantities, involved in immune reactions;

- **Water** - the minimum requirement for older people is 1500-2000 ml.

The most common eating disorder in people with dementia is **food refusal**. Opposition is expressed by the patient through:

- verbal message

- tightening the lips

- turning the head

- refusal to swallow

- spitting out food

The **domestic care worker** should be guided by the following principles:

- during feeding, the patient should be accompanied by the same persons or relatives

- be patient with the resident

- try to keep the elderly person as independent as possible

- maintain the nutritional preferences of the elderly person

- maintain regularity of meals

- determine the reason for food refusal and eliminate it if necessary

- inform doctor in case of prolonged food refusal

In the case of eating disorders from food refusal or swallowing disorders, food is given to patients directly into the stomach, bypassing the mouth. Patients, who needs **enteral nutrition**, are fed through a tube-probe inserted through the nose or mouth. Food is administered in the form of liquid or semi-liquid. The doctor determines the amount of nutrients and fluids that the patient should take in. Domestic care workers, working with the doctor, determine the quantity of meals and the intervals between them. In addition, they are responsible for ensuring adequate supply of fluids. Individual fluid requirements of the elderly are 30-40 ml/kg body weight. The

water content in the body of the elderly is about 45%. Older people have a greater fluid requirements then younger people. **Choking** is a condition in which a liquid (water, drink) or a small object enters to the airway. Choking is a life-threatening factor, which can lead to suffocation or induce choking pneumonia. Patients who are confused and who are eating in a reclining position are at risk of regurgitation.

When feeding a patient, **domestic care workers** are required to:

- identify risks
- maintain a high position during feeding and watering of the patient, especially when the patient is lying down
- check the attachment of the dentures in the mouth
- feed solid foods with a small spoon
- slowly water the patient
- in case of swallowing disorders, use of thickened food
- leave the patient in a raised position for 20-30 minutes after eating
- perform an oral hygiene after each meal to remove food residues

To prevent the risk of choking, domestic care workers can use one or more of these **dining accessories**:

Dining accessories	Usage
plates with overlay or high rim	prevents food from moving off the plate
single-handed cutlery	allow one-handed eating
multifunction cutlery	function as a fork and knife as well as a knife and spoon at the same time
glass and cup holders	facilitate holding and drinking
mats and suction cups	prevent dishes from moving

bottles with a spout	facilitate the dosage of liquids
bent spoons and forks	enable to hold cutlery with little effort, useful in cases of reduced hand and wrist mobility

1.4 CLEAN & CARE FOR WOUNDS – TYPES OF DRESSING

A **wound** is a break in the continuity of the skin or skin and underlying tissues caused by a damaging agent. The causative factor of the wound is:

- injury

- a condition resulting from venous insufficiency, ischaemia, infection, trophic skin changes.

Poor nutritional status of the body, cardiovascular diseases, lack of immunity has a strong connection with the **risk of wounds and their healing process**. Lack of proper blood flow in the tissues, results in poor nutritional status of the skin and risks wounds.

- ✓ Due to the **complexity of the damage to the skin and subcutaneous tissue**, we distinguish:
- **Simple wounds**: small size wounds, healing without complications;

- **Complex wounds**: wounds to vessels, tendons and internal organs;

- **Complicated wounds**: wounds with infection, abscess or suppuration.

- ✓ Based on the **depth of damage** to the epidermis and skin, we distinguish between superficial, deep and penetrating wounds.

- **Superficial wounds** - abrasions and scratches. They usually arise as a result of not very strong pressure from a hard, blunt instrument, a fall or a blow against a hard and rough surface.

- **Deep wounds** - these include cuts. They are caused by cutting with a sharp object, such as a knife or glass.

- **Penetrating wounds** - can be puncture wounds, lacerations. They are caused by wounding with a long, narrow and sharp object (e.g., nail, needle, pitchfork, bayonet);

they can penetrate into body cavities and damage internal organs; they are caused by a violent clogging with a curved instrument.

WOUND MANAGEMENT PRINCIPLES

Here are some basic principles to know about managing wounds:

✓ Ensure a comfortable position for the patient wherever possible

✓ Ensure safety and intimacy during handling

✓ Remove top layers of dressing using diagnostic gloves

✓ Dress the wound directly using sterile gloves and sterile equipment - tweezers

✓ If the top layer of the dressing adheres to the wound, the dressing can be dressed with a sterile agent, e.g., 0.9% NaCl

✓ If the wound is contaminated, the foreign body is removed with tweezers and the entire wound is irrigated with sterile fluid and then disinfected or just disinfected

✓ If the foreign body is deep in the wound, we disinfect the wound, apply a dressing and leave the wound to be debrided.

✓ Clean, acute wounds are irrigated from the centre of the wound to the outside, using a single swab to gently irrigate the wound edges.

✓ Clean, acute wounds are debrided, starting at the wound edges with the intact skin, moving in a circular motion from the outside towards the centre of the wound, and finishing with collection of the exudate from the bottom of the wound.

✓ Do not scrape the wound with granulation tissue to prevent possible bleeding

✓ In the case of bacterial infections we use, ointments with antibiotics, specialised dressings

WOUNDS SPECIALITY DRESSINGS

- **Hydrogel dressings**, primarily used for burns, used in the treatment of dry wounds and wounds with exudate. They are composed of more than 90% water and come in a variety of sizes, non-allergenic.

- **Hydrofiber, alginate dressings** are used for dressing hard-to-heal wounds, with an increased risk of infection or infected wounds (ulcers, bedsores). They contain silver ions, which have an antibacterial effect. They create an appropriate environment for wound healing, absorb excess exudate.

- **Silver ion dressings** contain Ag ions and are used in the treatment of infected wounds, sores and burns up to 2nd degree. They do not have absorbent properties.

The **process of wound healing** can be realized through:
- **Granulation tissue**: A granuloma is formed at the bottom of the wound, i.e. tissue that provides a substrate for the regeneration of layers of skin and epidermis. These layers gradually build up from the edges of the wound to the granulation tissue, and encapsulate the damaged area. Wound healing by granulation takes longer and complications are more likely to occur then, including the formation of an abnormal scar. During the granulation process, the wound requires care and frequent dressing changes, as well as watching to see if anything worrisome happens. The scar produced in the granulation process will usually be more visible.

- **Re-growth:** Involves the wound edges coming together and fusing. Re-growth involves the wound edges coming together and fusing. A line-shaped scar is then formed, and the healing process itself is shorter and less prone to complications.

1.5 SUPPORT WITH MOBILIZATION AND PROVIDE AMBULATION

For most dementias, there is currently no therapy leading to a cure. Therefore, the main goal of treatment is to improve the quality of life of patients and their loved ones. Medications used to treat dementia sometimes delay the progression of symptoms, but they cannot delay or stop the disease process taking place in the brain. There are a number of medications that can alleviate dementia's comorbid symptoms, such as restlessness, hallucinations, anxiety or sleep disturbances. In the early stages of the disease, psychotherapy can also be useful in alleviating discomfort and improving quality of life. A variety of treatment methods aim to train patients' residual capacities and strengthen their self-esteem, such as the physical activity. All human activity is related to movement and physical exertion. However, as we age, the ability to move

and the drive to move reduces. The risk of falls increases, which means that the danger of falling increases in everyday life situations. In people with dementia, falls most often occur in the early morning, evening and at night. This usually happens when the elderly gets up or go to bed. The home rooms where adverse events most often occurs are the bathroom and the toilet. Domestic care workers should activate people with dementia not only intellectually, but also physically. The forms of activity should be selected according to the patient's capabilities. They should not be too easy or too difficult. Breathing exercises and muscle-tightening isometric exercises are recommended.

> In caring for a patient with dementia, **domestic care worker** should focus on:
>
> - support, efforts to keep as much motor independence as possible
> - improving joint mobility, keeping proper muscle tone
> - take measures to prevent the formation of movement restrictions
> - minimize and prevent the risk of falling
> - provide activation care
> - select appropriate assistive equipment to facilitate patient movement.

SUPPORT EQUIPMENT

Properly selected medical equipment should consider the health status of the client; be easy to use and function flawlessly. The right equipment promotes health, helps maintain it, and facilitates the work of the domestic care worker. Depending on the function to be performed, we can distinguish between:

- **Walking aids:** walking sticks, tripods, quadrupeds, elbow and armpit crutches, walkers, wheelchairs.

- **Articles for standing up:** ladders, triangles to make it easier to sit up in bed, wedges for sitting up, pull-up supports.

- **Seating aids:** seats with or without backrest.

- **Lifting and handling equipment:** lifts, boards, slide mats, rotary plates.

ERGONOMICS OF THE CARER'S JOB – BASIC PRINCIPLES

✓ working in appropriate clothing that does not restrict body movement

✓ removing all obstacles, preparing aids, placing objects at the right working level, e.g., bed height

✓ taking the strain off the back (maintaining correct posture during lifting, i.e. bending the lower limbs at the knee and hip joints, working in pairs, working close to the patient)

✓ activating the patient to participate (provide information, use the patient's abilities, set the pace, cooperate).

1.6 PATIENT BODY HYGIENE IN BATHROOM AND IN BED IN THE CASE OF A RECUMBENT

Cleanliness needs are the desire to maintain personal and environmental cleanliness. Maintaining personal cleanliness is a subjective feeling, conditioned by the standard of the social group. People feel the need for cleanliness in different ways and satisfy it in different ways. Failure to meet the needs of maintaining cleanliness, affects dysfunction in the biological, psychological and social spheres of a person. Maintaining proper body hygiene for an elderly person is very important not only for his physical health, but also for his mental health. The elderly are very often negative about hygiene procedures. They do not like to bath; they forget about hygiene activities. They often react with aggression to the offer of a bath or look for excuses to avoid bathing. **Hygienic treatment** of the user includes, for example:

● **Personal skin care** - Special attention should be paid to keeping the skin clean, which is very delicate in old age. Use gentle, non-allergenic, non-drying cleansers. Moisturize the skin with emollients, protect against flare-ups. And do not forget about proper care of nails, which should be cut short and without sharp edges. The purpose of these treatments is to remove impurities from the surface of the body, which include dust, dust, bacteria, sweat and sebum, and exfoliated skin. These impurities impede the skin's ability to perform its functions and can cause widespread infections. Irritated skin is a gateway to infection for various bacteria, viruses and fungi. Underwear, clothing and footwear should not put pressure on the skin, as this causes irritation and impedes blood flow to the pressured areas, often causing painful thickening - corns. A warm bath not only cleanses the skin, but also regulates the function of the circulatory system, heart function, has a soothing effect on the nervous system and ensures a good night's sleep.

- **Intimate hygiene -** The reproductive organs happen to be the environment of many bacteria, and at the same time they are a very sensitive place. Every day they come into contact with many bacteria, such as faecal bacteria. Neglect of the intimate sphere leads to many infections and ringworm.

- **Oral hygiene** - It is important to clean teeth or dentures at least twice a day, use a gum rinse. This will help avoid problems with bad breath, tartar on teeth, holes and inflammation of the gums.

In the case of **immobile patients**, all care is carried out by the domestic care worker. The choice of care technique and equipment depends on the patient's general condition.

HYGIENE CARE FOR THE BED-RIDDEN, ELDERLY PATIENT - BASIC PRINCIPLES

Here are some basic principles to know about hygiene care for the bed-ridden, elderly patient:

✓ wash the patient in the bathroom, possibly in the bed (trolley-bath), eventually in the patient's bed

✓ ensure correct room and water temperature

✓ use suitable washing products for sensitive skin (with age, the skin loses its elasticity capacity, the number of sebaceous and sweat glands decreases, which exposes it to drying, cracking, keratosis and flaking)

✓ properly dry, moisturise and lubricate the skin (especially in areas prone to lesions and pressure sores - occiput, elbows, shoulder blades, tailbone, heels, pelvic edge)

✓ pay attention to the hygiene of the ears (prevent accumulation of ear wax, in the case of men cut the hair growing in the ears, which makes it difficult to maintain good hygiene)

✓ pay attention to the hygiene of the intimate area (especially the skin with wrinkles near the anus, where the presence of faecal residues leads to inflammation, and the scrotal area in men, because of the frequent occurrence of scrotal hernias)

✓ systematically cut the fingernails and toenails so that they do not extend beyond the fingertip

✓ when washing, pay attention to affected areas such as bedsores, wounds and avoid contact with shampoo and cleansers

✓ take good care of the scalp (regular shampooing and combing 1-2 times a day)

✓ take good care of the oral cavity (keep teeth clean and free of food residues, prevent gum bleeding and inflammation in the oral cavity, wash the dentures after every meal, do not leave the patient in the dentures while sleeping.

Auxiliary equipment is available on the medical market to facilitate bathing patients who are permanently immobilized in bed. Special bathing beds, seats, and wash tubs are aids to meet the patient's hygiene needs.

UNIT 2 – BASIC NURSING SKILLS

2.1 LEARNING OUTCOMES

At the end of Unit 2, the learner will be able to:

- Know and be able to use medical devices/equipment

- Give medicines (where allowed) and to understand the medical prescription

- Learn how to prevent pressure sores

- Know and be able to apply first aid techniques

2.2 USE OF MEDICAL DEVICES & EQUIPMENT

MEASUREMENT OF BLOOD PRESSURE - USE OF DIAL PRESSURE

The **dial pressure gauge** is characterised by above-average accuracy and measurement precision, and for this reason it is often used in medical facilities and in private homes. The person operating the device should have good hearing and be familiar with the user manual before taking the first measurement. **How to take the measurement**:

1. Put the cuff on the patient's arm and adjust it to the patient's arm circumference. It should fit well on the arm but not cause discomfort or pressure. The lower edge of the cuff should end 2-3 cm above the elbow.
2. Inflate the cuff using an air bulb.
3. Let the air out of the cuff very slowly.
4. The first sound you hear is the systolic pressure.
5. Similarly release the pressure gently.
6. The last sound is the diastolic pressure.
7. Remove the cuff from the patient.
8. Present the result to the patient.

USING AN ELECTRONIC BLOOD PRESSURE MONITOR

The **electronic blood pressure monitor** is used for the non-invasive measurement of a person's systolic and diastolic blood pressure values. How to take the measurement:

1 Put the cuff on the patient's arm and adjust it to the patient's arm circumference. It should fit snugly on the arm, but not cause discomfort or pressure. The lower edge of the cuff should end 2-3 cm above the elbow.

How to put the cuff on:

✓ Put the cuff on the patient's arm and adjust it to the patient's arm circumference. It should fit snugly on the arm, but not cause discomfort or pressure.

✓ The lower edge of the cuff should end 2-3 cm above the elbow

2 Press the START/STOP button.
3 The compressor will start pumping air into the cuff.
4 The display will show numbers indicating the increase in cuff pressure.
5 Once the cuff is inflated, the compressor will stop and the air will slowly be released from the cuff.
6 The current cuff pressure is displayed on the screen.
7 When the instrument detects a pulse, the heart symbol will appear on the display and will pulse in rhythm with the heart rate.
8 When the measurement is complete, the screen will display the systolic pressure, diastolic pressure and pulse rate.

The **optimum blood pressure** in a healthy person is **120/80**. The first number refers to the **systolic pressure** value, whereas the second number tells us about the **diastolic pressure**. To identify a state of too high diastolic pressure, its value should exceed 90, while too high systolic pressure is recorded when the measurement indicates more than 140. We speak of **hypertension** when the average values of blood pressure, obtained in at least two separate measurements, equal or exceed the value of 140/90 mmHg (140 mmHg for systolic pressure, 90 mmHg for diastolic pressure). In this case, there is too much pressure exerted on the walls of the arteries by the flowing blood.

SYMPTOMS OF HIGH BLOOD PRESSURE:

- severe headaches,
- sweating,
- insomnia,
- constant weakness or overexcitability,
- frequent distractions, difficulty concentrating,
- trembling hands,
- dizziness,
- flushed face,
- nosebleeds,

- sudden deterioration of vision, dark circles in front of the eyes, flashes in the eyes.

USE OF THE PULSE OXIMETER

A **pulse oximeter** is an electronic device that is used to measure the oxygen saturation of the blood, or so-called saturation. Another additional parameter measured by the pulse oximeter is the heartbeat rate, or pulse. Insufficient oxygen in the body can cause irreversible changes in the function of many organs and can lead to death. A hemoglobin oxygenation level of between 95% and 99% is a normal result. The pulse oximeter can be placed on:
- fingers or toes
- auricle
- nose wing

HOW TO TAKE THE MEASUREMENT:

1. The pulse oximeter is placed on the forefinger or middle finger with the fingernail facing upwards.
2. You should remain motionless during the measurement.
3. Please note that the presence of nail varnish on the fingernail or artificial nails may interfere with the correct reading by the pulse oximeter.
4. Inaccurate results are also affected by the patient's movement during the test, as well as cold hands on which the measurement is taken

HOME OXYGEN THERAPY – INDICATIONS

Home oxygen therapy is an important part of supporting patients with various chronic diseases. However, the administration of oxygen at home is only possible if the patient's condition is stable. Oxygen for home administration is used for a **variety of ailments**. These include:

- respiratory diseases (e.g. asthma, COPD, cystic fibrosis, pulmonary fibrosis)
- diseases of the nervous system (e.g. muscular dystrophy)
- selected cardiovascular diseases (e.g. myocardial fibrosis, circulatory failure)
- post-covid syndrome
- oncological diseases
- conditions after operations

The result of a pulse oximeter measurement can warn of hypoxaemia, i.e., too little oxygen in the arterial blood. If you want to use oxygen treatment at home, you need the **right equipment**. Among these, the most commonly used are:

- **Home oxygen concentrator:** This is a device that is at the same time considered to be the safest. It can also be operated by people who have no medical training. Once trained, homemakers are comfortable with switching on and setting up the concentrator.

- **Oxygen bottle:** In the home setting, oxygen bottles are now being used less and less. They work well when the patient is cared for at home by a qualified nurse.

Oxygen supply, depending on the needs, can be given in different ways. In patients who are lying down, oxygen is often administered by means of a mask covering the nose and mouth. Another way is to use only an oxygen moustache or cannula. During oxygen therapy using the moustache, the patient can talk, which increases comfort.

2.3 GIVING MEDICINES

When choosing a way to **administer a medicine**, it is necessary to consider all its advantages and disadvantages. Depending on the way the medicine is administered, the strength and speed of the medicine and the cost of treatment will be different.

WAYS TO ADMINISTER MEDICINES

ORAL WAY: The requirements for oral medicines are not high. The administration of these medicines does not require special equipment or skilled personnel. Absorption of the drug administered by this route is slow, which also makes it safe - in the event of an overdose, the drug can be removed easily and quickly. A wide variety of drugs are administered orally, such as analgesics, expectorants, cardiac medications, sedatives, sleeping pills and many others. It is the most common route of administration.

SUBLINGUAL ROUTE: The drug is absorbed through the mucous membrane, which has a very good blood supply. As a result, the active substance passes quite quickly into the bloodstream and begins its action. For example, nitroglycerine is administered sublingually.

RECTAL ROUTE: This is how medicines are administered to the elderly, chronically ill, unconscious or vomiting patients. The drug enters the blood through the mucosa into the rectal venous plexuses. Properly administered, the drug bypasses the hepatic circulation and spares the liver. The onset of action is faster than after oral administration.

SKIN APPLICATION: Most therapeutic substances penetrate the skin poorly, so these compounds are applied topically. In this way, a general action can be avoided. Drugs in the form of ointments, creams or compresses are most commonly used for this purpose.

OCULAR ROUTE: This method is used to treat eye diseases with ophthalmic drops. **Indications** for ocular route:

- ✓ prevention of infection,
- ✓ drying and tissue damage in the absence of eyelid movement;
- ✓ treatment of glaucoma;
- ✓ superficial anaesthesia;
- ✓ treatment of inflammation and allergic conditions.

Treatment technique:
- ✓ positioning the patient in lying on the back or sitting position with head support;
- ✓ tilting the patient's head slightly backwards;
- ✓ gripping a sheet of lignin between the third and fourth fingers of the left hand;
- ✓ spreading the eyelids with two fingers of the left hand - the index finger and the thumb,
- ✓ grasping the prepared medicine - a drop in a dropper - in the right hand,
- ✓ instructing the patient to look upwards;
- ✓ drip 1-2 drops of the medicine from a height of 2-3 cm perpendicularly on the conjunctiva of the lower eyelid (without touching the conjunctiva and eyelashes of the patient with the dropper),
- ✓ holding and pulling the lower eyelid forward for a few seconds so that the drug does not flow out through the eyelid slit,
- ✓ slowly release the pulled back eyelid.

INHALATION WAY: The use of inhaled medication has many advantages. First and foremost, it allows a high concentration of the therapeutic substance to be achieved in the respiratory tract, while at the same time the concentration of the drug in the blood is very low. This reduces the risk of side effects. Another advantage is the possibility of achieving a rapid therapeutic effect. The administration is painless, non-invasive and quite comfortable. Medications for the treatment of asthma, COPD (Chronic Obstructive Pulmonary Disease) , chronic bronchitis, cystic fibrosis, fungal infections of the respiratory system and chronic laryngitis are administered by means of an inhaler. After inhalation, it is important to take care of oral hygiene. It is recommended to wash out the mouth and brush the teeth. This prevents the development of

infections and the occurrence of hoarseness. This is especially relevant for inhalations where glucocorticosteroids are taken. If a mask was used, the face should also be washed in the areas to which it adhered.

2.4 PRESSURE SORE PREVENTION

A **pressure sore** is a damage to an area of the skin caused by constant pressure on the area for a long time. Pressure sores are divided into **4 stages**, from least severe to most severe. These are:

Stage 1 - The area looks red and feels warm to the touch. With darker skin, the area may have a blue or purple tint. The person may also complain that it burns, hurts, or itches.

Stage 2 - The area looks more damaged and may have an open sore, scrape, or blister. The person complains of significant pain and the skin around the wound may be discoloured.

Stage 3 - The area has a crater-like appearance due to damage below the skin's surface.

Stage 4 - The area is severely damaged and a large wound is present. Muscles, tendons, bones, and joints can be involved. Infection is a significant risk at this stage.

Many **factors contribute to the development of pressure sores**. Ultimately, the lesions develop as a result of blood supply disorders caused by prolonged or repeated pressure exerted on the patient's body. Pressure sores most often occur in **patients who are immobile for long periods of time**.

Common areas where pressure sores develop are:

- Back of head and ears
- Shoulders
- Elbow
- Hip
- Buttocks
- Inner knees
- Heel
- Spine
- Ankles

HOW TO PREVENT PRESSURE SORES

CHANGING POSITION: Changing position should be done at maximum intervals of 2 hours, including at night. Independent movement should be encouraged. When moving the patient, the body should be lifted to avoid frictional forces. Special hoists can be used for this purpose, but when these are not available - the cooperation of 2 people will be necessary.

APPROPRIATE UNDERWEAR AND BEDDING: Underwear and bedding made of natural materials are best. They should be changed frequently enough to reduce the likelihood of contamination and infection within the wound.

PROPER SKIN CARE: Proper care involves avoiding contamination of the skin surface with faeces or urine. Constant wetness leads to maceration of the epidermis, which promotes the formation of wounds. When using nappies with faecal or urinary incontinence, they should be changed at appropriate intervals to avoid prolonged contact of the skin with excretions. They should be appropriately selected, as only certain materials have optimal properties - they are air-permeable, allowing the skin to breathe, while being sufficiently absorbent and not permeable to moisture. The skin should also be cleaned, as sweat and other excretions also impede wound healing, and promote infection.

PRINCIPLES OF SKIN CARE IN BEDRIDDEN PATIENTS

✔ daily toileting - if there is urinary and faecal incontinence, it should be done more frequently.

✔ the products used should be pH-neutral (5.5), free from detergents that can irritate and dry out the skin. They should provide optimal moisture and nutrition. There are special dermo cosmetics on the market for the skin care of bedridden patients. Many are enriched with vitamins and plant extracts to soothe irritation.

✔ daily oiling of the skin, for which baby oil or hypoallergenic lotions are suitable.

✔ the application of anti-bedsore preparations to the areas most at risk (pelvic region, ankles, heels, knees). In addition, they remain on the surface of the skin, forming a protective layer.

USE OF ANTI-BEDSORE MATTRESSES: The anti-bedsore mattresses should be used if possible. They create variable pressure, which stimulates circulation and therefore increases the blood supply to areas particularly affected by pressure sores. It is important to remember

that they do not replace the need to change the position of the patient, but are a valuable element of prevention.

2.5 FIRST AID TECHNIQUES

Pre-medical first aid is a set of actions aimed at saving the life of a victim in a medical emergency until the arrival of qualified medical services. These actions are taken by people on the spot. First of all, the helper should ensure his or her own safety as well as that of the injured person and protect those in the vicinity. Therefore, the initial steps to be taken are to carefully assess the situation and eliminate hazards. Securing the first aid area and using personal protective equipment such as a breathing mask or disposable gloves plays a very important role.

FIRST AID STEP BY STEP

1. Make sure you are safe....

2. Assess the injured person's response - shake them gently by the shoulders and ask: "What happened? , Are you OK?"

3. IF RESPONSIVE	4. IF UNRESPONSIVE
Assess the condition of the casualty and **obtain information** as to their ailments; **Call for medical assistance if necessary.** Essential information to be given to the emergency services: ▪ **WHAT?** (Type of accident, what has happened) ▪ **WHERE?** (Location of the accident, where are you) ▪ **HOW MANY?** (Number of injured) ▪ **HOW?** (Condition of the injured) ▪ **WHAT ARE YOU DOING?** (Information about the assistance provided so far)	Look for **proper breathing**; **Clear the airway** - place one hand on the casualty's forehead tilting it back slightly, extend the jaw with the other hand. While leaning over the injured person, look for proper breathing: ▪ **visual** → movement of chest ▪ **tactile** → movement of air on your cheek ▪ **auditory** → breathing sounds This assessment should **last about 10 s.** Correct breathing starts with 2 breaths per 10 s. Moments after cardiac arrest, there may be single loud sighs, not to be confused with correct breathing.

▪ WHO ARE YOU? (Your personal details)	

5. IF BREATHING IS NORMAL

✓ Place the casualty in a recovery position
✓ While waiting for help, regularly assess breathing

If a person is unconscious but is breathing and has no other life-threatening conditions, they should be placed in the **recovery position. Watch the video to learn how to put someone into the recovery position:**

https://www.youtube.com/watch?v=TRQePNmR66w (source: NHS)

6. IF THE PATIENT IS NOT BREATHING, start **CARDIOPULMONARY RESUSCITATION** (CPR). Before starting resuscitation:

☐ call or instruct a witness to call for help,

☐ get another person to go and get an AED or portable defibrillator

☐ get help

HOW TO MAKE CPR

1. kneel down next to the injured person,
2. interlace your hands and place them ⅓ of the way up the sternum,
3. the straight arms should be perpendicular to the chest,
4. the chest should be compressed to a depth of 6 cm, at a rate of 100/min,
5. a series of 30 compressions should be performed,
6. then perform 2 rescue breaths, with one hand clamping the victim's nose wings and the other turning the chin down;
7. after taking a normal inspiration, embrace the victim's mouth with your mouth and blow in air for 1 s,
8. then return to chest compressions in a 30:2 sequence.

Cardiopulmonary resuscitation **should be carried out until**:

> ✓ the arrival of special services,
> ✓ return of normal breathing,
>
> ✓ the victim regains consciousness,
>
> ✓ loss of strength of the helper - the body is exhausted.

You can watch the video to improve understanding of first aid techniques:

https://www.youtube.com/watch?v=ErxKDbH-iiI

(COVID-19) ADVICE

If there's a chance the person who's unwell has COVID-19, place a cloth or towel over their mouth and nose and do hands-only CPR until an ambulance arrives.

UNIT 3 – PROTECTING YOU AND YOUR CLIENTS FROM INFECTIONS

3.1 LEARNING OUTCOMES

At the end of Unit 3, the learner will be able to:

- Know and be able to apply infection prevention and control practices
- Apply sanitation & personal hygiene practices used during the COVID-19 epidemic for increased protection
- Know the correct use of PPE (Personal protective equipment)
- Know and be able to apply green skills for cleaning and sanitizing without harming the environment or one's own health.

3.2 HOW INFECTIONS SPREAD

All **microorganisms (bacteria, fungi, viruses, etc.)** live in and colonise the same environments frequented by humans (soil, air, water), and some of these, especially bacteria, also live in harmony with **the human body** without causing harm. Infection occurs if, upon entering the human body, the **microorganism is not defeated by the immune system** and begins to replicate and, increasing in numbers, causes a physical reaction. The onset of infection requires:

- a source (environment, people, medical devices, etc.)
- a susceptible person (unvaccinated or immunocompromised)
- a route of transmission: contact, droplets, aerial, depending on the type of microorganism involved.

Infection prevention and control is vital to the **wellbeing of people** who need care and support and has been even more **crucial during the COVID-19** pandemic. And now that COVID-19 is more under control, we cannot give up these measures. In order to receive safe and effective care, infection prevention and control must be part of **everyday practice** and be applied consistently by everyone. Standard infection prevention control precautions include:

- good hygiene (hands and respiratory)

- staying safe – social distancing, testing, self-isolating in case of test positivity.

- personal protective equipment (PPE)

- environment: cleaning, disposal of waste and food preparation

3.3 SANITATION AND PERSONAL HYGIENE PRACTICES DURING THE COVID-19 EPIDEMIC

HAND HYGIENE

Hand hygiene is the most important measure to prevent the spread of infections among patients. The World Health Organization has identified 5 moments when it is important to do hand hygiene when dealing with a person to be cared for:

1. just before you provide care to a resident

2. as soon as you have finished providing care to a resident

3. straight after you have been exposed to any body fluids

4. straight after touching the person's surroundings (such as chair, door handle) if this may have contaminated your hands

5. as soon as you take off protective gloves.

More generally, we can say that it is important to do **hand hygiene**

BEFORE

- Touching your mouth, nose and eyes

- Eating

- Taking and administering medications

BEFORE AND AFTER

- Food handling

- The use of restrooms

- The dressing of a wound

- The changing of a diaper

- Contact with a sick person

AFTER

- Attending public places

- Having handled garbage
- Having used money
- Having touched other people or other people's objects

First of all, to make it easier to wash your hands regularly, you should:

- keep your arms bare below the elbow

- remove wrist and hand jewellery before starting work

- have short, clean fingernails without nail polish or false nails

- cover cuts or grazes with a waterproof dressing.

HOW TO DO HAND HYGIENE

1. Wet your hands with water
2. Apply enough soap to cover all hand surfaces
3. Rub your hands palm to palm
4. Right palm over left dorsum with interlaced fingers and vice versa
5. Palm to palm with fingers interlaced
6. Back of fingers to opposing palms with fingers interlocked
7. Rotational rubbing of left thumb clasped in right palm and vice versa
8. Rotational rubbing, backwards and forwards with clasped fingers of right hand in left palm and vice versa
9. Rinse hands with water
10. Dry hands thoroughly with a single use towel
11. Use towel to turn off faucet
12. Your hands are now safe

The procedure should take at least 40 seconds. The same procedure should be used when sanitising our hands with alcohol solution.

RESPIRATORY HYGIENE

Since infections can also be transmitted through airborne routes when the infected person coughs or sneezes and droplets (droplets) are deposited on another person or in the environment, it is good to adopt a Respiratory Hygiene/Cough Etiquette.

1) When we cough or sneeze do it in the bend of the elbow or cover our nose and mouth with a single use tissue
2) Throw the tissue immediately after use in undifferentiated waste
3) Do hand hygiene with soap and water or with alcoholic hand solution

Environmental measures to maintain proper respiratory hygiene

- Maintain the distance of at least 1 meter between people (patients, caregivers, caregivers and others).
- Ensure good natural ventilation of all areas (opening windows) or mechanical ventilation.
- Ensure that soiled or frequently touched surfaces are regularly sanitised.
- Ensure that tissues, surgical masks and alcohol solution are present in the area.

3.4 USE OF PPE

Personal protective equipment (PPE) refers to protective clothing, helmets, gloves, face shields, goggles, facemasks and/or respirators or other equipment designed to protect the wearer from injury or the spread of infection or illness. In this module we will focus on the use of PPE for infection prevention. The selection of the type of PPE must consider the risk of disease transmission, this depends on:

- type of transmission: which is by droplets and by contact in the case of COVID-19
- type of patient: those most at risk are children, the elderly, and immunocompromised people
- type of care contact. In the caring relationship the risk increases when:
  o the contact is close (< 1 meter) and prolonged (>15 minutes)
  o the contact is of a repeated and continuous type

Therefore, based on the factors we have just listed, we present 4 infection-risk situations that you might face when caring for someone and we will explain what kind of PPE you should use in each situation.

- When you are undertaking domestic duties and the person you are caring for does not have suspected or confirmed COVID-19, or are providing social contact within a care setting:

- mask (surgical mask Type I, II or IIR)
- gloves and aprons depending on the task, for example contact with cleaning solutions or cleaning the toilet
- eye protection if there is a risk of splash in to your face with blood, body fluids or cleaning solutions

- When you are caring for someone who does not have suspected or confirmed COVID-19, and contact with blood or body fluids is not likely

- mask (surgical mask Type I, II or IIR)
- no apron and gloves required (unless you would normally use them for the task you are doing)

- When undertaking care or domestic tasks which involve potential contact with blood or body fluids, to someone who is not suspected or confirmed to have COVID-19.

- apron (disposable plastic)
- mask (fluid-repellent surgical mask Type IIR)
- eye protection if there is a risk of splash in to your face with blood or body fluids
- gloves (disposable)

- When you are providing care, or cleaning the room of someone with suspected or confirmed COVID-19

- apron (disposable plastic)
- mask (single use fluid-repellent surgical mask Type IIR)
- eye protection
- gloves (disposable)

SAFE USE OF PPE

✓ Remember to remove and dispose of all PPE devices in undifferentiated garbage when you leave the care recipient's home
✓ Change gloves between one type of activity and another (such as helping to eat and helping to use the bathroom) and between different people in care
✓ Do not touch your mask or eye protection when you are wearing them
✓ Do not dangle your face mask or eye protection round your neck or place on the top of your head
✓ Put on and remove face masks and eye protection at least 2 metres away from the people you are caring for
✓ Do not re-use PPE items unless they are clearly marked as re-usable

WHEN TO CHANGE THE MASK

☐ after caring for a person with suspected or confirmed COVID-19 or leaving a cohort where several people with COVID-19 are being cohorted

☐ if they are damp, damaged or uncomfortable

☐ after 4 hours of use

☐ at break times

☐ between different people's homes

☐ if dirty or contaminated

RECOMMENDATIONS

PPE is only truly effective when combined with certain cautions:

✔ Hand hygiene and respiratory hygiene should always be performed.

✔ PPE that cannot be reused after use must be disposed of in an appropriate waste container, and hand hygiene must be performed before wearing and after removing PPE.

✔ Masks and gloves cannot be reused and must be disposed of properly.

✔ Proper use of the mask: the surgical mask must cover the nose, mouth and chin correctly. The mask must be changed if it becomes wet, damaged or dirty.

3.5 GREEN SKILLS FOR CLEANING AND SANITAZING

Global climate change is no longer a future threat but an existing reality; we all need to commit ourselves to making our habits and behaviours more sustainable. The health and care sector must also engage in supporting and fostering a sustainable health and care environment. Green healthcare can create economic value by reducing waste and operational costs, increasing the value of healthcare facilities and improving consumer awareness about the importance of sustainability. Organisations have sprung up all over the world to fight for greener healthcare, such as Doctors for Greener Healthcare or Nurses Climate Challenge Europe. The development of generic green skills is important for greening all sectors, as it enables people to develop a green mindset and adopt behaviours that minimize environmental impacts. Generic green skills include, for example, awareness in the use of materials, assessment of the impact and management of those materials both at the level of monitoring in use and at the level of impact in disposal.

WHAT ABOUT DOMESTIC CARE WORKES?

The acquisition of green skills by domestic care workers makes the **home environment** a more **effective care setting**, improving the **quality of life** of the person cared for and **decreasing** the **probability of the spread of infections**. Green skills that can be useful to domestic care workers in their daily work concern **cleaning and sanitising**. These green skills include responsible product management, waste reduction, and efficient performance.

GREEN SKILLS FOR CLEANING

Cleaning refers to all processes and operations that eliminate and remove waste, dust and dirt of all kinds from surfaces and environments. The cleaning of surfaces and environments is a **preliminary** and indispensable operation **to the subsequent sanitisation**. The **green cleaning** aims to use cleaning solutions and methods that keep people and the environment healthy and free of toxins. Exposure to chemicals and toxins can potentially cause irreparable damage to our bodies, water, air and ecosystem. Green cleaning can mean, for example, **using environmentally friendly products** or **cleaning the house in a way that reduces waste going to landfill**.

The colour-based system

A **colour-based system** can be used in home care to ensure greener and more sustainable cleaning. Four clearly distinguishable colors are used: red, yellow, blue and green. Each color represents an environment. Thus, a mop is used for only one area and germs are not moved from the bathroom to other objects. For instance, if all your microfiber cloths are the same color, it's possible to use one rag to clean a bathroom, then accidentally use the same one to clean the tables in a break room. A typical arrangement for color-coded cleaning looks like this:

- Red is for areas with a higher risk of contamination, such as toilets or bathroom floors.
- Yellow requires a cautious approach, so you would use yellow to clean bathroom sinks, counters, soap dispensers, and so on.
- Blue is your all-purpose colour. Blue is for general dusting, windows, desks, hallway floors, and similar surfaces.
- Green is typically reserved for food prep and consumption surfaces, like break room microwaves and kitchen counters.

What the 4-color rule is for:
- ✓ **optimize time** and **reduce the risk of bacterial contamination** between environments
- ✓ **quickly and conveniently differentiate products** for use in different environments
- ✓ **reduces the risk of accidents** caused by the incorrect use of chemicals

GREEN SKILLS FOR SANITIZING

Ecological sanitization consists of operations and interventions aimed at eliminating germs, bacteria and pollutants while fully respecting the health of the environment. Green technologies and machinery such as those that take advantage of **steam or uv-c light** can be used for this purpose. In home care work, you can use steam cleaners to optimally and naturally sanitize any type of surface in the home without releasing residual chemical traces. Through the use of special equipment, water is turned into steam and then emitted with extreme force onto the surface to be sanitized. Another extremely effective green tool for sanitizing objects and rooms is the UV sterilizer. UV sanitization is particularly effective because it changes the genetic makeup of viruses, bacteria and germs, which lose their viral load, becoming harmless and, more importantly, unable to reproduce.

UNIT 4 – DIGITAL AND ADMINISTRATIVE SKILLS

4.1 LEARNING OUTCOMES

At the end of Unit 4, the learner will be able to:

- know how to make a report, filling out care plans and digital records
- develop technical skills on e-mail and data sharing
- know and be able to use telecare system
- develop ICT skills for support with e-health devices

4.2 LET'S TALK ABOUT DIGITAL SKILLS

WHY ARE DIGITAL SKILLS IMPORTANT FOR DOMESTIC CARE WORKERS?

- Sharing data (E.g. reading, sending and receiving an e-mail communication)

- Learning and development (E.g. using search techniques to locate and select relevant information)

- Use digital skills in direct care (E.g. know how to help someone with their falls monitor, know how to set up and support a remote medical consultation for a person you support, using telecare systems)

- Managing information (E.g. know how to manage information provided by e-health devices)

…Let's find out the digital skills required in domestic care work…

4.3 WHAT IS A DIGITAL CARE PLAN?

Nowadays, it is increasingly common to use digital care plans in home care. A digitized care plan is a digital version of conventional paper care plan, created in collaboration between the patient, the health-care team, the family caregivers and the domestic care workers for a person who needs a healthcare, personal care or other forms of support. The care plan details why a person is receiving care, the medical history, personal details, expected and aimed for outcomes and what care and support will be delivered to the person, how, when and by whom.

> **TO DEEPEN**
>
> [Digital care plans – everything you need to know](#)
>
> [Advantages of digital care plans](#)

BENEFITS OF DIGITAL CARE PLANS

- ✓ For formal carers: Always stay up-to-date on the state of the patient's health in order to modify treatment, if necessary

- ✓ For domestic care workers: Easily share information and updates with professionals and family caregivers about the health status of the assisted person

- ✓ For families and friends: Provide peace of mind and keep relatives updated about their loved one's care

The digitized care plan can be easily consulted and updated via a mobile app by all social and health-care professionals and by caregivers. These aspects encourage communication and collaboration, make the care process integrated, flexible, personalized and efficient. Domestic care workers are involved in care planning and this involvement can take many forms. However, it is obvious that they play a central role in preparing, implementing, monitoring and updating digital care plans. The use of digital care plans by domestic care workers makes their work more effective because digitized planning saves time, facilitates the communication of information and the organization of all care documents as well as the planning of the day's care activities. To actively participate in setting, monitoring and updating the digital care plans, the domestic care workers should get specific digital skills, such as:

- ✓ Know how to access the digital care plan via an electronic device

- ✓ Know how the software and the application of the care plan work

- ✓ Know how to keep the care plan updated and monitored

- ✓ Know how to monitor the health parameters of the person being cared for

- ✓ Know how to keep track of reports on the health status of the assisted person

✓ Recognize if there are technical problems with the application or the software

AN APPLICATION FOR DIGITAL CARE PLANS: LOG MY CARE

Log my Care is a freemium electronic care planning and management system for domestic care work and for care structures. It offers an easy-to-use online dashboard for managers and an app for domestic care workers. Domestic care workers can access personal to-do lists containing the assigned tasks from health-care professionals, keep themselves up to date and update the assisted person's health status.

> **TO DEEPEN**
>
> Video Log my Care: https://youtu.be/fEcA_jVaRmo
>
> Video Tutorial Log my Care: https://www.youtube.com/watch?v=X-_jvV4nDIM&t=9s
>
> Frequently asked questions Log my Care

4.4 TECHNICAL SKILLS ON EMAILS AND SHARING DATA (E.G. OUTLOOK, GMAIL, YAHOO)

Upon the end of this subunit, the learner will know the role of the digital skills in the domestic care work. In particular, the learner will be introduced to the technical skills on e-mails and sharing data.

Email is a cost-effective and efficient way that we use to communicate in our personal and business lives. Short for email, e-mail or electronic mail is an information stored on a computer that is exchanged between two or more users via telecommunications. More simply, e-mail is a message that may contain text, files, images or other attachments, sent over a network to a specific person or group of people. To receive emails, you will need an email account and an email address. If you want to send emails to other people, you will need to have their email addresses.

Email addresses are always written in a standard format that includes:

- a user name to identify oneself
- the @ (at) symbol
- the email or webmail provider's domain

TO DEEPEN:

[Parts of an Email Message](#)

By contrast with an e-mail provider, webmail is a free web-based email service. The webmail providers allow you to access your email account from anywhere with an Internet connection. You can also access webmail on your mobile device. Yahoo!, Outlook.com and Google's Gmail are the top three webmail providers.

HOW TO:

[Create a Gmail Account](#) – video tutorial for beginners

[Use Gmail](#) – video tutorial for beginners

[Use Microsoft Outlook](#) – video tutorial for beginners

[Use Yahoo Mail](#) – guide for beginners

In addition to sending text messages, e-mail can also have attachments. For example, an attachment could be a picture, PDF, word processor document, movie, program, or any file stored on your computer. Because of some security issues, it may not be possible to send certain types of files without additional steps. For example, most e-mail providers have file size restrictions that would prevent any large files or programs from being sent over e-mail or many companies would require you to compress a file into a .zip file.

HOW TO

[Compress or make files into one file](#)

[Send an attachment or photo through e-mail](#)

[Use Google Drive](#)

4.5 EMAIL, SHARING DATA AND DOMESTIC CARE WORKERS

Being digitally competent to use the e-mail and its functionalities can be useful for domestic care workers to:

- formally contact the specialists;

- send files to the healthcare team and family of the assisted person;

- share and store files of the assisted person's health, e.g. on Google Drive;

- create the digital identity that allows the access to online services of the public administration and private services (e.g. electronic health record, health card);

- their personal life (e.g. send a CV as an attachment to an agency, access online services of public administration and private services, access to Google's services)

4.6 USE TELECARE SYSTEM

Upon the end of this subunit, the learner will know the role of the digital skills in the domestic care work. In particular, the learner will be introduced to the telecare system.

Telecare is care delivered at a distance through the use of technology. Alarms, fall monitors, support calls from a service center are examples of telecare system. The aim of the telecare system is to enable elderly or disabled people to stay living safely and independently in their home for as long as possible.

TO DEEPEN

What is Telecare?

What Is The Difference Between Telemedicine, Telecare, and Telehealth?

There are two main types of telecare:

- A personal telecare alarm pendant, worn round the neck or as a wristband

- Passive telecare, such as activity monitoring sensors around the home

Both of these are connected to a monitoring call center that is open 24/7 and ready to call the base unit if alerted to a problem.

PERSONAL TELECARE ALARM PENDANT

In its simplest form, telecare consists of a pendant, the personal alarm, with a single button that, when pressed, alerts the monitoring center via the base unit set up at the user's house. When the button is pressed, a trained staff member will attempt to contact the user. Subsequently, the trained staff member contacts a caregiver, a domestic care worker or the emergency services. Pendants can also include additional functions such as fall sensors, GPS and speed dial buttons for preset contacts.

ACTIVITY MONITORING SENSORS

Activity monitoring sensors placed around the house are forms of passive telecare. They are used to monitor the user's activity levels. Updates are sent to a monitoring centre, where if something is wrong a staff member triggers the base unit at the user's house and/or a predetermined contact, as in the case of a telecare alarm. Activity monitoring sensors and passive telecare can add an extra level of reassurance over pendants because they do not require the user to sound the alarm, but they rely on sensors and routine changes.

TELECARE AND DOMESTIC CARE WORKERS

There is also a form of telecare that relies more heavily on smart home devices or assistants and it doesn't include 24/7 monitoring services. These options rely on a nominated person – such as the domestic care worker – being available and accessible at any time to respond to an alarm or alert. Even more in these situations, domestic care workers have to improve their digital skills to know how to use the telecare system to increase the safety of the assisted persons, who may find themselves in difficult situations and need timely intervention.

4.7 ICT SKILLS TO SUPPORT WITH E-HEALTH DEVICES

Upon the end of this subunit, the learner will know the role of the digital skills in the domestic care work. In particular, the learner will be introduced to the ICT skills to support with e-health devices.

E-Health is a recent term for healthcare practice which is supported by electronic processes and communication. It is the transfer of health resources and health care by electronic means. E-Health provides a new method for using health resources – such as information, money, medicines – and in time should help to improve efficient use of these resources.

> **TO DEEPEN**
>
> What is E-Health? – Video
>
> What is e-Health?

ICT SKILLS

The skills required by the e-Health practice are known as "Information and communication technology" (ICT) skills. ICT skills refer to the ability to use various technologies to transmit, store, create, share or exchange information in normal activities of daily living (e.g. sending an email, making a video call, searching on the Internet, using a tablet or mobile phone). The use of ICT-based tools and resources to support and promote the prevention, diagnosis, treatment and monitoring of diseases, the management of health and lifestyle is a shared theme at European level.

Domestic care workers should be competent in the use of digital health devices requiring ICT skills. For example, in the context of the e-Health, ICT skills can be useful to:

- log in to the Electronic health records (EHRs)

- use mobile wireless technologies – such as the Estonia's "e-Health record – to log into health information and services

- facilitate all remote assistance services, such as medical teleconsultations or ECG telemonitoring

TO DEEPEN

- [Estonia's e-Health Patient Portal](#)

- [Remote Cardiac Care](#)

- [Electronic health records](#)

- [How do telemedicine and remote patient monitoring work](#)

COMARCH HOMEHEALTH

Comarch HomeHealth is a telemedicine system consisting of a tablet application connected to medical devices for measuring vital parameters such as ECG recorder, pulse oximeter, thermometer, glucometer, sphygmomanometer. Comarch HomeHealth enables remote monitoring of the patient's health status directly at home. Comarch HomeHealth can be used independently by the user directly at home, with the help of domestic care workers ICT skilled. The measurement procedure is guided step by step by the application. The collected data are recorded and sent to the Comarch e-Care cloud-based telemedicine platform. From there, medical personnel can view and analyze the parameters and assess the patient's health status remotely.

TO DEEPEN

[Remote Patient Monitoring with Comarch HomeHealth](#)

[Telemedicine Solutions for Seniors](#)

[Comarch LifeWristband - Remote Medical Care](#)

UNIT 5 – COMMUNICATION AND RELATIONSHIPS

5.1 LEARNING OUTCOMES

At the end of Unit 5, the learner will be able to:

- Learning **cultural awareness & expression**

- Develop **organizational skills, attention to detail and punctuality**

- Learning how to act in **situations of conflict and resolving**

- Learning how to provide **emotional support in difficult circumstances**

5.2 CULTURAL AWARENESS AND EXPRESSION

THE CONCEPT OF CULTURE AND CULTURAL AWARENESS

Culture can be described as the ideas, customs, and social behaviour of a particular people or society. The daily interaction between human beings is to a great extent characterised by cultural codes. Culturally specific codes shape people's understandings, behaviors and emotional responses. The concept of culture can also be used to draw boundaries between "us" and "them". "They" are seen as the bearer of culture and "we" are neutral.

RELATIONSHIP CULTURE ◻ In relationships cultures some characteristics are that it is centered around the group:

✓ I am part of the group
✓ I identify myself in relation to the group
✓ My individual needs are often put aside for the will of the group
✓ Relations in the group are guiding
✓ Children are expected to take care of their parents

ACCOMPLISHMENT CULTURE ◻ Some features of an accomplishment culture are that is centered around the individual:

✓ I identify myself from the self
✓ Independency and self-sufficiency come first
✓ Laws and rules of society guides relationships
✓ The institutions take care of our parents

PERSON-CENTERED APPROACH

In meeting people from other cultures, you need to take the time and ask" I don't understand, how do you mean?" We have to meet every individual as a person and not get blinded by what we call culture.

INTERSECTIONALITY

Groups are diverse. People have many different identities that exist at the same time. Everyone has their own unique experiences of discrimination and oppression.

UNIVERSAL EXPRESSIONS AND NON-VERBAL COMMUNICATION

Although there are differences of communication in different cultures, there are common factors and universal expressions such as empathy and respect. In home care the non-verbal communication is very important and to practice continuous reflection. It is good in-home care to adjust to cultures as long as it is possible.

5.3 ORGANIZATIONAL SKILLS

Organizational skills include your ability to use your physical space, mental capacity and energy effectively and efficiently to reach the desired outcome. Organizational skills can take different forms depending on your particular workplace and job title, but they typically involve maintaining an orderly workspace, meeting deadlines and communicating well with your team.

ATTENTION TO DETAIL AND PUNCTUALITY

Developing strong attention to detail makes you more effective in the workplace, increasing your productivity and reducing the likelihood of error. It is a skill that is desirable for companies.

- **To get organized you can:**
- ✓ Make sure all appointments are in your calendar
- ✓ Clean the desk and remove things that cause distractions
- ✓ Create lists: Make list and check tasks off when finished; Set three to five tasks for each day

- **To increase your ability to focus you can**

✓ Play focus-enhancing games. Exercising your brain is a highly effective way to increase your focus. Try using memory cards, puzzles or other games to improve your focus and, with it, your attention to detail.

✓ Learn to meditate. Meditation has been shown to improve not only your physical health but also your mental health, improving your memory and attention to detail by reducing stress and calming your mind.

✓ Download an application for organizing yourself, there are different examples for different countries.

● **To maintain attention to detail you can:**

✓ Be present and minimize distraction
✓ Take small breaks
✓ Focus on one task at a time

5.4 ACTING IN SITUATIONS OF CONFLICT AND RESOLVING - CONFLICTS AND CONSTRUCTIVE CONFLICT MANAGEMENT

Conflicts are a part of human relationships and therefore a part of groups' everyday lives – regardless of whether there is good group dynamics or not. If conflicts are handled constructively, they can be a positive power of change for both the individual and the group.
The definition of the word is "collision" and "clash". Conflicts arise when one or several parties want(s) something that the other party is unwilling to give or do. This blockage of requests and needs leads to frustration. Examples of human needs that leads to frustration when not met are:

● Confidence - do I have confidence in my group members and in the task?

● Respect - do I feel respected?

● Confirmation - is my performance good enough?

● Intelligibility – what am I expected to do?

● Stimulation - am I developing in my tasks, do I find them interesting and enjoyable?

● Solidarity - do I feel allied to the other members of the group?

● Autonomy - am I given the right to influence and control?

CONFLICT MANAGEMENT STYLES

People tend to handle conflicts according to five conflict styles. The conflict styles can be categorized according to a scale of how much care one party shows for its own interests:

- Competing
- Collaborating
- Compromising
- Avoiding
- Accommodating

An important part of constructive conflict management is to become aware of and understand your own and other's behaviors in conflicts.

The ABC model consists of a triangle where the different corners each represents one aspect of the conflict:

- Corner A: Attitudes, emotions and thoughts
- Corner B: Behaviours
- Corner C: The question of fact

If negative attitudes and emotions are the focus of the conflict, then the parties must process their attitude towards each other: Acknowledge that there is a conflict, Listen and try to understand, Question why you think and feel the way you do, focus on establishing a clear framework. If the conflict is **characterized** by a destructive **behavior** of part or one of the parties, then the first step should be to **minimize** and stop destructive **behaviors**, such as apologizing, try to focus on the question of fact. If neither behaviours nor emotions have stepped up and escalated, there is a good opportunity to start with the question of fact: Try to investigate which underlying needs and interests the parties involved do not feel are being met, dare to be clear and talk about your needs and thoughts, Listen and try to understand the other's perspective.

5.5 PROVIDING EMOTIONAL SUPPORT

EMOTIONAL SUPPORT IN DIFFICULT CIRCUMSTANCES

✓ CHOOSE PLACE AND INTEGRITY

It takes time and space to give emotional support, choose a place with integrity and not too many distractions. Take time to create a good conversation and don't forget to adjust your tone in your voice to the situation.

✓ LISTEN WITH ALL YOUR SENSES

To listen with all your senses means:

- keep eye-contact
- listen properly
- don't interrupt

✓ CONCLUDE AND VALIDATE THE FEELINGS

Listen first and avoid giving your opinion too quickly. After listening you can conclude what the other person told you. Validate her/his feelings. By saying that we understand, we can validate and value the other person's feelings. Two people going through similar situations don't feel and experience the same. But if you experienced something similar, try to explain how you felt and how you went through it.

✓ BODY LANGUAGE

To see the situation from another point of view can help. When we listen, we listen with our whole body, our ears, our eyes and our expressions. Body language is important, for example to avoid picking up your phone. A smile, a hug or a look, can sometimes be the best support.

✓ EMPATHY

Empathy is the ability to put ourselves in other people's shoes. Based on the understanding of how they feel, how they think and why they behave in a certain way. Therefore, empathy is a skill we can practice.

UNIT 6 – PERSONAL AGENCY & WELL-BEING

6.1 LEARNING OUTCOMES

At the end of Unit 6, the learner will be able to:

- manage stress
- manage time properly
- prioritize the workload
- know which are the relevant rights and how to strengthen personal agency

6.2 STRESS MANAGEMENT

Let's learn about stress management but first... Let's learn about stress. Stress is the body's response to any kind of demand or threat (real or imagined). This automatic process is called the "fight-or-flight" reaction, a way that your body protects you. The stress response, when working properly, can help you to stay focused, energetic and alert. But beyond a certain point, stress stops being helpful and can start to cause you damage. Stress is a normal part of your life. However, what makes a big difference to your overall well-being is the way you cope with stress. We can cope with stress more or less effectively based on whether we are feeling happy, angry, sad or frustrated. **Emotionally resilient people are those who can better adapt to stressful situations**. What's more, being able to discern between emotions and feelings and **being emotional competent** (Emotional competence refers to how you deal with emotions. It is about how you recognise, understand, express and regulate your own emotions and respond to the emotions and interactions of others.) **guarantees a better way to tackle stress.** There are three types of stress:

1. **Acute stress** can happen multiple times throughout the day, as a response to events seen by you as stressful. The word "acute" means the symptoms develop quickly but do not last long.
2. **Episodic acute stress** occurs when we experience mini-crises regularly and live in a state of tension. It tends to hit those who take on or worry too much.
3. **Chronic stress** comes when a person never sees a way out of a serious life situation and is the most likely to cause long-term damage.

The situations and pressures that cause stress are known as stressors. Stressors can be both, positive or negative. Some of the main stressors include: work, finance, relationships, parenting, major life changes, day-to-day problems. Stress is not only caused by external factors. Stress can be also self-generated, when, for example, we worry excessively about something that may not happen, or have irrational and pessimistic thoughts. External or internal, what causes stress depends, at least in part, on our perception of it. Therefore, depending on how we are acting towards the stress, understanding that it's a biological response from the start, will be decisive for our response. So, which are the coping strategies to deal with "bad stress"?

- **Action-oriented**: helps you to do what you can to reduce or eliminate the sources of stress, so there is less to deal with, so you have more control of your life.
- **Emotion-oriented**: helps to disrupt negative thinking and nurture positivity.
- **Acceptance-oriented**: helps you to deal with stress when you have no power to change or influence the source of the stress.

RELAXATION TECHNIQUES

Relaxation techniques are an essential and widely used resource in psychological treatments that involve the need to address and cope with stress or anxiety, and situations in which the person experiences a psychophysiological over-activation that prevents them from carrying out their daily activities normally. These types of techniques facilitate the reduction of body tension levels and the mental load that we often suffer in different areas of our lives (work, family, etc.). Therefore, they are useful tools, not only for patients with psychological problems or emotional disturbances, but also for all those who need to improve their quality of life and well-being. Learning to relax allows us to carry out activities that we would otherwise avoid due to the high levels of activation that we currently suffer in our modern societies. Rushing, stress… are factors that feed discomfort and worsen our physical and cognitive performance. By using relaxation techniques, we promote the proper functioning of our stress management system, ensuring an optimal hormonal balance and reducing excessive levels of cortisol which, in the long run, can be harmful to our organism. You have some power to tackle this response through a "relaxation response" which can be done through multiple exercises that don't require much, we recommend this deep breathing exercise that can be done almost anywhere at any time:

- ✓ Sit or lie down and place one hand on your stomach. Place your other hand over your heart.
- ✓ Inhale slowly until you feel your stomach rise.
- ✓ Hold your breath for a moment.
- ✓ Exhale slowly, feeling your stomach descend.

MEDITATION

Meditation has risen its popularity in the last decade and there are plenty of techniques… It's an art per se! So, why not following this video with autogenerated captions to know more about it and start your path on the meditation world.

Video   url: https://youtu.be/U9YKY7fdwyg

MINDFULNESS

Mindfulness is the basic human ability to be fully present, aware of where we are and what we're doing, and not overly reactive or overwhelmed by what's going on around us. Mindfulness is a relaxation and meditation technique from Buddhism that helps us to greatly reduce stress. But, in turn, it can also be very helpful in alleviating the symptoms of certain psychological disorders such as anxiety and depression. Not surprisingly, mindfulness reduces people's negative emotional states and increases positive feelings. The mindfulness technique is based on focusing on the present moment to accept our emotions as they are born, without trying to control or avoid them. In this way, we are able to eliminate the frustration or anxiety caused by facing a situation that we cannot change or modify no matter how hard we try. The main objective of mindfulness is to provide us with a method to learn to manage our emotions, reactions, attitudes and thoughts in order to deal with the situations we face in life. All of this is achieved through the practice and improvement of mindfulness. How to cultivate it? These are some tips:

- ✓ Sitting, walking, standing, and moving meditation (it's also possible lying down but often leads to sleep);
- ✓ Short pauses we insert into everyday life;
- ✓ Merging meditation practice with other activities, such as yoga or sports.

Finding the formula that suits you to tackle stress is a decision that will require time and some trial / error process but what about relying on…

PHYSICAL ACTIVITY

The physical benefits of exercise—improving physical condition and fighting disease—have long been established, and physicians always encourage staying physically active. Exercise is also considered vital for maintaining mental fitness, and it can reduce stress when stress affects the brain, with its many nerve connections, the rest of the body feels the impact as well. So, it

stands to reason that if your body feels better, so does your mind. Exercise and other physical activity produce endorphins—chemicals in the brain that act as natural painkillers—and also improve the ability to sleep, which in turn reduces stress. Meditation, acupuncture, massage therapy, even breathing deeply can cause your body to produce endorphins. And conventional wisdom holds that a workout of low to moderate intensity makes you feel energized and healthy.

SOCIALISATION

Social support can be thought of as the soothing impact of friends, family, and acquaintances. Social support can take many forms, including advice, guidance, encouragement, acceptance, emotional comfort, and tangible assistance (such as financial help). Thus, other people can be very comforting to us when we are faced with a wide range of life stressors, and they can be extremely helpful in our efforts to manage these challenges. Even in nonhuman animals, species mates can offer social support during times of stress. For example, elephants seem to be able to sense when other elephants are stressed and will often comfort them with physical contact— such as a trunk touch—or an empathetic vocal response.

ASSERTIVENESS

Assertive people tend to have fewer conflicts in their dealings with others. This translates into less stress in their everyday lives. They get their needs met (which equates to less frustration over unmet needs) and help others get their needs met, too. Having stronger, more supportive relationships means that, if you are ever in a bind, you have people that you can count on. This also helps with stress management and even leads to a healthier body. Studies have also found that assertiveness is positively associated with self-esteem. In other words, the more assertive you are, the better you tend to think of yourself.

SELF-CARE

The human body and mind are an interconnected and complex series of systems that control how well we function. Like any machine we require maintenance, but while this expectation is normal when it comes to taking care of our houses and cars, applying the same logic to our bodies carries negative societal implications. We don't want to be seen as too selfish with our time, over-indulgent, or weak, and we place a high value on how others perceive us. Every person's body has requirements to function properly and while we can deny reality for a while, there are shared truths when it comes to certain things that are universally good and bad for us.

Haven't we convinced you? Check this Ted Talk, subtitles available on YouTube, that explains how to make stress your friend.

Video url: https://www.youtube.com/watch?v=RcGyVTAoXEU

6.3 TIME MANAGEMENT

In our time, stress is closely related to lack of time. We have given ourselves over to a routine of filling our time with activities of all kinds, and sometimes we don't even realise that we have given up our leisure time. *But how do we get our time back?*

TIME MANAGEMENT

It's a common feeling: We have plenty of things to do but not enough hours on the clock to finish them. But often the *problem is not that there is not enough time, it is more a mistake in our time planning.* Time management is the process by which a person divides his or her available hours according to the tasks to be done. As we know that efficient time management translates into greater productivity and quality of life. How to win the clock back?

THE GTD TECHNIQUE

The more information bouncing around inside your head, the harder it is to decide what needs attention. What if there was a technique to **declutter your brain noise?** Check the following video with autogenerated captions to know more about the **Getting Things Done technique** (GTD)

Video URL: https://youtu.be/gCswMsONkwY

THE POMODORO TECHNIQUE

"All work and no play makes Jack a dull boy,

All play and no work makes Jack a mere toy."

(Maria Edgeworth, 1825)

These wise words, coming from a popular adverb, give us a truthful insight… The key is on the balance, so why not trying the **Pomodoro technique**? It consists of framing the work in sessions that are divided into four focus blocks of 25 minutes each. Between each one, you should take a 5-minute break, except for the last one, which should be 30 minutes.

PARKINSON LAW

The more time we have, the more time it will take to complete a task… (or it will allow us a sensation to keep procrastinating). Watch the video with autogeneration captions to break with this phenomenon!

Video url: https://youtu.be/nnlimOTcsAs

We have proposed things to do but… what shouldn't you be doing?

✓ **Avoid interruptions**: try to concentrate 100% on the task by taking short breaks to keep us more active.

✓ **Avoid using your mobile phone**: there are many elements stored on our devices that can distract us from our task. A good option is to leave the mobile phone out of our reach or turn it off for a period of time that we establish.

✓ **Procrastinating**: this is something we tend to do, especially with tasks that we do not like to do. This is something we should avoid, as the more time passes, the more stress it will cause us.

6.4 PRIORITISING THE WORKLOAD

On the previous subunit we have learnt more about how to boost our time management skills but… how we manage our workload? First, let's watch this Ted Talk with keys to handle organisation from a self-propose perspective.

Video url: https://youtu.be/R7cUvp3XnYs

THE EISENHOWER MATRIX

The Eisenhower matrix offers a tool to manage time and sustain productivity. Tasks should be separated into four quadrants:

o Urgent and important: those that need to be done immediately.
o Important but not urgent: tasks that can be scheduled for later.
o Urgent but not important: tasks that can be delegated to others.
o Neither urgent nor important: tasks that can be discarded or eliminated.

	Urgent	Non urgent
Important	Do – Do it know	Decide – When would you do this task?
Not important	Delegate – Who can support you on this task or do it on their own?	Eliminate – This task shouldn't even be on your mind

✓ **Allocate a specific time to each task:** it is necessary to leave free time between tasks. It may seem contradictory to talk about resting when there is little time, but it is necessary to increase effectiveness and efficiency.

✓ **Set SMART goals:** it is good to set short/medium/long-term goals, as it allows us to see our development in the task and increases motivation. These goals should respond to the SMART indicators: Specific, Measurable, Achievable, Realistic, Timely.

✓ **Dividing time into blocks:** by breaking down complex tasks into simple blocks we can optimise resources, save time and organise ourselves better.

✓ **Give yourself rewards:** as long as they are not abused, a good reward after a task is stimulating.

✓ **Set limits:** if we find that we are blocked by a task or we are tired and easily distracted, it is better to stop. Working longer hours does not make you do things better.

Having time management skills is not just about getting more done, although that is a good by-product. More importantly, time management allows you to feel more in control of your life and what you want to achieve. Identify what's important to you, find achievable goals and then start accomplishing them with clear, prioritised tasks. Building that structure and knowing when to say no, take a break or have someone else step in will go a long way to helping you manage your time better and live a fuller life.
 If you haven't included "me time", activities which focus on improving your wellbeing and allows you to be in peace with yourself: Re-read the last slide and think again.
In a world that moves fast, relying on "the show must go on" always leads to burn out…

How are you going to be on care duty if you don't care about yourself? Explore methods and techniques and find what suits you.

6.5 EMPOWERMENT

There are bachelor degrees, masters… Every piece of formal and nonformal education that you can imagine about workers' rights but DoCup wants to highlight that

You are not alone

Independently on which EU country you are, the European Union acts a supranational agent that encourages countries to fulfil the rights that protects the employees. If you are not aware of them, check them here. This webpage is available in all the EU languages (Web url: https://european-union.europa.eu/live-work-study/working-eu_en). Independently on which EU country you are, your employers should align with the European Pillar of Social Rights which in 20 principles guide us towards a strong social Europe that is fair, inclusive and full of opportunity. These 20 principles are divided in three chapters: Equal opportunities and access to the labour market, Fair working conditions and Social protection and inclusion. Check the website here. It's available in all the languages on the EU (Web url: https://ec.europa.eu/info/strategy/priorities-2019-2024/economy-works-people/jobs-growth-and-investment/european-pillar-social-rights/european-pillar-social-rights-20-principles_en).

"Having a sense of personal agency and ownership: The belief or experience that ''I'' (agency) am the cause of ''my own'' (ownership) thoughts and actions".

(Reference Module in Neuroscience and Biobehavioral Psychology, 2019)

Used in Psychology, Philosophy and Social-Economy defends that the individual is the ability to make decisions and play a role in the direction of one's own life. Want to know more? Follow this link to this website in English or watch this video with autogenerated captions (Website url: https://www.sciencedirect.com/topics/psychology/personal-agency;   Video   url: https://www.youtube.com/watch?v=TaxWbft-vJI).

PERSONAL AGENCY

Ready to make the ball roll? Watch this video with autogenerated captions to encourage you not to give up and learn more about how to calm your personal agency.

Video url: https://youtu.be/VC1xlh1cjYE

From this perspective, in order to boost the personal agency as a care worker, we recommend you to:

✓ Avoid infantilising your dependent as this will result in an abdication of personal agency.
✓ Keep learning to develop and evolve.

✓ Don't be afraid to fail as from failure you can learn valuable lessons that will help you to meet your goals.

From this perspective, in order to boost the personal agency as a care receiver, we recommend you to:

✓ Avoid being taken away responsibility (being infantilised) / Refrain claiming incapability to escape responsibility. Both of these options will lead to an abdication of personal agency.
✓ Be active in your learning as practicing a broad range of internal, external, mental, emotional, and physical abilities will boost your agency.