First aid training for older people

Participant guide

First Aid Education European Network

International Federation of Red Cross and Red Crescent Societies
Fédération internationale des Sociétés de la Croix-Rouge et du Croissant-Rouge
Federación Internacional de Sociedades de la Cruz Roja y de la Media Luna Roja
الاتحاد الدولي لجمعيات الصليب الأحمر والهلال الأحمر
Global First Aid Reference Centre

In Europe, life expectancy is increasing:

Consequence n°1: there is another life after retirement: retired people have free time for social, sport, associations' activities and for looking after their grand-children.

Consequence n°2: longer lives mean an increase in the needs related to health: how to face this on a financial and human point of view? The needs of structures for older people are more and more important but meanwhile care at home has been developing.

The European RC/RC National Societies feel concerned about this issue, proved by:

- the provision of a position paper "Improving lives of older people",
- a meeting of the EU RC National Societies in Budapest in 2007,
- a recommendation during the FAEEN meeting in Athens in 2008 which says "A task-force will work to develop a specific first aid training for the elderly",
- a selection as main topic for the European RC/RC National Societies conference in Vienna in April 2010.

In order to have a European overview of the training for older people and of the training of their caregivers, the European Reference Centre for First Aid Education made a survey within the First Aid Education European Network.

Main conclusions are that:

- only few National Societies have set up programmes and only few people are trained;
- some topics such as "Call for help", "Falls", "Prevention", "Heart problems"… are essential and should be included in the curriculum;
- only few tools are available;
- there are difficulties in terms of communication with the target groups.

With the objective of making available tools for training older people, a European task-force worked on a curriculum; the basic first aid training is not included in this curriculum as National Societies will use their basic first aid course adapting it to the target. Therefore in this participant guide, the topics developed are

Prevention in daily life

"We all want to feel safe at home, but around a third of accidental injuries requiring medical treatment occur at home, caused by falling hazards such as slippery floors, bad lighting, inadequate furniture, faulty products, etc… Other health hazards include noise, indoor air pollution, mould, toxic chemicals, to name but a few.

Vulnerable groups such as children, older people and people with disabilities are particularly at risk. These groups have special safety needs at home: appropriate children's rooms, aids like hand rails, enough space for medical care, unimpeded access, etc. In our ageing societies, more attention needs to be given to health and safety in the home so we can live independently for as long as possible."
http://ec.europa.eu/health-eu/my_environment/at_home/index_en.htm

What is prevention?
Prevention: set of measures to prevent a hazard, a risk, a damage from happening (Dictionary Larousse)

Prevention consists therefore of adopting measures that will prevent hazards and risks, and that will also reduce the effects of any accident that may occur.
Examples are:

- To install safety gates to prevent children from going up or down the stairs and thus prevent the risk of falling.
- To wear a helmet at all times while riding a bike in case of a fall. This will reduce the impact on the head and thus prevent the risk of trauma.

It is of course impossible to list all safety measures that could be taken. It depends on the type of house or building and the activities of the people involved.

There are different steps to prevention. The first step is to identify all potential hazards. Once these have been identified the objective is to implement measures to avoid an accident. It may consist of removing the hazard (example: taking away the extension lead that is running across the room) or in just saying: "Pay attention to the step". Also, you can adopt measures directly related to the potential source of an accident (eg: fix anti-slip strips onto the steps of stairs) or individual safety measures (eg: wearing protective gloves when using sharp tools).
These measures rank according to their degree of efficiency and how easy it is to implement them.

Keep in mind
Whatever your budget or availability of preventive measures, there is always something to be done to help prevent accidents. Everything you can do will have a positive impact on your life and your family. By adopting a prevention policy, you reduce the risk of accident.

In addition to the training, here is a chart summarizing the main causes of frequent accidents and the recommended prevention measures.

Thermal accidents		
Hazard	**Damage**	**Prevention**
Wood or coal-burning heating appliances	Fire, burns or asphyxia due to carbon monoxide	Regular sweeping. Regular cleaning. Protection guard around the fireplace.
Christmas lights	Fire and electrocution	Unplug if not in use or at night. Do not leave unattended.
Flammable products (oil, aerosols, perfume, solvent, household alcohols)	Fire, explosion and intoxication	Do not allow near to a flame. Do not expose to high temperature. Do not smell.
Cigarette, cigar	Burn, fire	Make sure ashes are cold before throwing them away. Put out cigarettes before going to bed. Do not smoke in bed.
Hot liquids	Burn	Always turn saucepan handles inward. Keep children away from cookers. Open the pressure cooker only once steam is out. Check the temperature of microwaved warm dishes. Check the water temperature before taking a bath or shower (with a thermometer and not with your hand!).
Barbecues	Burn and fire	Only use fire starters to light or to reactivate the fire. Make sure the barbecue is stable, balanced and secure. Keep children away from the barbecue.
Electrical accidents		
Hazard	**Damage**	**Prevention**
Electrical appliances	Electrocution, burns	Follow the Manufacturer's instructions. Unplug any appliance before repairing or cleaning it. Keep hair dryers away from sources of water. Use plug safety cover.

		Plug your electrical appliances (washing machine, dishwasher, electric hob) into grounding plugs.
DIY tools (Do-it-yourself is a risky activity)	Electrocution, burns, cuts, fractures, general trauma	Turn off electricity before carrying out any electrical repairs. Follow manufacturer's instructions. Use secure extension leads. Make sure your hands and feet are dry before operating any electrical device.
Chemical accidents		
Hazard	**Damage**	**Prevention**
Cleaning products	Ingestion and poisoning, burns	Keep them in their original packaging. Follow instructions. Do not pour them into food containers or unidentified containers. Use products with safety caps. Store them in locked places that children cannot reach.
Anti-rust products , drain cleaners	Severe internal burn, poisoning	Follow the instructions for use. Wear gloves and glasses, a mask if necessary. Store them in locked places that children cannot reach.
Chemical products used for gardening, repairing. (Large number of items)	Inhalation and contact with the skin may cause burns and/or poisoning. Potential effects on health from **long-term use.**	Carefully follow the instructions for use. Wear gloves and glasses, a mask if necessary. Use original containers. Store safely in locked places out of the reach of children.
Heating appliances (wood, coal, oil, gas)	Release of carbon monoxide that may lead to poisoning and even to death. Burns	Keep the locations of the appliance well ventilated. Regular sweeping, cleaning and maintenance. Follow your doctor prescription.

		Regularly change the gas hose according to the expiry date. Turn off correctly after use.
Medicines	Accidental overdose and poisoning.	Keep them in a locked and out of reach medicine cabinet. Use a pill-box if regularly taking a lot of medicines. Dispose of any expired or unused products by bringing them back to the pharmacy.
Cosmetic products	Allergy and other dermatological problems	Test a small amount of product on a clean small part of skin (e.g. inner forearm) and rinse thoroughly afterwards. Respect the expiration date.
Green plants and flowers	Toxicity if ingested Allergic reaction	See list below
Insect bites, wasp, bee	Allergic reaction, sometimes lethal (anaphalaxis)	Make sure that jars containing sugar products are properly closed. Do not leave food exposed. Wipe the table after eating. Use a wasp trap. If an allergy is already known, have the appropriate treatment nearby or contact the emergency services.
Mechanical accidents		
Hazard	**Damage**	**Prevention**
Knives, electric knives, scissors, tin cans	Cuts, bleedings, accidental amputations	Wear protection gloves Wrap sharp items with paper before throwing them in the bin.
Lawn mower	Serious injury. Finger or other potential accidental amputation	Mow when it is dry. Stop the engine, wait until the blade stops or unplug before touching the blade.

List of some toxic plants : Delphinium; Euphorbia ; Ficus ; Genista ; Aesculus hippocastanum ; Philodendron; Caesalpinia gilliesii ; Lathirus odoratus ; Rhododendron ; Dieffenbachia ; Anemone Coronaria ; Anthurium ; Papaver ; Spatifilum ; Matthiola ; Iris ; Yucca.

Trips and Falls

Overview

Falling is a common experience for older people. Evidence suggests that approximately 28-35% of people aged of 65 and over fall each year increasing to 32-42% for those over 70 years of age[1]. Rates of falling increase with rising rates of illness. Falls may be symptoms of underlying disease processes, impairments and disabilities but may also be the cause of disability. Factors that lead to falling include postural difficulties, declining vision, decreasing muscle power and reduced reaction times.

The consequences of falling include sprains, dislocations and fractures.

Bone and joint injuries

There are approximately 200 bones in the human body. Our musculoskeletal system is made up of different parts, just like a jigsaw puzzle. The location at which two or more bones make contact is called a joint.

When the musculoskeletal system is injured you cannot necessarily tell what kind of injury it is, and thus requires medical evaluation. Severe pain, immobility or a deformity point to a fracture or dislocation.

Fracture: excessive amount of force can lead to the breaking a bone. If the break causes a wound, it has to be treated with immobilization plus a sterile bandage.

Sprain: a sprain is an injury in the joint caused by the ligament being stretched. The joint itself is not injured and painful movement is possible.

Dislocation: when a bone is removed from a joint as a result of trauma, it is called dislocation. Dislocations are especially painful.

Osteoporosis: the bone-thinning disease, osteoporosis is a common disease especially affecting older women (two thirds of all women over 80 years of age). Measuring the bone mineral density is recommended for all women over 50 years of age. Because the bones become porous, affected people can suffer from fractures even when experiencing minor falls.

[1] *WHO Global Report on Falls Prevention in Older Age, 2007*

Leg Injury

Mrs Huber could no longer wait for her grandson to arrive in order to help her. She went to fetch the ladder from the cellar. She had always changed the batteries of her kitchen clock by herself in the past. Suddenly the ladder collapsed and Mrs Huber fell to the ground. Her face distorted with pain, she frantically cried for help…

You are her husband and you discover her:

- Make sure the vicitm is in a comfortable position. Ask, where the pain is
- Immobilize the leg (e.g. roll a blanket to support the leg)
- Place emergency call.
- Open shoelaces or tight clothing. Apply cold compresses.
- Continue to administer basic first aid* and wait for the ambulance.

(*basic first aid: assure to not mobilize the leg, keep good position, open the window – fresh air, keep victim warm, psychosocial support)

Please note: treat possible wounds resulting from the injury with sterile bandages and call to EMS.

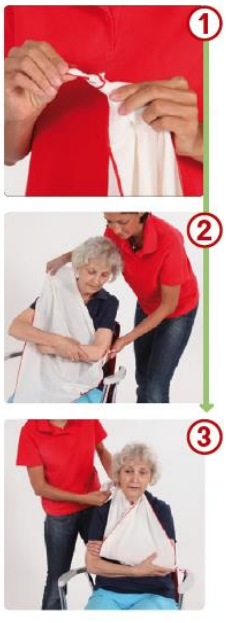
Arm Injury

Mrs. Huber was shopping. It was a rainy day and she decided to go without walking stick, cause using an umbrella. Suddenly she slipped and came to fall on the entrance to the grocery. She instantly felt the pain in her left arm and could hardly move it.

- Make sure victim is in a comfortable position. Ask where the victim is in pain.
- First, ask to the casualty to not move the arm.
- Then, immobilize the arm with the help of a triangular bandage.
- Remove jewelry. Gently apply cold compresses to reduce swelling.
- Administer basic first aid*. Seek medical treatment.

(* basic first aid: keep good position, open the window – fresh air, keep victim warm, psychosocial support)

<u>Detailed description of the triangular bandage:</u>



1) Secure the apex of the triangular bandage by tying a knot! The apex is opposite the long side of the triangular bandage.

2) Place one end of the triangular bandage under the injured arm so the bottom corner goes over the shoulder of the uninjured side.

3) The knot should be in the area of the elbow of the injured arm. The other end of the material should be placed over the injured arm. Bring the injured arm into a comfortable, horizontal (or better lightly elevated) position. Tie the two corners together at the side of the neck!

Please note: The victim can stabilize the injured arm herself/himself. An arm sling is not obligatory.

FRACTURES

Fracture of the upper part of the arm

When the upper arm breaks in the older person, usually as a result of a fall onto the arm. The broken bone ends usually stay in place so it is a stable fracture, and for this reason the break may not be immediately apparent. There is, however, likely to be pain, especially when moving the arm. There will be tenderness and some swelling around the fracture site.

If you suspect a fracture of the upper arm, ask the person to sit down. Gently place the injured arm across the body and support it with the other arm. Immobilize and support the arm in a sling. Arrange to go to hospital.

The wrist fracture

A fractured wrist commonly happens when a person falls and puts out a hand to 'save himself'. The fracture site is painful and tender and the wrist will appear to be deformed, especially when compared to the uninjured wrist. The wrist joint is also frequently sprained but it is impossible for lay public to make the difference between sprain or fracture. In any case, you should suspect a fracture, and treat a painful wrist as a fracture until this has been excluded.

If you suspect a fracture, you should keep the wrist as still as possible. This can be done by asking the person to gently bend the arm at the elbow so that the arm is across the body and then it can be supported by the other arm. Surround the arm in soft padding such as a small towel or a thick layer of cotton wool. If you have a first-aid kit, it is best to use a triangle bandage for the journey to hospital.

The hip fracture

A fractured hip usually occurs when a person falls directly onto that side. The fracture involves the neck of the thigh bone or femur.

If you suspect a fractured hip, please follow recommendations as for a leg injury:

- Encourage the person to lie down
- Use a blanket to immobilize the leg
- Call for an ambulance

The skull fracture

A skull fracture can result from a fall or a bang on the head. With a skull fracture there is a danger that the underlying brain will be damaged either by a piece of the skull itself or by bleeding into the brain. Always suspect a skull fracture when an injury to the head is accompanied by impaired consciousness.

If you suspect a skull fracture, you should help the person to lie down in a comfortable position and keep his head as still as possible. Monitor the level of response breathing regularly until help arrives. In case of altered consciousness, place the person in recovery position and if life signs get lost start CPR.

Call the ambulance and administer basic first aid. (*basic first aid: keep good position, open the window – fresh air, keep victim warm, psychosocial support)

SPRAINS

Tina balanced there and back again and just now outdid her personal record on the slack line. Delight and short carelessness made her lose her balance. She stepped into a hole in the grass and twisted her ankle. Ouch, what a drag! Her ankle started to swell instantly and Tina limped home.

- Make sure the victim rests the injured body part
- Wrap ice cubes in towels and cool affected area
- Administer basic first aid

The ankle is the most commonly sprained joint, and the injury very often results from falling off a roadside kerb and twisting the ankle. All sprains are characterized by pain, tenderness, and swelling and bruising around the site of the injury.

How to apply ice to the site of an injury:
Partially fill a plastic bag with small ice cubes, or use a bag of frozen peas. Wrap the bag in a dry cloth and hold it on the injury for ten minutes, replacing the pack as needed. Do not apply ice directly onto the skin, as it will lead to a cold burn.

After cooling with ice, apply comfortable and even compression to the site of the injury by surrounding the area with a thick layer of padding such as cotton wool.

DISLOCATIONS

A dislocation is a joint injury in which bones are partially or fully pulled out of normal position. There is usually severe pain and unusual difficulty moving the joint. The joints commonly dislocated are the shoulder, jaw and the joints of the fingers and thumbs.

In the event of a dislocation, ask the injured person to stay in the position that is least painful. If the dislocation affects the shoulder or hand, immobilize and support the limb in a triangle bandage: please report to first aid instructions in case of an arm injury.

If there is no first aider, you are alone with no one to help you after falling…

- In case of emergency, after falling, stay calm, take up time and collect your strength!
- If you are in trouble call for help: if you can reach your mobile, call the emergency services.

If you are alone, and can´t reach somebody by calling:

- Collect your strength (take a deep breath, take up time) and stay on the floor for some moments. Don´t try to get up immediately!
- Try to get up very slowly.
    a. Turn around, if you are in a supine position after your fall. Getting up is much easier from abdominal position.
    b. Try to kneel and try to prop on your forearm.
    c. Now raise up from your knees. If possible, take a chair or any other furniture to rest on while getting up.
- Now sit down on a chair and take up time. If you do not feel in good condition, call for help (neighbours, family members or EMS in case of injury). Stay calm!

Summary

If the pain is severe or the person is unable to move, arrange for medical assessment. Otherwise advise the person to rest and, if the pain persists, ask for medical assessment.

It is impossible for laypersons to differentiate between a sprain, dislocation or fracture. But it is not important to do: the main thing is to help in the easy way you learnt above, no matter which kind of injury exists.

Sudden illnesses in the older age group

Sudden illnesses in the older age group

As people increase in age, many carry the burden of physical health problems such as arthritis, high blood pressure, chest disease, heart disease and diabetes. In addition to this, older people are liable to suffer from sudden illness, the outcome of which can be dramatically improved if correct and immediate action is taken.

Possible sudden episodes of illness include strokes, angina, heart attacks, seizures and problems with the control of diabetes.

Strokes

A stroke occurs when there is a problem with the blood vessels in the brain. This leads to either a blood clot in a blood vessel or leakage from a damaged blood vessel. The resulting damage depends on where this happens in the brain, how big the blood vessel is, in which area of the brain this happens and how much of the brain is affected. Sometimes a rapid and full recovery is made after a stroke, but sometimes there is permanent brain damage which may lead to paralysis, and other neurological disorders.

It is important to try to recognize a stroke early and to send the person to hospital as soon as possible. If the stroke is a result of a blood clot, drugs can be given to try to dissolve the clot and help the person's recovery. The drugs will only be given after the person has had a brain scan to differentiate between a blood clot and a bleeding vessel.

<u>How would you recognize a stroke?</u>

There are several signs which could be suspicious for a stroke. These include:

- Feeling that one side of the face is paralyzed and/or inability to smile or show the teeth evenly
- Inability to move one or more limbs, often on one side
- Problems with speech
- Headache
- Feelings of confusion and upset
- Problem with swallowing
- Sudden or gradual loss of consciousness

Utilization of the F.A.S.T. scale is appropriate by the first aid provider and general public to facilitate the memorization of the stroke signs.

F.A.S.T.

F = Face numbness or weakness especially one side,

A = Arm numbness or weakness especially one side of body,

S = Speech slurred or difficulty speaking or understanding

T = Time to call to the EMS if these occur suddenly or are accompanied by; the loss of vision, the loss of balance with dizziness or the worst headache of your life, with no known cause, both sudden and severe.

If you suspect that a person has suffered a stroke, it is important that you stay calm. Reassure the person as much as possible because it is likely that he will be very concerned about what has happened. You should then dial 112 for an ambulance, or your local ambulance emergency numbers or ask someone else to do this for you.

Help the person to lie down with his head and shoulders supported, or if the person is already in bed make sure that he remains there. You should also loosen any restricting clothing and ensure that the sufferer is not given anything to eat or drink. If one side of the face is droopy, use a small towel to soak up any dribble and, monitor level of consciousness and response breathing and regularly until help arrives. In case of altered consciousness, place the person in recovery position and if life signs get lost start in CPR.

If you have yourself a stroke, call the emergency services or ask someone to do so. Stay calm, lie down with your head and shoulders supported. If you are in bed remain there. Do not drink and eat until the emergency services arrive. If one side of your face is droopy use a small towel to soak up any dribble.

Angina

Angina is a pain in the chest. It is caused by a narrowing of the arteries that supply oxygen around the heart and it is like “cramp” of the heart muscle vessel. When exercising, it is not possible to increase the blood flow through the narrowed arteries and so the cramp-like pain starts. At rest the muscle has enough blood to avoid pain.

<u>How would you recognize angina?</u>
There are several signs which could be suspicious for an angina:

- Chest pain
- Pain that comes on with exercise or emotion
- Pain that is relieved by rest
- Pain that sometimes spreads into one or both arms, or even in the upper abdomen
- Anxiety and shortness of breath.

If you suspect that it is angina, you should first rest (lie down if you have no respiratory difficulties, and head and shoulders supported if respiratory distress appears) if you have medication for the angina take it. However, if pain does not go away after resting for a few minutes, suspect a heart attack and dial 112 for an ambulance immediately.

Heart attacks

A heart attack is also known as “coronary thrombosis” and “myocardial infarction” and is caused by a sudden blockage of the blood supply of a heart muscle vessel. The result is a cramp-like pain in the chest that, like angina, is not relieved by rest.
The main risk associated with a heart attack is that the heart will stop beating regularly and the attack will be fatal. Therefore, early recognition and admission to hospital are vital.

How would you recognize a heart attack?

If a person is suffering from persistent cramp-like pain in the chest, or pain that spreads to the jaw, arms and/or through to the back and is experiencing either shortness of breath, dizziness, nausea, sweating and has an ashen colour of the skin, suspect that there is something seriously wrong. Pains and discomfort could also be found in the abdomen.

If you suspect a heart attack, make the person as comfortable as possible to ease the strain on the heart. Leaning back against some support with the knees bent is often the most comfortable position. Call for an ambulance and make sure that you say that you suspect a heart attack.

If the person has any angina medication, encourage him to take it. Whilst you are waiting for the ambulance, monitor breathing and level of response. Remember that if the person suddenly loses consciousness you should place him in the recovery position, if breathing, or should start resuscitation if there is no sign of breathing.

If you are suffering from persistent cramp-like pain in the chest, or pain that spreads to the jaw, arms and/or through to the back and are experiencing either shortness of breath, dizziness, nausea, sweating and have an ashen colour of the skin, suspect that there is something seriously wrong. Pains and discomfort could also be found in the abdomen.

If you suspect a heart attack, lie down or settle down comfortably for example with head and shoulders supported. Leaning back against some support is often the most comfortable position. Call the emergency services and tell that you suspect a heart attack. If you have any angina medication, take it.

Seizures

A seizure is a term used to describe sudden involuntary contractions in many muscles in the body caused by abnormal electrical activity in the brain. A seizure is otherwise known as a fit or a convulsion, and the most common cause is epilepsy. However, seizures can also take place as a result of a head injury, stroke, shortage of oxygen or glucose in the brain, and some poisons including the consumption of excess alcohol.

How would you recognize a seizure?

Very often a seizure follows a pattern. This pattern begins before the muscle contractions even start with the person saying that he is experiencing an abnormality of one of the senses such as sight or smell. This is called an “aura” and heralds the onset of seizure. The person will then suddenly lose consciousness and his body will become rigid.

Shaking movements follow and the jaw will become clenched, breathing will stop and sometimes the person bites his tongue. There may be also a loss of control of the bladder and the bowel resulting in incontinence.

After the shaking, the muscles relax and consciousness returns but the person may feel frightened, dazed and confused and want to sleep.
If you witness a seizure, it is important that you take the correct action to ensure the best care of the person. It is vital that you do not try to interfere with the pattern of the seizure, but instead protect the person from injury by removing from the scene items such as hot liquids or sharp objects. If you can, place soft padding under the head to protect it.

- When the seizure is over, give lots of reassurance and try to calm the person, allowing him to sleep if he wants but place him, if he agrees, in the recovery position. However, if the person remains unconscious, you must open the airway and, if breathing, place the person in the recovery position and call for an ambulance.
- Monitor level of response and breathing, regularly, until help arrives.
- In case of altered consciousness place the person in recovery position and if life signs get lost, start with CPR.

Medicines

Medicines

Advances in the development of medications have played a major part in improving the quality and extending the life of many people in our society. Many older people rely on tablets and other medication to maintain their well-being.

Taking medicines must follow precise rules, described in the prescription given by the doctor. Taking medicine is not a trivial matter. Carelessness or a lack of caution may have a negative impact on one's health and therefore on quality of life.

A short story

“This is the story of Christophe Martin, 84. He has been a widower for 12 years. He lives alone in his house in the city center of Brest. He has got two children, they live in the Paris area, and they speak to their father on the phone every day. A home helper visits him twice a week and a nurse comes every morning to give him his insulin injection.
He walks with a cane (he suffers from arthritis in the right knee), he does the shopping, cooks the meals and takes medicines by himself: insulin, treatment for a heart rhythm disorder, eye lotion (glaucoma), analgesic (arthritis) and a vasodilator for memory trouble. In November he goes to the dentist. He feels discomfort because of the new tooth filling and he eats less than usual. At the beginning of December he also suffers a painful flare-up of arthrosis He speaks with his chemist who advises him to take Paracetamol. The nurse notices a lowering of his blood sugar level. As he feels tired M. Martin asks his home helper to do the shopping for him. He keeps on saying to his children that everything is fine. A week later, in mid-December, he falls when getting up. Unable to get back on his feet he has to go the hospital”.

This story underlines the risk factors associated with taking medicines: lack of communication between the different health professionals (the dentist should have informed the doctor about the new filling and about any loss of appetite so that the doctor could adjust the dosage in the current treatment), lack of attention given to early symptoms, such as loss of appetite, fatigue.. (the home helper as well as the nurse should have alerted the doctor), self-medication (M. Martin asks his chemist for advice, who should have checked the compatibility between Paracetamol and the other current medications that Mr. Martin was taking) and also his willingness to hide how he really feels (“I feel well, don’t worry” keeps on saying M. Martin).

Fortunately for M. Martin, this is just a story and fortunately most of the professionals act wisely. Sensible people refrain from self-medication and inform their relatives about their health condition in an honest way.

Risks associated with the taking of medicines

- **Drug poisoning**

If an older person does not comply with the doctor's prescription it may lead to drug poisoning or intoxication. This non-compliance may be voluntary or accidental. The person may have:

- Taken medicines in too large quantity (overdose)
- Mistaken his medicines with those of his spouse
- Involuntarily mixed up medicines with interfering products (e.g. alcohol)
- Taken a medicine in an unusual way (mistake on how to take the medicine)

The poisoning will be more or less severe depending on the properties of the medicine(s), the dosage, the mixings and the health condition of the person taking them.

What could be the signs of drug poisoning?
Vomiting, nausea, breathing difficulties, changes in the level of consciousness.

What to do when you suspect a drug poisoning?
Call for medical help immediately.

- **Adverse effects of medicines**

Taking medicines may induce a risk of adverse effects. The older people may be taking a number of medicines for chronic conditions such as heart disease or diabetes and so are more exposed to adverse effects of medicines.

If you are disturbed by side effects of a medicine or if you suffer from side effects that are harmful to your quality of life, do not hesitate to call back the doctor to let him know and ask his advice. Don't do like Mr. Martin. Do not hesitate to say that you are not feeling well or that you are feeling discomfort (rash, drowsiness). When you go to the doctor, chemist or any other health professional inform him about all other prescribed treatments or any self-taken medicines, such as Paracetamol. Do not try to hide any non-prescribed medicine; it may have consequences for your health.

- **Self-medication**

Self-medication refers to buying medicines at the pharmacy without prescription (e.g. Paracetamol) as well as taking medicines that have been taken by someone else or from a previous treatment: 'I have heartburn. Last time this medicine was good to relieve the pain. There are some pills left, I should take some".

What are the risks of self-medication?

- Wrong diagnosis: you feel the same symptoms as a previous time but despite appearances the cause may be completely different. The previously taken medicine will thus have at best no effect, at worse it may aggravate your condition for example by interfering with other drugs you take.
- Risk of interaction with other treatments that may lead to severe poisoning
- Risk of adverse side effects.

Tips for managing medicines

What you should do:

- Follow the prescription and read the enclosed package leaflet
- Leave medicines in their original packaging
- Keep your medicines in a safe place and out of the reach of children
- Use a pill box in which you can keep the medicines in their original packaging so you always see the name
- Regularly check the expiry date of medicines, especially those you do not use regularly
- Bring back to your chemist expired or partly used boxes of medicines.

What you should not do:

- Do not leave any medicines lying around.
- Do not prepare your medicines in advance on a plate or in a glass.
- Do not keep too large quantity of medicines.
- Do not change your prescription.
- If you see several doctors, inform them about which medicines you take.

Tips for taking medicines

Make sure the person has all the information necessary for the correct use of the medicine. Whenever possible, capsules and tablets should be taken standing up or in an upright sitting position. Capsules and tablets should be taken with water.

Diabetes

Diabetes

Definition

Diabetes is characterized by too much glucose (sugar) in the blood, which is called hyperglycemia. Around XXX people *(insert national statistics)* have been diagnosed with diabetes in YYYY.

Causes

Glucose, provided by food, is an essential energy source for our cells, in particular for brain and muscles. It is the insulin, a hormone produced by the pancreas, which helps glucose enter the cells where it can be stored or used to give the body energy. Without insulin, glucose remains in the blood stream and cannot be used. Over time, having too much glucose in the blood can cause many health problems.
In the case of people with diabetes, the pancreas does not produce enough insulin, or does not produce at all; or the insulin produced is not effective in removing glucose from blood.

Consequences of diabetes

There are many consequences of diabetes for health. It is initially asymptomatic but if not monitored and controlled can quickly evolve to complications in various parts of the body.

<u>Long term complications</u>

- Small blood vessels:
    - In the eyes: Retinopathy, which manifests itself in visual impairment and may lead to complete blindness. Diabetes is the most common cause of blindness in adults;
    - In kidneys: Nephropathy (can lead to Chronic Renal Failure): the kidneys do not function normally anymore and cannot filter the blood correctly, the body becomes poisoned. Long term treatment may lead to dialysis or even kidney transplantation.
- Large arteries: diabetes is a major risk in cardiovascular diseases such as heart attack, stroke or arteritis (blocking of arteries supplying blood to the lower limbs).
- Nerves and feet: Diabetic Neuropathy: this is responsible for pain in the legs, quite difficult to relieve. Its frequency increases depending on how long the person has been diabetic and their age. If you have damaged nerves in your legs and feet, you might not feel heat, cold, or pain. If you do not feel a cut or sore on your foot because of neuropathy, the cut could get worse and become infected, and this may in turn lead to amputation.
  An older person suffering from diabetes should be very careful with the health of their feet and should consult a professional foot care specialist.

<u>Short term complications</u>

Hypoglycemia (low blood sugar level) and hyperglycemia (high blood sugar level) are the two most common, yet threatening, diabetes-related emergencies experienced by the elderly.

- **Hyperglycemia**

Hyperglycemia, or high blood sugar levels, occurs when the body lacks insulin or cannot use insulin properly. It may be caused by too much food, eating/drinking some food/drink (eg: alcohol), physical or psychological stress, and certain medications.
Hyperglycemia may develop slowly and may be asymptomatic (no obvious symptoms) over a long period (several days). It may have serious consequences such as stroke or heart attack.

Signs and symptoms of hyperglycemia

- Frequent urination
- Excessive thirst
- Nausea
- Dehydration symptoms: loss of weight, tightening of the skin, drying of mucous membranes, accelerated heart rate, low blood pressure, confusion,
- Drowsiness and gradual loss of consciousness in later stages

What to do?

If possible, make a quick measurement of the glucose level with the blood glucose test device. Call your doctor or call for Emergency Services. They will be able to confirm the diagnosis if necessary. The symptoms of hyperglycemia may often be confused with the symptoms of a heat stroke.

- **Hypoglycemia**

Hypoglycemia occurs when blood sugar levels drop below normal levels. Hypoglycemia is typically the result of too much insulin/diabetes medication or a missed meal. It can also be caused by meals with an insufficient amount of carbohydrates, a strenuous activity, drinking too much alcohol.
Hypoglycemia can occur in diabetics:

- who have not eaten enough or who have vomited causing there to be less sugar in their blood
- who have endured an intense physical activity or stress: their body has used up more sugar
- who have taken too much medication

If no treatment is given the person may collapse and have a seizure. The person with diabetes is usually aware of this risk and should always have sugar sweets or some other source of quick sugar.. But the attack may be re-occurring or severe: the help of a third person may be required and tell your friends and relatives what the alarm signs are and what to do.

Signs and symptoms of hypoglycemia

Hypoglycemia is a sudden event with typical symptoms:

- hunger, headache
- fatigue
- tachycardia, fast pulse or palpitations
- nervousness, anxiety, shakiness

- sweating
- paling skin
- blurred vision,
- tingling the lips,
- behavior that may be similar to the signs of intoxication: agitation, aggressiveness, uncoordinated movements, confusion.

What to do?

In people with diabetes the risk of developing a cardiovascular disease is three times higher than in people who do not have diabetes.

Ask the person with diabetes to check their sugar level. They normally carry their own blood sugar testing kit.

Encourage the person to eat or drink a sugar product (sugar lumps to take with a glass of water or sugar containing meal). The amount varies from a person to another, it is important to avoid food and drink containing fat. The effect will be rapid, the glucose entering the blood as soon as it is ingested by the mouth. However the effect will not last long: once the sugar has been "burnt" the victim may collapse again due to hypoglycemia. It is important to prevent that blood levels drop again so a snack may be necessary. The person will have to absorb slow sugars such as bred, pasta, starch. If the person is unconscious or unable to swallow, nothing should be given by mouth. Monitor level of response and breathing regularly until help arrives. In case of altered consciousness, place the person in recovery position and if life signs get lost start CPR.

Seek medical advice.

Conclusion

The best prevention is to follow your doctor's advice regarding your treatment and to lead a lifestyle that is beneficial to your condition.

Do not ever hesitate to check your blood sugar levels or to mention any change in your health condition to your doctor. This will help to avoid any deterioration in your condition that might have more severe consequences.

Hearing and visual impairments

Hearing and visual impairments

Visual and hearing impairments are common amongst older people and tend to increase with advancing age. Consequences of this can be both physical and psychological: poor sight and hearing can impact on a person's ability to communicate and there can be a sense of isolation and being ignored especially in a group setting.

On a practical level, there can be an increased risk of injuries such as burns, cuts and broken bones. Due to the loss of sight the older person is at a disadvantage and can have difficulty seeing an object lying on the floor or the pavement. The lack of clear vision, shadowed areas and/or blurred vision can create anxiety among the older person. The same consequences will be noticeable due to a lack of hearing: "I did not hear the bicycle arriving behind me. I was surprised, I was startled and almost fell".

The loss of hearing and visual capabilities can add together, increasing the discomfort, the communication difficulties and the risks of accident. Nowadays there are solutions to improve visual and hearing abilities. Do not hesitate to ask your doctor, insurance company and other health professional to find the best suited solution to your needs.

In the case of a health problem, do not hesitate to ask people to repeat what they said or to explain what they will do. Rescuers, first aiders and health professionals are aware of problems that older people may suffer from and they will be particularly patient and understanding.

1. Hearing impairment

Deafness is a common problem in later life. Most of older people have a gradual and progressive loss of hearing that impairs understanding of speech and generally affects both ears. If the loss of hearing is not compensated for, it will rapidly lead to communication problems.
"I could not properly hear what the person said; I do not know what to answer. I doubt myself and my answer. Feeling uneasy, I try to shorten the conversation".
"When surrounded by several people, I have some difficulty in identifying the voice of the speaker. I can just catch some words; everything is confused in the general hubbub. I am reluctant to take part in this kind of social interaction anymore."

Tips and tricks

- Consult a physician as soon as possible when you have the first signs of hearing impairment.
- Respect the ears hygiene rules.
- Always have with you a pen and a pad: you will be able to write down your question or ask whoever is speaking for details.
- In the case of health problems, you will be able to alert someone to your condition and ask for help.

- Try to collect information on alert systems for hearing impaired people such as the free emergency number 114 in France. Get familiar with it and record your own alert message in advance.

2. Visual impairment

As we get older, visual difficulties may appear. The visual problems come gradually due to common diseases that emerge becoming older (e.g. cataracts). If the loss of sight is sudden or severe, it can be a great shock to the person or to his immediate family. It will affect the person's mobility and personal relationships. Yet if the change in eyesight is slow, it may be neglected or underestimated by the affected person.
The loss of visual ability may rapidly shrink the person's environment: "I prefer using routes that I am familiar with. I'm afraid of unknown places, I fear getting lost."
It may also engender communication difficulties: "I met someone today in the street. The person waved to me but I could not recognize her. I did not wave back. What must she think of me?"

Tips and tricks

- Consult a physician as soon as possible when you have the first signs of visual impairment.
- If you have glasses, wear them according to the prescription and consult your ophthalmologist.
- Do not hesitate to share your visual deterioration with your relatives. Explain to them that it is important to maintain the same furniture arrangement in your house: a misplaced stool may seem insignificant to others but it may be an obstacle for you and make you fall.
- Display the emergency numbers (emergency services, firemen, doctor, relatives) in very large letters next to the phone. You will be able to call for help even if you do not wear your glasses.

Environmental effects

Environmental effects

Environments with extreme temperatures can cause serious damage to the human body, including injuries and death.
Taking preventive measures, recognizing these situations and providing necessary first aid treatment can reduce human suffering and save lives.

Hot environments which carry a risk for human health

- Exposure to sun
- Sauna
- Places with higher temperatures than what people are used to
- Heat wave
- Physical activity in hot environment

Preventive measures

- Avoid / reduce / control over exposure to the sun, hot environments and physical activities.
- Wear a hat and appropriate clothing to protect from the sun and allow air circulation.
- Drink fluids regularly throughout the day.
- Do not consume alcoholic drinks.
- Pay attention to weather reports.
- Ask for advice from Doctors or other healthcare professionals.

The main consequences of overexposure to hot environments are:

Heat stroke

In case of a heat stroke the body becomes rapidly overheated losing the ability to regulate temperature. It could be accompanied with physical and neurological symptoms.

Signs and Symptoms:

- Strange behavior, headache, dizziness, hallucinations, confusion, agitation, disorientation, coma
- High body temperature
- The absence of sweating, with hot, red or flushed dry skin
- Breathing difficulty
- Nausea, vomiting, fatigue, weakness

What to do:

- If possible provide a cool and airy environment for the victim.
- The victim should be doused with copious amounts of cold water, sprayed with water, fanned, covered with ice towels or have ice bags placed in the armpits and groin area. Be careful not to over-cool.

- Call for emergency services.
- Monitor level of response and breathing regularly until help arrives.
- In case of altered consciousness place the person in recovery position and if life signs get lost start CPR.

Heat syncope

It is a milder form of heat-related illness that can develop after exposure to high temperatures, resulting in excessive loss of salt and water from the body through sweating.

Signs and Symptoms:

- Heavy sweating
- Paleness
- Muscle cramps
- Tiredness, weakness
- Dizziness
- Headache
- Nausea or vomiting
- Fainting
- Cool, moist skin

What to do:

- Remove the victim from the hot environment if possible and/or cool the victim with a fan, ice bags, or water spray. Lie the victim down.
- Oral rehydration with a salt-containing beverage.
- Call for emergency services.
- Monitor level of response and breathing regularly until help arrives.
- In case of altered consciousness place the person in recovery position and if life signs get lost start CPR.

Cold environments which carry a risk to human health

- Cold places
- Exposure to cold environments aggravated by wind and / or wet clothes
- Cold Wave
- Inadequate clothing

Preventive measures

- Avoid / reduce exposure to these conditions
- Stay dry
- Wear several layers of clothes
- Protect the extremities (hands, feet, nose, ears)
- Do not consume alcoholic drinks
- Pay attention to weather reports
- Request advice from doctors or other healthcare professionals.

The main consequences of overexposure to hot environments are:

Frostbite

This results in localised skin and other tissue damage due to extreme cold exposure.

Signs and Symptoms:

- The affected areas become numb and red, then pale, then white and blue
- Decrease in ability to move the affected body part
- Initially, the area will be quite painful, but the area becomes gradually numb and the pain disappears as the frostbite progresses.
- Progressive stiffness and loss of sensation and feeling in the frostbitten area.

What to do if the first-aider is alone in the montains:

- The warming of the affected part of the body should only be done if there is no new risk of further exposure to cold.
- Reheating should be done by immersing the affected part of the body in water, between 37 ° C (i.e., body temperature) and 40 ° C (98.6 ° F and 104 ° F) for 20 - 30 minutes.
- Generators of chemical heat should not be placed directly on the affected tissue, because these can reach temperatures that can exceed the desired temperatures and cause burns.
- Call emergency service as soon as possible.

Hypothermia

It is a condition in which core body temperature drops below that required for normal body functions, 35ºC (95ºF)

Signs and Symptoms:

- Tremors, fast and superficial breathing
- Mental confusion and lack of coordination
- Movements become slow and difficult, with slow reactions.
- Pale skin, lips, ears, fingers and toes, possibly turning bluish in colour.
- Amnesia
- Inability to use your hands
- Exposed skin becomes blue and puffy, muscle coordination becomes very poor, walking becomes almost impossible and the victim behaves in a confused manner
- Unconsciousness

What to do:

- In all cases, victims should be handled gently, removed from the cold environment and have their wet clothes removed;
- Victims of hypothermia who are responsive and shivering vigorously should be re-warmed passively with a polyester-filled blanket, or any dry blanket, warm dry clothing or reflective/metallic foil.

- For victims of hypothermia who are not shivering, active warming should be started, with a heating blanket if available or a hot water bottle, heating pads or warm stones. Do not apply directly to the skin to prevent burning the person.
- In all cases, if the patient has moderate or severe hypothermia clothing must be cut to minimize movement.
- Call emergency service as soon as possible.
- Monitor level of response and breathing regularly until help arrives.
- In case of altered consciousness, place the person in recovery position and if life signs get lost start CPR.

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