

### **LECTURE 1:**

## First aid and Accidents

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### 1. First Aid



2. Prevention and avoidance of accidents



3. Epileptic crises



-Q & A





## **Learning Outcomes**

- Clear understanding of what first aid involves and its goals
- · What can we do to avoid accidents in the living environment
- How to organize a first aid kit and what it should contain.
- A reminder of the necessary information we should provide when calling for emergency help
- Understanding epilepsy and recognizing an epileptic crisis (seizure). Steps to deal with it and avoid injuries.
- Distinguish seizures that require an emergency call
- Adopt strategies and practices that reduce the risk of accidents during seizures, increase accessibility and improve quality of life.





## Having clear understanding of what first aid informs us about:



- What we need to do in case of emergency, and



- What the goal we want to achieve is.

### 1. First aid





## **Defining first aid**



- First aid is the immediate help provided to a victim until he or she receives emergency medical care. This help does not always require us to do anything to the victim's body. By assessing the situation, providing information and calling for emergency, you ensure the continuation of care and increase the survival possibility.
- The primary goal is to ensure his or her survival, as well as to prevent the deterioration of his or her health condition.
- Treatment of an illness and complete recovery of an injury should only be provided by specialized medical personnel, with the appropriate equipment and in the appropriate environment.

**FIRST AID = SAVE LIFE (TIME)** 

By providing first aid we save a life & save time until the hospital





## **Providing first aid**



### fundamental principles

- I) We do not forget that the life of the helper has the same value as the life of the victim. It is therefore important to make sure that we are safe (checking the safe of the place / using protective means) before giving first aid.
- 2) We do not experiment with techniques we do not know or with means we do not know how to use.
- 3) On the other hand, when we are trained in a technique (e.g. CPR) it does not matter how well it is performed but its application when and for as long as needed.





## **Providing first aid**

### fundamental principles



- 4) We stay calm and remember: "Adequate care provided is better than perfect care withheld".
- 5) If we cannot stay calm by providing first aid and there is another person who can also help, we stay in place and help with other important actions (e.g. by calling an ambulance, noting important information, etc.). This is also first aid.
- 6) In most very severe cases the deterioration will not be caused as a result of ineffective first aid but by the victim's state of health which may be irreversible.
- 7) We never give up until the ambulance arrives









## WHAT ITEMS WOULD YOU INCLUDE



IN A FIRST AID KIT PPP









#### **WHAT THE CONTENT SHOULD BE:**

- -Exam Gloves
- -Plasters in a variety of different sizes and shapes



- -Sterile gauze
- dressing(Small,Medium,Large)
- -Sterile eye dressings
- -Triangular bandages
- -Crêpe rolled bandages



- -Safety pins
- -Tweezers
- -Scissors
- -Alcohol cleansing wipes
- -Antiseptic spray/ cream
- -Sticky tape



- -Thermometer
- -Ice packs
- -Antihistamine cream & tablets
- -Distilled water for cleaning wounds
- -Painkillers such as paracetamol
- -Notebook & pen



### **Preparing** a first aid home kit



#### No unnecessary items

Include any personal items such as medications and emergency phone numbers or other items your healthcare provider may suggest.

Keep first aid kits in a cool, dry place out of the reach of children

Regularly check expiry of items with a use-by date



### **DON'T FORGET TO SAY:**





## **WHAT**

the problem is (unconscious victim, epileptic seizure, severe bleeding, etc.)



## WHO

the victim is, (a kid or an adult, caller's name, etc.)



## WHERE

we are (give the exact address or ask someone if it is possible or look at the area and mention very close places like the name of a bus / metro station etc.

## Calling for emergency



Do not hang up first. You may have forgotten to provide important information

Call from your mobile phone, have the phone next to you and avoid using it for other calls













# 2. Prevention & avoidance of accidents





### **Prevention & avoidance of accidents**

- I) Accidents are the leading cause of death in children aged I-14, constituting a global public health problem.
- 2) People with developmental disorders are 2-3 times more likely to develop an injury that requires medical attention, compared to the neurotypical population, with a prevalence mainly of adolescents (14-17 years), and more often boys.
- 3) It is characteristic that in cases of people with intellectual disability the risk of poisoning is four times higher.



### **Prevention & avoidance of accidents**

Preventive measures to avoid accidents and the provision of first aid after their occurrence play an important role in both survival and good prognosis of recovery





### **Prevention & avoidance of accidents**

- I) Accidents and the risk of their occurrence should be approached individually, based on the needs, unique characteristics, cognitive level and behaviors of the individual and not his chronological age.
- 2) For example, a toy (even a garment) may be age-appropriate for the child but may be practically inappropriate or even seriously dangerous due to the low skills and abilities he/she may has.
- 3) Even the individual's own living environment can be complex or unsuitable for their skills and may require some necessary modifications or adjustments (e.g. appropriate placement of furniture, organization of objects, protectors on the floors of activity of an epileptic person to prevent injury from falls, etc.).







## **Preventing accidents...**

We are not trying to create an environment without objects but an environment with controlled objects





## **Preventing accidents...**

What can we do to prevent accidents at home ???





## Preventing accidents At home

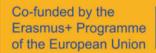














- >When we need to supervise the child our supervision should be active, maintaining eye and acoustic contact with him/her
- >We sort and organize the objects (e.g. small, sharp, accessories, food, etc.) of the house and decide on the possibility and the degree of access to them depending on the needs, abilities and condition (e.g. at this time there is no possibility of supervision or the person has shown some high risk behavior that needs special attention at this time, etc.).
- > We use protective covers on sockets, fuses in cabinets and windows, where or if this is necessary.





- > We cover the hobs and protect the heat sources to prevent burns. Additionally close the main switch on the panel when the device is not in use, providing additional safety for fire.
- > We place the drugs in a place where the access of the child is not possible or is controlled. We avoid using the pleasant taste that the drug may have as an incentive to take it.
- > We place detergents and cleaners in safe, controlled areas and cabinets.
- > Do not place cleaners under the sink or near other liquids and food
- ➤ The products should always have their outer packaging or labels and these should be identical to the content they indicate. We avoid cream soaps and products that contain fruit odors and ingredients that refer to foods and favor their ingestion, especially in cases of people who have such behaviors or have a history of poisoning.

- > We avoid visiting areas and places we do not know if they are safe or what services they have.
- It is also important to always have an emergency plan, especially in cases where we are in a new environment (e.g. access and escape route, especially for people with mobility problems, who is supervising, who is calling for help, etc.).
- Parents and caregivers of people without verbal communication should look for alternative ways to help people communicate in a high-risk situation by training them to use a whistle, or a bell, or an alarm.







In any case, it is not our overprotection but the effort to train the person in new skills that will ensure a functional and ultimately protective daily life with more or less serious accidents.

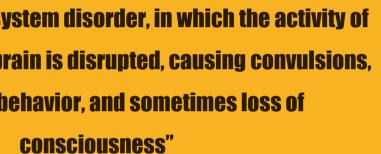








"Central nervous system disorder, in which the activity of nerve cells in the brain is disrupted, causing convulsions, or unusual behavior, and sometimes loss of









## **Epileptic crises**

- > Almost 10% of all people may have a unique crisis at some point in their lives.
- > However, a single seizure does not mean epilepsy.
- > It takes at least two unprovoked seizures to make a diagnosis
- ► An average seizure lasts 3-4 minutes





## **Epileptic crises** causative factors

- > Genetic effect
- > Head injury
- > Brain damage
- > Infectious diseases
- > Prenatal injury
- > Developmental disorders





## **Epileptic crises - triggers**

For many people with epilepsy, seizures seem to happen • randomly. But sometimes they can have a trigger, such as:

- Missed medication (diagnosed person)
- Stress & emotional tension
- · A lack of sleep
- Drinking alcohol
- Illness (both with and without fever)

- Not eating well, long times without eating, dehydration, not enough fluids, low blood sugar, vitamins and mineral deficiencies
- Some medicines and illegal drugs
- Specific foods, excess caffeine or other products that may aggravate seizures
- Menstruation in women (monthly periods)
- Flashing lights (this is an uncommon trigger)
- Long use of screens (this is an uncommon trigger)





## **Epileptic crises** symptoms

Because epilepsy is caused by abnormal activity in the brain, seizures can affect any process your brain coordinates. Seizure signs and symptoms may include:

- Temporary confusion
- A staring spell
- Uncontrollable jerking movements of the arms and legs
- Loss of consciousness or awareness
- Psychic symptoms such as fear, anxiety or deja vu
- Symptoms vary depending on the type of seizure. In most cases, a person with epilepsy will tend to have the same type of seizure each time, so the symptoms will be similar from episode to episode.

## **Epileptic crises - types**

### Simple partial (focal) seizures or 'auras'

A simple partial seizure can cause:

- a general strange feeling that's hard to describe
- a "rising" feeling in your tummy like the sensation in your stomach when on a fairground ride
- a feeling that events have happened before (déjà vu)

- unusual smells or tastes
- tingling in your arms and legs
- an intense feeling of fear or joy
- stiffness or twitching in part of your body, such as an arm or hand
- You remain awake and aware while this happens.

These seizures are sometimes known as "warnings" or "auras" because they can be a sign that another type of seizure is about to happe



## **Epileptic crises - types**

#### Complex partial (focal) seizures

During a complex partial seizure, you lose your sense of awareness and make random body movements, such as:

- smacking your lips
- rubbing your hands
- making random noises
- · moving your arms around
- · picking at clothes or fiddling with objects
- chewing or swallowing
- > You will not be able to respond to anyone else during the seizure and you will not have any memory of it.

#### **Tonic-clonic seizures**

A tonic-clonic seizure, previously known as a "grand mal", is what most people think of as a typical epileptic fit.

They happen in 2 stages – an initial "tonic" stage, shortly followed by a second "clonic" stage:

**-tonic stage** – you lose consciousness, your body goes stiff, and you may fall to the floor

 -clonic stage – your limbs jerk about, you may lose control of your bladder or bowel, you may bite your tongue or the inside of your cheek, and you might have difficulty breathing

The seizure normally stops after a few minutes, but some last longer. Afterwards, you may have a headac remembering

what happened and feel tired or confused.



## **Epileptic crises -types**

#### **Absences**

An absence seizure, which used to be called a "petit mal", is where you lose awareness of your surroundings for a short time. They mainly affect children, but can happen at any age.

During an absence seizure, a person may:

- stare blankly into space
- look like they're "daydreaming"
- flutter their eyes
- make slight jerking movements of their body or limbs

The seizures usually only last up to 15 seconds and you will not be able to remember them. They can happen several

#### **Myoclonic seizures**

A myoclonic seizure is where some or all of your body suddenly twitches or jerks, like you've had an electric shock. They often happen soon after waking up.

Myoclonic seizures usually only last a fraction of a second, but several can sometimes occur in a short space of time. You normally remain awake during them.





### **Epileptic crises Status enilenticus**



> Status epilepticus is when a seizure

lasts too long (>5min) or when seizures

occur close together and the person

doesn't recover between seizures.

Is a medical emergency **\*IPAT** 



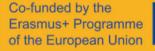


### **Epileptic crises** first aid



- > STAY Calm and begin timing the seizure
- > DON'T restrain and DON'T remove him/her
- > Remove other people around
- > Keep him/her SAFE from injury by removing any harmful and dangerous objects around
- > Put something soft under the head
- > Loosen any tight clothes & accessories
- > STAY until recovered from seizure
- > Turn on side (recovery position) if not awake, keep airway clear









## **Epileptic crises**

#### recovery position

Adult or child (over I year)

With the casualty lying on their back kneel on the floor beside them. Place the nearest arm to you at a right angle.



2

Take the casualty's other arm and place it across their chest with their hand resting under their head and pressed against the cheek.

Hold it in place.



3

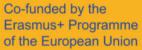
With your free hand, lift the casualty's leg that is furthest from you till their foot is flat on the ground.



4

Use their bent leg as a lever to roll them toward you. The casualty's mouth should be opened and head turned slightly downwards to allow any obvious fluid to drain.









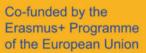
## **Epileptic crises**when and whom I call

#### When to call for emergency

- Seizure with loss of consciousness longer than 5 minutes, not responding to rescue med if available
- Repeated seizures longer than 10 minutes, no recovery between them, not responding to rescue med if available
- · Difficulty breathing after seizure
- Serious injury occurs or suspected, seizure in water

#### When to call your provider

- Change in seizure type, number or pattern
- Person does not return to usual behavior (i.e., confused for a long period)
- First time seizure that stops on its' own
- Other medical problems or pregnancy need to be checked







## **Epileptic crises**

accidents prevention

- ➤ Appropriate configuration of the living space in a period of exacerbation or frequent crises
- ➤ Adequate and comfortable activity area, without many and close dangerous objects that can cause injury from contact during the fall or spasms
- > Installation of protectors in the corners of the furniture
- > Use of a protective floor, at least in the areas of activity







## **Epileptic crises**

accidents prevention

- > Avoid moving and activities in an unknown place after the episode or during an expected crisis.
- > Supervision during feeding
- > Swimming with a life jacket
- > Fitting of a protective headgear during the period of mainly intense or frequent crises









## THANK YOU!



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