

**Topics and control questions for practical classes in the discipline "First Aid"
for the 1st year students
(Faculty of Foreign Students)**

STUDY 1

Topic: Introduction to the discipline "First Aid". First aid priorities. Ethics, deontology, psychology in the relationship of a medical worker with a patient.

Goal: To acquaint with the tasks; the content of the discipline "First aid", the rules of law in the provision of the first aid, issues of the medical ethics and deontology.

Control questions:

1. The history of development, the content of the discipline "First Aid".
2. The concept of types of the medical care.
3. Regulatory legal support for the provision of the first aid to patients by medical workers or persons obliged to provide first aid in accordance with the law.
4. Responsibility for failure to provide first aid.
5. Deontology, ethics, psychology in the relationship of the medical workers with patients.

STUDY 2

Topic: Personal safety in the first aid.

Goal: To acquaint with infection prevention and control during medical care.

Control questions:

1. Aseptics, antiseptics, general rules.
2. Definition of the concept of "healthcare-associated infections" (HAIs). Risk factors for the development of HAIs, classification.
3. Source of infection, ways and factors of the transmission, the definition of the HAIs disease.
4. Types of modern antiseptics. General characteristics of antiseptic agents.
5. Rules of hygienic hand antiseptic.
6. Personal protective equipment for medical workers.
7. Medical wastes management in the provision of first aid.
8. Prevention of medical workers occupational infection. Measures in case of the contact with the patient biological fluids and contamination of environmental objects.

Practical skills:

1. Hand protection and hygiene in the first aid (contact with the biological fluids).

STUDY 3

Topic: General principles of the first aid. Head-to-toe examination of the patient.

Goal: To acquaint with the basic rules of the first aid organization, methods of the victims transportation.

Control questions:

1. Rules of the first aid organization.
2. Algorithm of action at an emergency. Equipment and techniques at an emergency. Head-to-toe examination of the patient.
3. First aid kit. General principles of the first aid.
4. Methods for transporting victims, removing clothes and shoes.
5. Types of injections, injection technique at the pre-hospital stage. The technique of the pain relief.

Practical skills:

1. Calling for emergency help. Maintaining verbal, visual, tactile contact with the victim.
2. Moving the victim to a safe place by one rescuer, several rescuers using the improvisational stretchers.
3. Transportation of the victim on the stretchers.
4. Transportation of an injured person with trauma of the head, chest, abdomen, pelvis, spine.

STUDY 4

Topic: Monitoring of the vital signs. Medical priorities in lifesaving.

Goal: To master algorithms for assessing the general condition of the victim, measuring parameters of vital body functions.

Control questions:

1. Assessment of the victim's condition. Measurement of the parameters of vital body functions.
2. Objective data of the patient's state.
3. Assessment of consciousness, functions of the respiratory and circulatory systems.
4. Characteristics of the pulse, pulse measurement technique. Types and frequency of breathing, counting the breathing rate.
5. Blood pressure measurement technique.

Practical skills:

1. Examination of the victim.
2. Determination of signs of impaired consciousness, impaired breathing, cardiac activity.
3. Determination, counting the pulse on the radial, carotid arteries, counting the breathing rate.
4. Blood pressure measurement technique.

STUDY 5

Topic: First aid for patients with wounds and bleeding.

Goal: To acquaint with the basic principles of the first aid for victims with bleeding.

Control questions:

1. Bleeding definition, classification.
2. Criteria for determination of the severity of bleeding.
3. The main clinical symptoms of acute bleeding.
4. Mechanical, physical, chemical, biological methods for stopping bleeding.
5. Nosebleed care.

Practical skills:

1. Technique of applying pressure over a bleeding artery (temporal, submandibular, carotid, subclavian, axillary, brachial, femoral).
2. Temporary stopping of bleeding by the method of flexion of the limb (shoulder, elbow, knee joints).
3. Making and applying a pressing bandage.
4. Technique of using the hemostatic tourniquet on the shoulder, on the thigh.
5. First aid for the nosebleeds.

STUDY 6

Topic: First aid for injuries: contusion, sprain, dislocation, fracture.

Goal: To introduce the basic principles of the first aid to injured victims.

Control questions:

1. Concept of "injury". Mechanism and circumstances of the injury.
2. Soft tissue injuries, contusion, sprain, dislocation, fracture: clinical manifestations, basics of the emergency medical care. General rules for applying bandage.
3. Chest injuries: the concept of pneumothorax, clinical manifestations, the basics of the emergency care.
4. Crush-syndrome (traumatic rhabdomyolysis or Bywaters' syndrome): clinical manifestations, the basics of the emergency medical care.
5. The types of Eye Injuries (foreign bodies, injuries to the eyeball and eyelids, chemical exposures and burns): clinical manifestations, the basics of the emergency care.

Practical skills:

1. Making and applying an ice pack (cool pack) to the area of injury.
2. First aid for the eye injuries.

STUDY 7

Topic: First aid for patients with fractures and dislocations.

Goal: To acquaint with the basic principles of the first aid to victims with fractures and dislocations.

Control questions:

1. Dislocations and fractures: concept and clinical manifestations.
2. First aid for injuries of bones and joints, gunshot wounds of the musculoskeletal system.
3. Transport immobilization, prevention of complications in dislocations and fractures.
4. Wounds: a brief description, the basics of the emergency medical care. The concept of the primary surgical treatment of the wound.
5. First aid for injuries of the skin and mucous membranes. The technique of the removal of splinters, tick removal, complication prevention.

Practical skills:

1. Performing the transport immobilization of the upper limb with limb with one or two kerchiefs.
2. Making a cervical splint (collar) from the scrap materials and fixing the cervical spine of the victim in a supine, sitting position, in a vehicle seat.
3. Making an improvised splint and immobilization of the limbs in case of injury to the shoulder, forearm, thigh, lower leg.
4. Removal of a splinter, tick.

STUDY 8

Topic: First aid for injuries associated with heat exposure and cold temperature exposure (burns and frostbite).

Goal: To acquaint with the basic principles of providing first aid to victims with burns and frostbite.

Control questions:

1. Burns: clinical manifestations, methods for determining the area of the burn.
2. Basics of providing emergency medical care at the prehospital stage.
3. Rules of the transporting burns victims. Transportation options for burns victims.
4. Sunburn and dehydration. Heatstroke (sunstroke), lightning strike: first aid.
5. Cold injury (frostbite, general hypothermia): severity, clinical manifestations, basics of emergency medical care at the prehospital stage

Practical skills:

1. First aid for patients with burns.
2. First aid in case of heatstroke, sunstroke, lightning strike.
3. First aid for frostbite, hypothermia patients.

STUDY 9

Topic: First aid for patients with pathology of the respiratory system.

Goal: To acquaint with the basic principles of first aid for diseases, pathology of the respiratory system.

Control questions:

1. Clinical signs of life-threatening conditions in respiratory diseases.
2. Dyspnea, its types, cough.

3. Acute respiratory failure, the basics of emergency medical care.
4. Rules and techniques for using the inhaler.
5. Hemoptysis, pulmonary hemorrhage, basics of emergency medical help at the prehospital stage.

Practical skills:

1. The technique of the individual inhaler usage.

STUDY 10

Topic: First aid for patients with pathology of the cardiovascular system.

Goal: To acquaint with the basic principles of first aid for diseases of the cardiovascular system.

Control questions:

1. Clinical signs of life-threatening conditions in diseases of the cardiovascular system.
2. Acute heart failure, the basics of emergency medical care at the prehospital stage.
3. First aid for patients with the chest pain, fainting, collapse, arrhythmias, hypertensive crisis, acute cerebrovascular accident (stroke).
4. Sudden death (primary cardiac arrest), first aid technique.
5. The concept of the cardiovascular resuscitation. The main resuscitation measures (open airway, artificial ventilation, cardiac compressions). Criteria for the effectiveness of the cardiovascular resuscitation.

Practical skills:

1. Removal of a visible foreign body from the oral cavity of an unconscious victim.
2. Maintenance of upper airway patency
3. Basic cardiovascular resuscitation by one or two rescuers.

STUDY 11

Topic: First aid for patients with diseases of the gastrointestinal tract and kidneys.

Goal: To acquaint with the basic principles of the first aid for diseases of the digestive, urinary systems.

Control questions:

1. The main symptoms of the diseases of the gastrointestinal tract.
2. The concept and the main features of the "acute abdominal pain" syndrome. Rules of the transportation of patients with acute abdominal pain syndrome.
3. Gastrointestinal bleeding: causes, clinical symptoms, basics of emergency medical care at the prehospital stage.
4. The concept of the "renal colic", the main clinical symptoms, the basics of emergency medical care at the prehospital stage.

STUDY 12

Topic: First aid for injuries and diseases of the central nervous system.

Goal: To acquaint with the basic principles of the first aid for patients with diseases of the central nervous system.

Control questions:

1. Clinical signs of life-threatening conditions in diseases of the central nervous system.
2. Clinical signs of loss of consciousness, the main causes.
3. Seizures, types of seizures. Epileptic seizures. Hysterical seizures.
4. First aid for patients with diseases of the nervous system.
5. First aid for patients with hallucinations, delirium, loss of consciousness.
6. Injuries of the spinal cord and brain: the basics of emergency medical care at the prehospital stage, peculiarities of the transportation of victims and patients.

Practical skills:

1. First aid for patients with seizures, loss of consciousness.

STUDY 13

Topic: First aid for patients with fever and acute allergic reactions.

Goal: To acquaint with the basic principles of first aid for patients with fever, allergic reactions.

Control questions:

1. The concept and the mechanism of thermoregulation.
2. Clinical manifestations of fever.
3. First aid for patients with fever.
4. Warming, cold compresses, heating pads, ice packs usage; indications, contraindications.
5. Allergic reactions, the main symptoms and types.
6. Urticaria, drug allergy, anaphylaxis, angioedema (Quincke's edema), first aid.

Practical skills:

1. First aid for allergic reactions.

STUDY 14

Topic: First aid for poisoning, insect sting and animal bites.

Goal: To acquaint with the basic principles of first aid to victims of poisoning, insect sting and animal bites.

Control questions:

1. The concept of "acute poisoning".
2. Classification of poisoning and toxic substances. Periods of the acute poisoning.
3. Clinical manifestations of the most frequent acute poisoning (carbon monoxide, alcohol, drugs, poisonous (toxic) plants, mushrooms, pesticides used in agriculture, household poisons).

4. Basics of emergency medical care for acute poisoning at the prehospital stage. Gastric lavage technique.

5. Bites of poisonous snakes, insects, animals: clinical symptoms, the basics of emergency medical care at the prehospital stage.

Practical skills:

1. Emergency management of poisoning.

STUDY 15

Topic: First aid to participants in a traffic accident, fires, water incidents.

Goal: To acquaint with the basic principles of first aid to victims of traffic accident, fires, water incidents, electrical incidents, barotrauma.

Control questions:

1. Peculiarities of the first aid in extreme situations (traffic accident, fires).
2. Rules of work in an emergency (features of creating a safe environment and rules for providing assistance).
3. Inhalation of smoke, asphyxia, drowning, the basics of emergency medical care.
4. Electrical incidents: causes, local and general manifestations, course features, first aid.
5. The concept of barotrauma, first aid.