

МИНИСТЕРСТВО ЗДРАВООХРАНЕНИЯ РЕСПУБЛИКИ БЕЛАРУСЬ  
УЧРЕЖДЕНИЕ ОБРАЗОВАНИЯ  
«ГРОДНЕНСКИЙ ГОСУДАРСТВЕННЫЙ МЕДИЦИНСКИЙ  
УНИВЕРСИТЕТ»

Кафедра пропедевтики внутренних болезней

**ОСНОВЫ МЕДИЦИНСКОГО УХОДА**  
(методические рекомендации для студентов I курса факультета иностранных  
учащихся, обучающихся на английском языке)

**BASICS OF MEDICAL CARE**  
Methodical recommendations for *I-st year students of foreign faculty*  
(*who are studying in English*)

Гродно, 2018  
ГрГМУ

Методические рекомендации составлены сотрудниками кафедры пропедевтики внутренних болезней УО «Гродненский государственный медицинский университет» зав. кафедрой Пронько Т.П. и ассистентом Поплавской Э.Э. в соответствии с учебной программой по учебной дисциплине «Основы медицинского ухода» для специальностей 1-79 01 01 «Лечебное дело» студентов 1 курса ЛФ и ФИУ утвержденной первым заместителем Министра образования Республики Беларусь 03.10.2018г., регистрационный номер ТД – Л. 646/тип.

### **Study 1.**

#### **Introduction to the discipline "Basics of medical care". Health institutions.**

**Goal: To instruct with role of patient care, medical ethics and deontology, main types and structure of health institutions.**

##### *Control questions*

1. The definition of "medical care".
2. The role of patient care in the treatment process.
3. What is the concept of deontology?
4. What is the concept of ethics?
5. Types of medical care. Conditions when medical care can be provided.
6. Types of health institutions (agree with nomenclature)
7. Basic structural units of health institutions.

### **Study 2.**

#### **The infections associated with medical care.**

**Goal: To introduce the concept of infectious diseases, and sanitary and anti-epidemic measures for the prevention of infectious diseases associated with medical care.**

##### *Control questions*

1. Infection: stages and elements of infection development, initial cause, ways of transmission, pathogens.
2. Mechanisms of pathogen transmission, predisposing factors.
3. The concept of infectious diseases associated with medical care. Initial cause, ways of transmission.
4. The concept of infectious safety.
5. Sanitary and anti-epidemic measures for the prevention of infectious diseases associated with medical care.
6. Infection control: guidelines for regulating sanitary and anti-epidemic regime in health care organizations.

### **Study 3.**

#### **Disinfection: types, methods, technique.**

**Goal: To acquaint with methods of disinfection, sterilization, antiseptics.**

##### *Control questions*

1. Disinfection. Focal and preventive disinfection.
2. Methods of disinfection.
3. Chemical methods of disinfection. Types of modes of disinfection using chemical agents.
4. Modern agents of chemical disinfection: groups, requirements for them.
5. Rules of preparation and application of solutions of chemical disinfectants.
6. Rules for safe use of chemical disinfectants, prevention of side effects of chemicals.
7. First aid for poisoning with chemical disinfectants.
8. Sterilization. Types, methods, techniques of sterilization.
9. The concept of aseptic and antiseptic.
10. Pre-sterilization preparation of instruments.
11. Disinfection of medical devices (medical tools, dressing material, things for patient care), and surfaces.
12. Disinfection and disposal of used medical items and medical materials.

##### *Practical skills.*

1. Preparation of disinfectant solutions.
2. Performance of test for assessing the quality of cleaning medical instruments from blood and detergent solution.

### **Study 4.**

#### **Sanitary and epidemiological requirements for work environment of medical staff of health institutions.**

**Goal: To study the basic rights and duties of paramedical personnel, sanitary and epidemiological requirements for work environment of medical staff of health institutions.**

##### *Control questions*

1. Rights and duties of auxiliary nurse.
2. Ethical and juridical (legal) responsibility of medical workers.
3. Rules of use sanitary protective clothing and personal protective equipment.
4. Personal hygiene of medical staff.
5. Rules of hand hygiene.
6. Levels of Hygienic antiseptic hand.
7. Modern antiseptics for hygienic application on the skin.
8. Medical kit for first aid in emergency cases.

##### *Practical skills.*

1. Hygienic antiseptic hand: European standard EN-1500 treatment.
2. Preparation of disinfectants.

## **Study 5.**

### **Sanitary and epidemiological requirements for the regime of cleaning and linen regime in health institutions.**

**Goal: To study the sanitary and epidemiological requirements for the regime of cleaning and linen regime in health institutions.**

#### *Control questions*

1. Rules for sanitation for medical rooms and medical equipment
2. Types of cleaning of rooms in hospital. Current and general cleaning.
3. Requirements for current and general cleaning of wards, procedural room, canteen, back room, frequency of cleaning.
4. Requirements to cleaning equipment. Rules of storage and marking of cleaning equipment.
5. Disinfection quality control.
6. Storage of clean and dirty bed linen and underwear.
7. Measures in case of emergency contact with the biological substances of the patient and contamination of environmental objects.

## **Study 6.**

### **Admission department. Sanitary and hygienic treatment of patients.**

**Goal: Get acquainted with the structure and organization of the admission department. To learn technique of the sanitary and hygienic treatment of the patient.**

#### *Control questions*

1. Organization of work in admission department.
2. Medical documentation of admission department.
3. Patient reception and registration.
4. Sanitary treatment of the patient (complete and partial).
5. Rules of assisting and observing patient during a bath and shower.
6. Pediculosis. Identification of patients with pediculosis and scabies.
7. Set for the treatment of patients with pediculosis
8. Treatment of patients with pediculosis.

#### *Practical skills.*

1. Sanitary treatment of the patient (complete and partial).
2. Identification of patients with pediculosis and scabies.
3. Taking care of the patient with pediculosis.

## **Study 7.**

### **Anthropometry. Transportation of patients according to the rules of ergonomics.**

**Goal: To master the basic methods of anthropometry; to learn the principles of transportation of patients.**

#### *Control questions*

1. Anthropometry.
2. Determination of height and weight of the patient. Calculation of body mass index (Quetelet index).
3. Determination of chest, thigh, hip, and waist circumference, waist/hip index.
4. Basic movement activity regimes for therapeutic patients.
5. Types of transportation.
6. Rules and techniques of transportation of patients.
7. Methods of transferring patients from stretchers and wheelchairs to the bed and from the bed to the stretcher, wheelchair.

#### *Practical skills.*

1. Determination of height and weight of the patient
2. Determination of chest, thigh, hip, and waist circumference.
3. Calculation of waist/hip index.
4. Calculation of body mass index.
5. Transferring of patients from stretchers and wheelchairs to the bed and from the bed to the stretcher, wheelchair.
6. Transportation of patients on a wheelchair and on a stretcher.

## **Study 8.**

### **Structure of the medical department. Medical regime.**

**Goal: Get acquainted with the structure and organization of the therapeutic department, medical regime in the department.**

#### *Control questions*

1. Structure and organization of the therapeutic department.
2. Elements of health-protective regime
3. Day regime in the hospital.
4. Control of patient visit and transfer of food.
5. Types of hospital beds.
6. Prepare bed to exploitation. Change of patient's underwear and bed linen.
7. Movement activity regimes. Complications of bed-regime and strict bed-regime.
8. Methods of change of bed linen and underwear in patients with movement disturbances.
9. Safe hospital environment
10. Risk factors for accidents in patients and methods to reduce them.

*Practical skills.*

1. Change of bed linen in patients with movement disturbances.
2. Change of underwear in patients with movement disturbances.
3. Record a Form the account of shifting of patients and hospital bed fund.

**Study 9.**

**General inspection of patient. Determination of the rate of breathing.  
Water balance. Pulse oximetry. Oxygen therapy.**

**Goal: Get acquainted with the methods of General inspection of the patient and learn the methods of determining the rate of breathing and determine the water balance. Learn the technique of pulse oximetry and oxygen therapy with nasal cannula and oxygen mask.**

*Control questions*

1. State of the patient.
2. Examination of mental status.
3. Position of patient in the bed.
4. Inspection of a skin, visible mucous membranes.
5. The concept of edema. Determination of edema
6. Structure and functions of the respiratory system (basic concepts).
7. Determination of the rate of breathing and registration data in medical documents.
8. Structure and functions of the urinary system (basic concepts).
9. The concept of diuresis. Measurement of daily diuresis, data recording in medical documents.
10. Determination of water balance, registration of water balance data.
11. The concept of pulse oximetry.
12. The concept of oxygen therapy. Methods of oxygen supply.
13. Safety rules when working with oxygen equipment.
14. The flow of oxygen via nasal cannula and oxygen mask.

*Practical skills.*

1. Determination of the rate of breathing and registration data in medical documents.
2. Measurement of daily diuresis, data recording in medical documents.
3. Determination of water balance, registration of water balance data.
4. Determination of blood oxygen saturation using a pulseoximeter.
5. Performance of oxygen therapy via nasal cannula and oxygen mask.

**Study 10.**

**Examination of the pulse and blood pressure measurement.**

**Goal: Learn the technique of pulse research, blood pressure measurement.**

*Control questions*

1. Structure and functions of the cardiovascular system.
2. The concept of pulse. Method of examination of the pulse at the radial arteries. Registration of the pulse data.

3. Rules and technique of blood pressure measurement by method of Korotkov.
4. The concept of oscillographic method of measuring blood pressure.
5. Rules for measuring blood pressure by automatic devices.
6. Registration of results in medical records.

*Practical skills.*

1. Determination the pulse rate on the radial artery.
2. Technique of blood pressure measurement.

**Study 11.**

**Thermometry. Care of patients with fever.**

**Goal: To learn the methods of thermometry, registration of the measurement data.**

*Control questions*

1. Characteristics of human body temperature and factors affecting it.
2. The types of thermometers.
3. Storage and disinfection of thermometers.
4. Methods of thermometry.
5. Rules of measurement of the patient's body temperature.
6. Registration of thermometry data to medical documentations.
7. The concept of fever. Types of fever.
8. Periods of fever.
9. The types of temperature curves.
10. Care of patients with fever.

*Practical skills.*

1. Measurement of body temperature by mercury and electronic thermometers.
2. Registration of measurement data to the temperature form.

**Study 12.**

**Personal hygiene of the patient. Care for a patient with moving activity disorders.**

**Goal: To learn the technique of measures for personal hygiene of the patient, prevention of bedsores.**

*Control questions.*

1. Personal hygiene of the patient.
2. Skin care. Washing, wet wiping the patient's skin.
3. Care of eyes. Instilling drops into eyes.
4. Care of the nose. Instilling nasal drops.
5. Care of ears, Instilling drops into ears.
6. Care of the mouth.
7. Hair care. Wash critically ill patient's head.
8. Use of bedpan and urinals.
9. Washing of the external genitalia after defecation and urination.

*Practical skills.*

1. Washing, wet wiping the skin of the critically ill patient.
2. Care of mouth of the critically ill patient.
3. Wash critically ill patient's head.
4. Instilling drops in eyes and washing eyes.
5. Care of ears. Instilling drops in ears.
6. Instilling drops in the nose and rinsing the nose.
7. Washing of the external genitalia critically ill patient.

**Study 13.**

**Body biomechanics and positioning. Prevention of bedsores.**

**Goal: Get acquainted with the concept of biomechanics of the body and positioning. To learn the technique of measures for the prevention of bedsores.**

*Control questions.*

1. The rules of biomechanics. The concept of ergonomics.
2. Moving patients.
3. The basic physiological positions of the patient in bed: position Fowler's, supine position, Sims' position, prone position, on the one side.
4. Assistive devices for moving patients to a comfortable position.
5. Treatment of patients using positions in bed
6. Bedsores: the main causes, mechanism of occurrence, stage of development, clinical features.
7. Risk factors and assessment of risk of developing bedsores (Waterlow scale).
8. Prevention of bedsores.
9. Anti-bedsores bed and mattresses. Terms of use, disinfection and care.

*Practical skills.*

1. Preparation, disinfection and care of anti-bedsores bed.

**Study 14.**

**Diet. The concept of clinical nutrition.**

**Goal: Get acquainted with main types of diet. To master the skills of feeding seriously ill patients**

*Control questions.*

1. The concept of the caloric intake. The human body needs protein, fat, carbohydrates, vitamins, mineral salts, water.
2. The importance of diet as a therapeutic factor. Basic principles of diet.
3. Types of diets and their characteristics.
4. Organization of patient's nutrition in health care organizations.
5. Sanitary and epidemiological requirements for Organization of patient's nutrition in health care organizations, canteens.



6. Distribution of food.
7. Feeding of critically ill patients, elderly, bedridden.
8. The concept of artificial nutrition.

*Practical skills.*

1. Feeding critically ill patient (feed with a spoon and drinking bowl).

### **Study 15.**

#### **Simple medical procedures.**

**Goal: To learn the technique of the simplest medical procedures.**

*Control questions.*

1. Placing of mustard plasters.
  2. Types of hot-water bags.
  3. Technique of placing hot-water bag to patient.
- Disinfection of hot-water bag.
4. Application of ice pack and cooling gel pack.
  5. Rules for the application of warming compress.
  6. Rules for the application of cold compress.
  7. Rules for the use of an inhaler.

*Practical skills.*

1. Placing of mustard plasters.
2. Placing the local warming compress on the limbs and ear.
3. Application of cold compress.
4. Preparation and placing a hot-water bag to patient.
5. Preparation and placing an ice pack to patient.

### **Study 16.**

#### **Preparation of patients for laboratory tests. Rules of registration of medical documentation.**

**Goal: Get acquainted with the preparation of the patient for laboratory tests.**

*Control questions.*

1. Preparation for the blood test and biochemical blood tests.
2. Preparation for the sputum test, sputum test for detection of Mycobacterium tuberculosis and atypical cells.
3. Preparations for urine test, Nechyporenko urine test, Zymnitsky test, Urine Culture and Antimicrobial Sensitivity Tests, Urine Glucose test.
4. Preparation for feces test: stool test, detection of Helminthes Eggs, fecal microbiota analysis.
5. Rules of registration of medical documentation.

*Practical skills.*

1. Write down of prescription for the analysis of sputum, feces, the General analysis of urine and blood.

## **Study 17.**

### **Preparation of patients for instrumental methods of investigations.**

**Goal: Get acquainted with the preparation of the patient for instrumental methods of investigations.**

#### *Control questions.*

1. Concept of instrumental methods of patient 's examination : spirometry, peakflowmetry, bronchoscopy.
2. Preparation of patients for x-ray examination of the respiratory, cardiovascular, digestive, kidney and urinary tract.
3. Use of oral remedies to cleanse the intestines before instrumental methods of patient 's examination.
4. Preparation of patients for endoscopic methods (bronchoscopy, fibroesophagogastroduodenoscopy, rectoromanoscopy, fibrocolonoscopy).
5. Concept of pH-measurement of the esophagus and stomach. Preparation for the investigation.
6. Preparation of patients for ultrasound examination of the cardiovascular system, digestive organs, kidneys and urinary tract, spleen and lymph nodes.

#### *Practical skills.*

1. Preparation of patients for x-ray examination of the respiratory, cardiovascular, digestive, kidney and urinary tract.
2. Preparation of patients for endoscopic methods (bronchoscopy, fibroesophagogastroduodenoscopy, rectoromanoscopy, fibrocolonoscopy).
3. Preparation of patients for ultrasound examination of the cardiovascular system, digestive organs, kidneys and urinary tract, spleen and lymph nodes.

## **Study 18.**

### **Medical care and supervision of elderly and senile patients.**

**Goal: To Learn the features of care for elderly and senile patients.**

#### *Control questions.*

1. The main features of speech, hearing, memory, movements of the elderly
2. Rules of nutrition of elderly and senile patients.
3. Features of care of elderly and senile patients (skin care, nails, care in disturbances of intestine propulsion and evacuation).
4. Measures to prevent falls in the elderly and senile patients.
5. Microclimate of rooms.
6. Prevention of injuries and features of the bed for elderly and senile patients.

#### *Practical skills.*

1. Feeding elderly and senile bed-ridden patients and patients with impaired motor function.