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

Кафедра пропедевтики внутренних болезней

МЕДИЦИНСКИЙ УХОД И МАНИПУЛЯЦИОНАЯ ТЕХНИКА

(методические рекомендации для студентов II курса факультета иностранных учащихся, обучающихся на английском языке)

MEDICAL CARE AND MEDICAL MANIPULATIONS

Methodical recommendations for the II-d year foreign faculty students

Гродно, 2019 ГрГМУ Методические рекомендации подготовлены сотрудниками кафедры пропедевтики внутренних болезней УО «Гродненский государственный медицинский университет» зав. кафедрой доцентом Пронько Т.П., старшим преподавателем Поплавской Э.Э., доцентом Сурмач Е.М. в соответствии с типовой учебной программой по дисциплине «Медицинский уход и манипуляционная техника» для специальностей 1-79 01 01 «Лечебное дело», утвержденной первым заместителем Министра образования Республики Беларусь 03.10.2018г., регистрационный номер ТД – L. 644/тип.

Study 1.

Duties of the nurse of the therapeutic Department. Medical ethics and deontology in the professional activity of a nurse.

Goal: To instruct with role of patient care, medical ethics and deontology, Duties of the nurse of the Therapeutic Department.

Control questions:

- 1. The role of health professionals in the treatment and care of patients.
- 2. Ethical and juridical (legal) responsibility of medical workers.
- 3. What is the concept of ethics?
- 4. What is the concept of deontology?
- 5. Deontological requirements for the individuality of a nurse.
- 6. The concept of iatrogenic diseases.

Study 2

Organization of work of the nurse's workplace (reception). Maintenance of medical records. The activities of senior nurse of the Therapeutic Department.

Goal: To study the basic rules of work and duties of a nurse, of the senior nurse. Get acquainted with the device of the nurse's and senior nurse's workplace, maintaining medical documentation.

Control questions:

- 1. Rights and duties of the ward nurse.
- 2. Personal hygiene of the nurse.
- 3. The equipment of a workplace of the nurse.
- 4. Organization of work of the nurse's workplace (reception).
- 5. Medical documentation, rules of maintenance medical documentation
- 6. Rules of shift of nurses at the end of duty.
- 7. Selection of appointments from the hospital patient's medical records.
- 8. Organization of work of the senior nurse of Therapeutic Department.
- 9. Duties of the senior nurse.
- 10. Rules of the morning planning sessions during the shifting of duties.

- 1. Maintenance of medical records the ward nurse.
- 2. Selection of appointments from the list of prescriptions.

- 3. Selection of medicines from the list of prescriptions.
- 4. Management of medical records by the senior nurse of the therapeutic Department.

Study 3

Storage and record keeping of medicines, narcotic drugs and psychotropic substances.

Goal: To study the rules of prescribing, storing medicines, narcotic drugs and psychotropic substances.

Control questions:

- 1. Prescription, storage of medicines by the ward nurse.
- 2. Prescription, storage of medicines by the senior nurse of the Department.
- 3. Prescription, storage of narcotic drugs and psychotropic substances.
- 4. Write off of narcotic and potent drugs.

Practical skills:

- 1. How to prepare documentation for prescription of medicines?
- 2. Rules of storage of medicines.

Study 4

General rules for the use of medicines. Enteral administration of drugs. Goal: To study the rules of use of enteral medicines, and distribution of medicines.

Control questions:

- 1. Preparation and rules of distribution of various forms of medicines.
- 2. Characteristics of enteral methods of remedy use.
- 3. Rules of using of liquid, tablets and powdered forms of remedies.
- 4. Sublingual and buccal technique taking of medication.
- 5. Rules of distribution of enteral medicines.
- 6. Features of the using of enteral medicines in elderly and senile patients, patients with swallowing disorders, with damage of intellectual mnestic functions.

Practical skills:

- 1. Technique of enteral using of medication.
- 2. Sublingual and buccal technique of medication use.

Study 5

Topical administration of medicines

Goal: To examine routes of medicines administration (topical and rectal). To master the technique of instilling drops in the eyes, nose, ears, laying ointment for the eyelid, the use of suppositories, the application of drugs to the skin.

- 1. Features of external (topical) methods of drug administration.
- 2. The technique of instilling drops in the eyes, nose, and ears.
- 3. The technique of laying the ointment under the eyelid.
- 4. Methods of application of suppositories.

5. Methods of application of remedies on the skin.

Practical skills:

- 1. The application of topical medicines in the management of skin pathology.
- 2. The technique of instilling drops in the eyes, nose, and ears.
- 3. The technique of laying the ointment under the eyelid.
- 4. The technique of insertion of suppositories.

Study 6

Inhalation route of medicines administration.

Goal: To study the technique of inhalation route of drug administration. To master the method of use of individual inhaler, spacer, spinhaler, turbuhaler, the use of nebulizer.

Control questions:

- 1. Characteristics of the inhalation method of drug administration.
- 2. The use of individual inhaler and spacer.
- 3. The use of spinhaler, turbuhaler and multidisk.
- 4. Types of nebulizers and their characteristics.
- 5. Rules for the use of the nebulizer.

Practical skills:

- 1. The use of individual inhaler and spacer.
- 2. Rules for the use of the nebulizer.

Study 7

General inspection of patient.

Goal: Master the rules of General inspection of the patient.

Control questions:

- 1. History taking for nurses.
- 2. Assessment of the state of the patient.
- 3. Assessment of the patient consciousness.
- 4. Assessment of the patient's position.
- 5. Inspection of skin, visible mucous membranes.
- 6. Edema, types of edema.
- 7. Methods of determination of edema.

Practical skills:

- 1. General inspection of the patient.
- 2. Determination of peripheral edema and ascites.
- 3. Determination of the water balance.

Study 8

General inspection of patient: anthropometry and thermometry. Goal: Master the rules of anthropometry and thermometry. Care of patients with the fever.

- 1. Determination of height, weight, measurement of the chest and abdomen circumference.
- 2. Determination of the body mass index (BMI).
- 3. Storage and disinfection of thermometers.
- 4. Temperature measurement technique.
- 5. Registration of temperature measurement results.
- 6. The concept of fever. Types of fever, fever curves.
- 7. Periods of fever.
- 8. Care of patients with the fever.

- 1. Determination of the height, weight, measurement of the chest and abdomen circumference.
- 2. Determination of the BMI.
- 3. Temperature measurement technique.
- 4. Registration of temperature measurement results.

Study 9

Diet. The concept of clinical nutrition.

Goal: To study the features of dietary nutrition of patients and the organization of patient nutrition in health care organizations.

Control questions:

- 1. The concept of the caloric intake.
- 2. The human body needs for main nutrients (protein, fat, carbohydrates, vitamins, mineral salts, water).
- 3. The importance of diet as a therapeutic factor.
- 4. Therapeutic diets.
- 5. Organization of patient's nutrition in health care organizations.
- 6. Types of enteral nutrition.
- 7. Feeding patients with self-care deficiency, elderly and senile, bedridden.
- 8. The concept of artificial nutrition of patients.

Practical skills:

1. Making an application for the nutrition in the health care institutions.

Study 10

Observation and care of patients with diseases of respiratory system. Goal: To study the main symptoms of respiratory diseases, to determine the breath rate. Care of patients with respiratory tract diseases.

- 1. The main complaints of the patients with diseases of the respiratory system.
- 2. Signs of the breathing disorders, their assessment.
- 3. Determination of the breath rate and rhythm.
- 4. Pathological rhythms of breathing.

- 5. The collection of sputum for sputum analysis, for the analysis of Mycobacterium tuberculosis and atypical cells test.
- 6. Nutrition of patients with respiratory tract diseases.
- 7. Care of patient with cough, and first aid for this patient.
- 8. Definition of the "postural drainage position" for patient with respiratory tract diseases.

- 1. Collection of sputum for laboratory testing.
- 2. Collection of sputum for bacteriological testing.
- 3. Determination of the breath rate.
- 4. Performing postural drainage.

Study 11

Medical care of patients with chest pain, shortness of breath, attacks of suffocation, hemoptysis and pulmonary bleeding.

Goal: Learn the basic rules of care of patients with chest pain, shortness of breath, suffocation, hemoptysis and pulmonary bleeding, and first aid.

Control questions:

- 1. Medical care and first aid for patients with chest pain.
- 2. Medical care and first aid for patients with hemoptysis, pulmonary bleeding.
- 3. Medical care and first aid for patients with cough.
- 4. Medical care and first aid for patients with bronchial asthma attacks.

Study 12

Oxygen therapy for patients with respiratory tract diseases. Peakflowmetry.

Goal: To Introduce the method of oxygen therapy and instrumental methods of investigation.

Control questions:

- 1. The concept of oxygen therapy, their types.
- 2. Indications for the oxygen therapy.
- 3. Safety rules with oxygen devices.
- 4. Rules of using of peakflowmeters and registration of the results in medical documentation.
- 5. The concept of instrumental methods of the investigation of the respiratory tract respiratory function tests (spirography, pneumotachography, bronchoscopy, bronchography).
- 6. Preparation of patients for instrumental methods of investigations.

Practical skills:

- 1. Carrying oxygen therapy by different methods.
- 2. Rules of peakflowmeters using and registration of the results in medical documentations.

Study 13

Observation and care of patients with diseases of cardiovascular system.

Goal: to study the main symptoms of cardiovascular system diseases; care of patients with diseases of the cardiovascular system; to master the technique of registration of blood pressure and pulse determination.

Control questions:

- 1. The main complaints of patients with diseases of cardiovascular system.
- 2. Definition of the "pulse", its characteristics.
- 3. Palpation of the pulse.
- 4. Method of measurement of blood pressure. Registration of data to medical documentation.
- 5. Technique of using the digital automatic blood pressure monitor.
- 6. Characteristics of the diet used in patients with cardiovascular system diseases.
- 7. The concept of arterial hypertension.
- 8. First aid for patients with hypertensive crisis.
- 9. Care of patients after cardiosurgical interventions.
- 10. The concept of acute coronary syndrome.
- 11. First aid for patients with chest pain.

Practical skills:

- 1. Blood pressure measurement technique.
- 2. Determination of the pulse.

Study 14

Care of patients with urgent conditions in cardiovascular diseases. Goal: to study the care and first aid for patients with emergency conditions in cardiovascular diseases.

Control questions:

- 1. The concept of acute and chronic heart failure.
- 2. First aid for patients with attack of suffocation.
- 3. The concept of acute circulatory collapse (syncope, collapse, shock).
- 4. First aid for patients with syncope, collapse, shock.
- 5. The concept of cardiovascular resuscitation.

Practical skills:

1. Cardiovascular resuscitation technique.

Study 15

ECG registration technique.

Goal: To study and master the technique of ECG registration.

- 1. Design and structure of the digital ECG system.
- 2. Leads, rules of electrode application.
- 3. ECG registration rules.
- 4. Registration of the medical documentation for electrocardiography.
- 5. Safety rules with a digital ECG system (prevention of electric shock).
- 6. Disinfection of the electrodes and the patients couch.

1. Technique of ECG registration.

Study 16

Observation and care of patients with diseases of gastrointestinal tract. Goal: to study the features of care and monitoring of patients with diseases of the digestive system. To learn the methods of preparation of patients for x-ray, endoscopic and ultrasound examination.

Control questions:

- 1. The main complaints of the patients with diseases of gastrointestinal tract.
- 2. Observation and care of patients with diseases of the digestive system.
- 3. Diet for patients with diseases of the digestive system.
- 4. Preparation of patients for x-ray examination of the stomach, intestines, gallbladder and biliary tract.
- 5. Preparation of patients for esophagogastroduodenoscopy, proctosigmoidoscopy, colonoscopy.
- 6. Preparation of patients for ultrasound examination of the digestive system.
- 7. Care of patients with heartburn, first aid.
- 8. Care of patients with abdominal pain, first aid.

Practical skills:

- 1. Preparation of patients for x-ray examination of the stomach, intestines, gallbladder and biliary tract.
- 2. Preparation of patients for esophagogastroduodenoscopy, proctosigmoidoscopy, colonoscopy.
- 3. Preparation of patients for ultrasound examination of the digestive system.

Study17

Medical care of patients with vomiting, gastrointestinal bleeding, bloating (meteorism), constipation, diarrhea.

Goal: To study the care of patients with vomiting, gastrointestinal bleeding, meteorism, constipation, diarrhea. To learn the methods of collection the vomitus for the tests. To provide the first aid for patients with vomiting, gastrointestinal bleeding.

- 1. Care and first aid for patients with vomiting.
- 2. Methods of collection of vomit for examination.
- 3. Care and first aid for patients with gastric bleeding.
- 4. Care for patients with meteorism (bloating) and stool disorders (constipation, diarrhea).
- 5. Care and first aid to patients with diarrhea, constipation, fecal incontinence, meteorism.
- 6. The method of the feces collection for the stool test.
- 7. The method of the feces collection for the bacteriological test.

- 1. The method of the feces collection for the stool test.
- 2. The method of the feces collection for the bacteriological test.

Study 18

Diagnostic and therapeutic nursing procedures. The insertion of a tube into the stomach.

Goal: to master the technique of inserting nasogastric tube s into the stomach, the technique of gastric lavage with a tube and gastroenteric tube feeding of the patient.

Control questions:

- 1. Equipment for the gastric lavage.
- 2. Insertion of the tube into the stomach. Indications, contraindications, possible complications.
- 3. Insertion of the oral and nasogastric tubes into the stomach.
- 4. Gastric lavage with a tube.
- 5. Gastroenteric tube feeding of the patient.

Practical skills:

- 1. Insertion of the oral and nasogastric tubes into the stomach.
- 2. Gastric lavage with a tube.
- 3. Gastroenteric tube feeding of the patient.

Study 19

Diagnostic and therapeutic nursing procedures. The performance of various types of enemas.

Goal: To study and master the technique of enema and vapor tube.

Control questions:

- 1. Indications, contraindications, possible complications of the rectal tube.
- 2. Insertion of the rectal (flatus) tube into the rectum.
- 3. Equipment for the performance of enemas.
- 4. Preparation of the patient for performing of the cleansing enema.
- 5. Enemas, types of enemas. Indications and contraindications for the using of various types of enemas.
- 6. The technique of the cleansing, siphon, medicinal enema.

Practical skills:

- 1. The performance of cleansing, siphon, medicinal enema
- 2. Insertion of the rectal tube into the rectum.

Study 20

Observation and care of patients with diseases of the urinary system.

Goal: To study the features of care for patients with diseases of the urinary system.

Control questions:

1. The main complains in patients with the diseases of kidneys and urinary tract.

- 2. Diuresis. Measurement of daily diuresis.
- 3. Monitoring of changes in urine diuresis and urine properties.
- 4. Features of patient care in diseases of the kidneys and urinary tract.
- 5. Medical care for patients with acute urinary retention, urinary incontinence, renal colic, edema.
- 6. Characteristics of diets used in patients with diseases of the urinary system.
- 7. Medical care and supervision of elderly and senile patients with kidney and urinary tract diseases.
- 8. The method of urine collection for the urine test, Nechyporenko urine test, Zymnytskyi test.
- 9. The method of urine collection for detection of 24-hour glucose level.
- 10. Preparation of the patient for x-ray and ultrasound examination of the kidneys and urinary bladder.

- 1. Measurement of daily diuresis. Registration data of measurement to medical documentation.
- 2. The method of urine collection for urine test, Nechyporenko urine test, Zymnytskyi test.
- 3. The method of urine collection for detection of 24-hour glucose level.

Study 21

Diagnostic and therapeutic nursing procedures. Catheterization of the bladder.

Goal: Master the technique of collecting urine for tests. Master the technique of functional kidney tests. Master the technique of urinary bladder catheterization.

Control questions:

- 1. Urinary bladder catheterization. Indications, contraindications, complications.
- 2. Equipment for bladder catheterization.
- 3. Bladder catheterization using Nelaton and Foley urological catheter.
- 4. Technique of bladder catheterization in women.
- 5. Technique of bladder catheterization in men.
- 6. Removal of urine from the bladder, urine sampling for laboratory testing using a catheter.
- 7. Introduction of the medication into the bladder.
- 8. Care for urological catheter and urinals installed for a long time.

- 1. Preparing the workplace for bladder catheterization.
- 2. Bladder catheterization using a urological Nelaton catheter.
- 3. Collection of urine for laboratory testing using a catheter.
- 4. Bladder catheterization using a Foley urological catheter.
- 5. Care for urological catheter installed for a long time.

Observation and medical care of patient with movement disorders and self-care violation.

Goal: To learn the features of care for elderly and senile patients, with movement disorders and self-care violation.

Control questions:

- 1. Features of elderly and senile patients.
- 2. Features of care for elderly and senile patients.
- 3. Monitoring and hygienic care of patients with self-care deficit and motor activity disorders.
- 4. Features of feeding elderly and senile patients.
- 5. Feeding patients with self-care deficiency and motor activity disorders.

Study 23

Monitoring and medical care of patients in critical condition.

Goal: To study the features of monitoring and medical care for patients in critical condition.

Control questions:

- 1. Monitoring and medical care of patients in the intensive care unit.
- 2. Monitoring of the patient's condition according to the monitoring equipment.
- 3. Clinical signs of terminal conditions.
- 4. Signs of clinical and biological death.
- 5. Statement of death, legal and ethical standards of care for the corpse.
- 6. Rules for handling a corpse.
- 7. Paperwork for delivery to the mortuary.

Study 24

Organization of work of the procedural room. Duties of the procedural nurse. Equipment of a procedural room.

Goal: To study basic principles of organization of work of the procedural room, duties of the procedural nurse.

Control questions:

- 1. Duties of procedural nurse.
- 2. Equipment of a procedural room
- 3. Rules of safety work of the procedural nurse at the workplace.
- 4. Rules of personal hygiene of the procedural nurse.
- 5. Rules of use of sanitary clothes by the procedural nurse.

Practical skills:

1. Rules of use of sanitary clothes by the procedural nurse

Study 25

Organization of work of the procedural room. Rules of work with medical waste.

Goal: To study basic rules of work with medical waste and rules of disinfection of reusable and disposable medical devices.

Control questions:

- 1. Medical documentation of the procedural room.
- 2. Medical waste: groups.
- 3. Rules of medical waste management.
- 4. Disinfection of reusable medical devices.
- 5. Disinfection of a syringe with a disposable needle.
- 6. Disinfection of disposable system for infusion.

Practical skills:

- 1. Disinfection of reusable medical devices.
- 2. Disinfection of a syringe with a disposable needle.
- 3. Disinfection of disposable system for infusion.

Study 26

Organization of work of the procedural room. Disinfection measures in the procedural room.

Goal: To study the rules of disinfection measures in the procedural room. To master the preparation of the procedural room for injections and intravenous infusions.

Control questions:

- 1. Disinfection measures in the procedural room.
- 2. Current and General cleaning of the procedural room.
- 3. Preparation of the procedural room for injections and intravenous infusions.

Practical skills:

- 1. Disinfection the treatment room.
- 2. Current and general cleaning of the procedural room.
- 3. Preparation of the procedural room for injections and intravenous infusions.

Study 27

Collect of drug solution from an ampoule and a vial into a syringe. Goal: To master the preparation of medicines for parenteral administration and a collect of drugs from the ampoule and vial into the syringe.

Control questions:

- 1. Parenteral methods of medicines administration: intradermal, subcutaneous, intramuscular injections, intravenous drug administration using a syringe and infusion system, their characteristics.
- 2. Features parenteral administration of medicines in the procedural room of the health organization.
- 3. Preparation of medicines for parenteral administration.
- 4. Collect of medicines from an ampoule and a vial into a syringe.
- 5. Rules of storage of the opened vial with the medicines.

Practical skills:

1. Collect of medicines from an ampoule and a vial into a syringe.

Intradermal and subcutaneous injections.

Goal: To master the technique of intradermal and subcutaneous injections.

Control questions:

- 1. Indications and contraindications to intradermal injections.
- 2. Indications and contraindications to subcutaneous injections.
- 3. Preparation of the patient's skin for injection.
- 4. Technique of subcutaneous and intradermal injections.
- 5. Subcutaneous administration of insulin.
- 6. Subcutaneous insulin injection using a syringe pen.
- 7. Possible complications of subcutaneous and intradermal injections.

Practical skills:

- 1. Technique of subcutaneous injections.
- 2. Technique of intradermal injections.

Study 29

Intramuscular injections.

Goal: To master the technique of intramuscular injections.

Control questions:

- 1. Indications and contraindications to intramuscular injections.
- 2. Preparation of the patient's skin for injection.
- 3. Technique of intramuscular injections.
- 4. Features of injection of oil solutions and bicillin.
- 5. Possible complications in intramuscular injections.

Practical skills:

1. Technique of intramuscular injections.

Study 30

Collection blood from a vein.

Goal: To master the technique of taking blood from a vein with a syringe using the vacuum system S-Monovette and Vacutainer.

Control questions:

- 1. Characteristics of medical devices for blood sampling from a vein.
- 2. Collection blood from a vein with a syringe.
- 3. Collection blood from a vein by S-Monovette vacuum system.
- 4. Collection blood from a vein by a Vacutainer system.

Practical skills:

- 1. Collection blood from a vein with a syringe.
- 2. Collection blood from a vein by S-Monovette vacuum system.
- 3. Collection blood from a vein by a Vacutainer system.

Study 31

Preparation of blood for transportation to the laboratory, registration data in medical documentation. Preventive measures in case of emergency contact with blood.

Goal: To study the rules of preparation of blood for transportation to the laboratory, the rules of registration data in medical documentation and measures in case of emergency contact with blood.

Control questions:

- 1. Preparation of blood for transportation to the laboratory.
- 2. Registration data in medical documentation.
- 3. Rules of transportation of blood to the laboratory.
- 4. Preventive measures in case of emergency contact with blood.
- 5. Features of blood transportation to the bacteriological laboratory.

Practical skills:

- 1. Preparation of blood for transportation to the laboratory.
- 2. Registration data in medical documentation.

Study 32

Intravenous infusion of medicines using a syringe.

Goal: To master the technique of intravenous injections.

Control questions:

- 1. General characteristics of intravenous infusions.
- 2. Equipment for intravenous administration of medicines using a syringe.
- 3. The placing of a tourniquet on the shoulder.
- 4. Indications and contraindications for intravenous administration of medicines.
- 5. Technique of intravenous jet infusion.
- 6. Complications of intravenous infusions.

Practical skills:

1. The placing of a tourniquet on the shoulder.

Study 33

Filling the system for intravenous dropping infusion. Intravenous administration of the medicine using the infusion system.

Goal: To master technique of intravenous dropping infusion.

Control questions:

- 1. Characteristics of a single-use system for intravenous dropping infusion.
- 2. Indications and contraindications for intravenous dropping infusion.
- 3. Technique of intravenous dropping infusion.
- 4. Supporting the necessary speed of intravenous dropping infusion.
- 5. Shift a bottle with infusion solution.
- 6. Intravenous administration of the drug to the patient during infusion.
- 7. Complications of intravenous infusions.
- 8. Possible complications of intravenous dropping infusion.

- 1. Filling the system for intravenous dropping infusion.
- 2. Intravenous infusion of the medicine using the infusion system.
- 3. Shift a bottle with infusion solution.
- 4. Intravenous administration of the medicine to the patient during intravenous dropping infusion.

Study 34

Injections of medicines in the ward of the hospital, at home and at the place of accident.

Goal: To study the features of injections in the ward of the hospital, at home and the place of accident. To master the technique of peripheral venous catheter setting and.

Control questions:

- 1. Intravenous administration of the medicines using a device for infusion into small veins "needle-butterfly".
- 2. Peripheral venous catheter placement.
- 3. Infusion therapy using a peripheral venous catheter.
- 4. Care for peripheral venous catheter.
- 5. Removal of peripheral venous catheter.
- 6. Dosed administration of medicines using a syringe infusion pump.
- 7. Characteristics of medical devices for parenteral drug administration.
- 8. Features of parenteral administration of medicines in the ward of the hospital, at home and at the place of accident.
- 9. Possible complications in parenteral administration of medicines, first aid.

- 1. Peripheral venous catheter placement.
- 2. Care for peripheral venous catheter.
- 3. Removal of peripheral venous catheter.
- 4. Rules of using of the syringe infusion pump.