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Medical Institute of Sumy State University

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**METHODICAL RECOMMENDATIONS FOR PRACTICAL CLASSES**

***Lesson №1***

 **Peculiarities of deontology in the work of trained nurses with children and their relatives. Legislative and normative acts which regulate the work. Basic duties of nurses of pediatric department. Organization of the duties of a pediatric nurse. Documents filled by the nurse on duty, and the rules of its.**

**Registration of patients admitted into the department. Filling of hospital chart. Taking of body temperature, measuring of arterial pressure, examination of pulse and recording of information on the temperature chart. Work with prescription sheet. Rules of oral introduction of medications to children.**

Volume - 2 hours

The role of care for sick children in medical and diagnostic process. Structure and functions of children’s hospital and polyclinic department, peculiarities of their work organization.

**Aims:** to learn the basic principles of medical ethic and deontology in the children’s hospital; to be able to use questioning and examination of the patient to assess his condition; to be able to

fill in the medical records of children’s department and hospitals; to study the structure, general principles and the volume of work of main children’s treatment-and-prophylactic institutions, the volume and forms of a pediatrician’s work, the work and duties of middle

and junior medical staff.

**Professional motivation of students:**

The well-being of children has been a subject of great concern globally and in different countries for many years. There are many ways in which the health of a child can be influenced. The goal

is for health to be influenced positively. A variety of programmes now exists that directly or indirectly serve the health needs of children.

The knowledge of the principles of organization and methods of the medical – prophylactic service for children in Ukraine, the contents and forms of the work of a paediatrician are important for a correct use of abilities of the paediatric medical service. Maternity and childhood protection is one of the main parts of population health protection. Its integral part is treatment-and-prophylactic aid to children, which must organize medical observation of healthy children and teenagers and provide them with competent medical 4 service in case of necessity. Each doctor must have definite knowledge of children’s medical service organization adopted in

Ukraine.

In practice the medical specialist should understand the need for knowledge of the characteristics of medical ethics and deontology for the success of therapeutic and diagnostic manipulations aimed at achieving the patient’s health.

**Students’ independent study programme:**

1. Theoretical approaches to the growth and development of children.

2. Features of ethics in working with children and their relatives. Basic rules for communicating with a sick child and his family. Questioning of parents of a sick child.

3. The main forms of medical documentation in the pediatric hospital.

4. Rules of filling medical documentation of polyclinic department and children’s hospital.

5. Case history (methods of questioning patient’s complaints, history of the disease, history oflife, genetic, allergic, and epidemiological history).

**After self-training the student must know the following:**

1. General principles of children treatment-and-prophylactic aid organization.

2. Contents, methods and forms of activity, structure, and functioning peculiarities of the children’s (pediatric) polyclinic.

3. Children’s permanent establishment (hospital) structure, its peculiarities, works organization.

4. Forms of work and functional duties of a children’s department pediatrician and a district pediatrician.

5. Forms of work and functional duties of a children’s department nurse and a visiting nurse.

6. Forms of work and functional duties of a children’s department junior nurse. Having covered the topic, the student must be able to:

1. Define the treatment-and-prophylactic establishment a healthy or ill child must be sent to in order to be given the necessary medical aid.

2. Define the duties of a district pediatrician or a children’s department pediatrician.

3. Define the duties of a visiting nurse, a children’s department nurse and a children’s permanent establishment (hospital) junior nurse.

**Materials that might be helpful:**

• general principles of children’s treatment-and-prophylactic

aid organization in Ukraine;

• the list of children’s treatment-and-prophylactic establishments;

• the structure and volume of work of a children’s (pediatric) polyclinic department;

• functional duties of a district pediatrician and district (visiting) nurse;

• the structure and volume of work of a children’s permanent establishment (hospital);

• functional duties of a pediatrician, nurse, and junior nurse of a children’s permanent establishment (hospital).

***Lesson №2***. **Organization of the duties of the nurse in the manipulation room. Basic documents of the manipulation room. Rules of storage and accounting for medicinal facilities and medical instruments in the manipulation room and duty post. Excerpt, account and storage of drastic, narcotic and poisonous substances.**

**Preparation of the manipulation table for work. Technique of execution of intramuscular, intravenous and subcutaneous injections. Calculation of the dose of antibiotics.**

**Technique of execution of intravenous injections. Rules of using of the systems for and conducting of intravenous infusion. The basic requirements of disinfection and cleaning of instruments before sterilization.**

**The aim of the lesson:** To study the rules of calculation and preservation of drugs belonging to the general list and A and B groups; to be acquainted with the rules of drug administration to children. In addition, to study the rules and techniques of parenteral drugs administration to children.

**Professional motivation of students**: The administration of medications to children presents a number of problems that are not encountered when giving medication to adult patients. Children vary widely in age, weight, surface area, and the ability to absorb, metabolize, and excrete medications. Nurses must be particularly alert when computing and administering drugs to infants and children. Giving medications to children is a serious responsibility. The need for accuracy in preparing and giving medications to children is even greater than with adult patients. Since the pediatric dose is often relatively small in comparison with the adult dose, a slight mistake in the amount of a drug administered represents a greater proportional error.

**After self-training, the student must know the following:**

1. Organization of duties of the nurse of procedure room.

2. The rules of storage of medical instruments in the procedure room.

3. The rules of drugs prescription, preservation, and calculation.

4. The rules of parenteral drug administration.

5. Complications of parenteral drug administration. 4

**Having covered the topic, the student must be able to:**

1. Check the execution of the rules of prescription, preservation, and calculation of drugs of the general list or A and B groups.

2. Administer drugs through skin and mucous tunic, by oral (enteral) method.

3. Administer drugs by parenteral method.

**Materials, which might be helpful:**

1. The rules of drugs prescription, preservation, and calculation.

2. The methods of administering medicinal agents.

3. The rules and technique of hypodermic drug administration.

4. The rules and technique of intramuscular administration of drugs.

5. The rules and technique of intravenous instillation of drugs.

6. Possible complications of drug administration.

**The main task of the nurse of the manipulation room** is to perform injections according to the doctors' prescriptions.

**To perform her tasks, the nurse of the manipulation room is obliged to:**

- Perform manipulations prescribed by doctors (intravenous injections).

- Collect blood for biochemical, serological and other types of research;

- Assist the doctor in carrying out blood transfusions, novocaine blockade, etc.;

- Observe all rules of asepsis and antiseptics during manipulations;

- Follow all instructions on prevention after injection complications of anaphylactic shock, etc.;.

- Ensure availability of sterile material, medicines, systems, syringes;

- Provide accurate accounting and storage of drugs A and B in special cabinets;

- Keep special medical documentation (log of manipulations, analyses, work diary of secondary medical personnel, etc.);

- Ensure proper sanitary and hygienic conditions in the office;

- Systematically improve your qualification level.

***Lesson №3***.

**The urgent help and the rules of care of patients with high temperature, spasms,**

**respiratory and cardiovasculary failure. Technique of taking of nasal**

**pharyngeal swabs. Rules of application of hot compress. Technique**

**application of mustard plasters, use of hot-water bottles, and icepacks. Rules of**

**the use of pocket and stationary inhalers. Method and technique of presentation**

**of the moist oxygen to the children and use of an oxygen pillow.**

**Relevance:** The work of a nurse in providing emergency care to children with acute diseases of the respiratory, cardiovascular and nervous systems is one of the types of medical and diagnostic work of a nurse. The correctness of execution, timeliness, understanding of the methods of manipulations, taking analyzes significantly contributes to increasing the effectiveness of the treatment process.

**Purpose:** To master the skills of the technique of taking smears from the throat and nose, an ice pack, pocket and stationary inhalers, the methodology and technique of giving children humidified oxygen and using an oxygen pillow, as well as the ability to provide first aid for acute diseases of the respiratory, cardiovascular and nervous systems systems in children.

SPECIFIC GOALS

**The student should know**:

• Principles of providing first aid for acute diseases of respiratory organs, cardiovascular and nervous systems in children.

• The technique of indirect heart massage and mechanical ventilation;

• The technique of taking smears from the throat and nose.

• Rules for applying a heating compress.

• Rules for using pocket and stationary inhalers.

• Methods and techniques of providing children with humidified oxygen and using an oxygen pillow.

• Rules for preparing a sick child for manipulations and research;

**The student should be able to:**

- Provide assistance during fever, convulsions;

- Provide assistance during cardiac arrest;

- Conduct indirect heart massage and mechanical ventilation

- Give the child hydrated oxygen;

- Take smears from the throat and nose for research;

- Use pocket and stationary inhalers

- Prepare a sick child for manipulations and research;

TASKS FOR INDEPENDENT WORK DURING STUDENT PREPARATION FOR THE CLASS:

**Theoretical questions for the lesson:**

• Principles of providing first aid for acute diseases of the respiratory organs, cardiovascular and nervous systems in children (convulsions, fever, foreign body in the bronchi, sulfur stagnation).

• Technique of conducting indirect heart massage and mechanical ventilation;

• The technique of taking smears from the throat and nose.

• Rules for applying a heating compress.

• The technique of using mustard seeds, using a heating pad, an ice pack. Rules for using pocket and stationary inhalers.

• Methodology and technique of providing children with humidified oxygen and using an oxygen pillow.

• Rules for preparing a sick child for manipulations and research;

The initial level of knowledge and skills is checked by solving situational tasks on each topic, by answering tests and constructive questions.

***Lesson №4***

**The urgent help and the rules of care of patients with acute diseases of the**

**gastrointestinal tract. Draining of the stomach, nursing during dyspeptic disorders,**

**peculiar features of feeding sick children in severe conditions.**

**The main types of enemas, method and rules of introduction in children of different ages. Preparation of the sick child, and necessary instruments for collection of excrement to check**

**for eggs of helminthes, occult blood, and for coprology tests.**

**The urgent help and the rules of care of patients with acute urinary system failure.**

**Rules of collection of urine from children for analysis and research based on**

**Zimnitskiy, Nechiporenko, Àddis-Kakovsky’s methods and their diagnostic value.**

**Purpose:** to master the skills of gastric lavage, taking gastric lavage for research, to learn the technique of administering enemas to children of various ages, taking feces for research, to be able to prepare a patient for an X-ray examination and to provide emergency care to children with acute diseases of the gastrointestinal tract. Тo master the skills of collecting urine for various types of research, to learn their diagnostic value, the rules of conducting a toilet of the genitourinary organs, the method of catheterization of the urinary bladder, urography, to be able to prepare the patient for research and to provide emergency care to children with acute diseases of the urinary system.

**SPECIFIC GOALS**

The student should know:

• Principles of providing first aid for acute diseases of the gastrointestinal tract

• Stomach lavage technique;

• The technique of taking washing water and feces for research.

• The main types of enemas, methods and rules for their administration to children of different ages

• Rules for preparing a sick child for manipulations and research;

• Rules for the preparation of probes, catheters, end-pieces for manipulations.

• Principles of providing first aid for acute diseases of the urinary system

• The technique of carrying out the toilet of genitourinary organs;

• Bladder catheterization technique;

• Urography technique;

• Rules for taking urine for research according to the Zimnytsky method, its diagnostic value;

• Rules for taking urine for research using Nechiporenko's method, its diagnostic value;

• Rules for taking urine for research according to the Addis-Kakovsky method, its diagnostic value;

• Rules for taking urine for sugar and general analysis;

• Rules for preparing a sick child for manipulations and research;

**The student should be able to**:

- Provide assistance during vomiting;

- Provide assistance during diarrhea;

- Provide assistance with constipation;

- Wash the stomach;

- Provide different types of enemas;

- Take washing water, feces for research;

- Prepare the probe, catheter for manipulation;

- Prepare a sick child for manipulations and research;

- Provide assistance with acute urinary retention;

- Carry out the toilet of the genitourinary organs;

- Carry out bladder catheterization;

- Prepare the child for manipulations and research;

- Take urine for various types of research;

- Prepare a sick child for manipulations and research;

- prepare the child for urography.

The initial level of knowledge and skills is checked by solving situational tasks on each topic, by answering tests and constructive questions.

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