

**MINISTRY OF HIGHER EDUCATION, SCIENCE AND INNOVATIONS
OF THE REPUBLIC OF UZBEKISTAN
MINISTRY OF HEALTHCARE OF UZBEKISTAN
TASHKENT MEDICAL ACADEMY
DEPARTMENT OF CHILDREN'S DISEASES IN FAMILY MEDICINE**

"APPROVED"

Vice-rector for academic affairs

_____Boymuradov Sh.A.

2023 «__» _____

**WORKING PROGRAM
ON AMBULATORY POLYCLINIC PEDIATRICS
(Out-patient pediatrics)
(for the 6th course, the 12th -semester)**

Branch of education: 510000 - Healthcare

Direction of education: 5510100 - General medicine

5111000 - Vocational education
(General medicine 5510100)

Tashkent-2023

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Working program of the subject was prepared on the basis of the "Pediatrics" subject program approved by the Order No. 107 dated "04.25.2019" (Appendix 2 of the order) of the Ministry of Health of the Republic of Uzbekistan.

The working program of the subject was approved by the Scientific Council of the Tashkent Medical Academy on June 26, 2023 with protocol No. 12

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1.Relevance of educational science and its role in higher professional education

This discipline includes the growth and development of a healthy child at the primary level, nutrition, and the prevention, cure, treatment, and rehabilitation of common childhood illnesses. Due to the special attention paid to the primary health care, the importance of this subject in the training of a general practitioner is increasing. Timely diagnosis, treatment, prevention and dispensary of diseases occurring in childhood play a key role in the permanent activity of a general practitioner. monitoring is under control. This science is of great importance in the field of health care system reforms in the republic.

2.The purpose and tasks of educational science

The purpose of teaching the subject is to enable students to communicate with healthy and sick children of different ages and their parents, to examine children, to monitor their physical development, to determine measures for early diagnosis, treatment, prevention and rehabilitation of childhood diseases. formation of skills.The tasks of science are to teach communication with healthy and sick children and their parents; teaching the etiology, pathogenesis, classification, clinical manifestations, complications, principles of treatment, prevention and dispensation of children's diseases; drawing up a plan of inspection methods and showing the determination of GP tactics; teaching to make a clinical diagnosis and make a comparative comparison; formation of knowledge on rehabilitation of sick children.

3. Methodological instructions for the teaching of academic subjects

It is important to use advanced and modern methods of teaching, to apply new information-pedagogical technologies for students to master the science of "Outpatient Pediatrics". Textbooks, educational and methodical manuals, lecture texts, handouts, electronic materials, case technologies are used in mastering the subject. Lectures and seminars use interactive methods of teaching (visual, problem-based, author's lectures, Insert, cluster, "Venn" diagram, etc.).

Allocated hours for the academic year:

Direction (faculty)	General download	Auditorium hour			Independent education	Type of control
		Lecture	Exercise. (seminar)	Clinical study practice.		
General medicine	293	18	66	86	123	Control type: IC/ FC Form: OSCE+TEST
Vocational education	293	18	66	86	123	Control type: IC/ FC Form: OSCE+TEST

4. Lecture sessions

No	Lecture topics	Volume
12th semester		
1	Cough syndrome in children	2
2	Bronchoobstructive syndrome in children	2
3	Heart murmurs in children	2
4	Cardiomegaly syndrome in children	2
5	Arthritis in children	2
6	Arterial hypertension in children	2
7	Abdominal pain syndrome in children	2
8	Dysuric syndrome in children	2
9	Edematous syndrome in children	2
	TOTAL:	18

Lecture sessions are held in auditoriums equipped with multimedia devices for the flow of academic groups.

5. Practical training

N o	Topics of practical training	clock size
12th semester		
1	Duties of a general practitioner in the healthcare system. Basic statistical indicators of the primary system, regulatory and legal documents. Organization of dispensary for healthy and sick children. Principles of dispensary vision.	6
2	Physiology of infancy. Features of the adaptation period: borderline situations. Premature babies. Infant jaundice. Feeding with breast milk. Types of feeding children of different ages.	6
3	Immunoprophylaxis. Infant immunoprophylaxis. Preventive vaccination calendar. Postvaccinal reactions and complications, diagnosis and treatment. Contraindications to vaccination.	6
4	Tasks and work plan of the school doctor. Adolescent health. Characteristics of anatomo-physiological, psychophysical development and diseases of adolescents, depression, suicide, anorexia, bulimia. Arterial hypertension in adolescents. The influence of mass media on adolescent behavior. Contraception. Child abuse.	4
5	Deficit situations. Deficiency anemias. Hypovitaminoses. Rickets clinic, treatment, prevention and dispensation.	6
6	Stages of inpatient care for children (order SSV 225 of UzR). Urgent assessment of the child's condition and emergency treatment measures. Urgent and priority cases. Primary care.	6

7	Urgent situations. Acute cardiovascular, cardiac and respiratory failure. Anaphylactic shock. First aid in laryngospasm. Convulsions. Febrile convulsions, epilepsy. Spasmophilia. Collapse, fainting. Emergency medical assistance.	6
8	Fever syndrome. Infectious and noninfectious fever. Diseases with fever syndrome. Hypothermia. Fever of unknown origin. Antipyretic drugs. Emergency medical assistance.	6
9	Diseases accompanied by cough syndrome (whooping cough, bronchitis, pneumonia). Criteria for early diagnosis, differential diagnosis, treatment, prevention and rehabilitation. Outpatient treatment. Dispensary.	4
10	Diseases associated with bronchoobstructive syndrome. Obstructive bronchitis, bronchiolitis and bronchial asthma. Criteria for early diagnosis, differential diagnosis, treatment, prevention and rehabilitation. Outpatient treatment. Dispensary.	4
11	Congenital heart defects. Early diagnosis, differential diagnosis, treatment, prevention and rehabilitation criteria, dispensation.	4
12	Acquired heart defects. Rheumatic fever. Criteria for early diagnosis, differential diagnosis, treatment, prevention and rehabilitation.	6
13	Diseases associated with cardiomegaly syndrome. Non-rheumatic carditis. Cardiomyopathies. Early diagnosis, differential diagnosis, treatment, prevention and rehabilitation criteria, dispensation.	4
14	Diseases associated with joint syndrome. Arthritis. Early diagnosis, differential diagnosis, treatment, prevention and rehabilitation criteria, dispensation.	4
15	Systemic diseases. Early diagnosis, differential diagnosis, treatment, prevention and rehabilitation criteria, dispensation.	6
16	Abdominal diseases. Diagnosis of gastritis, ulcer diseases, differential diagnosis. Prevention, rehabilitation measures, dispensation.	4
17	Intestinal dysfunctions. Diseases associated with malabsorption syndrome. Diagnosis, differential diagnosis. Prevention, rehabilitation measures, dispensation.	6
18	Irritable bowel syndrome. Enterocolitis. Non-specific Wrench. Crohn's disease. Clinical appearance, diagnostic criteria, differential diagnosis of diseases, treatment, control in polyclinic conditions, dispensation, rehabilitation.	6
19	The concept of hepatomegaly syndrome. Hepatitis. Bile tract dyskinesias. Clinical appearance, diagnostic criteria, differential diagnosis of diseases, treatment, control in polyclinic conditions, dispensation, rehabilitation.	6

20	Diseases with rash syndrome. Atopic dermatitis. Criteria for early diagnosis, differential diagnosis, treatment, prevention and rehabilitation. Outpatient treatment. Dispensary.	6
21	Diseases with dysuria syndrome. Diagnosis of dysmetabolic nephropathies, comparative diagnosis, diagnostics. Management of diseases accompanied by dysuria in ambulatory conditions. Dispensary.	4
22	Urinary tract infection. Cystitis. Pyelonephritis. Enuresis. Diagnostics, comparative diagnostics, diagnostics. Management of diseases accompanied by dysuria in ambulatory conditions. Dispensary.	6
23	Diseases associated with swelling syndrome. Criteria for diagnosis, differential diagnosis, treatment, prevention and rehabilitation of glomerulonephritis.	4
24	ICAAT. Treatment of children's diseases in an integrated way. The purpose. Common danger signs. Cough. Assessment, classification and treatment.	6
25	ICAAT. Diarrhea. Assessment, classification and treatment. Dehydration, its levels.	6
26	ICAAT. Fever. Measles. Assessment, classification and treatment. Outpatient and home treatment of children.	6
27	ICAAT. Ear and throat problems. Eating disorders and anemia. Assessment, classification and treatment.	7
28	ICAAT. Baby. Local bacterial infection. Jaundice. Diarrhea. Instructions for sending to the hospital. Safe immunization. OSKE.	7
TOTAL:		152

Practical classes are held separately for each academic group in auditoriums equipped with multimedia devices. Classes are conducted using active and interactive methods, "Case-study" technology is used, the content of the cases is determined by the teacher. Visual materials and information are transmitted using multimedia structures. The clinical part of the practical training is conducted in hospital departments and family polyclinic reception departments, specific to the topics.

6. Independent education

No	Topics	Hour Volume
The 12th semester		
1	Iatrogeny in neonatology.	3
2	Alcohol consumption in newborns syndrome. Children of addicts.	4
3	A hemorrhagic disease in newborns	4

4	Vomiting syndrome in newborns	4
5	Sudden death syndrome in children _ _ _	4
6	Infusion therapy and parenteral nutrition in children	4
7	Candidiasis in children _	4
8	Antibiotic in the treatment of acne and vitamin therapy	4
9	Diabetic fetopathy	4
10	Hospital (in-hospital) and atypical diseases in children	4
11	Chest pain _ _ _ _	4
12	Lyella syndrome	4
13	Helminthiasis in children	4
14	Diarrhea in children	4
15	Congenital and acquired kidney diseases in children	4
16	Systemic vasculitis in children	4
17	DVS-syndrome	4
18	Arrhythmias in children	4
19	Headaches in children _	4
20	Tooth grinding syndrome	4
21	Long-lasting cough in children	4
22	Ways to calm the child	4
23	Speech syndrome in children _	4
24	Sudden death syndrome in children	4
25	Constipation syndrome in children	4
26	Nosebleed syndrome in children	4
27	and immunodeficiency cases	4
28	Growth disorders in children	4
29	Atypical pneumonias in children	4
30	Suicide in teenagers	4
31	AIDS, HIV infection in children	4
TOTAL		123

Independent study topics are mastered by students both in and out of the classroom and are taken into account in the subject-specific current assessment. Abstracts are prepared by students on topics to be learned independently and their presentation is organized.

Recommended educational and methodological support for organizing independent education:

The following forms are used to organize a student's independent work:

- in addition to classroom training, practical skills confirmed in simulators, simulators and simulation halls/centers are performed under the supervision of a pedagogue in terms of quantity and quality and reflected in practical skills mastery notebooks;
- practical skills confirmed in the clinical duty organized outside the auditorium

in the clinic and clinical educational bases under the supervision of the doctor-pedagogue on duty in terms of quantity and quality and reflected in duty notebooks;

- participating in patient care with the attending physician or nurse on duty;
- carrying out interviews and lectures on sanitary bleaching among the population;
- independent learning of some theoretical topics with the help of educational literature;
- preparation of information (abstract) on a given topic;
- work and lectures on special or scientific literature (monographs, articles) on sections or topics of the module;
- solving situational problems focused on situational and clinical problems;
- study based on real clinical situations and clinical situations) solving.
- making models, making crosswords, making organizers, etc

Course work on science. Coursework in science is not planned in the model curriculum.

7. Practical skills

No	Name of practical skills	Number	Necessary supplies (equipment) for performing practical skills
12th semester			
1	Help in case of anaphylactic shock		manuals, literature, photographs, phantoms, dummies, simulators, equipment, charts, instructional and control tests, computer programs, evening shifts, volunteering, working in simulation centers, etc.
2	Preparation for preventive vaccination		
3	First aid in hyperthermia		
4	Help in foreign body aspiration		
5	First aid in laryngospasm		
6	Behavior of algorithms in postvaccinal reactions		
7	Quick help in demonization (convulsions).		
8	Oral rehydration		

Algorithm of step-by-step implementation of practical skills:

1. Providing first aid in anaphylactic shock

No	Actions	was able to do	was not able to do
1	Stage I. Stopping the effect of the allergen (entering the body). Laying the patient flat (resuscitation measures may be necessary), turning the head to the side (preventing the aspiration of vomitus), raising the legs slightly (to ensure blood flow to the brain and heart) , standing up suddenly or Prohibition of standing (immediate death may be observed).	10	0
2	Assessment and provision of airway patency (clearing of pathological mass if necessary), assessment of blood circulation, breathing and patient comfort, appearance of skin, determination of the patient's required body mass based on age.	10	0
3	Adrenaline (1 mg/ml) 0.01 mg/kg m/o is injected into the middle third of the thigh along the anterior lateral surface. The maximum dose for children is 0.3 mg, for people over 15 years old - 0.5 mg. Record the time of administration of the first dose and repeat it after 5-15 minutes if necessary. In most patients, the pharmacological effect is observed in the first or second dose.	10	0
4	Oxygen is provided at a rate of 6-8 l/min when indicated. An Ambu bag is used for this.	10	0
5	NaCl 0.9% solution is injected IV. In the first 5-10 minutes, the liquid is injected at the rate of 10 ml/kg. It is transported to the ward while lying down.	10	0
6	Stage II. An antihistamine agent is selected: suprastin 1-12 months ¼ ampoule, 1-6 years ½ ampoule, 6-14 years ½ ampoule i/m Intravenous chloropyromine 2.5-5 mg, diphenhydramine - 1 mg/kg (maximum dose - 50 mg), clemastine - 12.5 mg/kg for 1 year old and older	10	0
7	In bronchospasm, B2-agonists are given in a dosed inhaler mask, (salbutamol in 2-6 doses (1 dose-100µg) depending on the severity of bronchial obstruction) or through a nebulizer mask (0.1% fentoral solution in an age-dependent dose up to 6 years old-1 drop /age, 6-14 years- 5-30 drops/age, children older than 14 years -10-40 drops can be returned up to 3 times in the first hour when bronchial obstruction is repeated.	10	0
8	Glucocorticosteroids i/v: hydrocortisone - up to 100 mg or methylprednisolone - 1 mg/kg (maximum - 50 mg)	10	0
9	NaCl 0.9% solution. The amount of fluid administered in the first hour is 30ml/kg.	10	0
10	Stage III . Treatment of refractory anaphylaxis:	10	0

	Tracheal intubation and artificial lung ventilation. In case of cardiac arrest, adrenaline (1 mg/ml) 0.01 ml/kg (1 ml of adrenaline is dissolved in 9 ml of 0.9% NaCl solution. 0.1 ml/kg of dissolved solution is administered. According to the instructions, this dose is administered 3-5 can be repeated after a minute). In persistent bradycardia (1-3 years - 80 beats/min, older than 3 years - 70 beats/min>) atropine sulfate 0.1% 0.02µg (0.02ml/kg).		
	Total	100	0

2. Preparation for preventive vaccination.

No	Actions	was able to do	was not able to do
1	Information about the vaccine is written on the vaccination card form 0.63 and on the outpatient card. A neuropathologist and orthopedist are required for initial vaccination.	15	0
2	GP examination is important before vaccination. GP allows the child to be examined and vaccinated. In case of allergic reaction and severe reaction, it is necessary to consult a doctor.	15	0
3	No new products are added to the child's diet before vaccination. OPV is prohibited in diarrhea.	15	0
4	Determination of body weight, height.	10	0
5	Determination of body temperature.	10	0
6	Vaccination is carried out in the vaccination room.	10	0
7	After vaccination, the mother should stay near the vaccination room for 30 minutes	10	0
8	The mother is informed about the side effects of the vaccine. It is necessary not to bathe and protect from cold for 3 days after pentavaxina and pneumovaccine.	15	0
	Total	100	0

3. First aid in hyperthermia

No	Actions	was able to do	was not able to do

1	Lay the child on a flat surface, provide fresh air.	15	0
2	Identify the type of hyperthermia. If it is white, it is necessary to warm the child.	15	0
3	Drinking liquid at 37.9°C.	15	0
4	Methods of physical cooling at 38°C: wiping with alcohol.	15	0
5	Application of antipyretic drugs at 39°C. Paracetamol 10 mg/kg Aspirin and siefekon are prohibited!	15	0
6	After 20-30 minutes you should try to urinate.	15	0
7	Conducting thermometry after 20-30 minutes. (the temperature should drop by 0.3-0.5°C.)	10	0
	Total	100	0

4 . Providing emergency aid when a foreign body enters the respiratory tract algorithm of actions

No	Actions	was able to do	was not able to do
1	The child is placed on the hand or thigh with the head bent	20	0
2	5 strokes are performed along the spine	20	0
3	If a foreign substance is retained, the child should be turned around and the chest should be tapped several times along the midline	20	0
4	If the foreign substance does not come out, check whether there is a foreign body in the oral cavity	20	0
5	Repeat the steps if necessary	20	0
	Total	100	0

5. Algorithm of actions in laryngospasm

No	Actions	was able to do	was not able to do
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1	Lay the child on a hard place, take off the tight clothes	15	0
2	Provide fresh air, spray cold water on the face and body	15	0
3	Affecting the mucous membrane (for example, sniffing alcohol, pressing the root of the tongue with a spatula)	15	0
4	Relanium (seduxen) m/o 0.1 ml/age, 10% calcium gluconate solution 1ml/age	15	0
5	If there is no effect, perform tracheal intubation or tracheotomy	15	0
6	Perform direct heart massage when the heart stops	15	0
7	Carrying out oxygen therapy when breathing is restored	10	0
	Total	100	0

6. Algorithm of actions in postvaccinal reactions

No	Actions	was able to do	was not able to do
1	When the temperature rises - paracetamol 5 - 10 mg/kg or ibuprofen 10 - 15 mg, antihistamine drugs - suprastin - 25 mg. 1-12 months ¼ tab per day, 1-6 years ½ tab 2 tablets per day	15	0
2	Tight clothes should be removed during convulsions	15	0
3	It is necessary to put a spatula between the rooted teeth	15	0
4	Laying the patient on his back, providing oxygen	15	0
5	Medication: 1. Relanium (seduksen) 0.1 ml/age/m/o or 2. 0.25% droperidol 0.1 - 0.2 ml/age/m/o or 3. 20% GAMK 50-100 mg i/v	15	0
6	Oxygen therapy	15	0
7	Referral to an inpatient facility for follow-up after discharge	10	0
	Total	100	0

7. Algorithm of emergency medical care in convulsions

No	Actions		
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1	Laying the child down on a soft place, removing harmful objects (preventing trauma)	15	0
2	Removing constricting clothing (relieving lung excursion)	15	0
3	Provide fresh air	15	0
4	Intravenous or intramuscular: Relanium (seduxen) 0.1ml/age, droperidol 0.25% 0.1-0.2ml/age, GAMK 20% 50-100mg/kg (1ml/200mg),	15	0
5	Carrying out oxygen therapy	20	0
6	Determining the cause of convulsions and treating the underlying disease	20	0
	Total	100	0

8. Algorithm of actions for oral rehydration in children

No	Actions	was able to do	was not able to do
1	Wear gloves	15	0
2	Laying the child in a horizontal position, the head is turned to the side	15	0
3	Using a ready-made solution or preparing an independent solution from powder and liquid (adding 1 packet of Regidron solution to 1 liter of water)	15	0
4	For 4-6 hours, one teaspoon of the solution is given every 5-10 minutes. (in severe cases, the solution can be given with a probe)	15	0
5	The treatment is continued until the symptoms of diarrhea and vomiting stop	20	0
6	Wash the container, spoon and dishes in which the solution is stored	20	0
	Total	100	0

Assessment of student knowledge in science and control criteria

Forms of current assessment (CA) of practical training in "Ambulatory polyclinic pediatrics"

Evaluation methods	Express tests, written works, oral survey, presentations.
Evaluation criteria	86-100 points "excellent" - to be able to fully master the theoretical and methodological concepts of the subject;

	<ul style="list-style-type: none"> - fully expressing one's opinion on the topic, answering all the questions correctly, analyzing and drawing conclusions, creative thinking, active participation in the discussion of the topic in the audience; - solving situational issues on the topic, answering test questions completely and correctly; - have a free imagination and exchange ideas with the teacher when necessary. <p>71 - 85 points "good"</p> <ul style="list-style-type: none"> - to be able to fully master the theoretical and methodological concepts of the subject; - to adequately express one's opinion on the topic, to answer all the questions correctly; - analysis and conclusion, creative thinking, participation in the discussion of the topic in the audience, - fill in the report of independent inspection on the results of practical work on the topic; - to have a clear idea about the topic of the given homework. <p>55-70 points "satisfactory"</p> <ul style="list-style-type: none"> - expressing one's opinion on the topic, answering all the questions correctly; - participation in the discussion of the topic in the audience, - to fill in the report of independent inspection on the results of practical work on the subject with the help of the teacher; - to have an idea about the topic of the given homework. <p>0-54 points "unsatisfied"</p> <ul style="list-style-type: none"> - not being able to express one's opinion on the topic, not being able to answer the questions; - not participating in the discussion of the topic in the audience; - to fill in the report of independent inspection on the results of practical work on the subject with the help of the teacher; -not having an idea about the given homework topic 		
	Types of rating assessment	Max. Score	
	Current control:	50	During the practical session
	ON	20	After completion of a unit/end of semester
	Final control (OSKE/test)	30	At the end of the semester or after the end of the cycle
	- Test	15	
	- OSKE	15	
	Total	100	

Type of control and assessment criteria

The 6th course treatment and students of the faculty of medical pedagogy "

Ambulatory-polyclinic pediatrics " 10 and 10 in science. FC in the 2nd stage: the 1st stage is given by OSKE in the department, the 2nd stage is given in the form of a test.

Conducting the final and final control rounds, as well as evaluating the students' knowledge, is carried out by a commission formed by the head of the relevant department.

The composition of the commission is formed from professors and teachers of relevant subjects and experts in the field .

7. Basic and additional educational literature and information sources list

Main literature:

1. Nelson Textbook of Pediatrics, 20 editions. Robert M. Kliegman, Bonita Stanton, Joseph St. Geme. 2015.

Additional literature:

1. The five Minute child Health Advisor/ - M. William Schwartz, MD., - 1998, USA.
2. A therapist's guide to pediatric assessment, - Linda King-Thomas, Bonnie J. Hacker, 1987, USA.
3. Pediatrics, - Margaret C. Heagarty., William J. Moss, -1997, USA.

Websites:

1. www.tma.uz
2. [www . zyyonet.uz](http://www.zyyonet.uz)
3. [http :// www . consilium - medicum . com / media / refer /](http://www.consilium-medicum.com/media/refer/)
4. <http://www.consilium-medicum.com>
5. <http://www.vh.org/pediatric>