

MINISTRY OF HIGHER EDUCATION, SCIENCE AND INNOVATIONS
OF THE REPUBLIC OF UZBEKISTAN
MINISTRY OF HEALTHCARE OF THE REPUBLIC OF UZBEKISTAN
TASHKENT MEDICAL ACADEMY



"APPROVED"

Rectoꝛ of Tashkent Medical
Academy A.K. Shadmanov

[Handwritten signature]

MODULE PROGRAM
ON INTERNAL DISEASE AND MILITARY FIELD THERAPY

| | | | |
|-------------------------|----------|---|--------------------------------|
| Area of knowledge: | 900 000 | – | Health care and social affairs |
| Field of education: | 910 000 | – | Healthcare |
| Direction of education: | 60910400 | – | Preventive medicine |

Tashkent -2023

| | | | | |
|-----------------------------------|---|------------------------------------|--------------------------------------|------------------------------|
| Module code IKHDT18-907 | Academic year 2023/2024 2024/2025 | Semester 4-5-6 | Credits 7 | |
| Module type Mandatory | Language of education English | | Class hours per week 4/2/1 | |
| 1. | Module name | Auditorium training (hours) | Independent education (hour) | Total download (hour) |
| | Internal disease, MFT | 105 | 105 | 210 |
| 2. | <p>I. Content of the module</p> <p>The purpose of teaching the module is to enter the medical profession, know the basics of medical ethics and deontology, take care of patients, make clinical diagnoses and substantiate it in various variants of internal diseases, as well as in the atypical course of some common diseases, the typical course of rare diseases, prevent their complications and form a standard –based</p> <p>The purpose of the module “Military field therapy”: organizational knowledge and practical skills, consisting in the formation of theoretical and practical knowledge on a theoretical, practical basis in the organization of medical care in military situations in students, accurate diagnosis of patients, primary, as well as the provision of specialized medical care.</p> <p>The task of the module is to know the main directions of patient care; follow the rules of medical ethics and deontology; general examination of patients by organs based on anamnestic data and methods of physical examination; teach the interpretation of the results of laboratory and instrumental examination methods; formulate knowledge of the etiology, pathogenesis, clinic, classification, clinical manifestations, comparative diagnosis, complications, treatment and prevention of internal diseases; develop the skills of collecting anamnesis and conducting examinations from patients according to the system of organs; teach the main clinical criteria of diseases; preliminary and clinical diagnosis in students, planning up an examination, doctor's tactics; teach the patient the processes of prescribing a complex treatment and determining the effectiveness of treatment.</p> <p>The ability to make a primary diagnosis and study the observed complications based on knowledge of the science of military field therapy; distribute to the patient by injury; teach the correct Organization of medical evacuation stages in emergency situations; the ability to provide therapeutic assistance in emergency situations, teach students methods of examination, diagnosis and treatment of injuries and diseases of internal organs.</p> | | | |
| | II. The main theoretical part | | | |

II.I. The module includes the following topics:

The 4th-semester:

Topic 1: Questioning of patients with respiratory diseases. Inspection. Physical and laboratory-instrumental diagnostic methods.

Topic 2: Questioning of patients with diseases of the blood circulatory system. Inspection. Physical and laboratory-instrumental diagnostic methods.

Topic 3: Questioning of patients with diseases of the digestive system. Inspection. Physical and laboratory-instrumental diagnostic methods.

Topic 4: Questioning of patients with diseases of the liver and biliary tract. Inspection. Physical and laboratory-instrumental diagnostic methods.

Topic 5: Questioning of patients with diseases of the urinary system. Inspection. Physical and laboratory-instrumental diagnostic methods.

Topic 6: Focal and croupous pneumonia. Etiology, pathogenesis, classification, clinic, study of research methods, interpretation of the results of laboratory and instrumental studies, standards of treatment and prevention.

Topic 7: Hypertensive disease. Hypertensive crisis. Etiology, pathogenesis, classification, clinic, examination methods, interpretation of the results of laboratory and instrumental studies, standards of treatment and prevention. The importance of diet.

The 5th-semester:

Topic 8: IHD. Angina pectoris.

Topic 9: IHD. Myocardial infarction. Chronic heart failure.

Topic 10: Chronic pyelonephritis. Chronic glomerulonephritis.

The 6th-semester:

Military field therapy

Topic 1. Radiation damage. Acute and chronic radiation disease: pathogenesis, clinical manifestations, clinical stages, diagnostic criteria for severity and principles of treatment.

Topic 2. Diseases of internal organs in gunshot wounds. The principles of diagnosis, etiopathogenesis, clinic, diagnosis, treatment of diseases of internal organs in the wounded in military field conditions.

Emergency medical care in life-threatening situations during the stages of medical evacuation. Long compression syndrome III.

Instructions and recommendations for practical (laboratory) training:

Below topics are recommended for practical classes:

The 4th-semester:

Topic 1: Introduction. The history of the development of internal medicine. Definition, goals and objectives of the subject of propaedeutics of internal diseases. Definition of semiotics, symptoms and diagnostics. Medical deontology. Methods of clinical examination of patients: questioning, complaints, medical history, life history. Physical methods of examination of patients: examination, palpation, percussion, auscultation

Topic 2: Questioning of patients with respiratory diseases. Inspection. Palpation and percussion of the chest. Pulmonary auscultation: physiological and pathological respiratory noises. Laboratory and instrumental diagnostic methods.

Topic 3: Questioning of patients with diseases of the circulatory system. Inspection. Examination of the heart and peripheral vessels. Palpation and percussion of the heart. Auscultation of the heart. The mechanism of tone formation. Tones in a healthy person and changes in the tones of a sick person with cardiovascular diseases. Physical and laboratory-instrumental diagnostic methods. Heart murmurs. The mechanism of noise formation. Organic and functional noises. Laboratory and instrumental diagnostic methods.

Topic 4: Questioning of patients with diseases of the digestive system. Inspection. Physical and laboratory-instrumental diagnostic methods.

Topic 5: Questioning of patients with diseases of the liver and biliary tract. Inspection. Physical and laboratory-instrumental diagnostic methods.

Topic 6: Questioning of patients with diseases of the urinary system. Inspection. Physical and laboratory-instrumental diagnostic methods.

Topic 7: Focal and cropuosa pneumonia (etiology, pathogenesis, clinic, study of research methods, interpretation of the results of laboratory and instrumental studies, standards of treatment and prevention).

Topic 8: Hypertensive disease. Hypertensive crisis (etiology, pathogenesis, clinic, study of research methods, interpretation of the results of laboratory and instrumental studies, standards of treatment and prevention).

Topic 9: Acute rheumatic fever (etiology, pathogenesis, clinic, study of research methods, interpretation of the results of laboratory and instrumental studies, standards of treatment and prevention).

Topic 10: Mitral and aortic heart valve disorders.

The 5th-semester:

Topic 1: IHD. Angina pectoris.

Topic 2: IHD. Myocardial infarction. Chronic heart failure.

Topic 3: Chronic gastritis. Peptic ulcer of the stomach and duodenum.

Topic 4: Chronic hepatitis. Cirrhosis of the liver.

Topic 5: Chronic pyelonephritis. Chronic glomerulonephritis.

The 6th-semester:

Military field therapy

Topic 1. Therapeutic assistance in the conditions of the military field.

Topic 2. Radiation damage during war and peace.

Topic 3. Chronic radiation sickness.

Topic 4. Gunshot wounds.

Topic 5. Life-threatening conditions in military conditions.

Topic 6. Prolonged compression and poisoning syndrome in times of war and peace.

Practical classes are held by one teacher to one academic group in an auditorium equipped with multimedia devices. When conducting practical training, the following didactic principles are followed:

- To clearly define the purpose of practical training;
- To arouse interest in students in the possibilities of deepening knowledge of innovative pedagogical activity of the teacher;
- Ensuring the opportunity for the student to independently achieve the result;
- Preparation of the student from a theoretical methodological abstract

IV. Practical skills:

The 4th-semester:

1. Chest palpation;
2. Comparative percussion of the lungs;
3. Pulmonary auscultation;
4. Palpation of the heart area;
5. Heart percussion (relative joint boundaries);
6. Cardiac auscultation;
7. Arterial blood pressure measurement;
8. Pulse check;
9. ECG-extraction methods;
10. Superficial palpation of the abdomen;
11. Liver palpation;
12. Liver percussion by Kurlov.

The 5th-semester:

1. Arterial blood pressure measurement;
2. Detection of pathological changes in ECG in nosologies.

The 6th-semester:**Military field therapy**

1. Principles of etiology, pathogenesis, diagnosis and treatment of diseases developed in military conditions;
2. Maintaining medical documents in military conditions;
3. Emergency assistance to therapeutic diseases in military conditions;
4. Be able to interpret the results of general blood analysis, general urine analysis and biochemical blood test in military conditions;
5. Being able to provide emergency care in complications of post-transfusion therapy;
6. Being able to provide emergency care for pulmonary edema;
7. Being able to provide emergency care in anaphylactoid and pyrogenic reactions;
8. Knowing how to fill out a military passport;
10. Knowledge of blood components and blood substitutes;
11. Ownership of blood transfusion techniques in times of war and peace;
12. How to identify blood group in times of war and peace;
13. To be able to determine the Rh factor of blood in military conditions, peace and war.

V. Independent education and independent work

Recommended topics for Independent Education

The 4th-semester:

1. Preparing patients for instrumental methods of examination.
2. Modern laboratory-instrumental methods of examination for diseases of the respiratory organs.
3. Modern instrumental methods of examination for diseases of the cardiovascular system.
4. Methods of instrumental examination of the digestive system: interpretation of radiological, esophagogastroduodenoscopic, colonoscopic, rectoromanoscopic methods.
5. Cholecystography, liver scan. Ultra sound scan of liver and gall ducts, interpretation of computer tomography.
6. Modern instrumental methods of the urine system.
7. Interpretation of the results of a laboratory examination of sputum and pleural fluid in diseases of the respiratory organs.
8. Types of hypertensive crises, types of first aid.
9. Myocarditis: etiology, pathogenesis, clinic, diagnosis, treatment.

10. Tricuspidal valves insufficiency. etiology, pathogenesis, clinic, diagnosis, treatment.

The 5th-semester:

1. Coronarography.
2. Relief measures that cannot be delayed in myocardial infarction.
3. Complications, diagnosis of ulcer disease of the stomach and duodenum.
4. Cholecystography, liver scan. Liver and gall UTT, computed tomography interpretation.
5. Nephrotic syndrome.

The 6th-semester:

Military Field Therapy Science

1. The basics of organizing therapeutic assistance in the army.
2. Modern military-therapeutic diseases.
3. The main features of patients who need therapeutic help.
4. Chronic radiation sickness.
5. Combined radiation damage.
6. Diseases of the internal organs of the victim.
7. The appearance, course and diagnosis of diseases of internal organs in axial lesions.
8. Goals and objectives of therapists in the treatment and prevention of diseases of internal organs in victims.
9. The role and tasks of therapists in the prevention of diseases of internal organs in the wounded.
10. Blood diseases in the wounded.
11. Therapeutic aspects of burns.
12. Principles of emergency medical care for patients and wounded in field conditions.
13. Acute poisoning.

Forms of recommended independent work:

The proposed independent work on the module of internal diseases is carried out in a variety of forms in the modular system:

- preparation of information (Abstract) on a given topic;
- work and lecture on special or scientific literature (monographs, articles) on sections or topics of the module;
- preparation of scientific articles, conference lecture theses;
- situational issues focused on situational and clinical problems;
- keys (case-study based on real clinical situations and clinical situational issues) solution;
- development and filling of graphic organizations;

| | |
|------------------|---|
| | <ul style="list-style-type: none"> - drawing up and solving crosswords; - wide application in the process of presentation and video preparation and independent work, etc. <p style="text-align: center;">General instructions and recommendations for the organization of Independent Education and independent work:</p> <p>Independent work on the Internal disease module is carried out outside the auditorium and auditorium.</p> <p>When organizing an independent work of a student, the following forms are used:</p> <ul style="list-style-type: none"> - to reflect on the numerical and qualitative performance of practical skills in pedagogical control and practical skill acquisition notebooks, approved in mulyaj and simulation halls/centers, in addition to audience training; - conducting and conducting the curation of standardized patents (patients) in the supervision of a doctor-educator on duty, writing a drug treatment analysis and reflecting in turnbooks on the basis of an approved list in organized clinical shifts outside the audience in medical clinics and clinical training bases; - numerical and qualitative performance of proven practical skills in the supervision of a doctor-educator on duty in organized clinical duty outside the audience in medical OTM clinics and clinical training bases, and reflection in duty books; - participate in the curation of patients together with the attending physician or the doctor on duty; - conducting interviews and lectures on the principles of promoting a healthy lifestyle among the population; - independent assimilation of certain theoretical topics with the help of educational literature; - information on a given topic (abstract) determination; - work and lecture on special or scientific literature (monographs, articles) on sections or topics of the module; - situational issues addressing situational and clinical problems; -Case (case-study based on real clinical situations and clinical situational issues) solution. - drawing up crosswords, making organizers, etc. |
| <p>3.</p> | <p style="text-align: center;">VI. Outcomes/ Professional Competitions</p> <p>The student should know:</p> <p>The 4th-semester:</p> <ul style="list-style-type: none"> •care of patients in internal diseases; knowledge of basic medical documents; with ECG-loading testing; ECG-monitoring; |

- with echocardiography, dopplerography; X-ray, Computed Tomography, nuclear-magnetic resonance imaging, angiography and cardiac catheterization; bacteriological planting of sputum; puncture of the pleural cavity; Bronchography; Spirography; bronchoscopy; bacteriological planting of feces; examination of feces for dysbacteriosis; examination of gastric juice and duodenal fluid composition; puncture (gaps and joint interval);
- identification of markers of hepatitis; USE; EGDS; colonoscopy; biopsy to have an idea of the methods of examination; (knowledge)
- being able to collect anamnestic data from patients (disease and life history). General examination of patients by organs based on physical examination methods;
- planning up a patient examination plan;
- able to interpret the results of general clinical laboratory tests: general blood and urine analysis, biochemical blood analysis, general sputum analysis, coprogram, bacteriological sowing tank of the stool
- be able to interpret the results of instrumental examinations: chest X-ray, abdominal ultrasound, ECG results;
- be able to recommend a diet table, know and use disease complications and their prevention (skill);
- patient care in diseases of organ systems;
- anthropometry;
- preparation of patients for laboratory and instrumental examination;
- knowledge of sending drug techniques;
- Professional examination of the patient;
- perform methods of physical examination in patients with diseases of the respiratory, heart circulatory, gastrointestinal, liver and biliary tract, kidneys and bladder separation, endocrin;
- must have skills to work with medical documents. (qualification)

The 5th-semester:

The student should know:

- etiology, pathogenesis, classification, clinic, knowledge of complications, comparative comparison, diagnosis of disease, examination and conclusion of a comprehensive treatment plan of the most common pulmonological, Cardiological, rheumatological, Gastroenterological, nephrological, hematological and endocrinological diseases;

- arthroscopy, biopsy of the skin-muscle loskuti, endoscopic examination of the gastrointestinal tract, general and excretory urography, angiography of the renal arteries to have an idea in terms of abdominal puncture; (knowledge)
- ability to collect anamnestic data from patients (disease and life history), general examination of patients by organs based on physical examination methods;
- formation and justification of an approximate diagnosis, drawing up a patient examination plan;
 - able to interpret the results of general clinical laboratory tests: general blood and urine analysis, biochemical blood analysis, general sputum analysis, coprogram, bacteriological sowing tank of the stool
- be able to make and justify clinical and final diagnosis, recommend scheduled treatment, know and use disease complications and their prevention; (skill)
- examination of patients with rheumatological, Gastroenterological, nephrological diseases;
- Professional Examination and examination of the patient;
- General, biochemical immunological, serological analysis of blood, interpretation of the results of synovial fluid analysis, endoscopic examination of the gastrointestinal tract, barium radiography, general and excretory urography, conclusion on the basis of the results of the UTT examination of internal organs;
- must have the skills to maintain the correct medical history. (qualification)

The 5th-semester:

Military field therapy

The student should know:

- Faculty of analysis, synthesis and abstract thinking;
- Being able to use the foundations of philosophical knowledge to form a worldview;
- Ability to act in non-standard situations, willingness to take social and spiritual responsibility for decisions made;
- Self-development, understanding, reading, willingness to use creative potential;
- Readiness to use first aid and protective equipment in emergency situations;
- Readiness to use first aid, protection methods in emergency situations;
- Readiness to solve the standard tasks of professional activity, taking into account basic information requirements, bibliographic resources, biomedical terminology, information and communication technologies and information security;
- Readiness for oral and written communication in Russian and foreign languages to solve problems in professional activities;

| | |
|----|---|
| 4. | <p style="text-align: center;">VII. Educational technologies and methods</p> <ul style="list-style-type: none"> • Interactive games; • Seminar (logical thinking, quick questions and answers); • Work in groups; • Introduction of presentations; • Individual projects; • Projects for teamwork and protection. |
| 5. | <p style="text-align: center;">VIII. Requirements for obtaining loans:</p> <p style="text-align: center;">Completion of tasks and tasks given in the form of current control, successful submission of written work on the types of intermediate and final control.</p> |
| 6. | <p style="text-align: center;">Basic literature</p> <ol style="list-style-type: none"> 1. Bates' Guide to Physical Examination and History Taking, Thirteenth edition, 2021 2. Macleod's Clinical Examination, 14th Edition, 2018 3. Propedeutics to internal medicine Kovalyova O.N., Ashcheulova T.V. 2011 4. Ivashkin, Okhlobystin: Internal Diseases Propedeutics, 2014 <p style="text-align: center;">Military field therapy:</p> <ol style="list-style-type: none"> 1. Babadzhanov A.S., Babadzhanova Sh.A., Kadomtseva L.V., Military field therapy, Textbook. Tashkent. TTA publishing house. 2014 year 2. Babadjanov A.S., Babadjanova Sh.A., Kadomtseva L.V., Military field therapy, Textbook. Tashkent. TMA printing house. 2015 year <p style="text-align: center;">Additional literature</p> <ol style="list-style-type: none"> 1. Vasilenko V.Kh., Grebenev A.L. "Propedevtika vnutrennix bolezney", Moscow. 1989. 2. Strutynsky A.V. "Osnovy semiotiki zabolevaniy vnutrennix organov" M. 2013 MEDpress-inform. 3. Perevod s angliyskogo pod redaktsiey akad. RAMN Ivashkina V.T. Geotar M. _ 2009 4. Scott Stern, Adam Saifu, Dane Altkorn "From symptoms to Diagnosis", Rukovodstvo dlya vrachey, Geotar M. 2008 5. Barbara Bates, "Ukovodstvo po klinicheskomu obsledovaniyu bolnogo", translation from English, dopolnennyy, Geotar M. 2008 <p style="text-align: center;">Military Field Therapy Science</p> <ol style="list-style-type: none"> 1. Mirziyoev Sh.M. Together we will build a free and prosperous democratic country of Uzbekistan. Tashkent, "Uzbekistan" NMIU, 2017. - 29 p. 2. Mirziyoev Sh.M. Protection of the rule of law and human interests is the guarantee of the country's development and people's well-being. NMIU "Uzbekistan", 2017. - 47 p. |

3. Mirziyoev Sh.M. We will build our great future together with our brave and noble people. NMIU "Uzbekistan", 2017. - 485 p.
4. Decree of the President of the Republic of Uzbekistan dated February 7, 2017 No. PF-4947 "On the strategy of further development of the Republic of Uzbekistan". Collection of Laws of the Republic of Uzbekistan, 2017, No. 6, Article 70.
5. COVID-19 Risk Communication Toolkit for Health Care Facilities, WHO. Updated March 10, 2020
6. Practical aspects of managing COVID-19 cases in health care facilities and at home. WHO Interim Guidelines of March 19, 2020
7. Infection prevention and control in emergency care settings for patients with novel coronavirus infection (nCoV), WHO interim guidance dated 25 January 2020.
8. Infection prevention and control when providing medical care to patients with suspected novel coronavirus (nCoV) infection, WHO interim guidance July 2020.
9. Gembitsky E.V., Komarov F.I. Military field therapy. Textbook. Moscow. Medicine, 1983
10. Miksailov V.G. Handbook of Field Therapy. Tashkent. Ed. Abu Ali ibn Sina. 1994
11. Ovchinnikov Yu.V., Military field therapy, Textbook. St. Petersburg. LBI-SPb. 2016 year

Websites:

1. www.tma.uz
2. www.ziyonet.uz
3. www.medlincs.ru
4. www.medbook.ru.
5. <http://www.labirint.ru/books/570674/>
6. <http://www.labirint.ru/books/570674/>
7. <http://www.labirint.ru/books/569902/>
8. <http://www.labirint.ru/books/569744/>
9. <http://www.labirint.ru/books/561702/>
10. <http://www.labirint.ru/books/558529/>
11. <http://www.labirint.ru/books/553394/>
12. <http://www.labirint.ru/books/534343/>
13. <http://www.labirint.ru/books/532940/>.

Military field therapy

1. www.med-info.ru

| | |
|----|--|
| | <p>2. www.rosmedlib.ru 3. www.pubmed.com 4. www.ziyonet.uz 5. www.medlinks.ru 6. www.MedPortal.ru 7. http://medvuz.info/load/laboratornaja_diagnostika 8. 6years.net/?do=static 9. medwedi.ru/knigi/laboratornaya 10. www.booksmed.com 11. shop.top-kniga.ru/books/catalogue 12. www.spruce.ru/diagnostics/urine/03.html - 16k 13. ru.wikipedia.org/wiki/Анализ_мочи - 51k 14. www.analisi.ru/urine.html 15. lechebnik.info/med-4/90.htm 16. www.venerologia.ru/venerologia</p> |
| 7. | <p>Developed and approved by the Tashkent Medical Academy.</p> <p>The curriculum of the module was approved by the order of the Tashkent Medical Academy dated _____ of 2023 (Annex _____ of the order).</p> <p>Head of the educational and methodological department</p> <div style="text-align: right;">  F.Kh. Azizova </div> |
| 8. | <p>Responsibilities for the module:</p> <p>Jabbarov O.O. – Head of the department of faculty and hospital therapy №2, nephrology and hemodialysis, professor, TMA</p> <p>Tursunova L.D. - TMA, department of faculty and hospital therapy №2, nephrology and hemodialysis, associate professor, PhD.</p> <p>Nazarova N.O. – TMA, department of faculty and hospital therapy №2, nephrology and hemodialysis, assistant, PhD.</p> <p>Sabithodjaeva S.U.- TMA, department of Gematology, transfuziologiya and clinical laboratory diagnostics, great listener.</p> |
| 9. | <p>Reviewers:</p> <p>Internal reviewer:</p> <p>Agzamova G.S. - TMA, department of faculty and hospital therapy №1, occupational pathology, associate professor, DSc</p> <p>External reviewer:</p> <p>Kenjayev M.L. – Senior research employee of Specialized somatic hospital of Tashkent region, DSc</p> |

