METHODICAL GUIDELINES FOR THE ORGANIZATION OF INDEPENDENT WORK OF STUDENTS ON THE DISCIPLINE "PHTHISIATRY"

SPECIALTIES 05.31.01 "General Medicine"

Full-time form of education

Introduced into the educational process by the decision of the Academic Council of IMEiFK UlSU

Protocol №. 9/239 dated 18.05.2022

Developer - Professor of the Department of Faculty Therapy Savonenkova L.N.

CONTENT

Introduction ……. …….. 3

The purpose of the CDS in the development of discipline … …… 3

The objectives of the CDS in the development of discipline 3

Expected results (competencies) …… ……..... .4

Questions for self-preparation for classes …….....6

The list of practical skills …… .. ……. ….. .14

Educational-methodical and informational support of the discipline ..... …….15

Introduction

Brief description of the discipline "Phthisiology"

The manual has been prepared in accordance with the requirements of the work program and contains guidelines for the main sections of the discipline "Phthisiology" according to the current curriculum. The methodological manual is intended for the organization of independent work of students of the medical faculty studying in the specialty 05.31.01 "General Medicine".

Discipline "Phthisiology" refers to the basic (compulsory) part of block 1 of the specialty according to GEF 988 (12.08.2020) and the Curriculum of the specialty 31.05.01 "General Medicine" of section B1, approved by the rector of Ulyanovsk State University.

Content, requirements, conditions and organization of independent work students taking into account the form of training are determined in accordance with the "Regulation on organization of independent work of students", approved by the Academic Council UlSU.

Type of CDS:

study of educational material according to the literature, development of educational material according to lectures.

The purpose of the independent work of students (IWS) in the development of discipline

The goal of the IWS in the development of the discipline "Phthisiology" is the formation of knowledge, skills and competencies in interpreting the results of general clinical laboratory, microbiological, immunological, radiation, endoscopic, functional, morphological studies and management of patients with various clinical forms of respiratory tuberculosis.

The objectives of the IWS in the development of discipline:

• Acquisition of knowledge in general clinical laboratory, microbiological, immunological, radiation, endoscopic, functional, morphological studies in various clinical forms of tuberculosis of the respiratory system.

• Mastering the principles of interpretation of the results of general clinical laboratory, microbiological, immunological, radiation, endoscopic, functional, morphological studies in various clinical forms of respiratory tuberculosis.

• Mastering the principles of management of patients with various forms of tuberculosis of the respiratory system.

Expected Results (Competencies)

Code and name of the general professional competence	Code and name of the indicator of achievement of general professional competence
GPC-7. aptitude to prescribe treatment and monitor its effectiveness and safety	IDK1 **GPC-7** Know: the classification and main characteristics of drugs, pharmacodynamics and pharmacokinetics, indications and contraindications for the use of anti-tuberculosis drugs of the 1st and 2nd line, their side effects, as well as methods of prevention and elimination of side effects of tuberculosis drugs; classification and main characteristics of drugs, pharmacodynamics and pharmacokinetics, indications and contraindications for the use of pathogenetic drugs for the treatment of tuberculosis, as well as side effects, methods of prevention and elimination of side effects of pathogenetic drugs in the treatment of tuberculosis; General principles of treatment of a patient with tuberculosis, ndard anti-tuberculosis chemotherapy regimens and indications for their use; e mechanism of therapeutic action, physiotherapy exercises and physiotherapy, indications and contraindications to their appointment, especially their implementation; nical and pharmacological characteristics of the main groups of drugs and the rational choice of specific drugs in the treatment of emergency conditions in a patient with tuberculosis; ID2 **GPC-7** To be able to: analyze the action of medicinal products in terms of the totality of their pharmacological properties and the possibility of their use for therapeutic treatment; to use basic antibacterial and biological drugs in the implementation of etiotropic pathogenetic therapy of tuberculosis; o evaluate possible manifestations of drug overdose and how to eliminate them; to formulate indications for the chosen method of treatment, taking into account etiotropic and pathogenetic methods; ubstantiate pharmacotherapy in a particular tuberculosis patient with major pathological syndromes and emergencies, determine the routes of administration, regimen and dose of drugs (taking into account body weight, age, concomitant diseases, individual intolerance), evaluate the effectiveness of the treatment; apply various methods of drug administration. ID-3 **GPC-7** Own: methods of analysis of clinical, laboratory and instrumental data to determine the algorithm for managing a patient with tuberculosis, drawing up drug and non-drug treatment schemes.
PC-2. Readiness to collect and analyze patient complaints, data from his anamnesis, examination results, laboratory, instrumental,	ID-1 pc2 Know: methods of diagnosis, diagnostic capabilities of methods of direct examination of a patient with tuberculosis; modern methods of clinical, laboratory (clinical and biochemical

pathological and anatomical and other studies in order to recognize a condition or establish the presence or absence of a disease	analysis of blood and urine, examination of sputum on the MBT by the scopic method with staining according to Tsil_Nelson, by flotation, inoculation, PCR, methods for determining the drug sensitivity of MBT), immunological (Mantoux test with 2 TE, with tuberculosis allergen recombinant, Koch test), instrumental examination of tuberculosis patients (including endoscopic, radiological methods, ultrasound diagnostics, computed tomography), histological (biopsies obtained during endoscopic examinations and surgical interventions, in sections) ID2-pc2 Be able to: determine the patient's status: collect anamnesis, epidemic history, interview the patient and / or his relatives, conduct a physical examination of the patient (examination, palpation, percussion, auscultation); to conduct a primary examination of systems and organs: respiratory, cardiovascular, blood and hematopoietic organs of the digestive, endocrine and urinary organs; outline the volume of additional studies in accordance with the prognosis of the disease, to clarify the diagnosis and obtain a reliable result. ID-3 pk2 Own: methods of general clinical objective examination (questioning, examination, palpation, percussion, auscultation) in a patient with tuberculosis; interpretation of the results of physical, laboratory, immunological, morphological, instrumental research methods in order to diagnose various forms of tuberculosis
PC-3. Readiness to manage and treat patients with various nosological forms on an outpatient basis and in a day hospital	ID-1pk 3 Know: the criteria for the diagnosis of various forms of respiratory tuberculosis and the most common forms of extrapulmonary tuberculosis; peculiarities of the organization and the volume of work of the outpatient-polyclinic doctor in the anti-tuberculosis service (organization of detection and prevention of tuberculosis, work in the focus of tuberculosis infection; dispensary observation of a patient with tuberculosis), modern diagnostic capabilities of the polyclinic service, methods of emergency measures, indications for planned hospitalization; features of tuberculosis treatment in outpatient and outpatient settings and in a day hospital. ID-2pk3 Be able to: formulate indications for the chosen method of treating a patient with tuberculosis using etiotropic and pathogenetic agents for various clinical forms of tuberculosis, taking into account the phase of the process; to develop an algorithm for the management tactics (dispensary registration group, treatment) of a tuberculosis patient in a polyclinic and a day hospital of an anti-tuberculosis dispensary. ID-3pk3 Own: an algorithm for determining the tactics of managing a patient with tuberculosis in a polyclinic and a day hospital, an algorithm for differential diagnosis of tuberculosis with diseases of non-tuberculosis etiology.

Questions for self-study preparation for classes

Section 1. Epidemiology, etiology and pathogenesis, pathological anatomy and methods for diagnosing tuberculosis

Topic 1. Etiology, pathogenesis and pathomorphology of tuberculosis. Methods of physical, laboratory and instrumental examination of a patient with tuberculosis. Clinical classification of tuberculosis, the formulation of the clinical diagnosis of a patient with tuberculosis.

Questions to the topic

- Specific and para-specific inflammatory tissue reactions in tuberculosis. Tuberculosis granuloma
- The concept of proliferative and alternative types of specific tissue reactions in tuberculosis and their clinical significance
- Indicators of clinical OAC, OAM, biochemical blood analysis for tuberculosis
- Methods for the detection of MBT (bacterioscopic, bacteriological, molecular genetic
- Instrumental and functional research methods
- Immunological diagnosis of tuberculosis. Tuberculin tests - diagnostic, provocative
- Indications and contraindications for the Mantoux test with 2 TE in children
- Indications and contraindications for testing with a recombinant tuberculosis allergen (DIASKINTEST) in children and adolescents
- Grinchar – Karpilovsky test: indications, technique, assessment of results
- Koch test: indications, contraindications, technique, evaluation of results
- X-ray and other radiation research methods for tuberculosis

Section 2. Clinical picture of tuberculosis

Topic 2. Primary period of tuberculosis infection. Pathogenesis of the primary period of tuberculosis. Turn of tuberculin test. Tuberculosis. Tuberculosis of the intrathoracic lymph nodes: infiltrative and tumor forms. Small forms of tuberculosis of the intrathoracic lymph nodes. Primary tuberculosis complex. Features of primary tuberculosis in adults. Atypical forms of primary tuberculosis. Clinic, diagnosis, differential diagnosis. Immunity for tuberculosis. Turn of tuberculin test. The concept of latent tuberculosis infection. The role of the Mantoux test in the diagnosis of primary tuberculosis. Diaskintest as a method of differential diagnosis of infection and post-vaccination allergy. Pathological anatomy of tuberculosis of primary tuberculosis.

Questions to the topic**:**

- Data from a general clinical laboratory study in the primary tuberculosis complex
- The results of the study of sputum on the causative agent of the disease in the primary tuberculosis complex
- The results of immunological diagnostics in the primary tuberculosis complex - Mantoux test with 2 TE and a recombinant tuberculosis allergen (diaskin test)
- X-ray picture of the primary tuberculosis complex
- Bronchoscopic picture in the complicated course of the primary tuberculosis complex

- Data from a general clinical laboratory study for tuberculosis of the intrathoracic lymph nodes
- The results of a study of sputum on the causative agent of tuberculosis in tuberculosis of the intrathoracic lymph nodes
- Results of immunological diagnostics for tuberculosis of the intrathoracic lymph nodes - Mantoux test with 2 TE and a recombinant tuberculosis allergen (diaskin test)
- X-ray picture of tuberculosis of the intrathoracic lymph nodes
- Bronchoscopic picture in complicated course of tuberculosis of the intrathoracic lymph nodes.
- The role of computed tomography in the diagnosis of small forms of tuberculosis of the intrathoracic lymph nodes.

Topic 3. Disseminated pulmonary tuberculosis. Miliary tuberculosis of the lungs. Sepsis Landusi. The pathogenesis of disseminated and miliary tuberculosis, risk factors. Acute, subacute and chronic disseminated tuberculosis. The clinical picture, course, outcomes, diagnostic criteria, differential diagnosis. Features of the clinical picture of miliary tuberculosis. Diagnosis and differential diagnosis, outcomes. The most acute tuberculosis sepsis of Landusi: features of pathomorphology, clinic and outcomes.

Questions to the topic:

- Data from a general clinical laboratory study for disseminated and miliary pulmonary tuberculosis
- The results of the study of sputum on the causative agent of the disease in disseminated and miliary pulmonary tuberculosis
- Results of immunological diagnosis of disseminated and miliary pulmonary tuberculosis
- X-ray picture of disseminated and miliary pulmonary tuberculosis
- Changes in the function of external respiration in disseminated and miliary pulmonary tuberculosis
- ECG changes in disseminated and miliary pulmonary tuberculosis

Topic 4. Focal and infiltrative pulmonary tuberculosis. Caseous pneumonia. Pathogenesis, clinic, diagnostics and differential diagnosis of soft and fibro-focal pulmonary tuberculosis. Infiltrative pulmonary tuberculosis. X-ray syndrome of dimming in the lung. Types of infiltrates: broncholobular, round, cloudy; perissssuritis, lobes. Pathogenesis, clinic, diagnosis, differential diagnosis. Caseous pneumonia. Features of morphogenesis and clinical presentation, differential diagnosis, complications, outcomes

Questions to the topic:

- Data from a general clinical laboratory study for focal pulmonary tuberculosis
- The results of the study of sputum on the causative agent of the disease in focal pulmonary tuberculosis
- The role of immunological diagnosis (Koch test) in determining the activity of focal pulmonary tuberculosis

- X-ray picture of soft-focal and fibro-focal pulmonary tuberculosis
- Data from a general clinical laboratory study for infiltrative pulmonary tuberculosis
- The results of the study of sputum on the causative agent of the disease in infiltrative pulmonary tuberculosis
- The role of immunological diagnostics (Grinchar-Karpilovsky test) in determining the degree of immunity in infiltrative pulmonary tuberculosis
- X-ray picture of broncholobular, round, cloud-like type of infiltrative pulmonary tuberculosis
- Changes in the function of external respiration in various types of tuberculous infiltrates
- ECG changes in various types of tuberculous infiltrates
- Data from a general clinical laboratory study for caseous pneumonia
- The results of the study of sputum on the causative agent of the disease in caseous pneumonia
- The role of immunological diagnosis (Grinchar-Karpilovsky test) in determining the degree of immunity in caseous pneumonia
- X-ray picture of caseous pneumonia
- Changes in the function of external respiration in caseous pneumonia
- ECG changes in caseous pneumonia

Topic 5. Tuberculoma of the lung. Classification, pathogenesis, clinic, diagnosis and differential diagnosis of tuberculoma. Features of the treatment of infiltrative-pneumonic, pseudotuberculoma and caseoma. Tuberculosis outcomes X-ray syndrome of a round shadow in the lung

Questions to the topic:

- Data from a general clinical laboratory study for pulmonary tuberculosis
- The results of the study of sputum on the causative agent of the disease in pulmonary tuberculosis
- The role of immunological diagnosis (samples with a recombinant tuberculosis allergen) in pulmonary tuberculosis
- Morphological picture of tuberculoma such as caseoma, pneumoniae infiltrative tuberculoma and pulmonary pseudotuberculoma
- Radiological picture of tuberculoma such as caseoma, infiltrative pneumonic tuberculoma and pseudotuberculoma of the lung

Topic 6. Tuberculous pleurisy. Tuberculous pleurisy. Classification, pathogenesis, clinical features, diagnosis and differential diagnosis of tuberculous pleurisy. Fluid syndrome in the pleural cavity. Fluid

syndrome in the pleural cavity. Puncture of the pleural cavity and the study of pleural fluid

Questions to the topic:

- Data from a general clinical laboratory blood test for tuberculous pleurisy
- Data from a general clinical laboratory and biochemical study of the contents of the pleural cavity in tuberculous pleurisy
- The results of the study of the contents of the pleural cavity on the pathogen diseases with tuberculous pleurisy
- The role of immunological diagnostics (tests with a recombinant tuberculosis allergen) in tuberculous pleurisy
- Morphological picture of endoscopic pleural biopsy in tuberculous pleurisy
- X-ray picture of tuberculous pleurisy
- X-ray picture of osmotic tuberculous pleurisy
- Function of external respiration in tuberculous pleurisy
- ECG changes in tuberculous pleurisy

Topic 7. Destructive forms of pulmonary tuberculosis. Cavernous, fibro-cavernous pulmonary tuberculosis; factors contributing to their formation, pathogenesis, clinical features, diagnosis and differential diagnosis. X-ray syndrome of the cavity in the lung. Cirrhotic tuberculosis. Outcomes. Features of reference.

questions to the topic:

- Data from a general clinical laboratory study for cavernous, fibro-cavernous and cirrhotic pulmonary tuberculosis
- The results of a study on the causative agent of the disease in cavernous, fibrotic-cavernous and cirrhotic pulmonary tuberculosis
- X-ray picture with cavernous pulmonary tuberculosis
- X-ray picture with fibro-cavernous pulmonary tuberculosis
- X-ray picture with cirrhotic pulmonary tuberculosis
- Function of external respiration in cavernous, fibro-cavernous and cirrhotic pulmonary tuberculosis
- ECG changes in cavernous, fibro-cavernous and cirrhotic pulmonary tuberculosis
- Morphological picture with cavernous, fibro-cavernous and cirrhotic pulmonary tuberculosis

Topic 8. Complications and emergency conditions. chronic pulmonary heart, amyloidosis, pulmonary bleeding, spontaneous pneumothorax. Pathogenesis, clinic, diagnosis. First aid treatment
questions to the topic:

- Data from a general clinical laboratory study for amyloidosis of internal organs
- Data from a general clinical laboratory study for pulmonary heart disease
- Data of an X-ray examination of the lungs in pulmonary heart failure
- The results of the study of FVD in pulmonary heart failure
- ECG results for pulmonary heart disease
- Data from a general clinical laboratory study for pulmonary hemorrhage
- Fibrobronchoscopy data for pulmonary hemorrhage
- The results of the study of HFV with pulmonary bleeding
- Results of an ECG study for pulmonary hemorrhage
- Radiological findings for spontaneous pneumothorax
- The results of the study of high pressure for spontaneous pneumothorax
- Results of an ECG study with spontaneous pneumothorax

Topic 9. Extrapulmonary forms of tuberculosis .. General concept of the pathogenesis of extrapulmonary tuberculosis. Features of pathomorphology. Tuberculosis of the membranes of the brain, urinary system, osteoarticular system, organs of the abdominal cavity (intestines, peritoneum, mesenteric lymph nodes), female and male genitalia, eyes, skin and peripheral lymph nodes. Clinic, diagnosis, differential diagnosis
Questions to the topic:

- Data from a general clinical laboratory study for tuberculosis of extrapulmonary localization
- Data from a general clinical and biochemical study of cerebrospinal fluid in tuberculous meningitis
- The results of a bacteriological study of cerebrospinal fluid on the causative agent of the disease in tuberculous meningitis
- Results of microbiological studies on the causative agent of the disease in female genital tuberculosis
- Radiological findings for female genital tuberculosis
- Results of endoscopic diagnosis of female genital tuberculosis
- Results of microbiological studies on the causative agent of the disease in male genital tuberculosis

- Radiological findings for male genital tuberculosis
- Results of endoscopic diagnosis of male genital tuberculosis
- Results of microbiological studies on the causative agent of the disease in case of urinary tuberculosis
- Data of radiation diagnosis in case of urinary tuberculosis
- Results of endoscopic diagnosis for urinary tuberculosis
- Data of radiation diagnosis in tuberculosis of the osteoarticular system
- Results of microbiological studies on the causative agent of the disease in tuberculosis of the osteoarticular system
- Results of morphological research methods for tuberculosis of the osteoarticular system
- The results of microbiological studies on the causative agent of the disease in tuberculosis of the intestine, mesenteric lymph nodes, peritoneum
- Data of radiation diagnosis for tuberculosis of the intestine, mesenteric lymph nodes, peritoneum
- Results of endoscopic diagnosis for intestinal tuberculosis, mesenteric lymph nodes, peritoneum
- Results of morphological research methods in the intestine, mesenteric lymph nodes, peritoneum
- Results of microbiological studies on the causative agent of the disease in tuberculosis of peripheral lymph nodes, skin.
- Data of radiation diagnosis for tuberculosis of peripheral lymph nodes.
- Results of fundus examination for choroid tuberculosis
- Results of morphological research methods for tuberculosis of peripheral lymph nodes, skin.

Topic 10. Tuberculosis in combination with other diseases, tuberculosis and motherhood. Tuberculosis and COPD, tuberculosis and peptic ulcer, tuberculosis and diabetes mellitus, tuberculosis and mental illness, tuberculosis and drug addiction, tuberculosis and HIV infection: features of pathogenesis and pathology, clinical presentation, course, outcomes and treatment. Tuberculosis and motherhood.

Questions to the topic:

- Features of pathogenesis, pathological anatomy of tuberculosis in combination with COPD (chronic non-specific lung diseases).
- Features of the clinical picture, diagnosis, differential diagnosis, outcomes in combination with COPD

- Features of the pathogenesis and pathological anatomy of tuberculosis in combination with UB and YAB duodenal ulcer (peptic ulcer of the stomach and duodenum).
- Features of the clinical picture, diagnosis, differential diagnosis and outcomes in combination with UB and YAB duodenum.
- Features of the pathogenesis and pathological anatomy of tuberculosis in combination with diabetes mellitus (DM)
- Features of the clinical picture, diagnosis, differential diagnosis, outcomes in combination with diabetes
- Features of the pathogenesis and pathological anatomy of tuberculosis in combination with mental illness, substance abuse and drug addiction.
- Features of the clinical picture, diagnosis, differential diagnosis, outcomes in combination with mental illness, substance abuse and drug addiction
- Features of the pathogenesis and pathological anatomy of tuberculosis in combination with HIV infection
- Features of the clinical picture, diagnosis, differential diagnosis, outcomes in combination with HIV infection

Section 3. Detection, treatment and prevention of tuberculosis

Topic 11. Detection and prevention of tuberculosis. The work of the general treatment network for the detection and prevention of tuberculosis. Organization of early detection of tuberculosis in adults: fluorographic examination (frequency of examination in risk groups, decreed groups). The organization of the Mantoux Test with 2TE for the early detection of tuberculosis in children. Differential diagnosis of infectious and post-vaccination allergies. DIASKIN test. Detection of tuberculosis by treatment

Questions to the topic:

- Clinical observation of tuberculosis patients.
- Organization and conduct of a Mantoux test with 2 TE and a sample with a recombinant tuberculosis allergen in the pediatric area. Differential diagnosis of infectious and post-vaccination allergies
- Organization and conduct of fluorographic examinations of the population. The formation of risk groups for tuberculosis at the therapeutic site
- Specific tuberculosis prophylaxis. BCG vaccination and revaccination: indications, contraindications, technique and timing. Monitoring the development of the vaccination reaction, complications of BCG vaccination and their treatment
- Primary and secondary chemoprophylaxis of tuberculosis: indications, methods
- Sanitary prevention of tuberculosis. Preventive work in the focus of tuberculosis infection

- Analysis of the main epidemiological indicators for tuberculosis: infection, morbidity, morbidity with tuberculosis; tuberculosis mortality

Topic 12. Treatment of tuberculosis. General principles for the treatment of tuberculosis. Chemotherapy: principles, classification of drugs, side effects of drugs; standard chemotherapy regimens. Pathogenetic methods of treating tuberculosis: indications and contraindications to them. Collapse-therapeutic methods of treating tuberculosis: indications and contraindications. . Surgical treatments for tuberculosis: radical and palliative surgery for pulmonary tuberculosis. Sanatorium treatment of tuberculosis patients.
Questions to the topic:

- Basic principles for the treatment of tuberculosis patients
- Categories of patients with pulmonary tuberculosis to be treated, according to the order of the Ministry of Health of the Russian Federation No. 951 dated December 29, 2014
- Classification of chemotherapy drugs according to their activity
- Basic anti-TB drugs: mechanism of action, contraindications
- Reserve anti-TB drugs: mechanism of action, contraindications
- Adverse reactions to anti-TB drugs and measures for their prevention and elimination
- Collapsotherapy therapeutic methods for the treatment of pulmonary tuberculosis, indications, contraindications
- Methods of radical surgery for tuberculosis
- Methods of palliative surgery
- Collapse surgical treatment for pulmonary tuberculosis
- Pathogenetic and symptomatic treatment of tuberculosis. Sanatorium treatment of tuberculosis
- Clinical observation of patients with tuberculosis.
- Organization and conduct of a Mantoux test with 2 TE and a protein recombinant allergen test (Diaskin test) in the pediatric area. Differential diagnosis of infectious and post-vaccination allergies
- Organization and conduct of fluorographic examinations of the population. The formation of risk groups for tuberculosis at the therapeutic site
- Specific tuberculosis prophylaxis. BCG vaccination and revaccination:
- indications, contraindications, technique and timing. Monitoring the development of the vaccination reaction, complications of BCG vaccination and their treatment
- Primary and secondary chemoprophylaxis of tuberculosis: indications, methods
- Sanitary prevention of tuberculosis. Preventive work in the focus of tuberculosis infection
- The main epidemic indicators for tuberculosis: infection, incidence, morbidity with tuberculosis; tuberculosis mortality.

WS Practical Skills List

1. Interpretation of the results of histological examination of samples of organs and tissues of patients with tuberculosis
2. Interpretation of indicators of clinical OAC, OAM, biochemical blood analysis for tuberculosis
3. Evaluation of the results of bacterioscopic and bacteriological studies of materials on the causative agent of tuberculosis
4. Interpretation of the results of a general clinical, biochemical study of cerebrospinal fluid
5. Interpretation of the results of a general clinical, biochemical study of the contents of the pleural cavity
6. Interpretation of the results of immunological studies in tuberculosis - Mantoux tests with 2 TE.
7. Interpretation of the results of immunological studies in tuberculosis - samples with a recombinant tuberculosis allergen
8. Interpretation of the results of immunological studies in tuberculosis - Koch tests
9. Interpretation of the results of immunological studies in tuberculosis - Grinchar-Karpilovsky tests
10. Interpretation of the results of bronchoscopic examination in patients with tuberculosis
11. Interpretation of the results of FCC, FGDS, laparoscopy, thoracoscopy for tuberculosis
12. Interpretation of the results of x-ray examination in various forms of tuberculosis
13. Interpretation of the results of ultrasound and CT in various localizations of tuberculosis
14. Interpretation of the results of functional studies of the cardiovascular and respiratory systems in tuberculosis
15. Preparation of a treatment plan and management of supervised patients
16. Drawing up an action plan for the detection and prevention of tuberculosis at the medical site.

Educational-methodical and informational support of the discipline. Basic literature

a) List of recommended literature

a) Core reading:

1. Koshechkin, V. A. Phthisiatry : textbook. / Koshechkin V. A. - Москва : ГЭОТАР-Медиа, 2019. - 256 с. - ISBN 978-5-9704-5302-5. - Текст : электронный // ЭБС "Консультант студента" : [сайт]. - URL : https://www.studentlibrary.ru/book/ISBN9785970453025.

2. Yushchuk, N. D. Infectious diseases : textbook / Yushchuk N. D. , Vengerov Yu. Ya. - Москва : ГЭОТАР-Медиа, 2020. - 464 с. - ISBN 978-5-9704-5504-3. - Текст : электронный // ЭБС "Консультант студента" : [сайт]. - URL : https://www.studentlibrary.ru/book/ISBN9785970455043.html

b) Supplementary reading:

2.Tarasova L. G. Orofacial tuberculosis: clinic, diagnosis, differential diagnosis / L. G. Tarasova. - Томск : Издательство СибГМУ, 2020. - 102 с. - ISBN 9785985911596. - Текст : электронный // ЭБС "Букап" : [сайт]. - URL : https://www.books-up.ru/ru/book/orofacial-tuberculosis-clinic-diagnosis-differential-diagnosis-10782954/

3. Budritsky A. M. Methodics instructions for practical training in Phthisiopulmonology : for the 4-th courses students of medical faculty / A. M. Budritsky, N. V. Vasilenko, N. S. Pravada. - Витебск : ВГМУ, 2020. - 104 с. - ISBN 9789854669700. - Текст : электронный // ЭБС "Букап" : [сайт]. - URL : https://www.books-up.ru/ru/book/methodics-instructions-for-practical-training-in-phthisiopulmonology-12145454/

c) Educational and methodical literature

Savonenkova L. N.
Methodical guidelines for the organization of independent work of students on the discipline «Phthisiatry» for specialty 31.05.01 «General medicine» / L. N. Savonenkova; Ulyanovsk State University, Insitute of Medicine, Ecology and Physical culture. - Ulyanovsk : UlSU, 2022. - Неопубликованный ресурс; На англ. яз. - URL: http://lib.ulsu.ru/MegaPro/Download/MObject/11528. - Режим доступа: ЭБС УлГУ. - Текст : электронный.

Approved by the head of Department of Faculty Therapy __ Ruzov V.I.

18.05. 2022 Record № 9/239