Ministry of Health of the Republic of Belarus

Educational Institution "Vitebsk State Order of Peoples' Friendship

Medical University"

Department of Faculty Therapy and Cardiology

with a course of the Faculty of Advanced Training and retraining

Approved at the meeting of the department

Protocol No. 10 from 09.01.2025

**METHODOLOGICAL GUIDELINES FOR STUDENTS**

**for practical training**

in the academic discipline "Internal diseases"

specialties 1-79 01 01 "Medical business"

4th year, Faculty of Medicine

full-time education

Lesson topic: Acute and chronic bronchitis. Chronic obstructive pulmonary disease

Duration: 6 hours

Compiled by:

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**Motivational characteristics of the need to study the topic**

**Goals and objectives of the lesson:**

***The educational goals*** are to form students

*scientific knowledge about:*

the importance of environmental and internal factors in the development of acute and chronic bronchitis, chronic obstructive pulmonary disease;

mechanisms of pathogenesis of acute and chronic bronchitis, chronic obstructive pulmonary disease;

typical clinical manifestations of acute and chronic bronchitis, chronic obstructive pulmonary disease;

modern methods of diagnosis of acute and chronic bronchitis, chronic obstructive pulmonary disease;

strategies and tactics of management of patients with acute and chronic bronchitis, chronic obstructive pulmonary disease;

*skills and abilities necessary for:*

individual examination of patients with acute and chronic bronchitis, chronic obstructive pulmonary disease;

diagnosis and differential diagnosis of acute and chronic bronchitis, chronic obstructive pulmonary disease;

drawing up an examination plan for patients with acute and chronic bronchitis, chronic obstructive pulmonary disease, and evaluating the results of laboratory and instrumental research methods;

selection and prescription of medicines for the treatment of acute and chronic bronchitis, chronic obstructive pulmonary disease;

prevention of acute and chronic bronchitis, chronic obstructive pulmonary disease.

***Developmental goals*** consist in the formation and development of the student's mental properties, including attention, sensory-perceptual properties, mnemic and mental properties, psychomotor properties, professional inclinations and abilities.

***Educational goals*** are aimed at the formation of personal qualities of students during the training session: a sense of mutual assistance, teamwork, subordination, tact, empathy, responsibility for the assigned task, diligence, accuracy, conscientiousness, understanding the importance of the profession, pride in the achievements of domestic medicine.

In the course of studying the topic of the training session, the student must

**study:**

*basic concepts:* acute bronchitis, chronic bronchitis, chronic obstructive pulmonary disease;

epidemiology, etiology, pathogenesis, predisposing factors, classification, clinical manifestations, complications, diagnostic methods, differential diagnosis, treatment, primary and secondary prevention, medical examination and prognosis in acute and chronic bronchitis, chronic obstructive pulmonary disease;

**learn:**

*conduct* a survey (collection of complaints and medical history) and clinical examination of patients with acute and chronic bronchitis, chronic obstructive pulmonary disease;

*make* an examination plan for patients with acute and chronic bronchitis, chronic obstructive pulmonary disease;

*to interpret* the results of laboratory and instrumental studies in patients with acute and chronic bronchitis, chronic obstructive pulmonary disease;

*formulate* a preliminary and final diagnosis for acute and chronic bronchitis, chronic obstructive pulmonary disease;

*to draw* up medical documentation (educational medical history, list of prescriptions, referrals for laboratory and instrumental examinations and consultations, prescriptions for basic medicines);

*use* educational, scientific, regulatory and reference literature;

*follow* the rules of medical ethics and deontology;

**work out:**

*skills* in interpreting the results of general blood analysis, general urinalysis, biochemical examination of blood serum, coagulograms, ECG, spirograms, radiographs, scans, angiograms, scintigrams, ultrasound of large arterial vessels, heart, abdominal organs and kidneys; formulation of the diagnosis of acute and chronic bronchitis, chronic obstructive pulmonary disease.

**Practical skills developed during the lesson, including through the use of simulation learning technologies:**

1. Determination of the function of external respiration.

2. Interpretation of spirograms.

3. Peak fluometry.

4. Interpretation of the results of general blood analysis, general urinalysis, biochemical examination of blood serum, coagulograms, radiographs, scans, angiograms, scintigrams, ultrasound of large arterial vessels, heart, abdominal organs and kidneys.

5. Formulation of the diagnosis.

**Interdisciplinary and interdisciplinary connections**

When studying the topic, use the knowledge and skills gained in the study of normal and pathological human anatomy, normal and pathological human physiology, pharmacology, propaedeutics of internal diseases.

The theoretical part

**Questions for classroom control**

1. The current state of the pulmonological service of the Republic of Belarus, achievements of the Republic of Belarus in the field of pulmonology.

2. Organization of medical care for patients with lung diseases, the prevalence of the underlying pathology.

3. Features of medical care in outpatient and inpatient settings.

4. Therapeutic and diagnostic technologies in the management of patients with lung diseases.

5. The main tasks for improving the care of patients with lung diseases at the present stage.

6. Medical ethics and deontology in the management of patients with lung diseases.

7. The main causes of acute bronchitis, clinical manifestations, diagnostic criteria, assessment of the severity of the disease, differential diagnosis, formulation of the diagnosis, choice of therapeutic tactics in accordance with modern international recommendations and clinical protocols of the Ministry of Health of the Republic of Belarus.

8. Features of clinical manifestations of bronchiolitis.

9. Coronavirus infection: epidemiology, etiology, clinical picture, diagnosis.

10. Radiation diagnostic methods.

11. Modern principles of therapy.

12. Chronic bronchitis and chronic obstructive pulmonary disease (COPD): definitions, epidemiology, risk factors for chronic bronchitis and COPD.

13. International recommendations "Global Strategy for diagnosis, treatment and prevention of chronic lung disease".

14. Assessment of the course of COPD.

15. COPD phenotypes.

16. Diagnosis of COPD: anamnesis, key symptoms, examination of respiratory function, laboratory and instrumental diagnostics.

17. Classification of COPD.

18. Integral assessment of COPD.

19. Features of clinical manifestations.

20. Formulation of the diagnosis.

21. Features of therapeutic tactics in accordance with modern international recommendations and clinical protocols of the Ministry of Health of the Republic of Belarus.

22. The choice of non-drug treatment methods for stable COPD: oxygen therapy, surgical treatment, medical rehabilitation of patients with COPD.

23. Prognosis for COPD.

The practical part

*Patient supervision:*

collection of complaints and medical history of patients with acute and chronic bronchitis, chronic obstructive pulmonary disease; objective examination; preparation of an examination plan; interpretation of the results of laboratory and instrumental examination methods; formulation of the diagnosis; preparation of a treatment plan. Registration of medical documentation.

*Modeling and solving situational problems.*

**Tasks and questions for monitoring the assimilation of the topic**

1. Prescribe basic medicines for the treatment of acute and chronic bronchitis, chronic obstructive pulmonary disease (azithromycin, amoxiclav, libexin, ambroxol, acetylcysteine, salbutamol, montelukast, budesonide).

2. Substantiate and formulate a diagnosis when solving a situational problem.

3. Test tasks on the topic of practical training.

**Questions for guided independent work**

Guided independent work is not provided for in the educational institution's curriculum for the academic discipline "Internal diseases" for specialty 1-79 01 01 "Medical science".

**Literature**

**Main:**

1. Internal Diseases = Внутренние болезни : textbook : in 2 vol. Vol. 1 : / edited by A. I. Martynov, J. D. Kobalava, S. V. Moiseev. - Moscow : GEOTAR-Media, 2022. - 683 p. : ill. - Bibliogr.: p. 677. - ISBN 978-5-9704-6766-4. - Режим доступа: https://www.studentlibrary.ru/book/ISBN9785970467664.html – 30 экз.

2. Internal Diseases = Внутренние болезни : textbook : in 2 vol. Vol. 2 : / edited by A. I. Martynov, J. D. Kobalava, S. V. Moiseev. - Moscow : GEOTAR-Media, 2022. - 614 p. : ill. - ISBN 978-5-9704-6767-1. - Режим доступа*:* https://www.studentlibrary.ru/book/ISBN9785970467671.html – 30 экз.

3. Special propedeutics of internal diseases : lecture course / Vitebsk State Medical University, Dep. of Propedeutics of Internal Diseases ; comp. by L. M. Nemtsov. - 2-е изд. - Vitebsk : VSMU, 2016. - 318 p. - Bibliogr.: p. 318. - ISBN 978-985-466-822-2. - Режим доступа: https://elib.vsmu.by/handle/123/9837 - 317 экз.

4. Немцов, Л. М. Пропедевтика внутренних болезней = Propaedeutics of Internal Diseases : учеб. пособие на англ. яз. : для иностр. студентов учреждений высш. образования по специальности "Лечебное дело" : [в 2 ч.]. Ч. 2 : : Обследование органов систем пищеварения, мочевыделения, желез внутренней секреции, крови и опорно-двигательного аппарата / Л. М. Немцов, В. А. Прищепенко, Ю. Г. Юпатов ; М-во образования Республики Беларусь, УО "Витебский гос. мед. ун-т". - Витебск : [ВГМУ], 2023. - 423 с. : ил. - Библиогр.: с. 421-423. - ISBN 978-985-580-165-9. - Режим доступа: https://elib.vsmu.by/handle/123/25144 Гриф(приоритет документа): МО - 250 экз.

**Additional:**

5. Examination of patients in clinic of internal diseases = Обследование пациентов в клинике внутренних болезней : educational instruction for students of 2nd and 3rd years in specialties "General Medicine" and "Stomatology" / Г. И. Юпатов [и др.] ; Ministry of Public Health of Republic of Belarus, EI "Vitebsk State of the order of International Friendship Medical University", Dep. of Internal Diseases Propedeutics. - Vitebsk : VSMU, 2016. - 59 p. - Bibliogr.: p. 31. - ISBN 978-985-466-838-3. – 254 экз.

6. Family Medicine : in 3 books : textbook for students of higher medical education establishments - medical universities, institutes and academies. Book 2 : : Symptoms and Syndromes in Clinical Course of Internal Diseases / L. S. Babinets [и др.] ; edited by O. M. Hyrina, L. M. Pasiyeshvili. - Kyiv : AUS Medicine Publishing, 2018. - 375 p. : ill. - Bibliogr. at the end of the chapters. - ISBN 978-617-505-652-3. Гриф(приоритет документа): МО Укр. *-* 1 экз*.*

7. Family Medicine : in 3 books : textbook for students of higher medical education establishments of the 4th level of accreditation. Book 1 : : General Issues of Family Medicine / O. M. Hyrina [и др.] ; edited by O. M. Hyrina, L. M. Pasiyeshvili. - Kyiv : AUS Medicine Publishing, 2016. - 558 c. : ill. - Bibliogr. at the end of the chapters. - ISBN 978-617-505-494-9. Гриф (приоритет документа): МО Укр. - 1 экз.

8. Internal Medicine: Critical Care : textbook / Babak O. Ya. [и др.] ; edited by O. Ya. Babak, O. M. Bilovol. - Kyiv : AUS Medicine Publishing, 2018. - 367 p. : ill. - ISBN 978-617-505-636-3. Гриф(приоритет документа): УМО Укр. - 1 экз.

9. Kumar & Clark's Clinical Medicine / ed. by Parveen Kumar, Michael Clark ; editor, Online Content Adam Feather. - 9th ed. - Edinburgh [etc.] : Elsevier, 2017. - XIV, 1437 p. : ill. - Bibliogr. at the end of the chapters. - ISBN 978-0-7020-6601-6. - 1 экз.

10. Буйневич, И. В. Болезни органов дыхания = Pulmonary Diseases : учеб.-метод. пособие для студентов 4 и 6 курсов фак. по подгот. специалистов для зарубеж. стран учреждений высш. мед. образования / И. В. Буйневич, Д. Ю. Рузанов ; М-во образования Республики Беларусь, УО "Гомельский гос. мед. ун-т", Каф. фтизиопульмонологии. - 2-е изд., стер. - Гомель : ГомГМУ, 2019. - 101 с. : ил. - Библиогр.: с. 101. - ISBN 978-985-588-153-8. - Режим доступа: http://elib.gsmu.by/handle/GomSMU/3133 - 45 экз.

11. Буйневич, И. В. Неотложные состояния в пульмонологии = Urgent conditions in pulmonology : учеб.-метод. пособие для студентов учреждений высш. образования, обучающихся по специальности 1-79 01 01 "Лечебное дело" / И. В. Буйневич, Э. Н. Платошкин, Н. Э. Платошкин ; М-во здравоохранения Республики Беларусь [и др.]. - Гомель : ГомГМУ, 2023. - 57 с. : ил. - Библиогр.: с. 56-57. - ISBN 978-985-588-269-6. - Режим доступа: https://elib.gsmu.by/handle/GomSMU/14251 Гриф(приоритет документа): УМО - 1 экз.

12. Внутренние болезни = Internal diseases : учеб. пособие для студентов фак. иностр. учащихся и магистрантов (с англ. яз. обучения) / В. М. Пырочкин [и др.] ; М-во здравоохранения Республики Беларусь, УО "Гродненский гос. мед. ун-т" ; под общ. ред. В. М. Пырочкина. - Гродно : ГрГМУ, 2016. - 389 с. : ил. - Библиогр. в тексте. - ISBN 978-985-558-617-4. – 1 экз.

13. Дополнительные методы исследования в клинике внутренних болезней. Практикум = Diagnostic methods in the internal medicine. Workbook : учеб.-метод. пособие для студентов учреждений высш. образования, обучающихся по специальности 1-79 01 01 "Лечебное дело" / Э. А. Доценко [и др.] ; М-во здравоохранения Республики Беларусь, Белорус. гос. мед. ун-т, Каф. пропедевтики внутрен. болезней. - 4-е изд. - Минск : БГМУ, 2024. - 158 с. - Загл. обл.: Diagnostic methods in the internal medicine. Workbook. - ISBN 978-985-21-1556-8. - Режим доступа: https://rep.bsmu.by/handle/BSMU/44425 Гриф(приоритет документа): УМО – 1 экз.

14. Платошкин, Э. Н. Неотложные состояния в пульмонологии = Urgent conditions in pulmonology : учеб.-метод. пособие для студентов 4-6 курсов фак. по подгот. специалистов для зарубеж. стран мед. вузов / Э. Н. Платошкин, Н. Э. Платошкин, И. В. Буйневич ; М-во здравоохранения Республики Беларусь, УО "Гомельский гос. мед. ун-т", Каф. внутрен. болезней № 2 с курсом эндокринологии. - Гомель : ГомГМУ, 2016. - 33 с. - Библиогр.: с. 33. - ISBN 978-985-506-841-0. - Режим доступа***:*** http://elib.gsmu.by/handle/GomSMU/2273 - 1 экз.

**Regulatory legal acts:**

15. О здравоохранении: Закон Республики Беларусь от 18 июня 1993 г. № 2435-XII: с изменениями и дополнениями. **Литература** / ООО «Профессиональные правовые системы». – Минск, 2019.