

## **Educational program for outpatient therapy for 4<sup>th</sup> year foreign students**

### **Lesson 1: Organization of outpatient medical care in the Republic of Belarus.**

#### **Organization of dispensarization.**

**Class times - 8.00-13.00**

#### **By the end of the lesson, students should know:**

1. Organization of ambulatory care in the Republic of Belarus.
2. The rights and duties of the district general practitioner.
3. Therapeutic and diagnostic work of the district general practitioner on an outpatient basis.
4. Organization of medical care at home.
5. Medical rehabilitation in work of the district general practitioner.
6. The main sections of the preventive work of the district general practitioner.
7. Basic medical documents of approved forms.
8. Types of temporary disability.
9. Documents certifying temporary disability (sheet of disability, a certificate of disability) and their functions.
10. The rules governing the granting and renewal of sheet of disability and certificate of disability.
11. The composition and functions of the medical advisory committee (MAC).

#### **By the end of the lesson students will be able to:**

1. Identify the indications for referral to the laboratory and instrumental studies, consultation of a specialist, referring to a hospital and sanatorium treatment.
2. Understand the medical records.
3. To make out prescriptions for drugs to various categories of patients.
4. Calculate BMI, to assess the risk for cardiovascular SCORE
5. To issue a document certifying the temporary disability.
6. Extend disability sheet or a certificate.

<b>Time</b>	<b>Theme, method</b>	<b>Content</b>	<b>Materials</b>
<b>8.00-9.30</b>	Students survey	Analysis of material of the me, familiarization with the regulation documents	Basic forms of medical documents (ambulatory card, health certificate, recipes), regulation documents, sheet of disability, certificate of disability
<b>9.30-9.45</b>	<b>Break</b>		
<b>9.45-10.00</b>	<b>Introduction to structural units of the polyclinic</b>		

<b>10.00-11.15</b>	Independent work of students	Work in a doctor's office: calculation of BMI, evaluation of risk factors in patients	Directly involved in communications with patients, prescribing of recipes, sheet of disability
<b>11.15-11.30</b>	<b>Break</b>		
<b>11.30-12.45</b>	Independent work of students	<b>11.30-12.45</b>	Independent work of students
<b>12.45-13.00</b>	Securing of material "What's new I've learned today"		

**Independent work of students (IWS):** dispensarization of population, the concept of medical rehabilitation expert board (MREB)

**After IWS student should know:**

1. Organization of the dispensarization, analysis of its quality and efficiency.
2. Identify the group of dispensarization.
3. Persistent disability, group of disability.
4. Structure and functions of the medical rehabilitation expert board (MREB).
5. Indications and order of referral to the MREB.

**Lesson 2. Respiratory diseases. Acute respiratory infections, COVID-19 infections, acute tonsillitis: outpatient aspects of diagnosis and treatment**

**Class times - 8.00-13.00**

**By the end of the lesson, students should know:**

1. Etiology of ARI, acute tonsillitis, acute bronchitis, pneumonia.
2. Features anamnesis and examination of patients with acute respiratory infections, COVID-19 infection, acute tonsillitis, acute bronchitis, pneumonia.
3. The clinical picture of acute respiratory infections, COVID-19 infection, acute tonsillitis, acute bronchitis, pneumonia.
4. Plan for a patient examination with acute respiratory diseases.
5. Indications for hospitalization of patients with acute respiratory infections, acute tonsillitis, acute bronchitis, pneumonia.
6. Treatment of acute respiratory infections, COVID-19 infection, acute tonsillitis, acute bronchitis, pneumonia.
7. Complications of ARI, acute tonsillitis, acute bronchitis, pneumonia.
8. Examination of temporary disability in ARI, acute tonsillitis, acute bronchitis, pneumonia.
9. Dispensarization and rehabilitation of patients with acute respiratory diseases.

**By the end of the session students will be able to:**

1. To collect anamnesis and carry out inspection of patients with acute respiratory diseases.
2. Identify the need for hospitalization.
3. To formulate a diagnosis.
4. Determine the tactics of treatment in an outpatient setting.
5. Analyze the data of laboratory and instrumental methods of examination.
6. To appoint treatment to the patient in accordance with the diagnosis.
7. Carry out medical rehabilitation, dispensarization and preventive work.

Time	Theme, method	Content	Materials
8.00-9.30	Students survey	Analysis of material of the theme, familiarization with the regulation documents	Regulation documents
9.30-9.45	<b>Break</b>		
9.45-11.15	Independent work of students	Work in a doctor's office: examination of the oropharynx; - palpation of lymphatic nodes - auscultation of the thorax	Participation in the examination of patients, prescribing of recipes and certificates
11.15-11.30	<b>Break</b>		
11.30-12.00	Discussion, skill demonstration	Clinical analysis of patients: taking of throat swab	Patient, ambulatory card
12.00-12.30	Group work. Brainstorm	Solving situational problems from case report	Situational problems
12.30-13.00	Securing of material "What's new I've learned today"		

**Lesson 3. Diseases of the cardiovascular system. Primary and secondary arterial hypertension. Somatoform dysfunction of the autonomic nervous system: outpatient aspects of diagnosis and treatment. Emergency aid in hypertensive crisis in an outpatient setting**

**Class times - 8.00-13.00**

**By the end of the lesson, students should know:**

1. Definition and classification of arterial hypertension.
2. Plan of inspection of patients with high blood pressure in the outpatient setting.
3. Principles of the treatment of arterial hypertension.
4. Indications for hospitalization of patients with arterial hypertension.

5. The classification of hypertensive crises.
6. Tactics provide emergency medical care for hypertensive crises in the outpatient setting.
7. Dispanserization and prevention of arterial hypertension.
8. Classification, principles of diagnosis and treatment of somatoform dysfunction of the autonomic nervous system.

**By the end of the lesson students will be able to:**

1. Measure the blood pressure.
2. Assign the required inspection plan for patients with high blood pressure.
3. Interpret laboratory and instrumental data.
4. Assign a treatment for patients with arterial hypertension.
5. Urgent care in hypertensive crises.
6. To conduct dispanserization.
7. To recommend methods of prevention.

Time	Theme, method	Content	Materials
8.00-9.30	Students survey	Analysis of material of theme, familiarization with the regulation documents	Regulation documents
9.30-9.45	<b>Break</b>		
9.45-11.15	Independent work of students	Work in a doctor's office: assessment of risk factors in hypertension; measurement of blood pressure (3 patients)	Participation in the examination of patients, prescribing of recipes
11.15-11.30	<b>Break</b>		
11.30-12.15	Discussion, demonstration of practical skills	Clinical analysis of patient	Patient, ambulatory card, visiting of manipulation room, familiarity with the first-aid kit
12.15-12.45	Brainstorm	Establishing a defined of risk factors by SCORE scale, GFR calculation by CKD-EPI formula	Situational problems, ambulatory card
12.45-13.00	Securing of material "What's new I've learned today"		

#### **Lesson 4. Coronary heart disease: aspects of outpatient diagnosis of various forms of it. Emergency aid in anginal attack and acute coronary syndrome in outpatient settings**

**Class times - 8.00-13.00**

##### **By the end of the lesson, students should know:**

1. Classification and risk factors for coronary heart disease.
2. Plan of inspection and diagnosis of angina.
3. Indications for hospitalization.
4. Treatment of patients with angina pectoris in an outpatient setting.
5. Indications to the referring on the MREB.
6. Dispensary observation of patients with angina.
7. The algorithm providing emergency care when anginal attack and acute coronary syndrome in the outpatient setting.

##### **By the end of the lesson students will be able to:**

1. To collect complaints and anamnesis in patients with coronary heart disease.
2. To prepare the patient's plan of survey with coronary heart disease.
3. Determine the tactics of treating a patient with coronary artery disease.
4. Provide emergency medical aid in anginal attacks and acute coronary syndrome.
5. Interpreting the data of laboratory and instrumental studies.
6. Carry out personal preventive measures.

<b>Time</b>	<b>Theme, method</b>	<b>Content</b>	<b>Materials</b>
<b>8.00-9.30</b>	Students survey	Analysis of material of theme, familiarization with the regulation documents	Regulation documents
<b>9.30-9.45</b>	<b>Break</b>		
<b>9.45-11.15</b>	Independent work of students	Work in a doctor's office: - assessment of risk factors of cardiovascular diseases (3 patients)	Directly involved in communication with patients, prescribing recipes
<b>11.15-11.30</b>	<b>Break</b>		

<b>11.30-12.00</b>	Discussion, demonstration of practical skills	Clinical analysis of patient	Patient, ambulatory card
<b>12.00-12.45</b>	Brainstorm	Solving situational problems from case report	Situational problems (2)
<b>12.45-13.00</b>	Securing of material "What's new I've learned today"		

**Lesson 5. Diseases of the digestive system. Functional dyspepsia, chronic gastritis, peptic ulcer and duodenal ulcer: outpatient aspects of diagnosis and treatment. Medical tactics and emergency medical care for suspected gastrointestinal bleeding in an outpatient setting**

**Class times - 8.00-13.00**

**By the end of the lesson, students should know:**

1. Features of the history collection and examination of patients with diseases of the digestive system.
2. Methods of laboratory and instrumental examination and interpretation.
3. Clinic, diagnosis and treatment of functional dyspepsia, chronic gastritis, gastric and duodenal ulcers.
4. Clinic of gastrointestinal bleeding.
5. Dispenserization of patients with chronic gastritis, gastric and duodenal ulcers.
6. The prevention of diseases of the digestive system.

**By the end of the lesson students will be able to:**

1. To collect complaints and anamnesis.
2. Inspect the abdomen (palpation, percussion, auscultation).
3. To prepare a survey plan.
4. Tactics emergency treatment in case of gastrointestinal bleeding.

<b>Time</b>	<b>Theme, method</b>	<b>Content</b>	<b>Materials</b>
<b>8.00-9.30</b>	Students survey	Analysis of material of the theme, familiarization with the regulation documents	Regulation documents
<b>9.30-9.45</b>	<b>Break</b>		

<b>9.45-11.15</b>	Independent work of students	Work in a doctor's office: Collection of complaints and anamnesis - Examination of the tongue Examination of the abdomen (2 persons)	Directly involved in communications with patients, prescribing recipes, sheet of disability
<b>11.15-11.30</b>	<b>Break</b>		
<b>11.30-12.00</b>	Demonstration of practical skills	Clinical analysis of patient	Patient in day-off stationer
<b>12.00-12.45</b>	Brainstorm	Solving situational problems from case report (system SOCRATES)	Situational problems (2)
<b>12.45-13.00</b>	Securing of material "What's new I've learned today"		

**Lesson 6. Chronic cholecystitis, biliary functional disorder, acute, chronic pancreatitis: outpatient aspects of diagnosis and treatment. Emergency aid in hepatic colic in an outpatient setting**

**Class times - 8.00-13.00**

**By the end of the lesson, students should know:**

1. Anamnesis taking and examination of patients with diseases of the biliary system.
2. Methods of laboratory and instrumental examination and interpretation.
3. Clinic, diagnosis and treatment of chronic cholecystitis, biliary functional disorders, chronic pancreatitis.
4. Clinic of biliary colic.
5. Dispenserization of patients with chronic cholecystitis, chronic pancreatitis.
6. The prevention of diseases of the biliary system.

**By the end of the lesson students will be able to:**

1. To collect complaints and anamnesis.
2. Carry out inspection of patients with diseases of the biliary system.
3. To prepare a survey plan.
4. Tactics emergency treatment in hepatic colic in an outpatient setting.

Time	Theme, method	Content	Materials
8.00-9.30	Students survey	Analysis of material of theme, familiarization with the regulation documents	Regulation documents
9.30-9.45	<b>Break</b>		
9.45-11.15	Independent work of students	Work in a doctor's office: Collection of complaints and anamnesis; - Examination of the abdomen	Directly involved in communications with patients, prescribing of recipes and sheet of disability
11.15-11.30	<b>Break</b>		
11.30-12.00	Summary questions	Summary	Writing
12.00-12.30	Demonstration of skills	Examination of patients	Patient in day-care department
12.30-13.00	Conclusions		

### Work in the simulation center

Theme 2	- Height, weight, BMI
	- Glucometer
	- Oropharyngoscopy, Otoscopy (normal otitis)
	- Wheezing with bronchitis and pneumonia
Theme 3	- GC emergency – GU tasks and bag stacking
	- Ambulatory BP monitoring
	- BP measurement
Theme 4	- Coronary heart disease: emergency care for acute coronary syndrome
Theme 5-6	- Hepatic colic

### List of preparations for discharge on recipes

#### CLASS №1,2

- |                                       |                           |
|---------------------------------------|---------------------------|
| 1. Azithromycin 0.5                   | 9. Clarithromycin 0.5     |
| 2. Ambroxol 0.03/100 ml (5 ml - 0.03) | 10. Levofloxacin 0.5/0.75 |
| 3. Amoxicillin 0.5/1.0                | 11. Oseltamivir 0.75      |
| 4. Amoxicillin klavulanate            | 12. Prenoxidiazine 0.1    |



0.5+0.125/0.875+0.125  
5. Acetylcysteine 0.2/0.6  
6. Ibuprofen 0.2/0.4  
7. Ibuprofen+paracetamol 0.4+0.325  
8. Inosine pranobex 0.5

13. Paracetamol 500ml  
14. Umifenovir 0.1/0.2  
15. Cefdinir 0.3  
16. Cefpodoxim 0.2  
17. Cefuroxim 0.5

### CLASS №3,4

1. Amlodipin 0.005/0.01  
2. Atorvastatin 0.01/0.02/0.04  
3. Acetylsalicylic acid 0.075/0.325/0.5  
4. Bisoprolol 0.0025/0.005/0.01  
5. Valsartan 0.08/0.16  
6. Valsartan+ Hydrochlorothiazide  
0.08+0.0125/0.16+0.025  
7. Verapamil 0.04/0.08  
  
8. Hydrochlorothiazide 0.025  
9. Glyceryl trinitrate 0.0004/10.0  
  
10. Diltiazem 0.06/0.09/0.18  
  
11. Mononitrate isosorbide 0.02/0.04  
12. Indapamid 0.0025  
13. Candesartan 0.008/0.016/0.032  
14. Carvedilol 0.00625/0.0125/0.025  
15. Clopidogrel 0.075  
16. Lisinopril 0.005/0.01/0.02  
17. Lisinopril+Amlodipin  
0.01+0.005/0.02+0.01  
18. Losartan 0.05/0.1  
19. Metoprolol 0.025/0.05/0.1

20. Moxonidine 0.0002/0.0004  
21. Molsidomin 0.002/0.004  
22. Nebivalol 0.005  
23. Nitroglycerin 0.0005  
24. Nifecard 0.01/0.02  
25. Perindopril 0.002/0.004/0.008  
  
26. Perindopril+Indapamid  
0.004+0.00125/0.008+0.0025  
27. Ramipril 0.0025/0.005/0.01  
28. Ramipril+ Hydrochlorothiazide  
0.005+0.025/0.01+0.025  
29. Ramipril+Amlodipin  
5+5/10+5/5+10/10+10  
30. Rosuvastatin 0.005/0.01/0.02  
31. Spironolactone 0.025/0.05  
32. Telmisartan 0.08/0.16  
33. Torasemid 0.005/0.01/0.02  
34. Trimetazidine 0.035/0.08  
35. Phenophobe 0.145  
36. Furosemide 0.04  
  
37. Esetimib 0.01  
38. Enalapril 0.005/0.01/0.02

### CLASS №5,6

1. Aluminum phosphate 230.0  
Amoxicillin 0.5/1.0  
3. Bismuth subcitrate 0.12  
4. Domperidone 0.01  
  
5. Drotaverine 0.04  
6. Clarithromycin 0.5  
7. Levofloxacin 0.5/0.75  
8. Mebeverin 0.2  
9. Metronidazole 0.25

10. Omeprazole 0.02  
11. Pancreatine 10000 IU  
12. Pantoprazol 0.02/0.04  
13. Amoxicillin 0.5+ Clarithromycin  
0.5+Omeprazole 0.02  
14. Tetracycline 0.1/0.5  
15. Ursodesoxycholic acid 0.25  
16. Famotidin 0.02/0.04  
17. Esomeprazol 0.02/0.04

Detailing pain for **SOCRATES** system:

Detail pain by SOCRATES system:

S - Site, Localization;

O - Onset, Beginning (sharp, gradual);

C - Character, Character;

R - Radiation, Irradiation;

A - Association, Related;

T - Timing, Duration;

E - Exacerbation, What is enhanced/eased;

S - Severity, Intensity.