

## FEDERAL STATE BUDGETARY EDUCATIONAL INSTITUTION OF EDUCATION **KUBAN STATE MEDICAL UNIVERSITY»** MINISTRY OF HEALTH OF THE RUSSIAN FEDERATION

#### DEPARTMENT OF DISEASE PREVENTION, HEALTHY LIFESTYLE AND EPIDEMIOLOGY

# TASKS FOR PRACTICAL CLASSES OF THE DISCIPLINE Diseases Prevention

Textbook for English-speaking students of the medical university

Krasnodar 2023 УДК: 616 -084 ББК: 51.1(2)2

 $\Pi$  84

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The publication is intended to ensure the control of knowledge and skills of students during practical (seminar) classes on discipline "Prevention of diseases", and independent development of the material by students of the medical faculty.

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S.N. Alekseenko, V.M. Bondina, D.A. Gubareva

#### **PREFACE**

The proposed educational and methodological manual contains a modern point of view on the elements of a healthy lifestyle, its categories that are of a social nature, such as quality of life and standard of living.

The purpose of the manual is to assist students in mastering the discipline, to form a holistic system of views on the basics of a healthy lifestyle. The manual is dedicated to effective measures to reduce the impact of risk factors on a person, and, accordingly, the ability to talk with people who have bad habits, as well as to identify and help individuals with addictive behavior.

Medical professionals have virtually no influence on socio-economic factors or change the environment. However, by promoting and teaching the population healthy habits (health-saving technologies), you can try to correct the image and stereotypes of life of individuals or certain groups of the population. The main task is to inform and teach certain behavioral skills; the goal is to increase the individual's responsibility for their own health and change the motivation of behavior.

Health promotion is impossible without a dialogue between the health professional and the individual. This dialogue should be aimed at explaining the need for certain preventive measures. Without dialogue, an individual is not able to actively perceive and often ignores information about factors that affect their health and put them at risk.

For the successful implementation of health promotion measures, a medical professional must be well-versed in all areas of medicine. But, first of all, they must understand what health and disease are, what criteria exist for their detection, and how they affect the quality of life of an individual. In addition, the health care provider must have information about the main factors affecting health. It is also necessary to know about the specifics of implementing health promotion programs in various target groups.

The structure of the manual includes educational questions to the topics of practical classes, which must be summarized directly in the workshop, methodological material necessary for solving situational problems, test tasks, as well as recommended literature.

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#### **INTRODUCTION**

A serious victory over many infectious diseases, which was marked by the first half of the 20th century, thanks to the development of methods of vaccination, and then the discovery of antibiotics, antiviral, antifungal and antiparasitic drugs, led to a significant increase in life expectancy.

However, the progress of medical science, along with the development of the benefits of civilization, brought to mankind new diseases, which, if they were known before, did not represent such a serious problem. We are talking, first of all, about non-communicable diseases (cardiovascular, endocrine, oncological, etc.).

The development of agriculture and the food industry has led to the elimination of hunger and, at the same time, to an increase in the availability of food, a decrease in their cost, the appearance of freeze-dried, processed foods. Overeating is no longer a rarity. Industrialization and urban climate change have led to a change in the ecological situation.

Thus, non-communicable diseases, being the reverse side of the development of human society, are often referred to as "diseases of civilization". At the same time, the risk of their development is not the same, and depends not only on environmental, genetic factors, on progress in the field of medicine, but also on the behavior of a particular individual. That is why in recent years the paradigm of a healthy lifestyle has begun to take shape as an integral part of preventive medicine.

Like everything new, a healthy lifestyle is rooted in the deep past. However, the philosophy of a healthy lifestyle began to take shape only in the second half of the twentieth century. It has become clear that many non-communicable diseases are cheaper and easier to prevent than to subsequently treat. In addition, there is an idea of the paramount role of health saving of each individual in the prevention of non-infectious pathology. Therefore, a healthy lifestyle is a certain cultural tradition of society, which is widely instilled in many foreign countries.

The growing interest in this problem in our country is due to the fact that there has been an awareness of the health of the individual as one of the basic values of society, and the need to strengthen the preventive component of healthcare has been repeatedly noted in the speeches of the President of the Russian Federation and other top officials of the state. Of course, the prevention of many diseases is impossible without lifestyle changes. Therefore, the central point in the preservation and strengthening of both individual and public health is the creation and maintenance of motivation for the formation of a healthy lifestyle and commitment to a healthy lifestyle.

#### TOPIC 1.

### HISTORY OF THE EMERGENCE AND DEVELOPMENT OF PREVENTIVE MEDICINE.

## PREVENTION AS ONE OF THE PRIORITY AREAS OF PUBLIC HEALTH PROTECTION.

| oreventive trend in medicine?                             |  |
|---|--|
| a) Ancient Egypt, China, Greece                           |  |
|   |  |
|   |  |
|   |  |
| b) Ancient Rome   |  |
| c) YI - XIY centuries.                                    |  |
|   |  |
| d)XI  |  |
| e) XVIII - XIX  |  |
| f) XIX : M. Petternkofer and A. Dobroslavin-              |  |
|   |  |
| F. Erisman  |  |
| G. Khlopin-   |  |
| F. Krotkov  |  |
| g) who introduced the following terms: "sanology"         |  |
| "valeology"   |  |
| "healthy lifestyle"                                       |  |
| h) at the end of the 20th - beginning of the 21st century |  |

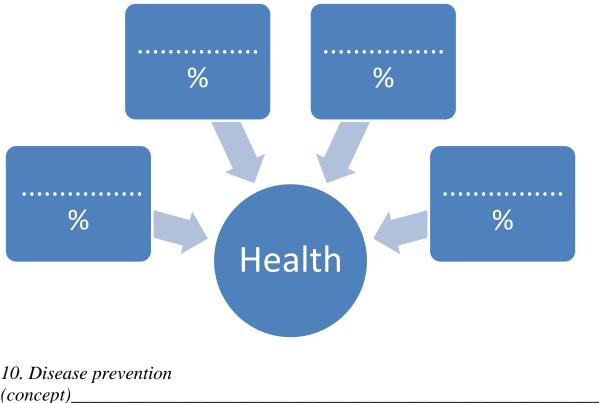
| Full name of the organization      | The main goals and tasks of the organization related to health |
|------------------------------------|--|
| WHO-                               |  |
| UNESCO -                           |  |
| UNICEF-                            |  |
| ILO -                              |  |
| R C                                |  |
| W M                                |  |
| W B                                |  |
| P F<br>UN                          |  |
| UNAIDS                             |  |
| 3. What are the functions of the W | orld Health Organization at present?                           |

## TOPIC 2. TERMS AND CONCEPTS USED IN MEDICAL PREVENTION. DEFINITION OF THE CONCEPTS "PREVENTION", "MEDICAL PREVENTION". TYPES OF MEDICAL PREVENTION. ROUTINE CHECKUPS AND PREVENTIVE COUNSELING

#### Security questions for self-training:

| 1. | Define the concept of "health"                       |
|----|--|
|    |  |
| •  | What types of health do you know (according to WHO)? |
|    | Define the main concepts:                            |
|    | Healthy lifestyle                                    |
|    |  |
|    |  |
|    | Personal health–                                     |
|    |  |
|    | Public health  |
| 9  | Quality of life-                                     |
|    |  |
|    |  |
| Ì  | Health promotion                                     |
| _  |  |

9. Factors and conditions that determine the health of the population (fill in the form below).



| 10. Disease prevention (concept) |  |
|----------------------------------|--|
|                                  |  |
| 11. Types of prevention          |  |
| 1. Primary prevention –          |  |
|                                  |  |
|                                  |  |
| 2. Secondary prevention –        |  |
|                                  |  |
|                                  |  |

| 4. Re         | <b>chabilitation</b> (1               | estoration | of health) - | _                  |                   |             |
|---------------|---------------------------------------|------------|--------------|--------------------|-------------------|-------------|
|               |                                       |            |              |                    |                   |             |
|               |                                       |            |              |                    |                   |             |
|               | al prevention i<br><b>ndividual</b> - | n relation | to the popu  | lation ( <u>FO</u> | <u>RMS</u> preven | tion measur |
| 2) groi       | un -                                  |            |              |                    |                   |             |
| 2) 8101       | <i></i>                               |            |              |                    |                   |             |
|               |                                       |            |              |                    |                   |             |
| 3) <b>pop</b> | ulation (mass)                        | -          |              |                    |                   |             |

|           | Individual | Group | Population (mass) |
|-----------|------------|-------|-------------------|
| Primary   |            |       |                   |
| Secondary |            |       |                   |
| Tertiary  |            |       |                   |

| 1. Preventive medi | cal examinati | ions – |      |  |
|--------------------|---------------|--------|------|--|
|                    |               |        | <br> |  |
|                    |               |        |      |  |
|                    |               |        | <br> |  |
| 5. Preventive cou  | nseling –     |        |      |  |
|                    |               |        |      |  |
|                    |               |        |      |  |
|                    |               |        | <br> |  |
|                    |               |        | <br> |  |
|                    |               |        | <br> |  |
| 6. Risk factors –  |               |        |      |  |
|                    |               |        |      |  |
|                    |               |        |      |  |
|                    |               |        | <br> |  |
|                    |               |        |      |  |

# TOPIC 3. RISK FACTORS FOR THE DEVELOPMENT OF DISEASES: DEFINITION, CLASSIFICATION, PRACTICAL SIGNIFICANCE. DIAGNOSTIC CRITERIA FOR RISK FACTORS FOR CHRONIC NON-COMMUNICABLE DISEASES. SCREENING: DEFINITION, PURPOSE, AND TYPES.

| I. Да | йте Define the concept of " risk factor»   |   |
|-------|--|---|
|       |  |   |
|       |  |   |
| 1.    | Classification of risk factors:  | _ |
|       |  | _ |
|       |  | _ |
|       |  | _ |
| 2.    | How does WHO categorize risk factors?  |   |
|       |  |   |
|       | llocated to public health practice?  |   |
|       |  | _ |
|       |  |   |
|       |  |   |
|       |  | _ |
|       |  |   |
|       |  |   |
|       | hat are the diagnostic criteria for risk factors for chronic unicable diseases?  Elevated levels of blood pressure – |   |
|       |  |   |
|       |  |   |
|       |  |   |
|       |  |   |

| Dyslipidemia –<br>————— |                    |         |                  |
|-------------------------|--------------------|---------|------------------|
|                         |                    |         |                  |
|                         |                    |         |                  |
|                         |                    |         |                  |
|                         |                    |         |                  |
|                         |                    |         |                  |
| Elevated levels         | of glucose in the  | blood – |                  |
|                         | ary (from the fing |         |                  |
| 2) in plasma (fi        |                    |         |                  |
| Tobacco Smok            | ing –<br>          |         |                  |
| Poor nutrition          |                    |         |                  |
|                         |                    |         |                  |
|                         |                    |         |                  |
|                         |                    |         |                  |
|                         |                    |         |                  |
|                         |                    |         |                  |
|                         |                    |         |                  |
| Overweight –            |                    |         |                  |
| The norm                |                    |         |                  |
| pre-obesity             |                    |         |                  |
|                         | st degree          |         |                  |
| obesity of the 2        | nd degree          |         |                  |
|                         | ed degree          |         |                  |
| abdominal obes          | •                  |         |                  |
| men's waist circ        | cumference         |         |                  |
| women's waist o         | circumference      |         |                  |
| Low physical a          | nctivity —         |         |                  |
|                         |                    | _       | of consumption o |
| narcotic                | drugs              | and     | psychotropic     |

| Tota | al cardiovascular risk                    |   |
|------|---|---|
|      | 1. What is the definition of "screening"? | _ |
|      |   | _ |
| 1    | 2. What types of screening do you know?   | _ |
| 2    |   | _ |

## TOPIC 4. FEATURES OF PREVENTION IN DIFFERENT CATEGORIES OF THE POPULATION.

1. Fill in the table.

| Stage and result    | Priority areas of prevention             |
|---------------------|--|
| Before and during   | Before and soduring pregnancy:           |
| labor: birth        | •  |
| of a healthy baby   | •  |
|                     | •  |
|                     | •  |
|                     | •  |
|                     | •  |
|                     | During pregnancy:                        |
|                     | •  |
|                     | •  |
|                     | •  |
|                     | •  |
|                     | •  |
|                     | During and immediately after childbirth: |
|                     | •  |
|                     | •  |
|                     | •  |
|                     | •  |
|                     | •  |
|                     | •  |
|                     | •  |
|                     | During the first month of life:          |
|                     | •  |
|                     | •  |
|                     | •  |
|                     | •  |
| First year of life: | •  |
| surviving through   | •  |
| the most vulnerable | •  |
| period              | •  |
|                     | •  |
| Early childhood (up | •  |
| to 5-6 years):      | •  |

| preparation-             | •  |
|--------------------------|--|
| for school               | •  |
| admission                | •  |
|                          | •  |
| Late                     | •  |
| childhood (up to 10-     | •  |
| 11                       | •  |
| years): beginning of     | •  |
| puberty                  | •  |
|                          | •  |
| Teen age                 | •  |
| Adolescence: a           | •  |
| healthy                  | •  |
| teen                     |  |
| Throughout               | •  |
| your life                | •  |
|                          | •  |
| Main risk factors for 1) | these diseases:  |
| 4)                       |  |
| 3. Classification of m   | nethods of contraception:                                |
|                          |  |
|                          |  |
|                          |  |
|                          |  |
| 4. What are the main     | directions of preventive measures for the elderly (who)? |
| •                        |  |

| ,           |               |               |              |              |     |  |
|-------------|---------------|---------------|--------------|--------------|-----|--|
|             |               |               |              |              |     |  |
| ·           |               |               |              |              |     |  |
|             |               |               |              |              |     |  |
|             |               |               |              |              |     |  |
|             |               |               |              |              |     |  |
|             |               |               |              |              |     |  |
|             |               |               |              |              |     |  |
| That are th | e proven risk | k factors for | disability i | in the elder | ly? |  |
| Vhat are th | e proven risk |               |              | in the elder | ly? |  |
| Vhat are th |               |               |              | in the elder | ly? |  |
| Vhat are th |               |               |              | in the elder | ly? |  |
| Vhat are th |               |               |              | in the elder | ly? |  |
| Vhat are th |               |               |              | n the elder  | ly? |  |
| What are th |               |               |              | in the elder | ly? |  |
| What are th |               |               |              | in the elder | ly? |  |
| Vhat are th |               |               |              | in the elder | ly? |  |
| Vhat are th |               |               |              | n the elder  | ly? |  |
| Vhat are th |               |               |              | n the elder  | ly? |  |
| Vhat are th |               |               |              | n the elder  | ly? |  |

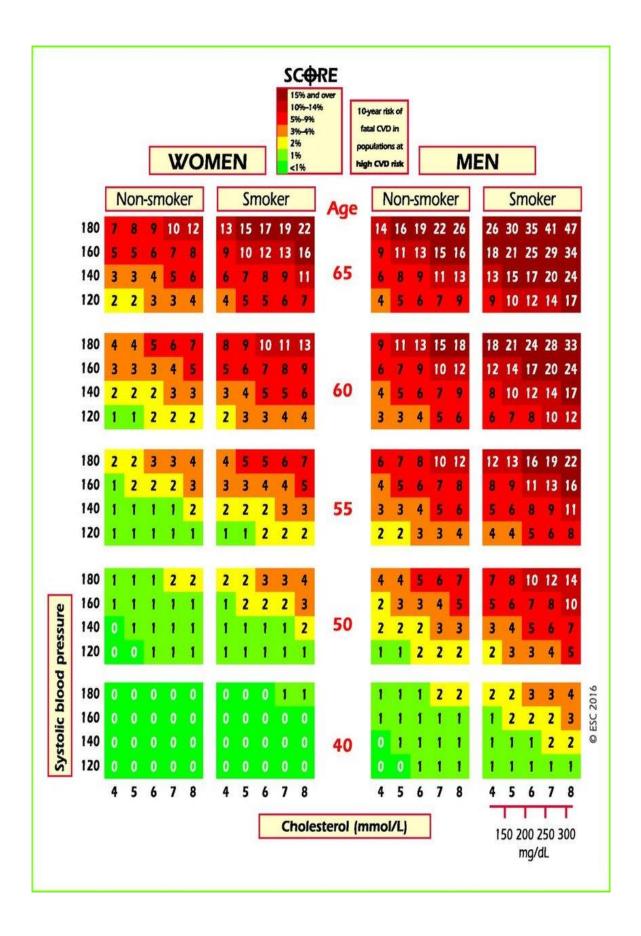
## TOPIC 5. DISEASES OF THE CARDIOVASCULAR SYSTEM: RISK FACTORS, PREVENTION (GENDER AND AGE CHARACTERISTICS). THE CONCEPT OF TOTAL RISK. THE SCORE RISK SCALE.

### 1. Methodology for determining the total cardiovascular risk using the SCORE scale

- 1. Select a column that corresponds to the patient's gender, age, and Smoking status.
- 2. Next, inside the table, you should find the cell that most corresponds to the individual level of measured SBP (mmol/lT.cT) and total cholesterol (mmol/l)
- 3. The figure in the cell corresponds to the 10-year cumulative risk of death is not being used in patients with proven atherosclerotic CVD Genesis (IBS, TSVB, aortic aneurysm, peripheral artery atherosclerosis), diabetes mellitus type I and II with damage to target organs, chronic kidney disease, in individuals with very high levels of individual FR, individuals under the age of 65 years (these groups of people are at very high CV risk) and citizens under the age of 40, since regardless of the presence of FR (with the exception of very high levels of individual FR) they have a low risk of CVD on the scale.

The total CV risk may be higher than on the SCORE scale and the relative risk scale in individuals:

- overweight or obese people, especially young people with abdominal obesity, with low physical activity (sedentary work);
- with diabetes: the SCORE scale should only be used in patients with type 1 diabetes without damage to target organs (the risk increases with increasing blood sugar concentrations);
- low HDL cholesterol, high triglyceride levels, especially in combination with familial hypercholesterolemia;
- with a proven atherosclerotic lesion of the carotid arteries, but without clinical manifestations of cerebral circulatory insufficiency;
- with moderate to severe chronic kidney disease [glomerular filtration rate (GFR) <60mL/min/1.73 m2<sup>2</sup>];
  - with a family history of early CVD development in the next of kin.



Assessment of total cardiovascular risk is a key position, since the level of total risk determines the choice of a preventive strategy and specific interventions.

| 2) co | rectable                    |           |              |           |        |   |
|-------|-----------------------------|-----------|--------------|-----------|--------|---|
|       |                             |           |              |           |        |   |
|       |                             |           |              |           |        |   |
| 3. W  | rite the criteria f         |           | abolic syndı | come :    |        |   |
|       |                             |           |              |           |        |   |
|       |                             |           |              |           |        |   |
|       | e the mechan<br>eal stress: | ism of pa | athological  | influence | on CVD | u |
|       |                             |           |              |           |        |   |
|       |                             |           |              |           |        |   |
|       |                             |           | d for CVD p  |           |        |   |

| 1              | en?           |             |               |              |     |
|----------------|---------------|-------------|---------------|--------------|-----|
| 1              |               |             |               |              |     |
|                |               |             |               |              |     |
|                |               |             |               |              |     |
| <del></del> 2. |               |             |               |              |     |
|                |               |             |               |              |     |
|                |               |             |               |              |     |
| 3              |               |             |               |              |     |
|                |               |             |               |              |     |
| 4              |               |             |               |              |     |
| Screening      | of CVD in chi | ldren in re | lation to the | following RI | ` • |
| _              |               |             |               | _            |     |
| 1              |               |             |               |              |     |
|                |               |             |               |              |     |
|                |               |             |               |              |     |
|                |               |             |               |              |     |
| 2              |               |             |               |              |     |
| 2<br>3         |               |             |               |              |     |
| 2              |               |             |               |              |     |
| 2<br>3         |               |             |               |              |     |

### Solving a typical problem. Example. TASK

The patient is 54 years old. He suffers from hypertension and regularly takes antihypertensive medications. In the anamnesis of gastritis (non-thin form). Complaints of heart pain (suspected angina pectoris), non-smoker, poor nutrition, alcohol abuse.

Objectively: the condition is satisfactory, blood PRESSURE 145/90 mm Hg, height 179 cm, weight-86.5 kg. During auscultation, heart sounds are clear and rhythmic, and vesicular respiration occurs in the lungs. The abdomen is soft and painless on palpation. Symptom Pasternatsky negative. Stool and diuresis are normal.

Laboratory parameters: TC 5.6 mmol/l, blood glucose 4.0 mmol/l. No ECG changes.

#### Questions

:

- 1. Identify the patient's risk factors for developing cardiovascular disease.
- 2. Evaluate the cardiovascular risk on the SCORE scale and set a health group for the patient.
  - 3. patient management Tactics.

### Creating a response to an issue Advanced preventive counseling

Age, gender <u>54 years, husband</u>

**Anthropometry:** height <u>179 cm (1.79 m)</u> \_ \_ \_ weight <u>86.5 kg</u>

**Abdominal circumference** (no information available)

BMI <u>27.0 kg /m<sup>2</sup></u> interpretation: <u>pre-obesity</u>

#### Risk factors for developing NCDs::

uncorrected: male gender, age

<u>correctable</u>: <u>hypertension</u>; <u>overweight</u>; <u>poor nutrition</u>; <u>alcohol abuse</u>;

<u>hypercholesterolemia</u> (>5.0 > mmol/l)

Existing NCDs in the anamnesis: <u>CHD: angina pectoris? GB</u>
SCORE level: <u>according to table 3% - average</u>, <u>but due to existing conditions</u>, <u>such as hypercholesterolemia</u>, <u>overweight</u>, <u>suspected coronary heart disease</u>, <u>the final interpretation of the USSR level is **high!**</u>

#### Recommendations to the patient for lifestyle correction:

- follow the principles of healthy eating;
- deal with the pain in the heart, this is a priority, as it is deadly! (in the lower column "Research of the 2nd stage of medical examination" we describe recommendations for physical examinations); further:
- physical activity: 30 minutes of moderate physical activity per day;

- body mass index <25kg /m<sup>2</sup> and no Central obesity;
- Blood PRESSURE < 130 / 80mmhg, if there are no contraindications;
- comply with the principles of rational nutrition (we recall the healthy lifestyle);
- control of blood PRESSURE; OHS; UAC;eKG

#### **Recommended research methods:**

Cardiologist's consultation: ECHO-CS (because CHD?); determination of the blood lipid spectrum of HDL, LDL, triglycerides (because hypercholesterolemia); endocrinologist's consultation: determination of glycated hemoglobin in the blood or glucose tolerance test (because overweight +hypercholesterolemia)

## Write out a similar task yourself, write it on the appropriate form (below):

#### **TASK**

The patient is 51 years old. He has a history of hypertension and does not take antihypertensive medications. Complaints of pain in the heart, suspected tension angina, prolonged cough with sputum discharge. Smokes up to a pack of cigarettes a day, low physical activity.

**Objectively:** the condition is satisfactory, BMI - 26.0 kg/ $^{m2}$ .

During auscultation in the lungs, respiration is vesicular, heart sounds are clear, rhythmic, heart rate is 81 beats./minute.mBlood PRESSURE – 120/80 mm Hg. the Abdomen on palpation is soft and painless.

SymptomPasternatsky negative on both sides. Stool and diuresis are normal.

Survey results

**Biochemical blood** test: TC – 7.8 mmol/l, blood glucose-5.0 mmol/l.

#### Questions:

- 1. Identify the patient's risk factors for developing cardiovascular disease.
- 2. Evaluate cardiovascular risk on the SCORE scale and set a health group for the patient.
  - 3. Patient management tactics.

## Creating a response to an issue Advanced preventive counseling

| Age, gender  |                                   |
|--|-----------------------------------|
| Anthropometry: growth  | weight                            |
| Abdominal circumference  |                                   |
| BMIin  | terpretation                      |
| Risk factors for developing 1                                  | NCDs:                             |
|  |                                   |
|  |                                   |
|  |                                   |
|  |                                   |
| There is a history of NCDs                                     | (Existing NCDs in the anamnesis): |
|  |                                   |
|  |                                   |
| Total vascular rick level by SC Recommendations to the patient | nt for lifestyle correction:      |
|  |                                   |
|  |                                   |
|  |                                   |
|  |                                   |
|  |                                   |
|  |                                   |
| Recommended research metho                                     | ods:                              |
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|  |                                   |
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|  |                                   |
|  |                                   |
|  |                                   |

## TOPIC 6. DIABETES MELLITUS: SIGNIFICANCE, RISK FACTORS, TYPES OF PREVENTION ., ФАКТОРЫ РИСКА, ВИДЫ ПРОФИЛАКТИКИ.

|              | 1.       | Diabetes mellitus – DM) - definition)-                       |
|--------------|----------|--|
|              |          |  |
|              |          |  |
|              |          |  |
|              | 2.       | Type 1 diabetes  |
|              |          |  |
|              |          |  |
|              |          |  |
|              | 3.       | Why is type 1 diabetes called "latent"?                      |
|              |          |  |
|              | 4.       | Type 2 diabetes  |
|              | , ,      |  |
|              |          |  |
|              |          |  |
|              | <u> </u> | Gestational age SD card holder                               |
|              |          |  |
|              | 0.       | «Prediabetes»  |
|              |          | Under what criteria is the diagnosis of "metabolic syndrome" |
| 1 \          |          | established?   |
|              |          |  |
| 2) _<br>3) _ |          |  |
|              |          |  |
| 4) <u> </u>  |          |  |
| 5)           |          |  |

|                               |             |                        |         | <br> |  |
|-------------------------------|-------------|------------------------|---------|------|--|
|                               |             |                        |         | <br> |  |
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|                               |             |                        |         | <br> |  |
|                               |             |                        |         |      |  |
|                               |             |                        |         |      |  |
| P.FR of ty                    | pe 2 diabet | es develo <sub>l</sub> | oment : |      |  |
| O.FR of ty                    | pe 2 diabet | es develo <sub>l</sub> | oment : |      |  |
| O.FR of ty                    | pe 2 diabet | es develo <sub>l</sub> | oment : |      |  |
| O.FR of ty  •                 | pe 2 diabet | es develop             | oment : |      |  |
| O.FR of ty  •                 | pe 2 diabet | es develop             | oment : |      |  |
| 0.FR of ty • •                | pe 2 diabet | es develop             | oment : |      |  |
| 0.FR of ty  • • •             | pe 2 diabet | es develo <sub>l</sub> | oment : |      |  |
| 0.FR of ty  • • • •           | pe 2 diabet | es develo <sub>l</sub> | oment : |      |  |
| 0.FR of ty  • • • •           | pe 2 diabet | es develop             | oment : |      |  |
| 0.FR of ty  • • • • •         | pe 2 diabet | es develop             | oment : |      |  |
| 0.FR of ty                    | pe 2 diabet | es develop             | oment : |      |  |
| 0.FR of ty  • • • • •         | pe 2 diabet | es develop             | oment : |      |  |
| 0.FR of ty  • • • • • • •     | pe 2 diabet | es develop             | oment : |      |  |
| 0.FR of ty  • • • • • • •     | pe 2 diabet | es develop             | oment : |      |  |
| 0.FR of ty  • • • • • • • •   | pe 2 diabet | es develop             | oment : |      |  |
| 0.FR of ty  • • • • • • • • • | pe 2 diabet | es develop             | oment : |      |  |
| 0.FR of ty                    | pe 2 diabet | es develop             | oment : |      |  |
| 0.FR of ty  • • • • • • • • • | pe 2 diabet | es develop             | oment : |      |  |

10. Risk FACTORS for the development of gestational diabetes:

| High-risk factors include:                                   |          |
|--|----------|
| •  |          |
| •  | -        |
| Medium risk factors include:  •                              |          |
| •<br>•   | _        |
| •  | _        |
| 11. Prevention of type 1 diabetes should include::           |          |
| •  |          |
|  | _        |
| 2. Primary prevention measures for type 2 diabetes include:: |          |
| •  |          |
| •  | _        |
| •  |          |
| •  |          |
| 3. risk Group for early carbohydrate metabolism disorders:   |          |
| •  |          |
| •  | <u>-</u> |
| •  |          |
| •  |          |
| •  | _        |
| •<br>•   | -        |

| 15. Pr | inciples of | diet, corr | ection of | eating be | havior:   |         |         |
|--------|-------------|------------|-----------|-----------|-----------|---------|---------|
|        |             |            |           |           |           |         |         |
|        |             |            |           |           |           |         |         |
|        |             |            |           |           |           |         |         |
|        |             |            |           |           |           |         |         |
|        |             |            |           |           |           |         |         |
| 16 Tyr | es of eatin | g disorde  | rs.       |           |           |         |         |
| 1      |             |            |           |           |           |         |         |
|        | •           |            |           |           |           |         |         |
| 2      | •           |            |           |           |           |         |         |
| 3      |             |            |           |           |           |         |         |
| 17. Ca | uses of the | e formatio | -         | _         |           |         |         |
|        | _           |            |           |           |           |         |         |
| 18 F   | xamples o   |            |           |           |           |         | their e |
| 10. L. | ior:        | j recomin  | nenaanor  | is joi pa | iienis io | correct | men e   |

| •   |      |
|---|------|
| •   | _    |
| 19. Recommendations for physical activity:  1) Formula for calculating the max value of heart rate, taking account age: | into |
| 2) How many calories do you need to utilize when "burning" 450 fat?   | g oj |
| 20. What is the goal of tertiary DM prevention?   |      |
| Its main purpose is:  |      |

Write down the solution to the problem on the appropriate form:

#### **TASK**

A man, 40 years old, suffers from diabetes mellitus 2 tops duringu 3 years. The patient's mother is 64 years old, больнаhas type 2 diabetes and hypertension. The father is 67 years old, suffers from hypertension, and suffered a myocardial infarction at the age of 50. My brother was diagnosed with hypertension. Higher education, works as a Manager of a construction company. Smokes 15 cigarettes a day. He doesn't drink much alcohol.

*Objectively:* Height 172 cm, body weight 87 kg. The skin is normal color, moist. Heart tones are clear and rhythmic. Blood PRESSURE – 125/75 mm Hg, heart rate-76 beats /min. The abdomen is soft and painless on palpation. The liver is not palpable, the symptom of beating is negative on both sides.

#### Survey results

**General blood test:** Er-4,  $0x10^{12}/l$ , Lake  $-7.9 \ x^{109}/l$ , p/I - 4%, s/I - 43%, e - 1%, l - 45%, m - 7%, ESR  $-7 \ mm/h$ .

*Urinalysis*: relative density-1023, protein-no, white blood cells-0-1 in the field of vision, red blood cells-0-1 in the field of vision.

**Biochemical blood**test: fasting blood glucose  $-7.1 \text{ mmol/}\pi$ , OXC - 5.6 /l, total cholesterol -5.6 mmol/l, LDL - 3.0 mmol/l.

ECG: sinus rhythm, heart rate-78 beats./ minute.мин.

#### TASK:

- 1. Does the patient have risk factors for developing hypertension? Name them.
- 2. Is diabetes a risk factor for developing hypertension?
- 3. Patient management tactics.

## Creating a response to an issue Advanced preventive counseling

| Age, gender                 |                                  |
|-----------------------------|----------------------------------|
| Anthropometry: height       | weight                           |
| Abdominal circumference_    |                                  |
| BMI                         | interpretation                   |
|                             |                                  |
| Risk factors for developing | ; CNID:                          |
|                             |                                  |
|                             |                                  |
|                             |                                  |
|                             |                                  |
|                             |                                  |
|                             |                                  |
| There is a history of CNID  | US:                              |
|                             |                                  |
|                             |                                  |
| Answer to the 2nd question  | of the task                      |
|                             |                                  |
| NB! level by SCORE          |                                  |
|                             |                                  |
| TT . 1/1                    |                                  |
| Health group                | -4'4 C1'C4 14'                   |
| Recommendations to the pa   | atient for lifestyle correction: |
|                             |                                  |
|                             |                                  |
|                             |                                  |
|                             |                                  |
|                             |                                  |
|                             |                                  |
| Recommended research me     | othods                           |
|                             | :uious                           |
|                             |                                  |
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## TOPIC 7. CHRONIC KIDNEY DISEASE: SIGNIFICANCE, RISK FACTORS, PREVENTION

| /   |  |
|---|--|
|   |  |
|   |  |
| 4. What groups of risk factors are identified in CKD? |  |
|   |  |
|   |  |
|   |  |

| Unmodified ones | Modifiable ones |
|-----------------|-----------------|
|                 |                 |
|                 |                 |
|                 |                 |
|                 |                 |
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|                 |                 |
|                 |                 |
|                 |                 |

| 6. What    | are | tha | elinical | guidelines | for        | gerooni |
|------------|-----|-----|----------|------------|------------|---------|
|            |     |     | Cunicai  |            | <i>Jor</i> | screem  |
|            |     |     |          |            |            |         |
| <i>2)</i>  |     |     |          |            |            |         |
| a)         |     |     |          |            |            |         |
| <i>b</i> ) |     |     |          |            |            |         |
| c)         |     |     |          |            |            |         |
| 2)         |     |     |          |            |            |         |
|            |     |     |          |            |            |         |
| 4)         |     |     |          |            |            |         |
|            |     |     |          |            |            |         |

## Focus of practical prevention measures and management of chronic kidney disease, depending on its stage

| Stage,<br>designation | And characteristics of kidney function | GFR level in adults | Recommended preventive measures |
|-----------------------|--|---------------------|---------------------------------|
| C1                    | High optimal                           | >90                 |                                 |
| C2                    | Slightly reduced                       | 60-89               |                                 |

| C3A | Moderately reduced         | 45-59 |  |
|-----|----------------------------|-------|--|
| СЗВ | Significantly reduced      | 30-44 |  |
| C4  | Sharply reduced            | 15-29 |  |
| C5  | End-stage renal<br>failure | <15   |  |

#### 8. Write the task on the appropriate form:

#### **TASK**

A 38-year-old woman had a sore throat 2 weeks ago. I didn't go to the doctor, I was treated with home remedies (herbs). Allergic history is burdened (Allergy to seafood).

Objectively: the condition is satisfactory. Temperature 37.1°° C. The physique is normosthenic. The skin is usually colored. The peripheral lymph nodes are not enlarged. In the lungs, breathing is vesicular, there is no wheezing. BDD – 18/min. The borders of the heart are not expanded. The heart tones are sonorous, the rhythm is correct. Heart rate – 72 beats./minute.mBlood PRESSURE – 105/65 mm Hg. the Abdomen is soft, painless. Liver at the edge of the costal arch. The symptom of beating in the kidney area is negative on both sides. There is no swelling. Urination and stools are normal.

#### Survey results:

**General blood test:** red blood cells.  $-4.3 \text{ x}^{10\text{-}12}/\text{l}$ , leukocytes-6.7  $\text{x}^{109}/\text{l}$ , p/I-4%, s/I-43%, e-1%, l-45%, m-7%, ESR-18 mm/h.

General analysis of urine: specific gravity-1020, protein-no, sugar-no, white blood cells-1-2 in the field/vision.

#### TASK:

- 1. What are the risk factors for developing kidney pathology in the patient?
- 2. PassumueWhat kidney pathology is possible in the patient? Doctor's tactics for primary prevention (what pathology) ???? in a patient with a sore throat.

## **Creating a response to an issue Advanced preventive counseling**

| ge, gender  |
|---|
| nthropometry: height weight                             |
| MIinterpretation  |
|   |
| isk factors for developing CNID:                        |
|   |
|   |
|   |
|   |
| here is a history of CNIDUS:                            |
|   |
|   |
| lease note!   |
| nswer the 2nd question of the task:                     |
|   |
| ecommendations to the patient for lifestyle correction: |
|   |
|   |
|   |
|   |
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|   |
|   |
|   |
| ecommended research methods:                            |
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## TOPIC 8. DISEASES OF THE BRONCHOPULMONARY SYSTEM (CHRONIC OBSTRUCTIVE PULMONARY DISEASE, BRONCHIAL ASTHMA); SIGNIFICANCE, RISK FACTORS, PREVENTION.

| 2) COPD risk f               | actors                   |                    | ······ |
|------------------------------|--------------------------|--------------------|--------|
| Tab                          | le. Risk factors for C   | OPD .              |        |
| Probability of factor values | External factors         | Internal fact      | tors   |
| Installed                    | _                        | _                  |        |
|                              | _                        |                    |        |
|                              | _                        | _                  |        |
| High                         | _                        |                    |        |
|                              | _                        |                    |        |
|                              |                          |                    |        |
| Possible                     |                          | _                  |        |
|                              |                          |                    |        |
| 3) How to calcu              | ılate the smoker's index | x?                 |        |
|                              |                          | screening studies. | _      |

| 3)<br>4)<br>6) Bronchial asthma (BA) is               | _           |
|---|-------------|
| 7) Principles of COPD treatment in a stable state.    |             |
| 2.  |             |
|   |             |
| 3.  |             |
| 4.  |             |
| 5.  |             |
| 5.  |             |
| 7   |             |
| 8   |             |
| 9.  |             |
| 8) What are asthma INDUCERS?                          |             |
| What are asthma TRIGGERS?                             | -           |
| ) Factors that contribute to the development of asthm | a (inducers |

Table. Factors that contribute to the development of asthma (inducers).

| Factors            | Description |
|--------------------|-------------|
| 1.Internal factors | 1.<br>2.    |

|                         | 3                         |  |
|-------------------------|---------------------------|--|
|                         |                           |  |
|                         | 4.                        |  |
|                         | 1.                        |  |
|                         | 1.1.                      |  |
|                         |                           |  |
|                         | 1.2.                      |  |
|                         |                           |  |
|                         | 2.                        |  |
|                         | 3.                        |  |
| 2.Environmental factors |                           |  |
|                         | 4.1.                      |  |
|                         |                           |  |
|                         | 4.2.                      |  |
|                         |                           |  |
|                         | 5.                        |  |
|                         |                           |  |
|                         |                           |  |
|                         |                           |  |
| 10) Trigger fac         | tors for Bronchial asthma |  |
| 10) Trigger jue         |                           |  |
|                         | Table. BA trigger factors |  |
|                         |                           |  |
|                         |                           |  |
|                         |                           |  |
|                         |                           |  |
|                         |                           |  |
|                         |                           |  |
|                         |                           |  |

11) Primary prevention of ASTHMA (briefly, highlights): Prenatal activities \_\_\_\_\_

| (2) | •             | y: predictors of | 2          |    |          |
|-----|---------------|------------------|------------|----|----------|
| •   |               |                  |            |    |          |
| ,   | Goal<br>thma: | tertiary         | prevention | of | bronchia |

## 14. Write the task on the appropriate form:

## **TASK**

A 45-year-old male who doesn't file any complaints. Smokes 20 cigarettes a day for 12 years. Professional history: works in the foundry for 4 years. The allergic history is not burdened.

Objectively: The skin is normally colored, dry and clean. The physique is normosthenic. The breathing rate is 16 per minute. On palpation, the chest is painless. Respiration is vesicular. Heart tone is rhythmic, heart rate-96 beats./minute.mBlood PRESSURE – 135/75 mm Hg.

The belly is a regular shape. On superficial palpation, the abdomen is soft and painless. The lower edge of the liver protrudes 1 cm from under the edge of the costal arch, on palpation the liver is painless. Dimensions of the liver according to Kurlov: 9x8x7 cm. The spleen is not palpable.

## Survey results

**General blood test:** Erythrocytes  $-4.1 \times ^{10-12}/l$ , Leukocytes- $5.9 \times ^{109}/l$ , p/I-4%, s/I-43%, e-1%, l-45%, m-7%, ESR-8 mm / h.

#### TASK:

- 1. What are the risk factors for COPD in this patient?
- 2. Determine the patient's Smoking index. Is the patient a heavy smoker?
- 3. Patient management tactics?

# Creating a response to an issue Advanced preventive counseling

| Age, gender   |                         |
|---|-------------------------|
| Anthropometry: height   | weight                  |
| BMIinterpre   | etation                 |
| Risk factors for developing CNID:                             |                         |
|   |                         |
|   |                         |
|   |                         |
|   |                         |
|   |                         |
|   |                         |
| There is a history of CNIDUS:                                 |                         |
|   |                         |
|   |                         |
| <b>Please note!</b><br>Answer the 2nd question of the<br>task |                         |
| Recommendations to the patient for                            | · lifestyle correction: |
|   |                         |
|   |                         |
|   |                         |
|   |                         |
|   |                         |
|   |                         |
|   |                         |
| Recommended research methods                                  |                         |
|   |                         |
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|   |                         |

# TOPIC 9. DISEASES OF THE DIGESTIVE SYSTEM: SIGNIFICANCE, EPIDEMIOLOGY, RISK FACTORS, PREVENTION

| !. V       | What is gastro esophageal reflux disease (GERD)? |
|------------|--|
|            |  |
|            |  |
|            |  |
|            |  |
|            |  |
|            |  |
|            |  |
|            |  |
| . <i>F</i> | Factors predisposing to the development of GERD? |
|            |  |
|            |  |
|            |  |
|            |  |
|            |  |
| _          |  |
| _          |  |
| _          |  |
|            |  |
| _          |  |
| _          |  |
|            |  |
|            |  |
|            |  |
|            |  |
|            | Primary prevention of GERD:                      |
|            | Goal:  |
| R          | ecommendations:                                  |
|            | *  |
|            | <u> </u>   |
|            | <b>*</b>   |
|            | *  |
|            | *  |
|            |  |
|            |  |
|            |  |
|            |  |
|            | <b>*</b>   |
|            |  |

| <b>.</b>                               |               |
|--|---------------|
| 4. Secondary prevention of GERD: Goal: |               |
| Recommendations:                       |               |
| 5. Chronic gastritis-definition:       |               |
| 6. Causes of chronic gastritis. Fill i | in the table: |
| Exogenous factors                      | Endogenous    |
| - infection H.Pylori;                  | -             |
| -                                      | -             |
|  | -             |
|  |               |
| -                                      | _             |
|  | -             |
|  | -             |
| -                                      |               |
|  |               |
|  |               |
| _                                      |               |
|  |               |
|  |               |
| 7. CG risk groups: 1                   |               |
|  |               |
| 2                                      |               |
|  | <del></del>   |

| ð. <i>1</i> | revent<br>•  | ion of chroni          | c gastriti. | S.:           |             |               |            |
|-------------|--------------|------------------------|-------------|---------------|-------------|---------------|------------|
|             | • –          |                        |             |               |             |               |            |
|             | *            |                        |             |               |             |               |            |
|             | *            |                        |             |               |             |               |            |
|             | <b>*</b> –   |                        |             |               |             |               |            |
|             | <b>*</b> –   |                        |             |               |             |               |            |
|             |              |                        |             |               |             |               |            |
|             | ••• <u> </u> |                        |             |               |             |               |            |
|             | _            |                        |             |               |             |               |            |
|             | _            |                        |             |               |             |               |            |
|             | <b>.</b>     |                        |             |               |             |               |            |
|             |              |                        |             |               |             |               |            |
|             | *            |                        |             |               |             |               |            |
|             | _            |                        |             |               |             |               |            |
|             | _            |                        |             |               |             |               |            |
|             | _            |                        |             |               |             |               |            |
|             | _            |                        |             |               |             |               |            |
|             | <b>.</b>     |                        |             |               |             |               |            |
|             | <b>*</b> –   |                        |             |               |             |               |            |
|             | _            |                        |             |               |             |               |            |
|             |              |                        |             |               |             |               |            |
|             |              |                        |             |               |             |               |            |
| 9.          | The ess      | ence of seco           | ndary pre   | evention of   | chronic go  | istritis:     |            |
|             |              |                        |             |               |             |               |            |
| 1           | Helicol      | acter pylori           | eradicati   | on scheme     |             |               |            |
| -           |              |                        |             |               |             |               |            |
| 1           | ngort tl     | e missing we           | ords in th  | a tragic sac  | manca of    | nrograssiva   | changas in |
|             |              | nucosa                 | mus in in   | e irugic seg  | juence of p | orogressive ( | munges in  |
| _           |              |                        |             | $\rightarrow$ |             | $\rightarrow$ | →can       |
| 10          | 7,           | nation→<br>ulcer and d | 1           | Joan defini   | ti oza i    |               |            |

# 11. Risk factors for Stomach ulcer and duodenal ulcer? Fill in the table:

| Unmodified ones | Modifiable ones |
|-----------------|-----------------|
| -               | -               |
| -               |                 |
|                 | -               |
|                 | -               |
| -               | -               |
|                 | _               |
|                 | -               |
| -               |                 |
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|                 |                 |
| -               |                 |
| -               |                 |
|                 |                 |
| -               |                 |
|                 |                 |
| -               |                 |

|                 | 12. Risk factors NSAIDs - gastropathies (non-specific anti-inflammatory drugs) |
|-----------------|--|
| 1. <sub>2</sub> |  |
| <b></b> .       |  |
|                 |  |
|                 |  |
| 3.              |  |
| 4.              |  |
|                 |  |
| 5.              |  |
|                 |  |
|                 |  |
| 6.              |  |
|                 |  |
|                 |  |

| 13 Prima                       | ry prevention:                |
|--------------------------------|-------------------------------|
| Goal:                          | y prevention.                 |
|                                | ty areas:                     |
| *                              |                               |
|                                |                               |
| *                              |                               |
| *                              |                               |
| *                              |                               |
| *                              |                               |
| *                              |                               |
| *                              |                               |
| *                              |                               |
| *                              |                               |
| *                              |                               |
| ***                            |                               |
| *                              |                               |
| *                              | nic cholecystitis-definition: |
| *                              | nic cholecystitis-definition: |
| * 14. Chroi 15. Risk j         | aic cholecystitis-definition: |
| <b>*</b><br>14. Chro           |                               |
| 14. Chron  15. Risk j          |                               |
| *  14. Chroi  15. Risk j       |                               |
| 14. Chron  15. Risk j          |                               |
| *  14. Chroi  15. Risk j  *    |                               |
| 14. Chron 15. Risk j           |                               |
| *  14. Chron  15. Risk f  *  * |                               |
| 14. Chron  15. Risk j  *  *    |                               |
| 14. Chron 15. Risk j           |                               |
| 14. Chron 15. Risk f           |                               |
| 14. Chron  15. Risk j          |                               |
| 14. Chron 15. Risk f           |                               |

| *         |   |
|-----------|---|
| *         |   |
| $C_{1}$ 1 |   |
| Cnoie     | lithiasis (GI)- definition:               |
|           |   |
| GI ris    | k factors:                                |
| *         |   |
| *         |   |
| *         |   |
| *         |   |
| *         |   |
|           |   |
| *         |   |
| -         |   |
| *         |   |
| *         |   |
| *         |   |
| *         |   |
| *         |   |
|           |   |
| Preve     | ntion of pathology of the biliary system? |
| 17000     | mon of pullology of the officer's system. |
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## Write the task on the appropriate form:

## **TASK**

Patient S., 57 year sold. He suffers from hip osteoarthritis of 5 Let, constantly takes NSAIDs (diclofenac), also has coronary heart disease, takes 75 mg of acetylsalicylic acid daily. According to the patient, he had a stomach ulcer in his youth.

**Objectively**: height 168 cm, weight 82 kg. The skin is clean and moist, the heart rate is 90 beats/minute, the blood PRESSURE is 145/90 mm Hg, the heart sounds are clear and rhythmic. In the lungs, breathing is vesicular, there is no wheezing. The abdomen is soft and painless on palpation. Stool and diuresis are normal.

## Survey results:

**Total blood count:** Erythrocytes -3,9x10<sup>12</sup>/l, Leukocytes -6,1x10<sup>9</sup>/l, p/i-4%, s/I-43%, e-1%, l-45%, m-7%, ESR – 10 mm/h.

**Biochemical blood test:** TC – 6.5 mmol/l.

### TASK:

- 1. List the patient's risk factors for NSAID-associated gastropathies.
- 2. What other risk factors for gastropathies exist?
- 3. Prevention of the development of gastropathies in the patient.

# Creating a response to an issue Advanced preventive counseling

| Age, gender                             |   |
|---|---|
| Anthropometry: height                   | weight  |
| BMI                                     | _interpretation                                     |
| Risk factors for developing             |   |
|   |   |
| There is a history of There             | is a history of chronic non-communicable diseases : |
| Please note! Answer the 2nd question of | the task :  |
| Recommendations to the pa               | atient for lifestyle correction:                    |
|   |   |
|   |   |
| Recommended research me                 | ethods:   |
|   |   |
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# TOPIC 10. DISEASES OF THE MUSCULOSKELETAL SYSTEM: SIGNIFICANCE, RISK FACTORS, AND PREVENTION.

| 1.               | Medical and social significance of diseases of the musculoskeletal system? |
|------------------|--|
|                  | <u>.</u>   |
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| 2.               | The most common diseases of the musculoskeletal system?                    |
|                  |  |
|                  |  |
|                  |  |
| 3.               | Osteoporosis-definition:   |
|                  |  |
|                  |  |
| <i>4</i> .       | The most characteristic places of fractures in osteoporosis are:           |
|                  |  |
|                  |  |
| 5.               | 1  |
| 5.<br><b>D</b> 1 | How is osteoporosis classified?  rimary OP:                                |
| . ,              | IType  |
|                  | I  |
|                  |  |
|                  |  |
|                  | IIType   |
|                  | II   |
|                  |  |
|                  |  |
| 56               | econdary OP  |
|                  |  |

| Fil       | 7. Risk factors for developing os li in the table: <b>Modifiable and unn</b> | teoporosis?<br>nodifiable risk factors for osteoporosis |
|-----------|--|---|
|           | Unmodified:  | Modifiable:   |
| 1.        |  | 1.  |
| 2.        |  | 2.  |
| 3.<br>4.  |  | 3.  |
| 4.<br>5.  |  | 4.  |
| ٥.        |  | 5.  |
| 6.        |  | 6.  |
| 7.        |  | 7.  |
| 8.        |  |   |
| 9.<br>10. |  |   |
| 10.       |  |   |
|           | 8. Effect of acid-base balance of  | n calcium metabolism:                                   |
| •         | 9. Indications for densitometry:   |   |
| •         |  |   |

| 10.<br> | What measures does primary prevention of osteoporosis include?  |
|---------|---|
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|         |   |
| 11.     | What is an indication for secondary prevention of osteoporosis? |
| 11.     | What is an indication for secondary prevention of osteoporosis? |
| 71.     | What is an indication for secondary prevention of osteoporosis? |
| 11.     | What is an indication for secondary prevention of osteoporosis? |
|         | What is an indication for secondary prevention of osteoporosis? |
| 111.    | What is an indication for secondary prevention of osteoporosis? |
| 11.     | What is an indication for secondary prevention of osteoporosis? |
| 11.     | What is an indication for secondary prevention of osteoporosis? |
| 111.    | What is an indication for secondary prevention of osteoporosis? |
| 11.     | What is an indication for secondary prevention of osteoporosis? |
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| 11.     | What is an indication for secondary prevention of osteoporosis? |
| 11.     | What is an indication for secondary prevention of osteoporosis? |
| 11.     | What is an indication for secondary prevention of osteoporosis? |
| 71.     | What is an indication for secondary prevention of osteoporosis? |
| 11.     | What is an indication for secondary prevention of osteoporosis? |

|     | Nutrition for osteoporosis?   |
|-----|---|
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|     |   |
| 13. | Groups of drugs used for the prevention and treatment of osteoporos   |
| 13. | Groups of drugs used for the prevention and treatment of osteoporosis |
| 13. | Groups of drugs used for the prevention and treatment of osteoporosi  |
| 13. | Groups of drugs used for the prevention and treatment of osteoporosi  |
| 13. | Groups of drugs used for the prevention and treatment of osteoporosi  |
|     |   |
|     | Groups of drugs used for the prevention and treatment of osteoporosis |
|     |   |
|     |   |
| 14. |   |
| 14. | Osteoarthritis (OA) - definition:                                     |

| Genetic resources | Non-genetic ones |
|-------------------|------------------|
|                   |                  |

| 17. Prim  | ary preventic  | on of osteod | urthritis? |  |
|-----------|----------------|--------------|------------|--|
| 17. Prim  | ary preventio  | on of osteod | urthritis? |  |
| 17. Prim  | ary preventi   | on of osteod | urthritis? |  |
| 17. Prim  | ary preventi   | on of osteod | arthritis? |  |
| 17. Prim  | ary preventi   | on of osteod | arthritis? |  |
| 17. Prim  | ary preventi   | on of osteod | urthritis? |  |
| 17. Prima | ary preventi   | on of osteod | arthritis? |  |
| 17. Prima | ary prevention | on of osteod | arthritis? |  |
| 17. Prim  | ary prevention | on of osteod | urthritis? |  |

| 18. Secondary prevention? |  |
|---------------------------|--|
| Recommended:              |  |
| *                         |  |
| *                         |  |
| *                         |  |
| *                         |  |
| *                         |  |
| *                         |  |
| *                         |  |
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# TOPIC 11. TRAUMATISM: CONCEPT, SIGNIFICANCE, CLASSIFICATION OF INJURIES. RISK FACTORS FOR VARIOUS TYPES OF INJURIES. INJURY PREVENTION.

| 1. Types of injuries                                    |  |
|---|--|
| 2. Risk factors for occupational (industrial) injuries? |  |
|   |  |
| 3. Risk factors for domestic and street injuries?       |  |
| 4. Risk factors for road traffic injuries?              |  |
|   |  |
| 5. Risk factors for sports injuries?                    |  |
|   |  |
|   |  |

| 6. Features of epidemiology of child injuries                                |
|--|
|  |
|  |
|  |
|  |
|  |
| 7. Who has higher injuries (men or women) and why?                           |
|  |
| 8. Features of prevention of certain types of injuries:  1) Traffic injuries |
|  |
|  |
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|  |
| 2) Occupational injuries   |
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|  |
| 3) Sports injuries   |
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| 4) Domestic injuries   |
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9. Complete the task on the appropriate form:

## **TASK**

A 59-year-old man, smokes 1 pack of cigarettes a day, abuses alcohol, and his diet is dominated by meat. He is registered at a dispensary for urolithiasis.

**Objectively:** condition on examination is satisfactory. A patient with a hypersthenic. Height-171 cm, weight-92 kg. In the lungs, breathing is vesicular on both sides, there is no wheezing. Heart tones are clear and rhythmic. Heart rate-76 beats / min, blood pressure-130/70 mm. r. t. st. The abdomen is symmetrical, participates in the act of breathing, and is painless on palpation.

Survey results

**General blood test:** Erytrocytes -  $4,1*10^{12}/l$  . Leukocytes- $6,2*10^{9}/l$ , p/i-4%, s/i-43%, e-1%, l-7%, ESR-8 mm/h.

**General urinalysis:** color-light yellow, reaction-acidic, relative density-1013, protein-0.04 g/l, salts-<u>urates +++.</u>

## TASK:

- 1. What are the risk factors for the patient to develop musculoskeletal disorders?
- 2. What pathology of the musculoskeletal system is possible in the patient?
- 3. Patient management tactics.

## Creating a response to an issue Advanced preventive counseling

| Age, gender           |                   |  |
|-----------------------|-------------------|--|
| Anthropometry:        |                   |  |
| height                | weight            |  |
| BMI                   | interpretation    |  |
| Risk factors for the  | e development of: |  |
|                       |                   |  |
|                       |                   |  |
|                       |                   |  |
|                       |                   |  |
|                       |                   |  |
|                       |                   |  |
| There is a history of | of CNIDUS:        |  |
|                       |                   |  |
|                       |                   |  |

Please note!

| Development of what pathology of the musculoskeletal system is possible in the |
|--|
| patient  |
| Recommendations to the patient for lifestyle correction:                       |
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| Recommended research methods:  |
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# TOPIC 12. MALIGNANT NEOPLASMS: MEDICAL AND SOCIAL SIGNIFICANCE, EPIDEMIOLOGY, RISK FACTORS, PREVENTION.

| in men  2) Fill in the table: Directions of primary preventio oncological diseases |  |
|--|--|
|  |  |
| Oncohygienic prevention  |  |
| Biochemical prevention (chemoprophylaxis)  |  |
| Medical and genetic prevention   |  |
| Immunobiological prevention  |  |
| Endocrine and age-related prevention   |  |
| 3) Principles of an anti-cancer (1)  |  |

| 3)  |
|---|
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|   |
| 4)  |
|   |
|   |
| 5)  |
|   |
| 6)  |
|   |
|   |
| 4) Fill in the table: Substances that have a carcinogenic effect  1. Nitrites, heavy metal salts (how do they affect the body?) |
|   |
|   |
| 2. Fats:  |
| o)  |
| 3. Canned and smoked products (what do they contain?)   |
| Camed and smoked products (what do they contain.)   |
|   |
| 1. Carbohydrates (what? what do they lead to and how?)  |
|   |
| 5. Aflotoxins (which food shave the highest content?)   |

| List the oncological diseases that it is advisable to create screening programs for the diagnosis of:  1)                            |                    |  |
|--|--------------------|--|
| <ul> <li>List the oncological diseases that it is advisable to create screening programs for the diagnosis of:</li> <li>1)</li></ul> |                    |  |
| List the oncological diseases that it is advisable to create screening programs for the diagnosis of:  1)                            |                    |  |
| List the oncological diseases that it is advisable to create screening programs for the diagnosis of:  1)                            |                    |  |
| programs for the diagnosis of:  1) 2) 3) 4)  |                    |  |
| programs for the diagnosis of:  1) 2) 3) 4)  |                    |  |
| programs for the diagnosis of:  1) 2) 3) 4)  |                    |  |
| programs for the diagnosis of:  1) 2) 3) 4)  |                    |  |
| 2)   | ) List t           | he oncological diseases that it is advisable to create screening |
| 2)   | •                  | e  |
| <i>3</i> )   | prog               | cams for the diagnosis of:                                       |
| 4)   | prog               | cams for the diagnosis of:                                       |
| /  | progr<br>1)<br>2)  | cams for the diagnosis of:                                       |
|  | programme 1) 2) 3) | rams for the diagnosis of:                                       |

## 7) Principles of secondary cancer prevention:

Fill in the table: Diagnostic methods recommended for screening the most common cancer diseases.

| Diseases                                    | Research method and frequency | Description | Age |
|---|-------------------------------|-------------|-----|
| Cervical cancer                             |                               |             |     |
| Breast cancer                               |                               |             |     |
| Colon and rectal cancer (colorectal cancer) |                               |             |     |

| Prostate cancer         |                |  |
|-------------------------|----------------|--|
| 8) List the cancer<br>1 | r risk groups. |  |
|                         |                |  |
|                         |                |  |
| 3                       |                |  |
| 4                       |                |  |
|                         |                |  |
| 5                       |                |  |
|                         |                |  |

9) Complete the task on the appropriate form.

## **TASK**

The patient is 55 years old. I have a history of stomach ulcers, the last exacerbation was 2 years ago. Osteochondrosis of the thoracic spine without exacerbation. Smokes up to 20 cigarettes a day. The patient's father suffered from CHD.

 $Complaints\ of\ abdominal\ pain,\ weight\ loss.$ 

**Objectively:** the condition is satisfactory. Low nutrition  $BMI - 17.5 \text{ kg/m}^2$ .

During auscultation in the lungs, respiration is vesicular. Heart sounds are clear, rhythmic, heart rate-84 beats./minute.m Blood pressure – 130/70 mm Hg. The abdomen on palpation is soft and painful in the epigastric region. Symptom Pasternatsky negative on both sides.

Survey results:

**Biochemical blood** test: TC - 3.8 mmol/ l, blood glucose 4.0 mmol/ l.

## Creating a response to an issue Advanced preventive counseling

| Age, gender                |                                   |
|----------------------------|-----------------------------------|
| Anthropometry: growth      | weight                            |
| BMI                        | interpretation                    |
|                            | -                                 |
| Risk factors               |                                   |
|                            |                                   |
|                            |                                   |
|                            |                                   |
|                            |                                   |
|                            |                                   |
|                            |                                   |
|                            |                                   |
| There is a history of CNII | DUS:                              |
|                            |                                   |
|                            |                                   |
|                            |                                   |
| D                          |                                   |
| Recommendations to the p   | patient for lifestyle correction: |
|                            |                                   |
|                            |                                   |
|                            |                                   |
|                            |                                   |
|                            |                                   |
|                            |                                   |
|                            |                                   |
|                            |                                   |
| Recommended research m     | nethods:                          |
|                            |                                   |
|                            |                                   |
|                            |                                   |
|                            |                                   |
|                            |                                   |

# TOPIC 13. INFECTIOUS DISEASES: SIGNIFICANCE. PATTERNS OF DEVELOPMENT OF THE EPIDEMIC PROCESS. THE CONCEPT OF IMMUNITY, TYPES OF IMMUNITY. TYPES OF PREVENTION OF INFECTIOUS DISEASES.

| 1. What are the features of infectious pathology at the present stage?                              |
|---|
|   |
|   |
|   |
|   |
| 2. Please indicate the main risk factors that contribute to the development of infectious diseases: |
|   |
|   |
|   |
|   |
| 3. What is an infectious process? How does it differ from the epidemic-process?                     |
|   |
|   |
|   |
|   |
| 4. Epidemic process-definition:   |
| 5. Describe the first link of the epidemic process:   |
|   |

| - person               |                               |                           |
|------------------------|-------------------------------|---------------------------|
| - animals              |                               |                           |
| - external environmen  | ıt                            |                           |
| "both human and anii   | mal                           |                           |
| - both the external en | vironment and animals         |                           |
| 6. Describe the 2 li   | inks of the epidemic process. |                           |
| Mechanism of           | Mechanism of infection        | Factors of infection      |
| transmission           | transmission                  | transmission              |
|                        |                               |                           |
| Fecal-oral             |                               |                           |
| 1 com oren             |                               |                           |
|                        |                               |                           |
|                        |                               |                           |
|                        |                               |                           |
| Aerogenic              |                               |                           |
|                        |                               |                           |
| Transmissive           |                               |                           |
|                        |                               |                           |
|                        |                               |                           |
| Contact number         |                               |                           |
| Contact number         |                               |                           |
|                        |                               |                           |
|                        |                               |                           |
| T7 1                   |                               |                           |
| Vertical               |                               |                           |
|                        |                               |                           |
|                        |                               |                           |
| Artificial             |                               |                           |
|                        |                               |                           |
| 7. What is immunit     | y?                            |                           |
|                        |                               |                           |
|                        |                               |                           |
|                        |                               |                           |
|                        |                               |                           |
| Make your              | own diagram (drawing) of the  | types and "subspecies" of |
| immunity:              |                               |                           |
|                        | Resistance 🖯                  |                           |

## 8. Fill in the table: Preventive and anti-epidemic measures aimed at 3 links of the epidemic process

| Event groups                              | Types of events |
|---|-----------------|
| 1.Activities related to the source of     |                 |
| infection                                 |                 |
|   |                 |
| 2. Activities related to the transmission |                 |
| mechanism                                 |                 |
| 3. Activities related to the susceptible  |                 |
| population                                |                 |
|   |                 |
| 9. Types of immunological prepa           | arations:1)     |
| 2)  |                 |

## Definitions (information for tests).

A bacteriophage is a group of viruses that parasitize bacteria.

A vaccine is a drug that provides the development of active artificial immunity, which creates immunity to the pathogen.

Immunoglobulins are human or animal proteins that have antibody properties.

**Immunoprophylaxis of infectious diseases** is a system of measures implemented to prevent, limit the spread and eliminate infectious diseases through preventive vaccinations.

**Medical immunobiological preparations** – vaccines, anatoxins, immunoglobulins, and other drugs designed to create specific immunity to infectious diseases.

The National calendar of preventive vaccinations is a regulatory legal act that sets the terms and procedure for conducting preventive vaccinations to citizens.

**Post-vaccination complications** – complications caused by preventive vaccinations included in the National Calendar of Preventive Vaccinations, and preventive vaccinations for epidemiological indications-severe and(or) persistent health disorders due to preventive vaccinations.

*Certificate of preventive vaccinations* – a document that registers a citizen's preventive vaccinations.

**Immune sera** are blood products from animals or humans that contain antibodies and are used for the diagnosis, treatment, and prevention of infectious diseases.

A cold chain is a continuously functioning system that provides optimal temperature conditions for storing and transporting vaccines and other

immunobiological preparations at all stages of their journey from the manufacturer to the vaccinated ones.

# TOPIC 14. TUBERCULOSIS: SIGNIFICANCE, EPIDEMIOLOGY, RISK FACTORS, RISK GROUPS. TYPES OF PREVENTION.

| 1. What is tuberculosis? Name the causative agent of tuberculosis.                        |
|---|
|   |
| 2. Who is most at risk of tuberculosis?   |
|   |
|   |
|   |
|   |
| 3. What is meant by the term "multidrug-resistant tuberculosis"?                          |
|   |
|   |
|   |
| 4. What are the clinical manifestations of tuberculosis in children? HIV-positive people? |
|   |
|   |
|   |
| 5. What factors contribute to tuberculosis?   |
|   |
|   |

| 6. Who | at groups of measures does TB prevention include?                                  |
|--------|--|
|        | w is early and timely detection and treatment of tuberculosis patients formed?     |
|        |  |
| 8. Wh  | at are the main measures of sanitary prevention of tuberculosis?                   |
|        |  |
| 9. Ho  | w is tuberculosis vaccination implemented?   |
|        |  |
|        | hat is tuberculin diagnostics? How and to whom is the tuberculin diagnosis formed? |
|        |  |

| <br> | <br> |  |
|------|------|--|
|      |      |  |
| <br> | <br> |  |

## TOPIC 15. CHEMICAL ADDITIONS. ALCOHOL AND RELATED PROBLEMS.

## Write answers to questions about the topic studied:

1. How alcohol affects health: a) disorders of the central nervous system b) disorders of the digestive system b) disorders of the cardiovascular and respiratory systems:

| c) disorders of the endocrine and reproductive systems:   |
|---|
|   |
|   |
|   |
| d) disorders of the urinary system:   |
|   |
|   |
|   |
|   |
|   |
| <ul><li>2. How alcohol affects the fetus (consequences of exposure):</li><li>a) what is FAS</li></ul> |
| b) write the FAS triad  |
| c) what are the differences between FAE and FAS   |
| c) what are the differences between FAE and FAS   |
|   |
|   |
|   |
|   |

- 3. <u>Metabolism</u> involving *alcohol dehydrogenase* normally this is the main metabolic pathway for alcohol, it includes two stages:
  - 1) oxidation to acetaldehyde.

By slowing down the rate of oxidation of ethyl alcohol, resistance to alcohol decreases.

Individuals with genetic low enzyme activity quickly become intoxicated. On the contrary, with increased activity of the enzyme, a person cannot get drunk even with a significant amount of alcohol drunk.

The resulting acetaldehyde is largely toxic, therefore, the faster the second stage of ethanol metabolism proceeds, the less pronounced its toxic effect.

With the accumulation of acetaldehyde during its slow oxidation, the development of intoxication in hangover syndrome is associated. In adolescents, enzymatic oxidation of acetaldehyde is practically absent, so even small amounts of alcohol can cause poisoning.

2) conversion to acetic acid under the influence of acetaldehyde dehydrogenase.

When the process slows down, intoxication is observed, which is all the more pronounced, the more the process is slowed down.

Sign the names of the oxidation products during the transformation (metabolism) of ethyl alcohol in the body:

an enzyme? an enzyme? 
$$C_2H_5OH \rightarrow CH_3 - C = O \rightarrow CH_3 - C = O \rightarrow CO_2 + H_2O$$

H OH

Ethanol

Intermediate ones decomposition products

Intermediate decay product

- 4. Would you recommend alcohol to your patients and why?
- 5. What are the basic principles of alcoholism treatment:
  - 1) medicines (common name)
  - 2) psychotherapeutic techniques
  - 3) other
  - 6. What is your personal relationship with alcohol?
  - 7. Can drinking alcohol cause death?\_\_\_\_\_
  - 8. What are the features of the action of the enzyme *alcohol dehydrogenase* on people of different nationalities:
    - a) Russians \_\_\_\_\_
    - b) Mongoloids
    - c) Europeans

## Test tasks.

Choose one correct answer from the given options

- ♦ What addiction can alcohol use cause?
- a) physical
- b) mental
- c) none, if used for preventive purposes and little by little
- d) both mental and physical
- e) none if there is no genetic predisposition

- ♦ Where is the effect of alcohol primarily directed?
- a) on the cardiovascular system
- b) on germ cells
- c) dividing cells
- d) the central nervous system
- e) on the hepatobiliary system
- ♦ The action (over time) of ethyl alcohol on the body eventually results in
- a) a constant desire to sleep
- b) to a decrease in working capacity, rapid fatigue
- c) to the mental destruction of the personality
- d) thirsty
- e) aversion to smoking
- ♦ Is it more common in chronic alcoholics?
- a) being overweight
- b) underweight
- c) limb hypertrophy
- d) swelling of the lower half of the body at the end of the day
- e) pink cheeks
- ♦ How does alcohol affect the central nervous system?
- a) depressing
- b) exciting
- c) in three stages
- d) in two stages: 1st stage of excitation, 2nd stage inhibition
- e) in two stages: 1st stage of inhibition, 2nd excitation
- ♦ Is it permissible for a pregnant woman to drink alcohol for "prophylactic" purposes?
- a) yes, with initial manifestations of ARI
- b) only in medicines
- c) yes, if there is a strong desire
- d) no way
- e) yes, only in the first trimester of pregnancy
- ♦ What is the effect of ethyl alcohol on the fetus?
- a) in the prophylactic antibacterial action
- b) ethanol does not affect the fetus in the last trimester of pregnancy
- c) ethanol accumulates in the amniotic fluid and is present there even when it is no longer present in the mother's blood
- d) the content of ethanol in the amniotic fluid is directly proportional to its content in the mother's blood

- e) weak alcoholic drinks have a positive effect, as they cause positive emotions in the mother
- ♦ What is the toxicity of ethanol?
- a) in the initial action on the central nervous system by a whole molecule
- b) in the production of the liver enzyme primary alcohol dehydrogenase
- c) in the action on the body of metabolites: acetaldehyde and acetic acid
- d) in the action on the body of metabolites: formaldehyde and formic acid
- e) in the cumulative (accumulation effect) in hepatocytes (liver cells)
- ♦ Why can even small amounts of alcohol cause poisoning in teenagers?
- a) they do not know how to control the dosage
- b) lack of "training"
- c) there is practically no enzymatic oxidation of acetaldehyde
- d) labile (unstable) central nervous system
- e) lack of funds for high-quality alcoholic beverages
- ♦ What is the reason for the presence of hangover intoxication in the morning after drinking alcohol?
- a) with joint smoking while drinking alcohol
- b) the absence of fatty, oily foods in snacks
- c) if you do not drink plenty of liquid
- d) with the accumulation of acetaldehyde during its slow oxidation
- e) genetics

# SMOKING TOBACCO (NICOTINE) AND ITS HARM TO HEALTH.

Test questions for self-study

1. List the substances found in cigarette smoke?

| 2.<br>smokers? | What | diseases fi | rom | various | organs | and | systems | can | occur | in |
|----------------|------|-------------|-----|---------|--------|-----|---------|-----|-------|----|
|                |      |             |     |         |        |     |         |     |       |    |
|                |      |             |     |         |        |     |         |     |       |    |

| 3. | Can pregnant women smoke and why?  |
|----|--|
|    |  |
|    |  |
|    |  |
| 4. | What is the physicochemical mechanism of smoking?                              |
|    |  |
| 5. | What drugs are used to relieve withdrawal symptoms when quitting               |
|    | tobacco?   |
|    |  |
|    |  |
|    |  |
| 6. | Does the WHO recommend e-cigarettes as an alternative to smoking cessation?    |
| 7. | What substances are present in hookah smoke?                                   |
|    |  |
| 8. | List the toxic and carcinogenic substances contained in electronic cigarettes? |
|    |  |
|    |  |
|    |  |

| control?  |                         |   |                       |  |  |  |  |
|---|-------------------------|---|-----------------------|--|--|--|--|
| 10. Write recommendations to avoid weight gain With withdrawal syndrome in tobacco dependence:  |                         |   |                       |  |  |  |  |
| TOPIC 16. NARCOTIC SUBSTANCES AND THEIR IMPACT ON HEALTH. DRUG ADDICTION AND ITS TYPES On the spread of a double sheet of notebook, fill in the table. Characteristics of the main drugs. |                         |   |                       |  |  |  |  |
| Substance name  | Application in medicine | Features of the action of a substance on the body | First aid, antidotes. |  |  |  |  |
| 1.Opiates (opioids) 1) morphine;  |                         |   |                       |  |  |  |  |
| 2) codeine;   |                         |   |                       |  |  |  |  |
| 3) fentanyl;  |                         |   |                       |  |  |  |  |
| 4) methadone;   |                         |   |                       |  |  |  |  |
| 5) tramadol   |                         |   |                       |  |  |  |  |
| 2. Cannabinoids   |                         |   |                       |  |  |  |  |

What are the two main directions of the WHO policy on smoking

9.

3. Cocaine.

3) ecstasy

2)

4. Stimulants:

1) amphetamine;

methamphetamine

| (MDMA)            |  |  |
|-------------------|--|--|
| 5. Hallucinogens: |  |  |
| 1) psilocin and   |  |  |
| psilocybin;       |  |  |
| 2) phencyclidine; |  |  |
| 3) DLC.           |  |  |
|                   |  |  |
| 6. Entheogens     |  |  |

## TOXIC SUBSTANCES AND THEIR EFFECT ON THE HUMAN BODY. TOXICOMANIA AND ITS TYPES.

### Test tasks.

Choose one correct answer from the given options

- ♦ Toxic substances are:
- a) substances that cause toxicosis of pregnant women
- b) substances that cause aversion to food
- c) substances that disturb the normal chemical balance or interfere with the chemical processes occurring in the body
- d) substances that promote detoxification
- e) all drugs in high doses
- ♦ Who needs a detox program?
- a) all children
- b) astronauts
- c) older people
- d) mentally ill
- e) for those who were associated with "harmful" production, for residents of large cities and environmentally unfavorable zones
- ♦ What is the difference between substance abuse and drug addiction?
- a) they are the same
- b) addiction to alcohol is classified as drug addiction, but not to substance abuse
- c) pathological addiction to substances that are not considered as drugs.
- d) routes of administration of substances
- e) complications
- ♦ What are the most common substances used by drug addicts?
- a) smoking mixtures like "Spice"
- b) opioids
- c) alcohol
- d) sedatives or hypnotics
- e) cocaine
- ♦ What are the "volatiles" used by drug addicts?

- a) Phosphacol, atropine, galantamine
- b) ficillin
- c) acyzol, amyl nitrite
- d) gasoline, acetone, toluene, perchlorethylene, stain removers
- e) amphetamine, methamphetamine
- ♦ Which of the following substances is not classified as a drug?
- a) psilocin and psilocybin
- b) spice
- c) LSD
- d) cyclodol
- e) cannabinoids
- ♦ Where are substance abusers treated?
- a) outpatient at the place of residence
- b) in hospitals at the place of residence
- c) in neurological sanatoriums
- d) in drug or mental dispensaries
- e) in isolation wards of a special strict regime
- ♦ What are the main principles of the treatment of substance abuse with seduxen and other tranquilizers?
- a) abrupt and unconditional withdrawal of drugs
- b) begin with a gradual decrease in daily doses of tranquilizers; sleep and mood disorders are eliminated with the help of antipsychotics
- c) the use of blood substitutes
- d) the use of a pressure chamber and physiotherapy
- e) lobotomy
- ♦ What do drug addicts who use gasoline and other "volatile" substances seek to achieve?
- a) restful sleep
- b) problem solving
- c) euphoria and hallucinations
- d) suicide
- e) improving performance and quality of life
- ♦ What is the development of addiction and substance abuse related to?
- a) unhappy life
- b) mental trauma
- c) individual features of the functioning of neurotransmitter systems and their compensatory capabilities during prolonged exposure to substances
- d) from the initial dosage and route of administration
- e) none of the above

## **BASIC LITERATURE LIST**

- 1. Joann G. Elmore, Dorothea M.G. Wild, Heidi D. Nelson, David L. Katz. Jeke'ls Epidemiology, Biostatistics, Preventive medicine, and Public Health.- St.Lous, Missouri: ELSEVIER, 2020. 451 p.
- 2. David L. Katz Joann G. Elmore, Dorothea M.G. Wild, Sean C. Lucan. Jekel's Epidemiology, Biostatistics, preventive medicine, and public health, Student Consult Philadelphia: ELSEVIER, Sauders, 2014,-403 p.

### **FURTHER READING LIST**

- 3. Ющук Н.Д., Маев И.В., Гуревич К.Г. Здоровый образ жизни и профилактика заболеваний. Москва, 2019. С.536.
- 4. С. Н. Алексеенко, В. А. Шашель. Здоровый образ жизни, профилактика заболеваний у детей и подростков: учебное пособие для студентов медицинских вузов Краснодар, 2020.-324с.
  - 5. Ющук Н.Д., Маев И.В., Гуревич К.Г. Здоровый образ жизни и профилактика заболеваний, учебное пособие. М.: изд-во Перо, 2012. 650 с.