



TRENDS AND FEATURES OF SOCIALLY IMPORTANT AND DANGEROUS DISEASES IN DIFFERENT COUNTRIES OF THE WORLD AND IN UKRAINE

*Guidelines to the practical lesson
for students in the specialties 222 "Medicine"
and 228 "Pediatrics" on the course "**Social Medicine,
Public Health (Public Health)**"*

МІНІСТЕРСТВО ОХОРОНИ ЗДОРОВ'Я УКРАЇНИ
Харківський національний медичний університет

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**ТЕНДЕНЦІ ТА ОСОБЛИВОСТІ
СОЦІАЛЬНО ВАЖЛИВИХ
І НЕБЕЗПЕЧНИХ ЗАХВОРЮВАНЬ
В РІЗНИХ КРАЇНАХ СВІТУ ТА В УКРАЇНІ**

*Методичні вказівки
до практичного заняття студентів
спеціальностей 222 «Медицина» та 228 «Педіатрія»
з дисципліни «Соціальна медицина,
громадське здоров'я» (Громадське здоров'я)*

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Trends and Features of Socially Important and Dangerous Diseases in Different Countries of the World and in Ukraine : guidelines for students to the practical lesson **for** students in the specialties 222 “Medicine” and 228 “Pediatrics” on the course “*Social Medicine, Public Health (Public Health)*” / comp. V. A. Ohniev, V. G. Nesterenko, P. O. Tregub. – Kharkiv : KhNMU, 2020. – 32 p.

Compilers V. A. Ohniev
 V. G. Nesterenko
 P. O. Tregub

Тенденції та особливості соціально важливих і небезпечних захворювань в різних країнах світу та в Україні : метод. вказ. до практичного заняття студентів спеціальностей 222 «Медицина» та 228 «Педіатрія» з дисципліни «Соціальна медицина, громадське здоров'я» (Громадське здоров'я) : упоряд. В. А. Огнєв, В. Г. Нестеренко, П. О. Трегуб. – Харків : ХНМУ, 2021. – 32 с.

Упорядники В. А. Огнєв
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LESSON METHODS

The purpose of the lesson:: to acquaint students with the medical and social significance of the most important diseases and the factors that led to their wide distribution among the population of economically developed countries of the world and Ukraine. To describe the features of the organization of health care for patients with these diseases.

Need to know:

types of morbidity, in particular the morbidity of major non-epidemic diseases; an in-depth study of the morbidity of major non-epidemic diseases; features of the morbidity of major non-epidemic diseases in Ukraine and other countries of the world; features of the morbidity of major non-epidemic diseases in certain population groups (age, gender).

Main international and national regulatory documents on the topic:

- WHO report on the global tobacco epidemic, 2008 MPOWER package. – WHO, 2008;
- Report on the situation of noncommunicable diseases in the world, 2010 -Geneva: WHO 2013;
- Health 2020: a European policy framework and strategy for the 21st century (WHO, 2013);
- Action Plan for the implementation of the European Strategy for the Prevention and Control of Noncommunicable Diseases for 2012–2016. – Copenhagen WHO/Europe, 2012;
- WHO Framework Convention on Tobacco Control;
- Fundamentals of the legislation of Ukraine on health care (adopted by the Verkhovna Rada of Ukraine on November 19, 1992 No. 2801-XII);
- On the harmonization of the materials of the National Targeted Social Program for Combating HIV / AIDS for 2014–2018: The Law of Ukraine // Vedomosti of the Verkhovna Rada (VVR). – 2014. – No. 48. – Art. 2055. 99;
- On measures to prevent and reduce the use of tobacco products and their harmful effects on public health: Law of Ukraine of September 22, 2005 No. 2899-IV // Ofits. Bulletin of Ukraine. – 2005. – November 2, No. 42. – S. 51, Article 2642, act code 34098/32005;
- Law of Ukraine "On the fight against tuberculosis" No. 4565-VI of March 22, 2012

Accounting and reporting documentation:

- a report about a patient with a first-ever established diagnosis of active tuberculosis, trichophytosis, microsporia, favus, scabies, trachoma (*f. 089/y*);
- a report about a patient with a first-ever established diagnosis of cancer or other malignant neoplasms (*f. 090/y*);

Need to be able to:

calculate indicators of the incidence of the population of major non-epidemic diseases; analyze calculated indicators; fill out basic medical cards.

Form of the lesson: practical lesson.

Lesson location: training room of the department.

Methodical support of the lesson:

- methodological developments for classes;
- methodical literature: workbook for students (basic training);
- presentation materials;
- test items.

Recommended literature**Basic literature**

1. Little William Chapter 19. Health and Medicine // In: Introduction to Sociology, 1st edition. / W. Little. – Victoria: Rice University, 2014. – 32 p. URL: <https://opentextbc.ca/introductiontosociology/chapter/chapter19-health-and-medicine/>
2. Conrad P, Barker KK The social construction of illness: key insights and policy implications. J Health Soc Behav. 2010;51 Suppl:S67-79. Doi: 10.1177/0022146510383495. URL: <http://www.ncbi.nlm.nih.gov/pubmed/20943584>
3. Fran Baum The New Public Health. 4th edition / F. Baum. Oxford: Oxford University Press, 2016. – 720 p. URL: <https://global.oup.com/academic/product/the-new-public-health-9780195588088?cc=ua&lang=en&>
4. Talbot Lyn, Verrinder Glenda Promoting Health: The Primary Health Care Approach, 6th edition / L. Talbot, G. Verrinder. – Australia: Elsevier, 2017. – 400 p. URL: <https://elsevier.com/books/promoting-health/talbot/978-0-7295-4257-9>
5. Vivian Lin, James Smith and Sally Fawkes Public Health Practice in Australia. The organized effort / V. Lin et al. – Australia: A&U Academic, 2014. – 560 p. URL: <https://www.allenandunwin.com/browse/books/academic-professional/health/Public-Health-Practice-in-Australia-Vivian-Lin-James-Smith-and-Sally-Fawkes-9781743314319>
6. Methodical materials on the subject “Public Health”.
7. Summary of lectures in Social Medicine and Public Health / Kharkiv National Meedical University, Department of Public Health and Healthcare Management

Additional literature

1. Gebbie K, Rosenstock L, Hernandez LM Who Will Keep the public Healthy? Educating Public Health Professionals for the 21st Century / K. Gebbie et al. – Washington D.C.: National Academy Press, 2003. – P. 33–144.

2. Last John M. A Dictionary of Epidemiology 4th edition. Ed. by International Epidemiology Association / J. Last – New York, NY: Oxford, University Press, 2001. – 219 p. URL:
https://pestcontrol.ru/assets/files/biblioteka/file/19-john_m_last-a_dictionary_of_epidemiology_4th_edition-oxford_university_press-usa_2000.pdf
3. Lorber, J. Women Get Sicker, but Men Die Quicker : Gender and Health / J. Lorber. / In Phil. Brown ed. Perspectives in Medical Sociology. – Illinois: Waveland Press, 2000. – P. 40–70.

Information Resources

1. U.S. National Library of Medicine –
<http://www.nlm.nih.gov/>
2. University of West Florida – University libraries. LibGuides. Public Health. Statistics and Data
<https://libguides.uwf.edu/c.php?g=435443&p=2968919>
3. Scientific Library of Kharkiv National Medical University –
<http://libr.knmu.edu.ua/index.php/biblioteki>
4. Vernadsky National Library of Ukraine –
<http://www.nbu.gov.ua/>
7. National Scientific Medical Library of Ukraine –
<http://www.library.gov.ua/>
8. Korolenko State Scientific Library –
<http://korolenko.kharkov.com>
10. Central Scientific Medical Library of Sechenov State Medical University in Moscow –
<http://www.scsml.rssi.ru>

BASIC THEORETICAL MATERIAL FOR PREPARING FOR THE LESSON

Socially significant diseases are among the most pressing issues of our time and have become one of the main threats to public health. The social significance of these diseases requires effective prevention and involvement of not only medical workers, but also the public, authorities, education, culture, etc. Socially significant diseases cause enormous damage to society associated with temporary and permanent disability, the need for huge costs for prevention, treatment and rehabilitation, premature mortality, crime.

Current trends in public health indicate a progressive spread of noncommunicable diseases and risk factors for their development, significant medical and social losses and economic damage. In 2010, 63 % of deaths in the world were caused by noncommunicable diseases, but already in 2017 their share was 68 %. By 2030, this share is projected to increase to 75 %. Particularly menacing is that of all deaths due to noncommunicable diseases, 40 % were premature.

Cardiovascular diseases, oncological diseases, chronic obstructive pulmonary diseases, diabetes, as well as risk factors for their development, play a leading role in shaping the global burden of diseases and mortality rates.

The global burden of noncommunicable diseases is not only a major threat to the health system, but it also impedes social and economic development worldwide.

1. The history of the concept of “socially significant diseases”

The concept of “socially significant diseases” appeared in the 19th century during the era of rapid industrial development. Tuberculosis was considered the main socially significant disease at that time. At the same time, a high incidence rate was associated with difficult working conditions, unsatisfactory living conditions and inaccessibility of medical care. During the historical process, social transformations aimed at improving working conditions, observing safety precautions, improving the quality of life of workers, and the development of medicine have led to a decrease in the incidence of certain diseases of this group.

During the 20th century, especially in its 2nd half, in the economically developed countries of the world a new “non-epidemic” type of population pathology was formed, the main sign of which is that most of the population of these countries dies from causes associated with non-epidemic diseases: diseases of the circulatory system and malignant neoplasms. A significant proportion is mortality from injuries, and mortality from mental disorders is increasing. These are the so-called “diseases of civilization.” In countries, the main cause of mortality is infectious and parasitic diseases, causing the “epidemic type of pathology of the population.” There are countries that occupy an intermediate position and have an “intermediate type of pathology”. In these countries, mortality from chronic non-epidemic diseases is increasing along with high mortality from infectious and parasitic diseases. Thus, the transformation of the pathology of the world’s population has occurred, which has led to the fact that most of the infectious diseases that were the main cause of death of the population have given way to “silent killers of the 21st century” – chronic nonspecific diseases. Among them, the most important socially significant diseases are distinguished, the significance of which is steadily growing.

Since the beginning of the third millennium, the main cause of population death and significant social and economic losses in the developed countries are recognized as circulatory system diseases, malignant neoplasms, endocrine and mental disorders, injuries; in developing countries – tuberculosis, HIV infection/AIDS, malaria.

The analysis of the phrase “socially significant” shows that the diseases of this group are of great importance for society, pose a threat to a large number of people. The concept of socially significant diseases includes a number of diseases that pose the greatest threat to the well-being of the country’s population.

2. The main features of the concept of “socially significant diseases”.

The main signs that are laid down in the concept of a socially significant disease are:

- the mass of the disease, that is, a high level of spread of the disease among the population, including the presence of a significant percentage of "hidden" patients in society;
- high rates of annual increase in the number of patients, diseases of this group have the peculiarity of spreading fairly quickly;
- restriction of the full functioning of the patient in society in the presence of such a disease;
- the danger of disease to others;
- infectious and non-infectious in nature.

In addition, diseases in this category not only destroy human health and the human body, but also entail negative social consequences: loss of family, friends, work, livelihood, etc. A characteristic feature of such diseases is that they take away in the bulk of the life of youth, people of working age. An important feature of socially significant diseases is that if you know how not to get sick and follow certain rules, then the disease can be detected at an early stage of the disease.

3. Medical and social significance of socially significant diseases.

The medical and social significance of these diseases is determined by:

- the growth of their role in the structure of morbidity and mortality;
- their leading role among the causes of disability;
- they cause significant levels of hospitalization
- a significant need for specialized medical care;
- Significant economic costs for treatment and rehabilitation.

All this leads to large economic, social and medical-demographic losses of society, undermines reproductive health, increases the burden on the health care system, poses a threat to the national development of the country, and also negatively affects the condition of the family and personality of the patient.

The prevalence of noncommunicable diseases in the structure of morbidity and mortality is increasing every year. So in 2019, 68 % of deaths were caused by non-communicable diseases, in 2012 their share was 63 %, and by 2030 this share is projected to increase to 75 %.

4. Factors of occurrence and problems of socially significant diseases.

Universal common factors for the emergence of the problem of socially significant diseases or “diseases of civilization and social maladaptation” are that a person created a new environment, unusual for the physiological processes of the body, as a result of hypertrophic or uncontrolled physical activity, which leads to pathological disorders in the body.

Initially, negative factors acquire social factors:

- Change in nutritional features;
- Environmental pollution (air, soil, water);
- Radiation pollution;
- The use of new synthetic materials in industry, construction, in everyday

life;

- Change of rhythms of life, overwork, nervous tension;
- Physical inactivity;
- Excessive technicalization and informatization, which affect the physical and mental health of the population.

To reduce or eliminate the influence of these factors on human health is possible only on the basis of conducting large-scale comprehensive socio-hygienic studies of various levels and increasing the responsibility of everyone for their health.

5. List of socially significant diseases.

The concept of “socially significant diseases” appeared in the era of rapid industrial development. At that time, a high incidence of this sem pathology (primarily tuberculosis) was associated with difficult working conditions, unsatisfactory living conditions and inaccessibility of qualified medical care.

As the course of the historical process has shown, social transformations aimed at improving working conditions and creating safety precautions, improving the quality of life of workers, and the development of medicine have led to a decrease in the incidence of certain diseases from this group. It should be noted that in socially significant diseases at different times, different authors attributed various diseases. In modern conditions, socially significant diseases include:

- Circulatory system diseases;
- Malignant neoplasms;
- Accidents, injuries, poisoning;
- Diabetes;
- Obesity;
- Mental disorders;
- Tuberculosis;
- HIV infection / AIDS;
- Addiction;
- Alcoholism;
- Nicotine addiction and others.

The main role in shaping the global burden of disease and mortality is played by cardiovascular and oncological diseases, as well as chronic respiratory diseases and diabetes. According to WHO, the above diseases account for two-thirds of all deaths in the world (80% in the European Region), the main causes

of most diseases being tobacco use, unhealthy diets, inadequate physical activity and alcohol abuse.

6. Diseases of the circulatory system (ICD-10, class IX, code I00-I99)

According to WHO experts, diseases of the circulatory system are the leading cause of death in developed countries. About 17 million people die from cardiovascular diseases each year, accounting for 31.3 % of all deaths (50 % in the European Region). In Ukraine, circulatory system diseases determine two-thirds of deaths and one-third of causes of disability (in the structure of mortality they account for 67.5 %, in the structure of disability – 32%). In the structure of the prevalence of diseases among the population of Ukraine, they account for 30.99 %, and among the adult population – 37.50 %. In the structure of the primary incidence among the population of Ukraine, they account for 6.99 %, and among the adult population – 10.6 % (2014) The most common cardiovascular diseases are:

- hypertonic disease;
- coronary heart disease;
- cerebrovascular disease.

The prevalence of diseases of the circulatory system in Ukraine amounted to 52718.8 cases per 100 thousand of the total population, and the incidence – 4381.8 cases per 100 thousand of the total population. Among the adult population, the prevalence of diseases of the circulatory system was 63,312.9 cases per 100 thousand people, and the incidence was 5136.3 cases per 100 thousand people.

Lifestyle is the most important risk factor for diseases of the circulatory system, namely: bad habits (smoking and drinking alcohol), obesity, physical inactivity, stress and others.

Organization of medical care for patients with circulatory system diseases.

Primary medical care for such patients is provided by general practitioners – family medicine, who implement preventive measures that ensure early detection of diseases and timely access to specialists (cardiologists, neurologists, etc.). Specialized outpatient cardiological care is provided in the cardiology rooms of polyclinics, while inpatient care is provided in the cardiology departments of city and regional hospitals, where an intensive care and resuscitation unit is necessarily provided. Highly specialized care is provided by cardiological centers, research institutions. Also provided for the spa treatment of cardiological patients, provides various types of rehabilitation of cardiological patients.

7. Malignant neoplasms (ICD-10, class II, code C00-D48)

Malignant neoplasms are one of the most complex scientific, medical and socio-economic problems of mankind. This group of diseases is the second leading cause of death. Malignant neoplasms annually take up 10 million lives

in the world and according to the forecasts of WHO experts, by 2030 this figure will increase in both developed and developing countries. The occurrence of the problem is associated with the aging of the world population and at the age of over 65, mortality from this pathology is 10 times higher than this indicator at a young age.

Mortality from malignant neoplasms is 13 % of all deaths in Ukraine (15–17 % of deaths of people of working age). In Ukraine, mortality from neoplasms is 202.7 cases per 100 thousand. The total population. Mortality from malignant neoplasms has age-gender characteristics, increases with age and reaches maximum levels in the age group of 75–79 years. Mortality of men is much higher than women. The contingent of patients with malignant neoplasms in Ukraine is more than 1 million people. Every year, as a result of these diseases, the country loses more than 90 thousand people, a third of which (35 %) are people of working age. Malignant neoplasms cause 11 years of life lived with disability.

The main causes of death in the male population of Ukraine are neoplasms of the lungs, colon, stomach and prostate, causing 50 % of cancer mortality.

The main causes of death of the female population of Ukraine are neoplasms of the breast, lungs, stomach, colon, cervix and ovaries, which account for 60 % of cancer mortality.

In the European Region, the level of premature mortality from oncopathology remains high, at 70.5 cases per 100 thousand people, and in half of the countries of the European region this group of diseases came out on top in terms of premature mortality, ahead of cardiovascular pathology.

The prevalence of malignant neoplasms in Ukraine is 3965.2 cases per 100 thousand people, and the incidence is 846.0 cases per 100 thousand of the total population. Among the adult population, the prevalence of malignant neoplasms was 4628.0 cases per 100 thousand people, and the incidence rate was 954.1 cases per 100 thousand people. In men, the structure of oncological morbidity is dominated by tumors of the respiratory system, stomach, and prostate gland; in women, cancer of the breast, body and cervix, colon and stomach.

Lifestyle is the most important risk factor for the development of malignant neoplasms, however, for this group of diseases, the complex effect of various factors, including heredity factors, the influence of viruses and environmental influences, is most characteristic.

In Ukraine, a cancer accounting system has been introduced. During the diagnosis for the first time in the life of a diagnosed oncological disease, the clinic doctor fills out a specific registration form (*f. No. 090/y*) and within 3 days sends it to the regional oncological clinic, where all cases are analyzed and submitted in the "Report on the incidence of cancerous tumors". The National Cancer Register of Ukraine has been created in Ukraine.

Organization of medical care for patients with malignant neoplasms. In outpatient facilities, general practitioners – family medicine implement preventive measures that ensure early detection of diseases and timely access to an oncologist, there are survey rooms. For inpatient care for cancer patients, oncology departments of hospitals or separate oncological beds are provided. The main institution for the provision of specialized oncological care is a cancer dispensary, the main tasks of which are the organization and conduct of primary prevention, early diagnosis of cancer, preventive examinations of the population, treatment and clinical follow-up of patients, as well as organizational and methodological support for the activities of oncological institutions. Highly specialized oncological care is provided by research institutions (National Cancer Institute, S. P. Grigoriev Institute of Medical Radiology in Kharkov).

8. Injuries, poisoning and some other consequences of exposure to external causes (ICD-10, XIX class, code S00-T98)

In most countries of the world, the level of injuries is constantly growing, which is associated with global natural disasters, social factors and the rapid development of technology. This type of pathology is the third most important among all causes of death in Ukraine. This group of pathologies is also called external causes of death. In Ukraine, mortality in this pathology group amounted to 87.0 cases per 100 thousand. The most common type of injuries in Ukraine is domestic, after it is street and industrial, and the highest mortality is observed in traffic accidents.

As a result of accidents, injuries and poisoning in Ukraine, more than 60 thousand people die every year, 70 % of which are people of working age. A characteristic feature of mortality from external causes in Ukraine is a striking gender differentiation, which consists in a significant predominance of the mortality rate of the male population over the corresponding mortality rates of the female population, namely five times. The main part in the formation of mortality from external causes belongs to accidental poisoning (formerly alcoholic), suicides and injuries with an undefined purpose. Alcohol poisoning accounts for 70 % of accidental poisoning.

The prevalence of accidents, injuries and poisoning in Ukraine is 4,276.0 cases per 100 thousand people, and the incidence is 4,015.0 cases per 100 thousand people. Among the adult population, the prevalence of accidents, injuries and poisoning amounted to 4,104.5 cases per 100 thousand people, and the incidence rate was 3824.3 cases per 100 thousand people.

Organization of medical care for patients with injuries, poisonings and in accidents. With this type of pathology, often mandatory quick emergency care, the main task of which is to save the life of the victim and deliver him to a specialized institution for further treatment. In Ukraine, ambulance and emergency stations are organized. Trauma centers are of primary importance –

these are emergency trauma departments of territorial outpatient clinics, where the patient is examined and first aid is provided, after which the question of further organization of treatment of the patient is resolved. On an outpatient basis, the patient receives the help of a polyclinic specialist, and for inpatient treatment, the patient is sent to the orthopedics and traumatology department of the city hospital. Also, highly specialized centers are currently being created – ambulance hospitals.

9. Diabetes mellitus (ICD-10, class IV – Endocrine system diseases, eating disorders and metabolic disorders, code E00-E90, diabetes mellitus is of various types and has codes E10-E14)

According to the WHO definition, diabetes mellitus is a serious progressive disease that has a high risk of disabling cardiovascular and microvascular complications. Worldwide, there are 347 million people with diabetes. 3400000 person die every year in the world from the consequences of high blood sugar. Most people with diabetes have the form of a type II disease, in the vast majority of cases it affects overweight people with a sedentary lifestyle. However, the primary incidence rate is increasing not only for this type of diabetes, but also for genetically determined type I diabetes.

In the European Region, about 22.5 million people have diabetes. Adults The prevalence of diabetes in the countries of the European Region reaches 3.1 % of the population, and mortality from diabetes mellitus was 11.3 cases per 100 thousand people. A 50 % increase in mortality is projected if urgent measures are not taken in the next decade.

In Ukraine, 1,200,000 people suffer from diabetes, the prevalence rate was 2,790.7 cases per 100 thousand people, and the incidence rate was 231.5 cases per 100 thousand people. About 100 thousand new cases of the disease are registered annually.

Diabetes mellitus accounts for 3 % of the primary disability of the adult population of Ukraine.

The main risk factors for type II diabetes mellitus are obesity, metabolic disorders, old age, and for type I diabetes mellitus it is a hereditary predisposition and lifestyle factors that lead to absolute insulin deficiency as a result of destruction of pancreatic beta cells (viral infections, high carbohydrates and fats in food, chemicals that cause pancreatic cell death).

A registry of patients with diabetes is functioning in Ukraine, which is a necessary condition for providing such patients with insulin preparations.

Organization of medical care for patients with diabetes. General practitioners – family medicine implement preventive measures and provide early detection of diabetes and timely treatment to an endocrinologist. Specialized endocrinological care is provided in endocrinology clinics, while inpatient treatment is provided in the endocrinology departments of city and

regional hospitals. Also, on the basis of hospitals and dispensaries, offices have been organized for the prevention of diabetes complications, namely, “diabetic foot cabinets”. Endocrinological centers – research institutions (Danilevsky Institute of Endocrine Pathology Problems in Kharkov) provide highly specialized assistance. A big problem was diabetes of pregnant women, in connection with which specialized departments of pathology of pregnant women were organized to provide assistance to pregnant women with diabetes on the basis of city hospitals. Groups for kindergartens and boarding schools have been created for children with diabetes, where conditions are created not only for teaching and staying for children, but also for round-the-clock medical monitoring of them in order to create conditions for monitoring blood glucose levels, treatment and optimal compensation diabetes. Sanatorium treatment of endocrinological patients is also provided.

10. Obesity (ICD-10, class IV – endocrine system diseases, eating disorders and metabolic disorders, code E00-E90, obesity and other types of excess food have code E65-E68)

Obesity is the excess deposition of adipose tissue in the body. Obesity leads to an increased risk of developing diabetes mellitus, myocardial infarction, cholelithiasis, etc., causes an increase in indicators of general morbidity and mortality. According to Dutch scientists, obesity shortens a person’s life by an average of 7 years.

According to world statistics, 10 % of men and 14 % of women aged 18 years and older suffered from obesity. Overweight had 42 million children under 5 years. As a result, more than 2,800,000 people die each year due to overweight and obesity. An increase in body mass index increases the risk of heart disease, stroke and diabetes, and certain types of cancer. In the European, Eastern Mediterranean and American regions, according to WHO, more than 50 % of women are overweight. Obesity is more common in women and increases with age.

In Ukraine, the problem of the prevalence of overweight among the population due to a variety of reasons is of particular importance. According to WHO estimates, 53 % of Ukrainian people are overweight, including 50.5 % of men and 56.0 % of women. At the same time, 21.3 % of the population were obese, including 15.9% of men and 25.7 % of women, and obesity – 11 % and 20.4 %, respectively.

The prevalence of obesity is due to an unhealthy diet, which is dominated by foods high in sugar and fats and low in vitamins and minerals, as well as psychological eating disorders. By the average number of calories per person per day, Ukraine ranks twenty-eighth among European countries with an indicator of 3198 kcal. A change in the way of transportation due to

urbanization, a sedentary lifestyle contribute to low physical activity, and stress and bad habits exacerbate the problem of obesity.

Organization of medical care for patients with obesity. Medical assistance involves consultation, observation and treatment with an endocrinologist, and general practitioners – family medicine provide early detection of obesity and the timely access to a specialist. Specialized endocrinological care for patients with obesity is provided in endocrinology clinics, in the endocrinology departments of city and regional hospitals. Endocrinological centers – research institutions (Danilevsky Institute of Endocrine Pathology Problems in Kharkov) provide highly specialized assistance. Sanatorium treatment of patients with obesity is also provided.

11. Mental disorders (ICD-10, Grade V – mental disorders and behavioral disorders, code F00-F99)

Mental disorders are a state of the psyche that is different from a normal healthy one, therefore the definition of mental health, which is considered in conjunction with mental well-being, is important. Thus, mental health and well-being is an essential component of a high quality of life, which allows a person to consider his life to be full and meaningful, allows him to be an active and creative member of society.

The prevalence of mental disorders in Europe is 4.6 cases per 100 thousand of the population, and according to experts, is constantly growing. This is facilitated by rapid changes in the conditions of modern life, urbanization. Structural changes in families, as well as an aging population. Mental disorders are often associated with somatic. The mortality rate from mental and behavioral disorders in Ukraine is 3.6 cases per 100 thousand of population. From a WHO perspective, the most significant mental disorders include:

- depression;
- dementia (memory loss);
- suicide.

Also the most common mental disorders in adults are:

- dependence on alcohol and psychoactive substances;
- eating disorders (anorexia, bulimia);
- sexual problems;
- sleep disorders;
- personality disorders;
- schizophrenia;
- Alzheimer's disease.

Socially vulnerable groups of the population are identified, namely adolescents, unemployed, single, elderly people who have a high risk of developing mental disorders. The risk factors for the development of this

pathology include destabilization of society, the spread of bad habits (alcoholism, drug addiction), an unhealthy lifestyle, and uncertainty about the future.

Organization of medical care for patients with mental disorders. Patients with this pathology receive specialized psychiatric care. Infrastructure includes drug treatment facilities, neuropsychiatric dispensaries, specialized psychiatric hospitals. The work of primary health care institutions is important in identifying, early diagnosing mental disorders and referring such patients to specialists. Along with psychiatric care, an important link is psychotherapeutic assistance to the population, which people can receive in the psychotherapeutic rooms of polyclinics.

12. Tuberculosis (ICD-10, I class –some infectious and parasitic diseases, code A00-B99, tuberculosis has code A15–A19)

Tuberculosis is a socially dangerous disease that is caused by mycobacterium tuberculosis and most often affects the lungs.

Tuberculosis is a disease that has been combated for decades. According to WHO forecasts, in the European Region, tuberculosis cannot be defeated in the next 85 years. The difficulty lies in the fact that there is a direct correlation between the socio-economic development of the country and the level of spread of tuberculosis in it. Firstly, tuberculosis is an infection that requires long-term treatment, and secondly, the spread of tuberculosis is a medical problem by only about 10%, and the rest is a social component.

According to official statistics, now in Europe, an average of about 1 thousand people get tuberculosis every day. Given that in the world every year since 2009, 10 million people suffer from tuberculosis and 2 million die, WHO has identified this situation as an epidemic of tuberculosis. According to the forecasts of this organization, if the situation does not change, then by 2025 the number of TB-infected people will increase to 1 billion people, 150 million will have clinical symptoms of the disease and 36 million may die. Every hour in Ukraine, one person dies from this disease, and four become infected. In the absence of treatment, a patient with active tuberculosis can annually infect an average of 10 to 15 people.

The incidence and mortality from tuberculosis in the European Region is 51.0 and 7.0 per 100 thousand people, respectively.

The incidence of tuberculosis in Ukraine is 70.4 per 100 thousand of the total population and 7.4 per 100 thousand of the child population (0–14 years). The highest incidence rates are recorded in the age group of 50–59 years, mainly in men and the incidence rate of children under the age of 14 is increasing. Adverse is the increase in the primary disability indicator for tuberculosis, especially for people of working age.

The particularities of the epidemic (patients recognize 1 % or more of the country's population) of tuberculosis in Ukraine is that it combines three

components: the epidemic of ordinary tuberculosis, which is treated by traditional methods, the epidemic of multidrug-resistant tuberculosis and the epidemic of tuberculosis/HIV co-infection. The causes of the tuberculosis epidemic are:

- unemployment, poverty, malnutrition, unhealthy lifestyle, which leads to a decrease in the quality of life;

- increase in the number of people without a fixed place of residence, congestion in prisons;

- alcoholism, drug addiction;

- unfavorable environmental situation;

- insufficient funding for TB measures;

- multidrug-resistant tuberculosis, HIV/AIDS;

and also

- adaptation of the causative agent of tuberculosis to the used anti-tuberculosis drugs by developing resistance, which leads to low efficiency of treatment of patients;

- reduced resistance of the human body as a result of the spread of immunodeficiency conditions caused by the HIV/AIDS pandemic.

The spread of tuberculosis leads to reduced life expectancy, increased mortality, temporary and permanent disability, an increase in the required volume of medical services, social inequality and discrimination. Therefore, an indicator of the country's social well-being is a favorable government approach to the problem of tuberculosis incidence.

Organization of medical care for patients with tuberculosis. Of great importance in solving the problem of tuberculosis is prevention, namely *medical* (vaccination, chemoprophylaxis), *sanitary and epidemiological* (ongoing and final disinfection, sanitary and educational work) and *social* (active identification of tuberculosis patients and people with an increased risk of infection, as well as a solution social problems of society, which will lead to lower morbidity and mortality from tuberculosis). Vaccination is the primary prevention of tuberculosis and is carried out by vaccination with BCG vaccine at birth, with revaccination at 7 and 14 years after tuberculin diagnostics (Mantoux test). From the age of 15, fluorography is additionally used. Secondary prophylaxis is carried out by persons who have had contact with sick bacteriological isolators and consists in treatment within 3 or 6 months. The main way for the timely detection of tuberculosis is to seek medical help at outpatient facilities. Many of these institutions have TB clinics, so general practitioners – family medicine, when suspected of having tuberculosis, refer the patient to a TB doctor. When a patient with tuberculosis is identified, he is sent to a TB dispensary, the main tasks of which are the treatment and medical examination of such patients. Treatment can be provided on an outpatient basis and/or in a hospital setting of a TB dispensary, as well as in tuberculosis hospitals. A doctor who discovered a

patient with tuberculosis, regardless of his specialization, is required to fill out a special medical document within 3 days – a report on a patient with a newly diagnosed active tuberculosis disease and send this document to a TB dispensary to record and control all cases of diseases and organize treatment preventive measures. Tuberculosis patients are treated according to standard protocols. It is important spa treatment in special tuberculosis sanatoriums.

13. HIV infection/AIDS (ICD-10, Grade I – some infectious and parasitic diseases, code A00–B99, HIV infection/AIDS has code B20–B24 – Disease caused by human immunodeficiency virus)

The modern definition of HIV infection defines it as a viral disease, which is based on immunodeficiency, which causes the development of concomitant infections and oncological processes. AIDS is the last stage of HIV infection; it can be congenital or acquired.

The world is currently experiencing an HIV pandemic. In terms of the number of cases, Africa is considered the world center of the epidemic. HIV remains one of the main problems of global public health protection: to date, it has claimed more than 34 million human lives. Every year, 1.2 million people worldwide die from HIV-related causes. There were approximately 36,900,000 people with HIV in the world, and 2,000,000 people in the world become infected with HIV each year.

HIV is also a major risk factor for developing active tuberculosis. Among the HIV-infected population, there are approximately 360,000 deaths from tuberculosis. This is 25 % of the estimated 1.5 million deaths from HIV this year.

In Ukraine, according to the Ukrainian Center for Socially Dangerous Disease Control of the Ministry of Health of Ukraine, 15 808 new cases of HIV infection were registered (of which 2961 were children under 14 years old). Since 1987, 280,297 new cases of HIV infection have been officially registered in Ukraine; 38,128 people have died from AIDS in Ukraine. Ukrainians most often become infected through unprotected sex. If in 2005 33 % of people who were infected with HIV were infected through sexual contact, in 2012 this percentage increased to 51. In 2015, this figure was 60 percent. Most cases of HIV infection in Ukraine today are recorded in young people from 15 to 30 years old.

Ukraine remains the leader in Europe in terms of the spread of HIV infection. According to experts, about 290,000 people live in Ukraine with HIV infection. And only every second knows about his diagnosis. As of October 1, 2015, there were 127,377 HIV-positive patients registered in Ukraine.

Organization of medical care for patients with HIV/AIDS. To establish a diagnosis of HIV/AIDS, it is necessary to test the patient's blood, which is carried out in HIV diagnostic laboratories, a network of which is created in Ukraine. At the primary level, assistance in the prevention, detection and diagnosis of HIV/AIDS is provided by general practitioners – family medicine.

The main structural unit for the provision of specialized medical care is specialized centers for the prevention and control of HIV/AIDS. These medical and preventive institutions carry out an initial examination and registration of patients with a newly diagnosed diagnosis, provide planned, emergency and consultative care, direct them to hospitalization and monitor the treatment process. On the basis of such centers, Trust offices operate, which also conduct anonymous qualified screening and diagnosis of HIV/AIDS, medical examinations and referrals to infectious diseases hospitals. In the terminal stage of the disease, hospices provide assistance to patients.

It is important to examine pregnant women for the presence of antibodies to HIV, and in the case of a positive test, the child born to this woman is also subject to examination (from birth to 18 months, every 3 months).

14. Addiction (ICD-10, class XIX – injuries, poisoning and some other consequences of external causes, code S00-T98, addiction refers to code T40 – drug poisoning and psychodysleptic drugs [hallucinogens])

Addiction is an uncontrolled craving for substances that affect the central nervous system and cause a state of artificial psychological and physical satisfaction. The most common drug addiction in the United States.

There is no single approach to solving the drug problem in the world yet. The most common repressive strategy, however, a total drug ban has shown its lack of effectiveness.

Recently, the policy of liberalization (legalization) of drugs, in particular soft drugs, has become increasingly popular.

New psychoactive substances, the so-called “designer drugs,” are becoming an increasingly serious threat to human health. They do not fall under international control measures, but have a psychoactive effect. In recent years, there has been an increase in the abuse of new psychoactive substances. For example, in Europe, notifications of new substances arrive almost weekly. In the EU alone, 49 new psychoactive substances were registered.

The eternal companion of drug addiction is crime. According to the reporting of the Prosecutor General’s Office of Ukraine “Unified Report on Criminal Violations”, in January-December 2014 more than 529.1 thousand criminal offenses were taken into account, of which almost 30.5 thousand were crimes in the field of drug trafficking.

Narcotization of the population of Ukraine remains an extremely urgent problem. The social portrait of drug users in recent years is quite stable (according to the Ministry of Internal Affairs of Ukraine). These are mainly young people aged 15–27 years, 74 % of them do not work and do not study anywhere, almost 2 % are students of technical schools and vocational schools, 0.4 % are university students. 73 % of drug users are urban residents, but the proportion of rural youth is gradually increasing. Drugs and psychotropic

substances have become indispensable attributes of youth gatherings, parties, discos, concerts of fashionable musical groups.

Routes of drug use by mouth, inhalation and injection. Drug use in Ukraine is focused on substances produced domestically. The most popular narcotic drugs are still opioids, cannabinoids and polynarcotism. According to the data received, the number of injecting drug users in Ukraine is from 278 to 387 thousand people. This is the largest group of drug addicts in Europe, with the exception of Russia.

According to the UN, the prevalence of injecting drug use in Ukraine is at least three times higher than the global average and ranges from 0.88 % to 1.22 %.

Injecting drug use is closely linked to HIV/AIDS. The main route of HIV transmission in Ukraine since 1995. Until 2007, inclusive, was parenteral, mainly due to the injection of drugs. In 2008, there was a change in transmission paths with the dominance of sexual, a tendency to which continues. This is almost 60 % among new cases of HIV infection. The vast majority of the country's population is at risk of HIV / AIDS. However, the parenteral route of HIV infection remains one of the main ones and continues to influence the HIV/AIDS epidemic.

Organization of medical care for patients with drug addiction. Medical assistance to drug-addicted patients in Ukraine is provided by drug treatment clinics. Patients undergo inpatient treatment in the narcological departments of psychiatric hospitals (in the city of Kharkov, city psychiatric hospital No. 15). There are also rehabilitation centers where social rehabilitation methods are used. Religious organizations also provide active assistance in this matter.

15. Alcoholism (ICD-10, XIX class – injuries, poisoning and some other consequences of external causes, code S00-T98, alcohol poisoning has code T51 – toxic effect of alcohol)

Alcoholism is a chronic disease characterized by a painful addiction to alcohol (physical and mental dependence) with alcoholic damage to internal organs.

Alcoholization of the population is an urgent problem of modern society. According to WHO, it increases the risk of developing more than 200 diseases, including cirrhosis of the liver, cancer, and cardiovascular diseases. Alcohol use enhances the development of infectious diseases such as tuberculosis and pneumonia. The proportion of the population leads a sober lifestyle, in Ukraine it is scanty – this is only 2 %.

In Ukraine, the level of alcohol consumption has a negative trend. About 3,300,000 people die each year as a result of alcohol abuse, accounting for approximately 5.9 % of all deaths and 5.1 % of the global burden of disease. More than half of these cases are caused by chronic pathology, including cancer, cardiovascular disease, and cirrhosis.

On average, 6.2 liters of pure alcohol per capita in the world, although there is an uneven distribution across regions. In the whole world, 45 % of men and 55% of women have never consumed alcohol.

Ukraine in the world ranking takes one of the first places in terms of alcohol consumption per capita (15.6 liters), second only to Moldova, the Czech Republic, Hungary and the Russian Federation. Of particular concern is the dominant model of alcohol consumption: the early age of drinking, the frequent use of large doses, mainly hard liquors, with a significant proportion of low-quality and dangerous ones. In terms of consumption of hard liquors, Ukraine ranks seventh in the ranking of European countries. Another new problem is the so-called “beer” alcoholism. Almost 40 % of adolescents regularly drink alcohol. As a result, over 40,000 people die every year from causes associated with alcohol consumption in the country. In 30 % of cases, it is the cause of premature death of Ukrainian men. During the year, 8 thousand alcohol poisonings, about 4 thousand acute alcoholic psychoses, 36.0 thousand new cases of chronic alcoholism, 8 thousand cardiopathies are recorded.

Alcohol is traditionally one of the main causes of car accidents, industrial accidents, injuries etc.

An indicator of the state of an alcohol problem in a country is the prevalence of mental and behavioral disorders. In the 21st century, the trend continues to slowly decrease the number of registered persons with mental and behavioral disorders due to alcohol consumption, registered (preventive and dispensary supervision groups). The prevalence of mental and behavioral disorders due to alcohol consumption is almost 616.2 thousand people, or 1436.0 per 100 thousand of the population.

The medical and social consequences of alcoholism are measured by mortality from alcoholism, the number of accidents, the level of hospitalization of patients with alcoholism. Economic consequences are associated with a decrease in the quality and productivity of work in production, an increase in the level of injuries, and a decrease in the number of able-bodied people. Biomedical consequences are caused by a decrease in life expectancy by 10–20 years, a decrease in the birth rate, an increase in maternal and child mortality, an increase in the morbidity of the population, and a general deterioration in the nation's gene pool. Social consequences are caused by an increase in crime, a decrease in the general intellectual level of society, morality and spirituality, which entails the collapse of the family and orphanhood.

Organization of medical care for patients with alcoholism. The most important task is prevention, the success of which depends on the peculiarities of the mentality, clear moral guidelines and spiritual values of the country's population. Specialized outpatient care is provided in drug treatment rooms of polyclinics and in drug treatment clinics. Inpatient care is provided by

specialized departments of psychiatric and narcological hospitals. An important part of the work is done by anonymous help rooms.

16. Nicotine addiction

Nicotine addiction this is a painful addiction to tobacco smoking, accompanied by deep physical disorders.

Tobacco-related diseases are the biggest threat to public health. It is estimated that one person dies from tobacco-related diseases every six seconds, equivalent to about six million people a year. According to forecasts, by 2030, this figure will increase to 8,000,000 people if decisive measures are not taken to combat this epidemic. Tobacco use is also one of the four main risk factors that underlie the global epidemic of noncommunicable diseases - cancer, cardiovascular disease, lung disease and diabetes. These diseases cause premature death (before the age of 70) of 1,600,000 people, with more than 80% of these cases occurring in low- and middle-income countries.

The loss of population of Ukraine due to tobacco smoking is almost 120,000 people annually. The tendency of “rejuvenation” of nicotineomania and its “feminization” is progressing. These trends are characteristic of all regions of the world, including Ukraine. In our country, among the working-age population, 42 % of men and 26 % of women smoke. From the age of 15, 24 % of men and 8 % of women begin to smoke, and in the period of 15–24 years – 67 % and 60 %, respectively.

Organization of medical care for patients with nicotine addiction. The best solution is primary prevention - all efforts are aimed at ensuring that a person never begins to smoke. The organization of medical care for people with nicotineomania has certain features and difficulties. More than 90 % of smokers are aware of the negative health effects of smoking, but they cannot quit smoking on their own. Psychologists provide assistance to these patients, nicotine replacement therapy is used, significantly reduces the severity of nicotine withdrawal, acupuncture, and hypnosis.

17. Measures to reduce the social significance of diseases of this group

According to many epidemiologists, sociologists, hygienists and others, to reduce the social significance of diseases of this group, in addition to all of the above, it is necessary to provide:

– full functioning of the human in society in the presence of the disease (in particular, diabetes in Japan is a common, but socially insignificant disease, since drug provision and education of diabetes patients is organized in such a way that the average life expectancy of a diabetes patient in Japan is higher than in an ordinary person);

– reducing the number of "hidden" patients and guaranteeing the absence of a significant number of such patients in society. By improving the quality of

diagnosis in the early years, the number of officially registered patients will necessarily increase, however, as a result, the social significance of the disease will be reduced, due to a decrease in the number of fatal and seriously traumatic body effects of the treatment of the disease, due to the beginning of treatment at an early stage, for example, cancer patients.

So, socially significant diseases are a group of diseases that pose a threat to modern society. Today the situation with the spread of socially significant diseases is very serious, it requires the consolidation of many structures, not only state, medical, pedagogical, but also voluntary. Volunteering has great potential in organizing primary prevention, the essence of which is to expand hygienic knowledge among young people, to develop health-saving behavioral strategies in situations involving a risk of infection or the onset of a disease.

18. WHO global action plan for the prevention and control of noncommunicable diseases 2013–2020

Recognizing the devastating effects of noncommunicable diseases on social, socio-economic processes and the state of health and its protection, a declaration was adopted at the global level in 2011 containing clear commitments to reduce the global burden of noncommunicable diseases. One of the important steps in overcoming the epidemic of noncommunicable diseases was the development of the WHO Global Plan of Action for the Prevention and Control of Noncommunicable Diseases 2013–2020. The document includes nine voluntary Global Goals and a global monitoring system.

Global Goal No. 1, according to the WHO Global Plan of Action for the Prevention and Control of Noncommunicable Diseases, is to reduce by 25 % the total mortality from circulatory system diseases, cancer, diabetes and chronic noncommunicable diseases until 2025.

Improving public health and reducing the prevalence of noncommunicable diseases lies in the fight against risk factors. In this context, **Global Goal No. 2** is crucial: reducing the harmful use of alcohol by at least 10 % by 2025.

Global Goal No. 3: Relative increase in physical inactivity by 10 % until 2025. The prevalence of physical inactivity at the global level reaches 31 %, including 28 % in men and 34 % in women. For this reason, about 3,200,000 people die every year in the world. In people with insufficient physical activity, the risk of death from all causes increases by 20–30 %. Regular physical activity reduces the risk of circulatory system diseases, including high blood pressure, diabetes, breast and colon cancers, and depression.

Global Goal No. 4: A relative reduction of 30% in the average salt intake among the population until 2025. There is convincing evidence that excessive salt intake is one of the causes of high blood pressure and diseases of the circulatory system, and a decrease in salt intake to the recommended level (less than 5 g per day) will have a significant positive effect on public health.

The success of the fight against noncommunicable diseases largely depends on the achievement of **Global Goal No. 5**: a relative 30 % reduction in the prevalence of tobacco use among people aged 15 to 2025. Statistics show that nearly 6 million people die annually as a result of direct tobacco use and secondhand smoke. By 2030, their number is projected to increase to 7,500,000, which is 10 % of all deaths. Smoking causes about 71 % of lung cancer cases, 42 % of chronic respiratory diseases, and about 10 % of the circulatory system diseases. In Ukraine, according to a global adult survey of tobacco use in 2010 – 28.8 % of people over the age of 15. Among men, the proportion of smokers was higher (50.0%) than among women (11.2 %). At the same time, 45.4 % of men and 8.9 % of women smoked daily. Smoking accounts for 14.8 % of the burden of disease and 12.8 % of lost healthy lives.

Reducing the prevalence of high blood pressure by 25% or controlling the prevalence of high blood pressure in accordance with national conditions is **Global Goal No. 6**. 40 % of the world's adult population are diagnosed with hypertension. A worldwide prevalence indicator of an increase in blood pressure of more than 140/90 among the population of 18 years and older reached 22 %. Blood pressure causes the development and complication of most diseases of the circulatory system and is the cause of 9,400,000 deaths account for 12.8 % of the total.

Global Goal No. 7 is to stop the growth of diabetes and obesity by 2025.

Based on existing experience and scientific evidence, WHO has identified a number of highly effective strategies and interventions for the prevention of noncommunicable diseases that can be successfully implemented even with limited resources. It is possible to halt the onset of the epidemic if three components of national programs are implemented, namely: *surveillance, prevention, and medical care*. These actions include an integrated approach, multi-stakeholder participation, surveillance and monitoring, profitable investments, strengthening health systems, ensuring sustainable development, strengthening the role of civil society.

Such an organization of surveillance is important when monitoring by type of exposure (risk factors and determinants), results (incidence and mortality) and relevant measures of the health system (practical measures and potential). Sustainable noncommunicable disease surveillance systems should be integrated into national health information systems and have adequate resources. Therefore, **Global Goal No. 8** is to provide, by 2025, at least 50 % of the people who need it with drug therapy and counseling, including glycemic control, to prevent heart attack and stroke.

Global Goal No. 9 envisages the achievement by 2025, both in private and in public health institutions, of 80 % of the availability of basic technologies and essential medicines, including generic drugs needed to treat major non-communicable diseases.

PRACTICAL TASKS

Task № 1.

(Performed individually)

Calculation of incidence rates for major non-epidemic diseases. Students are offered a situational task, based on the data of which it is necessary to calculate the relevant indicators.

Example of a task: In N.'s district, the average annual population in 2014 amounted to 500,000. 265,000 cases of circulatory system diseases were registered, of which for the first time in their lives – 27,000 cases; 20,250 cases of cancer, of which for the first time in their life – 4,350 cases; 22,400 injuries and poisonings; 12,650 cases of diabetes mellitus, of which 1250 for the first time in their life.

Task solving example:

Prevalence of diseases of the circulatory system:

The number of all diseases of the circulatory system registered during the first treatment in the current year (detected both in the current year and in previous years) 265000

$$\frac{\text{Average annual population } 500000}{\text{Average annual population } 500000} \times 1000 = \underline{530.0} \%$$

Prevalence of cancer:

The number of all oncological diseases registered during the first treatment in the current year (detected both in the current year and in previous years) 20250

$$\frac{\text{Average annual population } 500000}{\text{Average annual population } 500000} \times 1000 = \underline{40.5} \%$$

Prevalence of injuries and poisonings:

The number of all injuries and poisonings among the population registered at the first treatment in the current year 22400

$$\frac{\text{Average annual population } 500000}{\text{Average annual population } 500000} \times 1000 = \underline{44.8} \%$$

Prevalence of diabetes mellitus:

The number of all cases of diabetes among the population registered at the first treatment in the current year 12650

$$\frac{\text{Average annual population } 500000}{\text{Average annual population } 500000} \times 1000 = \underline{25.3} \%$$

Primary morbidity of the circulatory system:

The number of diseases of the circulatory system detected for the first time in the current year 27000

$$\frac{\text{Average annual population } 500000}{\text{Average annual population } 500000} \times 1000 = \underline{54.0} \%$$

Primary cancer:

The number of cancers diagnosed for the first time in the current year 4350

$$\frac{\text{Average annual population } 500000}{\text{Average annual population } 500000} \times 1000 = \underline{8.7} \%$$

Primary incidence of diabetes:

The number of cases of diabetes diagnosed for the first time in the current year 1250

$$\frac{\text{Average annual population } 500000}{\text{Average annual population } 500000} \times 1000 = \underline{2.5} \%$$

Table 1

Comparison and analysis of the incidence of the most important non-epidemic diseases of the population of the region (2020)

Data	The general prevalence of certain classes of diseases among the entire population			
	Diseases of the circulatory system	Neoplasm	Injuries, poisoning	Diabetes
Calculated	530,0 ‰	40,5 ‰	44,8 ‰	25,3 ‰
Republican	527,2 ‰	39,6 ‰	42,8 ‰	27,9 ‰

Table 2

Comparison and analysis of primary morbidity the most important non-epidemic diseases of the population of the region (2020)

Region	Primary morbidity among the population by certain classes of diseases		
	Diseases of the circulatory system	Neoplasm	Diabetes
Calculated	54,0 ‰	8,7 ‰	2,5 ‰
Republican	43,8 ‰	8,5 ‰	2,3 ‰

Analysis and conclusions:

In region N, the overall prevalence of such classes of diseases as circulatory system diseases, oncological diseases, and injuries exceeds the average statistics in Ukraine, and the prevalence of diabetes is slightly lower than in Ukraine as a whole. The primary incidence rate in region N is higher than the general in Ukraine for all diseases indicated in the table. The obtained data should be used in the development of measures to optimize medical care for the population in N.

TEST TASKS

- Among the diseases that caused the chronic type of pathology of the population are diseases of the circulatory system. Which of the following diseases of this class takes the first place in the structure of the morbidity of the population of Ukraine?
 - Active rheumatism.*
 - Hypertonic disease.**
 - Diseases of arteries, arterioles and capillaries.*
 - Coronary heart disease.*
 - Cerebrovascular disease.*
- Among the diseases that caused the chronic type of pathology of the population are diseases of the circulatory system. Which of the following diseases of this class takes the second place in the structure of the morbidity of the population of Ukraine?
 - Active rheumatism.*
 - Hypertonic disease.*
 - Diseases of arteries, arterioles and capillaries.*
 - Coronary heart disease.**
 - Cerebrovascular disease.*
- Among the diseases that caused the chronic type of pathology of the population are diseases of the circulatory system. Which of the following

diseases of this class takes the third place in the structure of the morbidity of the population of Ukraine?

- A. Active rheumatism.* *C. Diseases of arteries, arterioles and capillaries.*
B. Hypertonic disease. *D. Coronary heart disease.*
*E. Cerebrovascular disease.**

4. The medical and social significance of circulatory system diseases is determined by large economic losses for society in connection with their leading role in mortality and disability of the population, morbidity with temporary disability, and so on. Determine which of the following place in the structure of mortality of the population of Ukraine is occupied by diseases of the circulatory system?

- A. First place.** *C. Third place.* *E. Fifth place.*
B. Second place. *D. Fourth place.*

5. Circulatory system diseases are the main cause of mortality in Ukraine. Determine which of the following is the proportion of diseases of the circulatory system among all causes of mortality in Ukraine?

- A. up to 30 %.* *C. 45–50 %.* *E. 70% and more.*
B. 30–40 %. *Д. 55–65 %.**

6. Circulatory system diseases play a leading role in the disability of the population. Determine which of the following is the proportion of adults who are first assigned a disability group are people with disabilities with circulatory diseases?

- A. up to 10 %.* *C. 20–29 %.* *E. 40 % and more.*
B. 10–19 %. *D. 30–40 %.**

7. Circulatory system diseases are more common than all others. The most important among them, in addition to coronary heart disease and hypertension, is:

- A. Vegetative-vascular dystonia.* *D. Angina pectoris.*
B. Myocardial infarction. *E. Cerebrovascular disease.**
C. Acute heart failure.

8. The main causes of mortality in Ukraine are diseases of the circulatory system, neoplasms, injuries, accidents and poisoning. Determine which of the following place in the structure of mortality of the population belongs to diseases of the circulatory system.

- A. First place.** *C. Third place.* *E. Fifth place.*
B. Second place. *D. Fourth place.*

9. The main causes of mortality in Ukraine are diseases of the circulatory system, neoplasms, injuries, accidents and poisoning. Determine which of the following place in the mortality structure of the population belongs to neoplasms.

- A. First place.* *C. Third place.* *E. Fifth place.*
*B. Second place.** *D. Fourth place.*

10. Injuries occupy a significant place in the structure of the incidence of the population, leading to large economic losses in the workplace and in society. In addition, socio-medical significance is determined by the fact that injuries:

- A. Is the first cause of death.* *D. Is the fourth cause of death.*
B. Is the second cause of death. *E. Is the fifth cause of death.*
*C. Is the third leading cause of death.**

11. Mortality from malignant neoplasms has age-gender characteristics, it increases with age and reaches maximum levels in:

- A. 65–69 y.o.* *C. 75–79 y.o.** *E. 85–89 y.o.*
B. 70–74 y.o. *D. 80–84 y.o.*

12. Specify the sexual characteristics of mortality from malignant neoplasms in Ukraine:

- A. Mortality among men is higher compared to women in all age groups.**
B. Mortality among women is higher compared with men in all age groups.
C. Mortality is the same for men and women.
D. Mortality among women is higher at working age.
E. Mortality among women is higher at the age of 60 years and older.

13. The problem of tuberculosis is relevant today in Ukraine. Therefore, every doctor should know that the highest morbidity of all forms is inherent in the age group:

- A. 30–39 y.o.* *C. 50–59 y.o.** *E. 70–79 y.o.*
B. 40–49 y.o. *D. 60–69 y.o.*

14. Which of the following types of injuries takes first place in its structure?

- A. Domestic.** *C. Industrial.* *E. Street injuries.*
B. Traffic accidents. *D. Sports.*

15. The main types of injuries are: traffic accidents, industrial, domestic, street, sports. Determine which of the following type of injury takes third place in its structure.

- A. Domestic.* *C. Industrial.** *E. Street injuries.*
B. Traffic accidents. *D. Sports.*

16. One of the main causes of mortality in Ukraine is injuries, accidents and poisoning. Indicate what place this cause occupies in the structure of mortality in Ukraine:

- A. First place.* *C. Third place.** *E. Fifth place.*
B. Second place. *D. Fourth place.*

17. Addiction is rated by the UN as a global phenomenon. Today it has reached almost 100 million people. Which of the following is the first prevalence in the world in?

- A. Afghanistan.* *B. Russia.* *C. USA.** *D. Turkey.* *E. Ukraine.*

18. Acquired immunodeficiency syndrome (AIDS) belongs to the most important problems of morbidity. According to the number of cases, the world center of the epidemic is:

- A. Australia.* *B. Asia.* *C. Africa.** *D. Europe.* *E. India.*

19. The pathology of the population of economically developed countries of the world was determined by the most common socially significant diseases. Determine which of the following diseases belong to this group.

- A. Diseases of the blood and blood-forming organs.*

B. Diseases of the nervous system.

C. Respiratory diseases.

D. Digestive diseases.

*E. Circulatory system diseases.**

20. The pathology of the population of economically developed countries of the world was determined by the most common socially significant diseases. Determine which of the following diseases belong to this group?

A. Urinary system diseases.

D. Digestive diseases.

B. Diseases of the nervous system.

*E. Malignant neoplasms.**

C. Respiratory diseases.

21. Among the diseases, the importance of which is steadily growing in the structure of morbidity and mortality of the population are circulatory system diseases, malignant neoplasms, etc. Determine which of the following diseases also belong to the group of socially significant.

A. Diseases of the blood and blood-forming organs.

D. Digestive diseases.

B. Diseases of the musculoskeletal system.

*E. Mental disorders.**

C. Diseases of the nervous system.

22. Among the diseases, the importance of which is steadily growing in the structure of morbidity and mortality of the population are circulatory system diseases, malignant neoplasms, etc. Determine which of the following diseases also belong to the group of socially significant?

A. Diseases of the blood and blood-forming organs.

B. Diseases of the musculoskeletal system.

*C. Diseases of the nervous system.**

D. Mental disorders.

E. Injuries, poisoning, accidents.

23. The medical and social significance of the most important non-epidemic diseases that determine the pathology of the population of economically developed countries is the large economic losses that these diseases cause to society. Which of the following provisions causes these losses?

A. Their leading role among causes of disability.

B. They cause significant levels of hospitalization.

C. They cause a significant need for specialized medical care.

D. Increasing their role in the structure of mortality and morbidity.

*E. All answers are correct.**

24. Primary care physicians play a significant role in the early detection of malignant neoplasms. What is the deadline for diagnosing a malignant neoplasm, the doctor must fill out and send the registration form 090/o to the oncology dispensary?

A. Immediately.

C. During the week.

E. After re-examination.

*B. No later than 3 days.**

D. Within 10 days.

25. Tuberculosis is an infectious disease. Therefore, its early detection is important. In what term, if a diagnosis of tuberculosis is established, must the doctor fill out and send registration form 089/o to the TB dispensary?

A. Immediately.

D. Within 10 days.

*B. No later than 3 days.**

E. After re-examination.

C. During the week.

26. Among the institutions providing medical assistance to the injured are clinics, hospitals, emergency rooms, etc. Determine which of the following institution takes first place in providing such assistance.

A. Ambulance hospital.

B. Outpatient hospital.

C. Prevention department of outpatient hospital.

*D. Traumatological departments of territorial outpatient facilities.**

E. Traumatological (surgical) departments of hospitals.

27. The structure of the morbidity of malignant neoplasms has sexual characteristics. Which of the following diseases occupies the first place in the structure of the oncological incidence of the male population?

A. Stomach cancer.

*C. Lung cancer.**

E. Liver cancer.

B. Skin cancer.

D. Bladder cancer.

28. The structure of the morbidity of malignant neoplasms has sexual characteristics. Which of the following diseases takes first place in the structure of cancer incidence among the female population?

A. Stomach cancer.

C. Lung cancer.

E. Thyroid cancer.

B. Skin cancer.

*D. Breast cancer.**

29. The main institution for the provision of specialized cancer care in Ukraine is the Oncology Center. Determine which of the following is his task.

A. Treatment and follow-up of patients.

B. Organization and implementation of primary prevention.

C. Conducting preventive examinations of the population.

D. Early diagnosis of cancer.

*E. All answers are correct.**

30. The main focus of the fight against AIDS is prevention, which is conditionally divided into primary, secondary and tertiary. Which of the following is the purpose of secondary prevention?

A. Infection prevention.

*B. Prevention of HIV transmission from patient to healthy.**

C. Preventing the spread of AIDS and sexually transmitted diseases.

D. Public education and training.

E. Specific vaccination.

31. A doctor of a narcological dispensary needs to organize drug prevention activities. Which of the following age groups are most at risk for drug use?

A. Up to 15 y.o.

C. 28–35 y.o.

E. 46 y.o. and older.

*B. 15–27 y.o.**

D. 35–45 y.o.

32. A 26-year-old patient has been drinking alcohol almost daily since he was 16 years old. Twice a week gets drunk to a pronounced degree of intoxication. Over the past 2 years, conflicts at work have become more frequent. Which of the following are the therapeutic and tactical measures for this patient?

*A. Voluntary consultation and treatment with a narcologist.**

B. Psychologist consultation.

C. Referral to a medical labor dispensary.

D. Referral to MSEC to address the issue of working capacity.

E. Compulsory treatment

THE TOPIC QUESTIONS

1. Define the concept of "socially significant diseases" and the history of its occurrence.
2. Describe the "non-epidemic" and "epidemic" types of pathology of the population.
3. Name the main features of the concept of "socially significant disease".
4. What determines the medical and social significance of socially significant diseases?
5. Name the factors of the problem of socially significant diseases.
6. List the main socially significant diseases.
7. Describe the diseases of the circulatory system as a medical and social problem.
8. Describe malignant neoplasms as a medical and social problem.
9. Describe the problem of injury.
10. Describe the problem of diabetes.
11. Describe the problem of obesity.
12. Describe the problem of mental disorders.
13. Describe the problem of tuberculosis.
14. Describe the problem of HIV / AIDS.
15. Describe the problem of drug addiction.
16. Describe the problem of alcoholism.
17. Describe the problem of nicotine addiction.
18. Name measures to reduce the social significance of diseases.
19. Name the Global Goals in line with the WHO Global Plan of Action for the Prevention and Control of Noncommunicable Diseases for 2013-2020.

CONTENT

Lesson methods	3
Basic theoretical material for preparing for the lesson	5
1. The history of the concept of “socially significant diseases”	6
2. The main features of the concept of “socially significant diseases”	7
3. Medical and social significance of socially significant diseases	7
4. Factors of occurrence and problems of socially significant diseases	7
5. List of socially significant diseases	8
6. Diseases of the circulatory system (ICD-10, class IX, code I00-I99)	9
7. Malignant neoplasms (ICD-10, class II, code C00-D48)	9
8. Injuries, poisoning and some other consequences of exposure to external causes (ICD-10, XIX class, code S00-T98)	11
9. Diabetes mellitus (ICD-10, class IV – Endocrine system diseases, eating disorders and metabolic disorders, code E00-E90, diabetes mellitus is of various types and has codes E10-E14).	12
10. Obesity (ICD-10, class IV – endocrine system diseases, eating disorders and metabolic disorders, code E00-E90, obesity and other types of excess food have code E65-E68)	13
11. Mental disorders (ICD-10, Grade V – mental disorders and behavioral disorders, code F00-F99)	14
12. Tuberculosis (ICD-10, I class –some infectious and parasitic diseases, code A00-B99, tuberculosis has code A15–A19)	15
13. HIV infection/AIDS (ICD-10, Grade I – some infectious and parasitic diseases, code A00–B99, HIV infection/AIDS has code B20–B24 – Disease caused by human immunodeficiency virus)	17
14. Addiction (ICD-10, class XIX – injuries, poisoning and some other consequences of external causes, code S00-T98, addiction refers to code T40 – drug poisoning and psychodysleptic drugs [hallucinogens])	18
15. Alcoholism (ICD-10, XIX class – injuries, poisoning and some other consequences of external causes, code S00-T98, alcohol poisoning has code T51 – toxic effect of alcohol)	19
16. Nicotine addiction	21
17. Measures to reduce the social significance of diseases of this group	21
18. WHO global action plan for the prevention and control of noncommunicable diseases 2013–2020	22
Practical tasks	24
Test tasks	25
The topic questions	26
Content	32

Навчальне видання

ТЕНДЕНЦІЇ ТА ОСОБЛИВОСТІ СОЦІАЛЬНО ВАЖЛИВИХ І НЕБЕЗПЕЧНИХ ЗАХВОРЮВАНЬ В РІЗНИХ КРАЇНАХ СВІТУ ТА В УКРАЇНІ

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