

Ministry of Education and Science of Ukraine  
V. N. Karazin Kharkiv National University

**MEDICO-SOCIAL PROBLEMS OF DEMOGRAPHIC PROCESSES.  
FEATURES OF DEMOGRAPHIC INDICATORS IN DIFFERENT  
REGIONS OF THE WORLD, INDIVIDUAL COUNTRIES  
AND IN UKRAINE**

Methodical recommendations  
to prepare 3<sup>rd</sup>–4<sup>th</sup> year students for independent work  
Discipline "Social Medicine, organization of health care"

*Electronic resource*

UDK 614.1(072)

M 46

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M 46 **Medico-social** problems of demographic processes. Features of demographic indicators in different regions of the world, individual countries and in Ukraine: methodical recommendations to prepare 3<sup>rd</sup>–4<sup>th</sup> year students for independent work Discipline "Social Medicine, organization of health care" [Electronic resource] / compilers Oksana V. Bobrova, Nataliia H. Tsukor. – Kharkiv : V. N. Karazin KhNU, 2023. – (PDF 27 p.)

The methodical recommendations set out the main aspects of the medico-social problems of demographic processes in different regions of the world, individual countries and in Ukraine. For 3<sup>rd</sup>–4<sup>th</sup> year students to prepare for independent work in the discipline "Social Medicine, organization of health care".

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## INTRODUCTION

The curriculum of the discipline “Social medicine, organization of health care” is developed in accordance with the Educational Program of specialists’ training at the second (master's) degree for 222 "Medicine" Specialty in the field of knowledge 22 “Healthcare”.

### Characteristics of the academic discipline "Social medicine, organization of health care"

Name indicators	Field of knowledge, direction of training, educational and qualification level	Characteristics of the academic discipline full-time education
3 <sup>rd</sup> -4 <sup>th</sup>	Specialty: 222 "Medicine"	Normative
		A year of training
The total number of hours is 180	Specialty: 222 "Medicine"	3 <sup>rd</sup> -4 <sup>th</sup>
		Semester
The total number of hours is 180	Specialty: 222 "Medicine"	3 <sup>rd</sup> -4 <sup>th</sup>
		Lectures
	Educational and qualification level: master's degree  Qualification: doctor	30 hours
		Practical training
		60 hours
		Independent work
		90 hours
		Type of control
		Differentiated scoring

#### **The purpose of teaching the discipline**

The purpose of the "Social medicine, organization of health care" discipline is to provide sufficient knowledge of research, analysis and evaluation of public health indicators, the health care system and to improve the organization of medical care and public health structure for medical students.

## **RECOMMENDATIONS FOR STUDYING THE TOPIC**

### **Lesson goal:**

To know the definition of demographics and their components, to understand patterns of demographic situation and its special aspects in Ukraine, to interpret factors that impact population reproduction, to be able to fill in records necessary for studying natural change in population, to determine and analyze indicators of natural change in population.

### **As a result of self-training, the student must know:**

- A list of documents that can be used to study performance of Vital
- Procedure for registration of deaths and births in Ukraine
- Methods for determination of total and specific birth rates
- Definition of "natural population growth", "natural movement of the population" and being able to use them.

### **As a result of studying the subject, the student should be able to:**

- Calculate the total and specific mortality
- Complete the medical records used for birth control
- Complete the medical records used for control mortality
- Count rate of natural population movement
- Analyze and effective use of the knowledge and skills.

### **Questions for self-preparation of students for practical training:**

- Documents used to record births
- Documents used to account for mortality
- Documents used to record vital
- General and specific fertility rates
- General and specific mortality
- The demographic situation in Ukraine. Problems and Solutions. The birth and death rates and their dynamics in recent years

## **BASIC THEORETICAL MATERIAL FOR PREPARATION TO THE LESSON**

The current population of Ukraine is 42,386,403 as of Wednesday, March 25, 2020, based on Worldometer elaboration of the latest United Nations data. Ukraine 2020 population is estimated at 43,733,762 people at mid-year according to UN data. According to the World Health Organization, in 2002 Ukraine lagged due to this figure behind the countries of the European Union by 10.9 years. An excess premature mortality has led to a loss of almost 11 years of life. According to the State Statistic Service, in 2011 on the territory of Ukraine with nearly 665 thousand deaths 2.3 thousand people died from accidents related to the influence of natural factors. Essential for Ukraine is also the difference in life expectancy of men (66 years) and women (75.9 years) - about 10 years. The current demographic problems have not only a historical painting, but also long-acting effects. Not all the parameters of future demographic trends can be radically changed. Practically in any form of demographic development Ukraine will face: - Reduction of the total population of the country, especially in the employable age;

- Strengthening of demographic aging and a corresponding increase in the ratio of the number of people of pensionable and employable age;

- Demographic degradation of some rural areas and depressed areas.

The reduction of the population of Ukraine, which started under the influence of the socio-economic crisis, will continue until 2026. Even a measurable improvement in the reproduction of the population will not be able to compensate for the impact on the formation of the population, which is caused by the unfavorable age-old structure.

## **GENERAL ASSESSMENT OF THE MACROECONOMIC SITUATION**

The war in Ukraine has generated a major humanitarian crisis affecting millions of people. The associated economic shocks, and their impact on global commodity, trade and financial markets, will also have a material impact on economic outcomes and livelihoods. Prior to the outbreak of the war the outlook appeared broadly favorable over 2022-23, with growth and inflation returning to normality as the COVID-19 pandemic and supply-side constraints waned. The invasion of Ukraine, along with shutdowns in major cities and ports in China due to the zero-COVID policy, has generated a new set of adverse shocks. Global GDP growth is now projected to slow sharply this year to 3%, around 1½ percentage points weaker than projected in the December 2021 OECD Economic Outlook, and to remain at a similar subdued pace in 2023.

In part, this reflects deep downturns in Russia and Ukraine, but growth is set to be considerably weaker than expected in most economies, especially in Europe, where an embargo on oil and coal imports from Russia is incorporated in the projections for 2023. Commodity prices have risen substantially, reflecting the importance of supply from Russia and Ukraine in many markets, adding to inflationary pressures and hitting real incomes and spending, particularly for the most vulnerable households. In many emerging-market economies the risks of food shortages are high given the reliance on agricultural exports from Russia and Ukraine.

Supply-side pressures have also intensified as a result of the conflict, as well as the shutdowns in China. Consumer price inflation is projected to remain elevated, averaging around 5½ per cent in the major advanced economies in 2022, and 8½ per cent in the OECD as a whole, before receding in 2023 as supply-chain and commodity price pressures wane and the impact of tighter monetary conditions begins to be felt. Core inflation, though slowing, is nonetheless projected to remain at or above medium-term objectives in many major economies at the end of 2023.

The uncertainty around this outlook is high, and there are a number of prominent risks. The effects of the war in Ukraine may be even greater than assumed, for example because of an abrupt Europe-wide interruption of flows of gas from Russia, further increases in commodity prices, or stronger disruptions to global supply chains. Inflationary pressures could also prove stronger than expected, with risks that higher inflation expectations move away from central bank objectives and become reflected in faster wage growth amidst tight labor markets. Sharp increases in policy interest rates could also slow growth by more than projected. Financial markets have so far adjusted smoothly to tighter global financial conditions, but there are significant potential vulnerabilities from high debt levels and elevated asset prices. Challenges also remain for many emerging-market economies, from rising food and energy prices, the slow recovery from the pandemic, high debt, and the potential for capital outflows as interest rates rise in the advanced countries. Risks also remain from the evolution of the COVID-19 pandemic: new more aggressive or contagious variants may emerge, while the application of zero-COVID policies in large economies like China has the potential to sap global demand and disrupt supply for some time to come.

The substantial economic costs of the war, elevated uncertainty, and the forthcoming embargo on coal and seaborne oil imports from Russia in Europe add to the challenges already facing policymakers from rising inflationary pressures and the imbalanced recovery from the pandemic:

- Faced with an adverse supply shock of uncertain duration and magnitude from higher commodity prices, monetary policy should remain focused on ensuring well-anchored inflation expectations. This calls for a differentiated response across the major advanced economies. The case for a relatively quick normalization is particularly strong in the United States, Canada and many smaller European countries, where the recovery in demand from the pandemic is well advanced and broad-based inflation pressures were already apparent ahead of the recent commodity price surge. Removing accommodation more gradually is appropriate in

economies where core inflation is lower, wage pressures remain modest and the impact of the conflict and the future embargo on growth is greatest. Further policy rate increases are likely to be needed in many emerging-market economies to help anchor inflation expectations and avoid destabilizing capital outflows.

- Temporary, timely and well-targeted fiscal measures, where feasible, provide the best policy option to cushion the immediate impact of the commodity and food price shocks on vulnerable households and companies and provide support for refugees from the war. Many countries have appropriately slowed plans for gradual fiscal consolidation in the aftermath of the pandemic, at least until 2023, but consolidation should not be delayed where demand pressures are clearly apparent in inflation. Over the medium and long term, the conflict in Ukraine is raising new fiscal priorities, including accelerated investment in clean energy and higher defense spending, reinforcing the need for a thorough reassessment of the composition of the public finances. Credible fiscal frameworks with strong national ownership can help to provide clear guidance about the medium-term trajectory of the public finances and mitigate concerns about debt sustainability.

- The pandemic and the war in Ukraine have exposed many longstanding structural weaknesses, which have been felt unequally across households, firms and countries. Effective and well-targeted reforms are needed to boost resilience, revive productivity growth, address persisting inequality and accelerate reductions in carbon emissions. International cooperation will need to be preserved to improve prospects for sustainable and equitable longer-term growth by keeping markets open to trade, helping developing countries overcome the COVID-19 pandemic and reduce debt burdens, and enabling more ambitious and effective collective actions on climate change.

The war has underlined the vulnerability of energy and food security given the dependence of many countries on exports from Russia or Ukraine. Substantial, but not complete, diversification of energy sources can be achieved relatively quickly in some countries, as highlighted by the plans for oil and gas imports set out by the

International Energy Agency. Providing regulatory and fiscal incentives to move towards alternative energy sources and invest in innovation and infrastructures are both important steps to help develop clean energy supply and spur energy efficiency. Some progress in this direction has been made in recent public investment plans but more needs to be done to meet the commitments made at COP26. Food security has also become a more pressing concern given the acute risk of economic crises in some developing economies and sharp increases in poverty and hunger. To monitor and mitigate such risks, all countries must provide the assistance necessary to facilitate the planting of new crops, including in Ukraine, tackle logistical barriers limiting the supply of food to countries most at risk, and refrain from export restrictions on food and other agricultural products.

## **ECONOMIC AND SOCIAL SHOCK IN UKRAINE**

The Russian invasion of Ukraine is a humanitarian crisis affecting millions of people. Beyond the tens of thousands of deaths and injuries, close to 7 million people have already been forced to flee Ukraine to other countries in Europe, and an even greater number have been displaced within the country. The war is also a severe economic shock, above all in Ukraine itself, but also in Russia, the neighboring region, and even in more distant parts of the world (OECD, 2022).

The effects of the war are being felt through many channels. Large output declines in Russia and Ukraine directly shrink global economic activity and reduce demand for output from other countries. This effect is relatively modest, given the limited direct role of Russia and Ukraine in global activity and trade, but could still reduce global growth this year by over  $\frac{1}{4}$  percentage point at market prices and by close to  $\frac{1}{2}$  percentage point in PPP terms.

The major influence of Russia and Ukraine on the global economy is via their role as important suppliers in a number of commodity markets. Together they account for about 30% of global exports of wheat, 15% for corn, 20% for mineral fertilizers

and natural gas, and 11% for oil. In addition, global supply chains are dependent on Russian and Ukrainian exports of metals (see below) and inert gasses. The prices of many of these commodities increased sharply after the onset of the war, even in the immediate absence of any significant disruption to production or export volumes.

The surge in commodity prices and the possible disruptions to production will have significant consequences for many economies, particularly emerging-market and developing economies (Box 1.1). A particular concern is that a cessation of wheat exports from Russia and Ukraine could result in serious food shortages in many developing economies. There would be an acute risk not only of economic crises in some countries but also humanitarian disasters, with a sharp increase in poverty and hunger. The food supply shock could be compounded by fertilizer shortages and price rises, with Russia and Belarus major suppliers in many countries, putting agricultural output next year and perhaps beyond under stress.

The war and the sanctions on Russia are also causing disruptions through financial and business linkages.

Sanctions placed on Russia have targeted selected individuals and banks, reduced access to foreign capital and frozen access to the foreign exchange reserves held by the Central Bank of Russia (CBR) in Western economies. Bans have also been imposed on some exports to Russia. As a result, the CBR has tightened monetary policy and imposed capital controls, and risk premia on Russian sovereign debt have widened. Selective export bans and delays and difficulties in making international payments are disrupting trade – Russian imports have plummeted since the start of the war – and could result in formal defaults on dollar-denominated Russian debts, with US banks now prohibited from handling US dollar payments from Russia. Financial market conditions around the world have also tightened, including in many economies in Central and Eastern Europe with relatively strong business ties with Russia. Air and sea traffic have been disrupted (see below) and many multinational companies have suspended operations in Russia.

The refugee flows caused by the war will result in additional public expenditure in the short term in host countries, although this will be offset over time as refugees enter the labor force, helping to alleviate some labor market pressures. The number of people who have already fled Ukraine since the start of the war is several times greater than the annual flow of asylum-seekers into Europe at the height of the Syrian refugee crisis in 2015-16. Supporting the refugees from Ukraine involves upfront spending on housing, food, medical assistance and child care and schooling, along with assistance to help those who stay to enter the labor market. The scale of the spending challenge is difficult to predict due to uncertainty about the number of refugees, the length of time they will stay, and which country they may move to. An illustrative estimate, using current support for refugees, points to a minimum expenditure in European Union (EU) countries of around 0.2% of EU GDP (Box 1.2). This spending could be covered by the resources already made available in various EU funds.

Energy imports by the European economies from Russia are set to fall sharply in 2023. The EU has agreed an embargo on coal imports from Russia, to take effect in August, and an embargo on seaborne oil imports from Russia to begin in 2023. In addition, some countries have, or will, bilaterally end imports of gas and pipeline imports of oil from Russia this year, and Russia has halted gas exports to a few EU member states.

These changes are incorporated in the baseline projections. A Europe-wide end to most oil imports from Russia brings challenges, with petroleum products (including crude oil) accounting for over one-third of total energy use in the EU. Even if alternative supplies can be found on world markets at higher prices and shortages avoided, as assumed in the baseline projections, the embargo is projected to push up inflation and weaken growth, particularly in Europe. The challenges in adjusting to the embargo, the risks of possible adverse supply-side effects and the impact of an additional EU embargo on gas imports from Russia are discussed further below.

## **THE IMPLICATIONS OF COMMODITY PRICE CHANGES AND DISRUPTIONS TO AGRICULTURAL TRADE FOR EMERGING- MARKET ECONOMIES**

The disruptions in commodity markets brought about by the war in Ukraine will likely have strong economic and social impacts on emerging-market economies. Current accounts, and through them the income of the private and public sectors, are being affected by soaring commodity prices, to the benefit of net commodity exporters and the detriment of net importers. In addition, the available quantities of certain commodities are also under strain. Agricultural commodities are of particular concern on this count, since Russia and Ukraine are two major suppliers of cereals and fertilizers.

### **Current account effects**

The current account effects of the commodity price shock depend on countries' net export positions and the size of the price shocks for individual commodities. Both aspects – variation in net exports and the magnitude of the price shock – tend to be larger for energy commodities than for food or metals. An illustrative estimate of the potential annual gains (or losses) from the abrupt price changes that have been observed since the outbreak of the war in Ukraine is shown in Figure 1.2. For each country and commodity, the average net exports-to-GDP ratio over 2015-19 is multiplied by the respective price shock since the invasion of Ukraine, with the effects aggregated by broad commodity categories.

The use of a five-year period helps to minimize the potential sensitivity of the results to exceptional events, such as droughts or strikes. These calculations isolate the impact of trade of selected commodities and do not incorporate possible changes in consumption patterns in response to price changes, or in non-commodity trade that could affect aggregate saving-investment balances. Hence, the depicted gains or

losses should not be regarded as estimates of expected changes in overall current account balances.

Colombia, Indonesia, Russia and Saudi Arabia, all large energy exporters, gain from improvements in their terms of trade. In contrast, Bulgaria, India, Thailand and Türkiye could suffer significant losses.

Bulgaria and Romania benefit from the sharp rise in wheat and maize prices, and Chile from higher metals prices, but these fall short of the costs from rising energy prices. Rising food prices are likely to yield moderate gains to Argentina, but sizable income losses in Egypt and Tunisia.

## DEMOGRAPHIC PROCESSES IN UKRAINE

### Ukraine Population 2023 (Live) - 36,352,642

Ukraine experienced several decades of rapid population growth between 1950 and 1990 when its population was at its highest of 51.46 million people.

Since the 1990s, Ukraine's population has been declining due to high emigration rates, low birth rates, and high death rates. Ukraine's birth rate is 9.2 births per 1,000 people, which has decreased over 2% every year the past several years, and its death rate is 15.193 deaths per 1,000 people.

Many people leave the country because Ukraine is the second-poorest in Europe, is in Russian aggression to Ukraine.

### Ukraine Population Clock

Ukraine Population (as of 3/28/2023)	36,352,642
Next UN Estimate (July 1, 2023)	36,744,634

Births per Day	505
Deaths per Day	1,693
Migrations per Day	4,886
Net Change per Day	3,698
Population Change Since Jan. 1	321,726

The population is currently declining at a rate of 0.59%, a rate that has increased every year since 2015. The United Nations estimates that Ukraine could lose nearly one-fifth of its population by 2050.

<b>Population Rank</b>	41
<b>Growth Rate</b>	-3.74% (237th)
<b>2023 World Percentage</b>	0.46%
<b>Density</b>	63.43/km <sup>2</sup> (148th)
<b>Land Area</b>	579,400

- Net increase of 1 person every 23 seconds
- Population estimates based on interpolation of data from World Population Prospects

### **UKRAINE GROWTH RATE**

**Ukraine's population** is equivalent to 0.56% of the world population.

The population density in Ukraine is 75 per Km<sup>2</sup> (196 people per mil). The total land area is 579,320 Km<sup>2</sup> (223,677 sq. miles). 69.4 % of the population is urban (30,334,632 people in 2020). The median age in Ukraine is 41,2 years.

Demographics in Ukraine and one of the world's most pressing topics latest international and Ukrainian medical discussions underway at all levels. One of the most important demographic indicators are indicators vital that most fully and comprehensively reflect the demographic of society. Economic and social turmoil that our country has experienced in 90 years is reflected in major demographics and affects the performance of natural movement. Unstable socio-economic situations in our time also leads to changes in demographics.

According to the first All-Ukrainian census (2001) there lived 37.5 million Ukrainians, or 77.8% of the total population of the state. There are now 7-8 million Ukrainians living outside the state. Most of them are concentrated in the Russian Federation (2.9 million), Canada (1.1 million) and the USA (about 1 million). According to various estimates, up to 500 thousand Ukrainians live in Western Europe. The largest ethnic minority in Ukraine are Russians. They make up 17.3% of the total population of the state. About 3% of the population of Ukraine is represented by Western (Poles, Czechs, Slovaks) and Southern (Bulgarians) Slavs, Romanic (Moldovans and Romanians), Finno-Ugric (Hungarians and Estonians), and Turkic (Tatars, Crimean Tatars, Azeris, and Gagauz) nations. Jews, Armenians and Greeks belong to the individual ethnic communities in Ukraine. However, the number of inhabitants of each of these specified nationalities in Ukraine does not reach 1% of the total population of the state. After having gone in the first half of the 20th century through difficult tests, which were accompanied by the First and Second World Wars, famines (1921, 1932-1933, 1947), mass repressions of the 1930s-1950s, the deportations, the Chernobyl disaster and the protracted systemic crisis of the 1990s, Ukraine has suffered population losses which constitute, according to some estimates, about 16 million people. The modern demographic crisis in Ukraine is not a purely Ukrainian phenomenon; its causes are due to common civilizational trends of lifestyle changes and reproduction of the population inherent in the developed countries that have implemented the main phases of the demographic revolution in the 20th century. But a purely Ukrainian feature is that the demographic changes in our country have been under a significant negative

impact of the economic crisis of the early 1990s, which greatly accelerated the growth of the negative demographic dynamics. After reaching a maximum number in 1993 (52.2 million) for all years the population decreased by 6.3 million people in 1993-2010. The most destructive modern demographic processes in Ukraine are the falling birth rates and the rising death rates. The birth rate compensates the mortality by 67%, i.e. the reproduction of the population is compensated only by two thirds. In Ukraine, like in the economically developed countries, the decline of birth is accompanied by an increase in the average life expectancy, which holds back the depopulation.

**Into problems of a demography include:** studying of territorial placement of the population, the analysis of tendencies and the processes happening among the population in connection with their social and economic living conditions, existing traditions, ecological, medical, legal and other factors.

**Demographic indicators form** a basis for statistical studying of the population which is conducted in two directions:

- 1) the population characteristic on a certain time-point;
- 2) the characteristic of processes of change of population (dynamics of population movement) which is subdivided into mechanical movement and natural.

**Demographic indicators are used** for a quantitative assessment of health of the population which is conducted in two directions: studying of statistics of the population and dynamics of the population.

**The statistics of the population** is characterized by numerical structure of the population on a certain (critical) time point. It is studied on the following main signs: distribution on a sex, age, social and professional accessory, an education level, relationship status, a nationality, etc.

**The demographics of Ukraine includes statistics** on population growth, population density, ethnicity, education level, health, economic status, religious affiliations, and other aspects of the population of Ukraine. The data in this article are based on the 2001 Ukrainian census which is the most recent, the CIA World Facebook, and the State Statistics Committee of Ukraine. The next census is

scheduled to take place in 2020. The total population of 42,386,403 depicted here excludes the Autonomous Republic of Crimea and Sevastopol which were annexed by Russia in 2014. The total population including those territories is 44,727,181.

#### **4. TEST QUESTIONS FOR SELF-CONTROL**

1. Demographic indicators are all below, except:
  - A) Birth rate
  - B) Mortality
  - C) Infant mortality
  - D) Disability
  - E) The Natural increase
2. Natural movement of the population is characterized by following indicators:
  - A) Mortality, birth rate
  - B) Infant mortality, birth rate
  - C) Migration
  - D) Mechanical movement
  - E) All of the above
3. What data are required for studying indicators of birth rate?
  - A) Number of born children
  - B) Number of live births
  - C) Average annual population
  - D) All of the above
  - E) Number of live births and average annual population
4. What data are needed for studying the overall mortality?
  - A) Number deaths per year
  - B) Number of deaths of infants per year
  - C) Number deaths per year and average annual population
  - D) Average annual population
  - E) Number deaths per year and number of deaths of infants per year
5. Type of a natural increase of the population is typical for Ukraine:

- A) Regressive
- B) Negative
- C) Stationary
- D) Positive
- E) Progressive

6. All these tendencies are characteristic for demographic situation in Ukraine, except:

- A) The negative natural increase
- B) Reduction of the rural population
- C) Population aging
- D) Progressive population type
- E) Reduction the number of population

7. Progressive type of population age structure is characterized by following features:

- A) The number of children exceeds the number of persons older than 50 years
- B) The number of children less than number of persons older than 50 years
- C) The number of children equals than number of persons older of 50 years
- D) The number of middle aged people the most
- E) The number of middle age people equals to number of children

8. The following data are required for calculation of fertility indicator:

- A) Number women of childbearing (fertile) age
- B) Number of live births
- C) Number of stillborn
- D) Number women of childbearing (fertile) age and Number of live births
- E) Number women of childbearing (fertile) age and Number of stillborn

9. Citizen N. was born in the maternity hospital as a healthy full-term baby. On the seventh day after birth the mother and child were discharged. At discharge the mother warned of the need to register her child in the Registry office. How long after childbirth has been done according to the current legislation of Ukraine?

- A) Not later than three months

- B) Not later than three days
- C) Not later than one year
- D) Not later than ten days
- E) Not later than one month

10. One of the major demographic indexes of public health is infant mortality, which characterizes the level of medical securing of pregnant women. What accounting document is filled by a doctor in case of newborn death at the age from 22 weeks till first six days (168 hours) of life?

- A) Medical death certificate (form №106)
- B) Newborn development card (form №097)
- C) Medical certificate of perinatal death (form № 106-2)
- D) Medical assistant's certificate of death (form №106-1)
- E) Prenatal record of maternity hospital, maternity department of hospital (form №113)

Keys: 1 - D, 2 - A, 3 - E, 4 - C, 5 - B, 6 - D, 7 - A, 8 - D, 9 - E, 10 - C.

## 5. SITUATIONAL TASKS

**Task.** Based on the data below, calculate indicators of natural change in population and other demographic indicators:

- Total birth rate indicator
- Special birth rate indicator (fertility)
- Total mortality indicator
- Natural population growth
- Share of men (women)
- Share of children aged 0–14 years.
- Share of population aged more than 50 years.
- Type of age structure of the population
- Demographic burden indicator

In 2022, average population of the city N is 728 000.

This number includes 425 300 men, 346 700 women aged 15–49 years, 143 400 children aged 14 years or less, 154 600 people aged more than 50 years, 405 000 people of unemployable age (children, retired). In the year under review, there have been 6700 live births and 13 200 deaths.

## Appendix 1

Ministry of Health of Ukraine <hr/> Medical facility name and address <hr/> Identification code <table border="1" style="width: 100%; height: 20px; border-collapse: collapse;"> <tr> <td style="width: 20px; height: 20px;"></td> <td style="width: 20px; height: 20px;"></td> <td style="width: 20px; height: 20px;"></td> <td style="width: 20px; height: 20px;"></td> <td style="width: 20px; height: 20px;"></td> <td style="width: 20px; height: 20px;"></td> <td style="width: 20px; height: 20px;"></td> <td style="width: 20px; height: 20px;"></td> <td style="width: 20px; height: 20px;"></td> <td style="width: 20px; height: 20px;"></td> <td style="width: 20px; height: 20px;"></td> <td style="width: 20px; height: 20px;"></td> </tr> </table>													<b>MEDICAL RECORDS</b> <hr/> Form of primary documentation <b>№ 103/r</b> <b>APPROVED</b> by the Order HM of Ukraine <table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 20px; height: 20px; text-align: center;">0</td> <td style="width: 20px; height: 20px; text-align: center;">8</td> <td style="width: 20px; height: 20px; text-align: center;">0</td> <td style="width: 20px; height: 20px; text-align: center;">8</td> <td style="width: 20px; height: 20px; text-align: center;">2</td> <td style="width: 20px; height: 20px; text-align: center;">0</td> <td style="width: 20px; height: 20px; text-align: center;">0</td> <td style="width: 20px; height: 20px; text-align: center;">6</td> <td style="width: 20px; height: 20px; text-align: center;">№</td> <td style="width: 20px; height: 20px; text-align: center;">5</td> <td style="width: 20px; height: 20px; text-align: center;">4</td> <td style="width: 20px; height: 20px; text-align: center;">5</td> </tr> </table>	0	8	0	8	2	0	0	6	№	5	4	5
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<b>MEDICAL BIRTH CERTIFICATE</b> № _____ (issued for the registration in the Registry of civil status)																									
“ _____ ” _____																									
<b>I. I am doctor, (feldsher, midwife),</b> _____ , (surname, first name, middle name)																									
I confirm, that the citizen _____ , (surname, first name, middle name)																									
who lives at address: _____ Region _____ State _____																									
District _____ , populated locality _____																									
street _____ house _____ flat № _____ in _____ - , _____ , _____																									
_____ place _____ medical institution name, at home, other																									
Child was born in _____ year, month _____ , day _____ hour _____																									
Child: male, female (underline) with weight _____ gr. Special information:.....																									
Signature of the physician (midwife, paramedic) _____																									
I agree with above _____ (surname, first name, middle name of mother)																									



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2. <http://www.nlm.nih.gov/> – U.S. National Library of Medicine – Національна медична бібліотека США
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Електронне навчальне видання комбінованого використання  
Можна використовувати в локальному та мережному режимі

**Боброва** Оксана Вячеславівна  
**Цукор** Наталія Григорівна

**МЕДИКО-СОЦІАЛЬНІ ПРОБЛЕМИ ДЕМОГРАФІЧНИХ ПРОЦЕСІВ.  
ОСОБЛИВОСТІ ДЕМОГРАФІЧНИХ ПОКАЗНИКІВ У РІЗНИХ  
РЕГІОНАХ СВІТУ, ОКРЕМИХ КРАЇНАХ ТА В УКРАЇНІ**

Методичні рекомендації  
до самостійної роботи для здобувачів вищої медичної освіти 3–4 року навчання  
з дисципліни «Соціальна медицина, організація охорони здоров'я»

*(Англ. мовою)*

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