

Structure of the incidence of older people in a demographic context

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The scientific article is devoted to the study of the incidence of elderly people through the prism of the demographic status of the population of Ukraine during 2010–2019.

Purpose: to study the dynamics of aging of the population of Ukraine and determine the incidence of elderly people.

Material & Methods: analysis of scientific, methodological, regulatory literature, research of data from the State Statistics of Ukraine, copying from medical records. The study processed 487 medical records of the elderly.

Results: according to the State Statistics Service of Ukraine, it was determined that from 2010 to 2019 the proportion of people over working age is 1/6 of the country's population and has some upward trend. In the structure of the incidence of elderly people, diseases of the circulatory system, diseases of the musculoskeletal system and connective tissue, and diseases of the nervous system were most often encountered.

Conclusions: in Ukraine, as in most countries of the world, the nation is aging. In connection with the deterioration in the health of the population of Ukraine, as evidenced by the results of screening studies, scientists pay attention to the problem of attracting to motor activity.

Keywords: elderly, health, incidence, physical activity.

Introduction

The data of literary sources indicate that there is an increase in the elderly population both in the world and in Ukraine [1; 2; 6; 10 and others]. A. V. Kabachkova et al. (2015) indicate that as of 2013, almost every fifth resident of Ukraine, which is 8,4 million people, was older than able-bodied [4]. In the Belarusian Republic, a similar trend is observed. So, T. V. Matveychik et al. (2016), analyzing mortality in the period 1970–2013. It was found that over the study period, the proportion of the population older than 70 years increased in men from 3,5% to 6,6%, in women – from 5,4% to 13,8% [5].

However, regardless of the demographic situation, the elderly remain the most vulnerable socially. There is an acute question of the extremely low standard of living of this group of the population, therefore, there is a need to create conditions for the socialization of a person of retirement age, to activate life in old age in order to improve its quality. It is worth noting that domestic scientists indicate that old age can become a period not only of maintaining social roles, but also the development of new [3; 9; 12].

Aging of the population becomes a state problem in almost all countries, in connection with which society is interested in prolonging the period of activity in the elderly, finding ways to solve their problems, acceptable and modern methods of non-pharmacological correction of growing changes in their health [7; 13].

To maintain the health and physical performance of older people and improve their quality of life, physical activity is of great importance. An increase in motor activity helps to maintain and strengthen health, increase the adaptive capabilities of their body, reduce the frequency of exacerbations of chronic

diseases and improve the psycho-emotional sphere of a person, while reducing the risk of undesirable effects, such as a decrease in cognitive dysfunction, poor mental health, mobility [8].

According to the authors, among the elderly there are few who care about their health properly [11], probably due to low motivation, low socio-economic status. With increasing age, there is a decrease in muscle mass in conjunction with a decrease in activity and performance. After fifty years, strength decreases by 12–14%, at the age of 65–85 years – a decrease in strength occurs by 3–5% per year [5]. It is these indicators that become the basis of a large number of morbidity among the studied age category.

Purpose of our study is to study the dynamics of aging of the population of Ukraine and determine the incidence of elderly people.

Material and Methods of the research

To ensure the completeness of the research information field, a set of mutually complementary research methods was used: analysis of scientific, methodological, regulatory and legal literature, research of data from the State Statistics of Ukraine, and copies from medical records. The incidence rate was determined by ICD-10, the tenth revision of the International Statistical Classification of Diseases and Health Problems, conducted from September 25 to October 2, 1989 by the World Health Organization in Geneva. ICD-10 was approved at the Forty-third World Health Assembly in May 1990 and, since 1994, has begun to be implemented in WHO Member States. These codes are developed by the World Health Organization and are publicly owned. The study processed 487 medical records of older people.

Results of the research

Maintaining the health of each individual throughout his life is a priority for public health. One of the most important components in this case should be personal motivational attitudes [3].

This dictates the need for preventive measures in the pre-natologic period in order to prevent the incidence of those pathologies that can further contribute to disability and socio-psychological disintegration of an elderly person in society.

Around the world, an aging population is continuing at an intensive pace. According to the State Statistics Service of Ukraine, from 2010 to 2019 the proportion of people over working age is 1/6 of the population and has some tendency to increase (Figure 1).

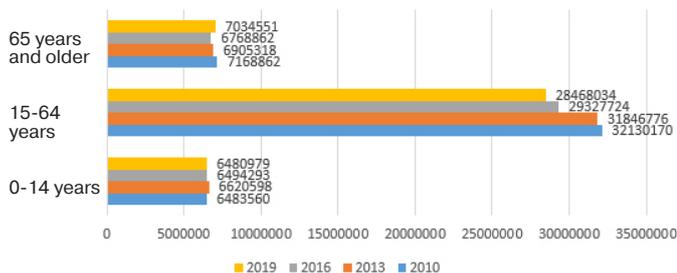


Fig. 1. Demographic data of the State Statistics Service of Ukraine from 2010 to 2019 number of persons

A characteristic feature of older people is the slowed down aging processes, which are expressed in involuntal changes in specific organs and systems of the body. On the whole, the activity of nonspecific and the tension of specific immunity decreases, the adaptive capabilities of the body to external factors, in particular, to physical exertion, worsen, and the periods of development and recovery increase.

For a detailed determination of the morbidity structure according to the ICD-10 classes, we studied the results of comprehensive medical examinations of 487 elderly people during 2016 and 2019 (Table 1).

A comprehensive medical examination was organized in the city clinic of the city of Chernivtsi. The results of the medical examination showed that the leading ones were chronic diseases and pathological conditions of the cardiovascular system (53,3 and 52,8 per 100 examined) – ischemic heart disease: angina pectoris in the compensation stage, hypertension stage 1 and 2 in the compensation phase, chronic artery disease, arterioles and veins in remission. The second place in importance was occupied by chronic diseases of the musculoskeletal system (arthrosis, arthritis) – 55,6 and 45,9 per 100 examined. The third ranking place was accounted for by diseases of the nervous system, which were mainly represented by radiculitis of various localization (sacro-sacral, cervical) – 17,4 and 16,6 per 100 examined. The average – for one elderly person examined, 1,9 in 2010 and in 2019 – 1,3 chronic diseases in the compensation stage or phase of remission or pathological condition, does not affect the functions of organs and systems. From 487 elderly people, ac-

Table 1

Structure of the incidence of women aged 60–75 years according to a comprehensive medical examination (2016 and 2019, n=309)

Class ICD-10	Chronic diseases and pathological conditions	2016 (n=178)		2019 (n=309)	
		Number of cases	per 100 people	Number of cases	per 100 people
III	Blood diseases (including: anemia)	8	4,5	13	4,2
IV	Diseases of the endocrine system (including: thyroid disease, diabetes, overweight, obesity of 1 degree)	24	13,5	32	10,4
VI	Diseases of the nervous system (including: lumbosacral radiculitis, cervical radiculitis, lumbago in remission)	31	17,4	45	16,6
VII	Diseases of the eye and its adnexa (including: myopia, hyperopia in a correction state)	22	12,4	31	10,0
VIII	Diseases of the ear and mastoid process (including: chronic otitis media in remission, auditory tube diseases in compensation)	7	3,9	11	3,6
IX	Diseases of the circulatory system (including: coronary heart disease: stable angina pectoris class 1 and class 2 in the compensation stage, hypertension of the 1st and 2nd stage in the compensation phase, diseases of arteries, arterioles and capillaries in the compensation stage, vein disease, lymphatic vessels and nodes in the compensation stage)	102	53,3	163	52,8
X	Respiratory diseases (including: chronic bronchitis, emphysema in the stage of compensation)	12	6,7	16	5,2
XI	Digestive diseases (including: liver disease, gallbladder and biliary tract disease, pancreatic disease in remission)	16	8,9	24	7,8
XII	Diseases of the skin and subcutaneous tissue	5	2,8	7	2,3
XIII	Diseases of the musculoskeletal system and connective tissue (including: osteochondrosis: arthropathy (arthrosis), dorsopathy)	99	55,6	142	45,9
XIV	Diseases of the genitourinary system (including: urolithiasis in the stage of compensation)	8	4,5	12	3,9
Total		334	1,9	396	1,3
	No diseases detected	11	6,2	15	4,9

ording to a comprehensive preventive examination, 15 and 11 people were practically healthy.

The structure of diseases of the circulatory system is dominated by "diseases characterized by high blood pressure", including "hypertensive heart disease".

In the structure of respiratory diseases, acute respiratory infections of the upper respiratory tract came first in the periods under consideration, due to age-related anatomical and morphological changes in the body and the formation of physiological senile immunodeficiency, as well as the deterioration of the environmental situation and socio-economic situation of this age group. This also confirms a three-fold increase in the incidence of influenza over a given period of time.

Among the diseases of the musculoskeletal system and connective tissue, the most frequently detected pathologies were arthritis and arthrosis.

It should be noted that in the structure of the diseases of the genitourinary system, high growth rates have breast dysplasia

and endometriosis. Thus, an increase in indicators is noted for diseases associated with structural and hormonal changes.

Conclusions / Discussion

The results of the study made it possible to establish the demographic share of older people compared with 2010 to 2019 inclusive. It should be noted that in Ukraine, as in most countries of the world, the nation is aging. In connection with the deterioration in the health of the population of Ukraine, as evidenced by the results of screening studies, scientists pay attention to the problem of attracting to motor activity. The diseases of the circulatory system (2016 – 53,3%; 2019 – 52,8%), diseases of the musculoskeletal system and connective tissue (2016 – 55,6%; 2019 – 45,9%) were most often found in the structure of the incidence of elderly people and diseases of the nervous system (2016 – 17,4%; 2019 – 16,6%).

This study will serve as a perspective for the scientific justification, development and introduction of new measures in the recreational and health activities of older people.

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