

СОЦІАЛЬНА МЕДИЦИНА І ФАРМАЦІЯ: ІСТОРІЯ, СУЧАСНІСТЬ ТА ПЕРСПЕКТИВИ РОЗВИТКУ

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AGEING OF THE POPULATION: TRENDS IN THE EASTERN EUROPE AND INTERNATIONAL PRIORITIES

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The results of the analysis of the tendencies and prognosis of ageing in the Eastern Europe are given in the article. The results of the comparative characteristics of the median age of the population in the countries of the Eastern Europe projected for the years of 2020 and 2040 are presented. International recommendations for health systems concerning "healthy" ageing have been grouped and summarized, the main priorities of the WHO Strategy and the action plan for healthy ageing in Europe have been presented.

Key words: ageing, "healthy" ageing, trends of ageing, strategy of "healthy" ageing.

Formulation of the problem. Global population ageing is a by-product of the demographic transition, in which both mortality and fertility decline from higher to lower levels. The older population is growing at a considerably faster rate than that of the world total population [5-7]. In the middle of the 20th century there were just 14 million people on the whole planet aged 80 years or older. By 2050, there will be 100 million living in China alone, and 400 million people in this age group worldwide [5, 7].

In all regions people are increasingly likely to survive to older ages, and once there they are tending to live longer as the gains in life expectancy are relatively higher at older ages. However, notable differences exist between areas in the numbers and proportions at higher ages. Although the highest proportions of older per-

sons are found in the more developed regions, this age group is growing considerably more rapidly in the less developed regions. As a consequence, the older population will be increasingly concentrated in the less developed regions.

Analysis of the recent research and publications. From the beginning of the century the international society paid special attention to the "ageing" problems [1-7, 11-12]. In 2002, the United Nations convened its second World Assembly on Aging (the first was in 1982) to consider the ramifications of the global population ageing. In 2007, the US National Institute on Aging and the U.S. Department of State jointly issued a report entitled "Why Population Aging Matters", in 2008 the US National Institute on Aging issued "An aging world: 2008" international population reports, in 2012 the World Health Organization (WHO) announced a "world health day" as "Healthy ageing" and published Global Brief where the main aspects

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Table 1

**THE PERCENT CHANGE IN POPULATION FOR OLDER AGE GROUPS
IN THE EASTERN EUROPE BY COUNTRIES: 2000 TO 2020 AND 2020 TO 2040**

Country	2000 to 2020				2020 to 2040			
	55 to 64 years	65 to 79 years	80 years and over	65 years and over	55 to 64 years	65 to 79 years	80 years and over	65 years and over
Eastern Europe								
Bulgaria	-2.6	-2.7	86.5	9.4	0.4	-6.2	46.3	5.9
Czech Republic	17.2	42.3	89.1	50.3	17.3	4.4	84.6	21.6
Hungary	5.0	19.3	70.8	28.1	17.3	4.4	67.0	18.9
Poland	53.8	36.1	111.2	48.5	14.0	6.1	94.2	26.9
Russia	30.5	2.2	82.4	15.1	-9.5	15.5	55.3	25.6
Ukraine	6.2	-3.8	82.9	9.9	-5.1	12.8	40.1	20.0

and trends of ageing were described [5-6, 9]. From 2013 in RF the conferences of the ageing direction take place ("Elder patient: quality of life", etc.).

Definition of unsolved aspects of the problem discussed in the article. At the same time there is a limited number of relevant studies of trends and main approaches to healthy ageing in less developed countries, and it is of particular importance for the process discussed, namely ageing, due to unique conditions in each country – economical, social and spiritual features of the country.

Formulation of the purpose of the article. Taken into account actuality of the problem the aim of the investigation was to indicate the main trends of ageing in Ukraine comparing to the region tendencies and describing of the international approaches and the strategy for "healthy ageing".

Presentation of the main material. "Healthy ageing" is a short term for the broader concept of both active and healthy ageing. *Active ageing* is defined by the WHO as: "... the process of optimizing opportunities for health, participation and security in order to enhance the quality of life as people age. Active ageing applies to both individuals and population groups. It allows people to realize their potential for physical, social, and mental well being throughout the life course and to participate in society according to their needs, desires and capacities, while providing them with adequate protection, security and care when they require assistance" [3, 9-10].

Using data from the U.S. Census Bureau, the United Nations, the Statistical Office of the European Communities, as well as from regional

surveys and scientific journals the main tendencies of population ageing in the countries of the Eastern Europe have been identified. Official statistical data predicted change in population for older age groups to 2040 by countries are given in Table 1 [5].

The lowest ageing of the population from 2000 to 2020 will be in Bulgaria, Ukraine and Russia, the highest – in Poland – elder people (80 years and over) will be more twice. To 2040 the faster ageing predicted in Poland too, the lowest – in Bulgaria, Ukraine and Russia compared to 2020 (Table 1).

Currently, the median age in the more developed regions is more than 13 years higher than in the less developed regions and almost 20 years higher than in the least developed countries [5, 9]. At the same time the analysis of the median age allows to determine that within the period studied the indexes of the median age in all countries of the Eastern Europe are almost equal: 35-38 years in 2000; 41-45 – in 2020 and 47-52 – in 2040. They have increased – the average index is 34% (Table 2).

The data obtained confirm similarity of the countries analyzed in economic development and allows cooperating by health systems in the process of Healthy ageing programmes creation.

The study of international approaches to ageing of the population was the next stage of our work. In many ways the population ageing can be viewed as a direct consequence of the socioeconomic development. While the experience of each country varies, the common patterns emerge. The WHO recommendations concerning particular actions that governments and societies can take to minimize the negative impact from aging are grouped in Table 3 [4, 6, 8, 10].

Table 2

THE MEDIAN AGE IN THE EASTERN EUROPE BY COUNTRIES: 2000, 2020 AND 2040 (IN YEARS)

Country/ Year	Bulgaria	Czech Republic	Hungary	Poland	Russia	Ukraine
2000	38	38	35	37	38	38
2020	45	43	42	41	42	42
2040	52	52	49	50	47	50
Ratio 2040 to 2000	+ 37 %	+ 37 %	+ 36 %	+ 35 %	+ 24 %	+ 32 %

The recommendations were created for implementation in healthcare systems to minimize the negative economic and social impact of ageing on society. Harmonization of the approaches to the legislative base and practical life allows to provide a social model of ageing.

In 2012, the 53 Member States of the WHO European Region endorsed *Health 2020* – a new European policy framework supporting action across government and society for health and well-being. The overall Health 2020 goal to “*significantly improve the health and well-being of populations, reduce health inequalities, strengthen public health and ensure people-centred health systems that are universal, equitable, sustainable and of high quality*”. At the same time, the Strategy and action plan for healthy ageing in Europe 2012-2020 was adopted. The following four strategic priority areas have been sin-

gled out in the WHO Strategy and action plan for healthy ageing in Europe (Fig. 1) [3, 4].

Its goal is to address the specific challenges of ageing populations, allow more people to live longer in good health and live an active, independent and fulfilling life, including at the highest ages. Both the Health 2020 policy framework and the healthy ageing strategy and action plan have been developed through a participatory process with Member States and a wide range of other stakeholders. Fig. 2 shows how integrated health policies can respond to rapid ageing in Europe.

For Ukraine, as a developing country, a great experience of a well-developed country with the practical social network of services for appropriate population ageing is useful in the process of reforming the country, especially in the field of the healthcare system.

Table 3

THE LIFE-COURSE APPROACHES TO HEALTHY AND ACTIVE AGEING

Recommended approach	Explanation
Promoting good health and healthy lifestyle at all ages to prevent or delay the development of chronic disease	Being physically active, eating a healthy diet, avoiding the harmful use of alcohol and not smoking or using tobacco products can all reduce the risk of chronic diseases in older age. These habits need to start in early life and continue into older age
Minimizing the consequences of a chronic disease by its early detection and quality care (primary, long-term and palliative care)	While we can reduce the risk of a chronic disease through a healthy lifestyle, many people will still develop health problems in older age. The metabolic changes such as high blood pressure, high blood sugar and high cholesterol should be early detected and managed effectively. But it is also necessary to address the needs of people who already have chronic diseases and ensure that everyone can die with dignity
Creating physical and social environments that foster the health and participation of older people	Social determinants not only affect the health behaviours of people across the life course, they are also an important factor in whether older people can continue to participate. It is therefore important to create physical and social environments that are “age-friendly” and foster the health and participation of older people
Reinventing ageing – changing social attitudes to encourage the participation of older people	Many current attitudes to ageing were developed during the 20th century when social patterns were very different. It is necessary to develop new models of ageing that will help us creating the future society, in which we want to live

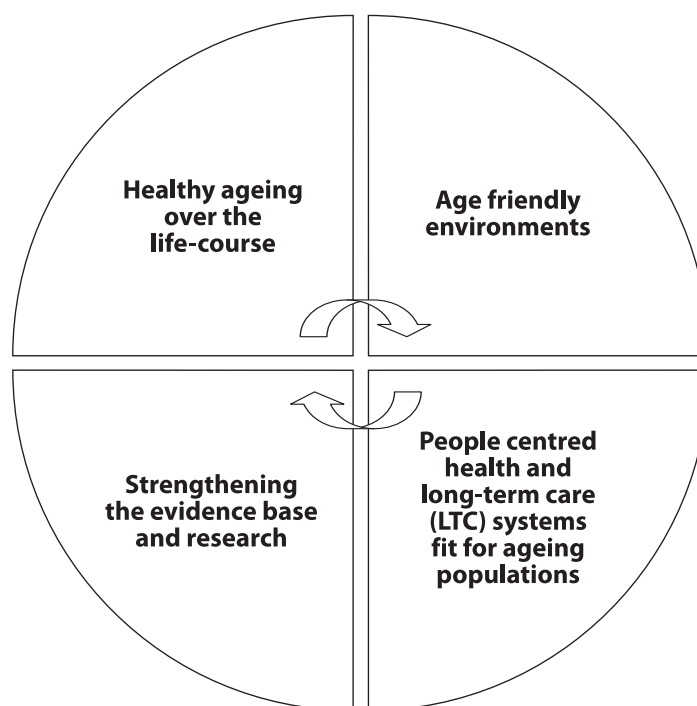


Fig. 1. Four strategic priorities of the WHO Strategy and action plan for healthy ageing in Europe

Healthy ageing over the life-course

Noncommunicable diseases account for the bulk of loss of healthy life years for people aged 65 and over. An individual's health and level of activity in older age thus depend on his or her living circumstances and actions over a whole life span. However, more can be done to promote health and prevent disease, including among older populations, for whom access to prevention and rehabilitation may be impaired

Age friendly environments

This is also a focus of the WHO Regional Office for Europe's contribution to the European Innovation Partnership on Active and Healthy Ageing

People centred health and long-term care systems fit for ageing populations

The degree of cost-sharing of the health bill is too high for many older people in Europe and public spending on long-term care varies enormously among countries. The evidence indicates that many people increasingly expect better access to high-quality health and social services, including public support for the informal care provided by family, friends and other volunteers

Strengthening the evidence base and research

Knowledge exchange and transfer will continue to be key for a European Region that is rich in innovative examples of best practice for healthy ageing, including at the local level. More research is needed in particular to fill in gaps in knowledge about trends in the sexual health of older people and on how policies can better respond to their specific sexual health needs

Fig. 2. Characteristics of strategic priorities of the WHO Strategy and action plan for healthy ageing in Europe

Conclusions and perspectives of future investigations in the direction

1. Ageing of the population is a global tendency for both well and less developed countries. In the Eastern Europe the lowest ageing of the population from 2000 to 2020 and from 2020 to 2040 will be in Bulgaria, Ukraine and Russia, the highest – in Poland.

2. The analysis of the median age between the countries of the Eastern Europe allows to determine that during 2000-2040 the indexes of the median age in all countries will be almost equal: 35-38 years in 2000; 41-45 – in 2020 and 47-52 in 2040 and is characterized by increase (34% growth).

3. The WHO recommendations to healthy and active ageing have been studied. The main of them include: promotion of good health, minimizing the consequences of a chronic disease through quality systems of care, creating physical and social environments for participation of older people and reinventing ageing.

4. Assessment of international approaches to the population ageing allows to define four strategic priorities of the WHO Strategy and action plan for healthy ageing in Europe and their characteristics such as healthy ageing over the life-course, age friendly environments, people centred health and long-term care systems fit for ageing populations and strengthening the evidence base and research.

The data of the research conducted can be used by domestic authorities for substantiation and prognosis of creation of geriatric services that in-time take into account the given tendencies of the population ageing.

The future study may include the complex of the data analyzed about of the structure of ageing, its epidemiology and the experimental model of the healthy ageing system proposed at the domestic level. The data obtained data can be also used for predicting of the tendencies of costs for ageing for the health systems.

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СТАРЕНИЕ НАСЕЛЕНИЯ: ТЕНДЕНЦИИ В ВОСТОЧНОЙ ЕВРОПЕ И МЕЖДУНАРОДНЫЕ ПРИОРИТЕТЫ

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Приведены результаты анализа тенденций и прогноз старения населения в странах Восточной Европы, а также результаты сравнительной характеристики среднего возраста населения в странах Восточной Европы в перспективе на 2020 и 2040 годы. Авторами сгруппированы и обобщены международные рекомендации для систем здравоохранения по организации «здорового» старения, а также выделены основные приоритеты Стратегии ВОЗ по организации «здорового» старения в Европе.

Ключевые слова: старение населения, «здоровое» старение, тенденции старения, стратегия «здорового» старения

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СТАРИННЯ НАСЕЛЕННЯ: ТЕНДЕНЦІЇ У СХІДНІЙ ЄВРОПІ ТА МІЖНАРОДНІ ПРІОРИТЕТИ

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Наведено результати аналізу тенденцій і прогноз старіння населення у країнах Східної Європи, а також результати порівняльної характеристики середнього віку населення у країнах Східної Європи у перспективі на 2020 та 2040 роки. Авторами згруповано та узагальнено міжнародні рекомендації для систем охорони здоров'я щодо політики «здорового» старіння населення, а також виділено основні пріоритети Стратегії ВООЗ щодо організації «здорового» старіння в Європі.

Ключові слова: старіння населення, «здорове» старіння, тенденції старіння, стратегія «здорового» старіння.