

Dementia	6,2	7,0
Chronic obstructive pulmonary disease	4,8	8,0
Cerebrovascular disease	2,2	4,9
Depression	0,5	4,8
Rheumatoid arthritis	1,7	3,7

In the investigation probably possible approaches giving by WHO and other international organizations have been described (fig. 1)

Feasible approaches for mitigation of challenges from ageing		
<p><b>Reducing welfare payments</b></p> <p>Public spending on the elderly could potentially be reduced, without impact on service quality, by a radical change to the means-testing approach to certain benefits and social care services.</p>	<p><b>Improving health</b></p> <p>Much of the costs of old age have arisen because growth in total life expectancy has outpaced growth in healthy life expectancy (i.e. the number of years we can expect to live in good health).</p>	<p><b>Increasing employment</b></p> <p>A healthier old-age population would also allow greater numbers to remain in the labour market for longer, thereby mitigating the impact of an ageing population on the dependency ratio. This in turn could increase tax receipts and limit public expenditure growth.</p>

Fig. 1 Main feasible approaches for mitigation of challenges from ageing (for governments)

**Conclusions.** Population aging is likely to influence patterns of health care spending in both developed and developing countries in the decades to come. Action plan for healthy ageing is urgently needed for each country separately.

## ANALYSIS OF APPROACHES TO THE TREATMENT OF ALZHEIMER'S DISEASE

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**Introduction.** With the improvement of the quality of medical care and pharmaceutical provision of the population in most countries with high socio-economic development, the level of dementia, as a threatening neurodegenerative disease among the population, began to increase gradually. For example, in the countries of the European Union in 2001 the prevalence of dementia was 7.7 million people, and according to forecasts in 2040 the number of patients with dementia is expected to increase to 16 million. According to Dementia in Europe Yearbook as of 2019 year, the total number of people with Alzheimer's disease (AD) in Europe was 9780678 people, or 1.57% of the total population.

**Aim** was to analyze approaches to the treatment of AD in countries around the world. The objects of the study are the Unified clinical protocol of primary, secondary (specialized) and tertiary (highly specialized) and palliative care for dementia, approved by the Order of the Ministry of Health

of Ukraine № 736 from 19.07.2016, national clinical recommendations of the USA, Japan, India, Russia, and Kazakhstan for the treatment of dementia.

**Materials and methods.** Content analysis, comparative, analytical and statistical analysis.

**Results and discussion.** Cholinesterase inhibitors (N06D A), namely donepezil (N06D A02), galantamine (N06D A04), rivastigmine (N06D A03) and NMDA-receptor antagonist memantine (N06D X01), have been recommended in all countries. The duration of therapy lasts from 6 month to several years. Determined that common in the recommended treatment regimens is the use of inhibitors of acetylcholinesterase and memantine, but the dosage of these drugs may vary. In the protocols of Kazakhstan and Ukraine there is no drug rivastigmine in the dosage form transdermal patch.

According to the Unified clinical protocol in Ukraine, donepezil, galantamine and rivastigmine are used for the treatment of AD, which are recommended as options for mild and moderate Alzheimer's disease. In case of intolerance or poor efficacy of cholinesterase inhibitors, memantine is recommended for patients with mild or moderate dementia in Alzheimer's disease. In severe AD, combination therapy with memantine and cholinesterase inhibitors is recommended.

**Conclusions.** Thus, the analysis of international and national standards for the treatment of HA indicates the predominance of a single approach and treatment regimens using acetylcholinesterase inhibitors and memantine. It is determined that the approved standards of treatment of AD in Ukraine meet international recommendations.

## ANALYSIS OF THE PHARMACEUTICAL MARKETS OF AFRICAN COUNTRIES

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**Introduction.** Despite the low-income indicators of the population of African countries, there are more and more quality and safe medicines due to the development of the health sector. This is due to the fact that the pharmaceutical market has become interesting for large companies for the production of medicines and medical devices. In this regard, it is relevant to analyze the indicators of import and export, as well as income from pharmaceutical products sold in the markets of African countries, including Morocco.

**Aim** is to analyze the indicators of import and export of pharmaceutical markets in African countries.

**Materials and methods.** For the study, scientific articles on selected topics and WHO publications, as well as open Internet data were used.

Methods - statistical and analytical.

**Results and discussion.** As of 2018, Algeria was the largest African importing country for pharmaceuticals, with more than US \$ 2.6 billion worth of pharmaceutical imports this year, up 1.33% over the previous period. South Africa was the country with the highest pharmaceutical export value, with pharmaceutical exports of more than US \$ 438 million in 2019. At the same time, the indicators of exports and imports to Morocco were 123.33 million dollars: 585.33. million dollars, and in Kenya 86.95 million dollars: 475.54 million dollars. On average, exports decreased by 1.7%, while imports