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

increased by 2.3%, respectively. Pharmaceutical revenue figures were analyzed in terms of total health sector revenue. During 2018, revenue generated from the pharmaceutical industry in Kenya accounted for 20.8% of the healthcare mix. The country scores were as follows: 43.6% the highest in Malawi, followed by Senegal with 42.3% and Algeria with 33%. The lowest percentage was in the countries: Tunisia, Egypt, Ivory Coast, Ghana - from 25 to 27.7%. Income from the pharmaceutical industry in Morocco was 23.1%. According to the results of the analysis, the lowest rates were in Nigeria and Sudan, 5.2% and 9.2%.

**Conclusions.** Despite the economic crises, African countries continue to develop dynamically and remain attractive with potential for large pharmaceutical holdings.

## MARKET OVERVIEW OF DIETARY SUPPLEMENTS IN THE WORLD AND IN UKRAINE

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**Introduction.** Vitamins are a group of chemically diverse organic substances needed by humans in minimal quantities. But their absence makes it impossible for all body systems to work properly. Vitamins regulate many physiological processes, normalize metabolic reactions and in various ways affect the entire life support system. Without them, cellular respiration and nutrition, growth and development, movement are impossible. The differentiation of cells in organs and tissues is disturbed. In addition, vitamins are able to regulate the body's resistance to infectious diseases and adverse effects of the natural environment.

Aim. Market overview of dietary supplements in the world and in Ukraine.

Materials and methods. Scientific publications on the Internet.

**Results and discussion.** In 2018, the market for food and food additives in the United States reached 39 billion US dollars compared to 27 billion US dollars. The growth was due to economic recovery, rising employment and an increase in chronic diseases. Among the various categories of products selling vitamins and dietary supplements, the largest contribution was made to the sale of herbal supplements and sports nutrition. Thus, sales of vitamin D in the United States reached 686.75 million US dollars, which is 11.55% more than last year. Vitamins and minerals make up the largest percentage of the total US diet due to the high level of use in women. From 2017 to 2019, the demand for vitamins (especially vitamins D, C, A and E) showed strong growth mainly during economic crises. And it grew by more than 42%. Fat-soluble vitamins are one of the most sought-after supplements in the category of minerals due to the female population, population aging, arthritis cases, osteoarthritis, bone fractures and other bone and joint diseases.

In Ukraine, FR vitamins are represented by such foreign manufacturers as: Teva Pharmaceutical Industries Ltd., Ltd. Teva Operations Poland, S.M.B. SA Technologies, Belgium, Mibe GmbH Artsmeimittel, Germany, Medana Pharma Joint Stock Company, Poland. The analysis of the Ukrainian market showed that according to the studied vitamins, Teva has the largest share - 35%; Teva is also in second place, but its representation in Poland is 22.2%; and the third position is occupied by four companies from Belgium, Turkey, Germany and Poland - 15.1% respectively.