

ANALYSIS OF THE CONSUMPTION OF ANTIBACTERIAL MEDICINES ACCORDING TO THE AWARE CLASSIFICATION IN UKRAINE

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Today, antibiotic resistance of microorganisms, according to the World Health Organization (WHO), is one of the most serious health threats. Resistance of bacteria to antibiotics (antibiotic resistance, antimicrobial resistance - AMR) increases every year. The reason for this was the excessive and uncontrolled use of antibiotics in medicine, veterinary medicine, agriculture, as well as their entry into soil and water. According to the US Expert Commission to combat antibiotic-resistant bacteria in the world about 73 billion single doses are used annually or 300 thousand tons of antibiotics per year.

Antibiotic resistance is also a significant economic problem. According to the WHO, only in the EU the cost of treating patients with diseases caused by resistant pathogens is estimated at about 1,500,000,000 euros per year. The US Department of Technology has estimated that the cost of managing AMR in the United States is 0.1-10 billion dollars USA per year.

The classification for reducing antimicrobial resistance developed in 2017 was finally launched by the WHO in 2019. The system acts as a management tool at the global, national and local levels of health care in the form of classification of AWARe antibiotics by parameters «Access» (available), «Watch» (supervised), «Reserve» (reserve) - and includes 180 drugs. The database also lists non-recommended fixed-dose combinations of broad-spectrum antibiotics for which there are no scientifically sound indications for use or recommendations in authoritative international guidelines. In the course of our research, drugs of the PBX classification group J01 «Antibacterial agents for systemic use» were developed on the example of a pharmacy in an urban-type settlement. It was found that from 2016-2019, the group of drugs «Access» accounted for the largest share in consumption, averaging 54% of total consumption. The Watch group averaged 43%, the Reserve group 0.1 to 0.2%, and the non-recommended antibiotics group 2.5 to 2.6%.

In 2020, the structure of consumption had the following changes. Thus, the percentage of antibacterial drugs «Access» decreased to 47.5%, the group «Watch» increased to 49.3%, the level of the group «Reserve» increased to 0.5%, and the group of non-recommended antibiotics to 2.9%. According to a study of the structure of antibiotic consumption from the age of five, it can be called relatively balanced in relation to the «AWARe» classification.

Considering the increase in retail sales of antibiotics, it was found that in 2016 the share in monetary terms was 11%, in 2017 9%, in 2018 26%, in 2019 8%, and in 2020 56%. According to the results of the study, the following conclusions can be drawn. The structure of antibiotic consumption according to the AWARe classification and groups of drugs has not changed significantly. However, there has been a significant increase in consumption in monetary terms, which, in our opinion, is due to a change in the structure of consumption towards more expensive drugs.