## MARKET ANALYSIS OF MOST PRESCRIBED ANTIBIOTICS IN REPUBLIC OF NORTH MACEDONIA

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## **ABSTRACT**

Antibiotic resistance is global concern to public health that lead to unfavorable therapeutic effect, compromises the therapy and also increases the cost of treatment and hospital stay. Monitoring and analysis of consumption of antibiotics is general responsibility of pharmacists that contribute to adaptation of measures and guidelines in order to rationalize the antibiotic use to limit the antibiotic resistance.

The aim of this study is to analyze antibiotic consumption in Republic of North Macedonia in period of 2011-2016. For this purpose, we used relevant data from primary, secondary and tertiary literature, recommendations from Evidence-based Medicine, official data from world and national drug registers and published reports from the HIF of Republic of Macedonia from the Positive List for the period 2011-2016 in order to determine the trends of antibiotic consumption and their effect of increased occurrence of multiresistant bacterial species. Unfortunately, in this analysis antibiotics released without prescription are not included due to lack of evidence data.

According to data obtained from HIF, WHO, EMA and EBM, most commonly prescribed antibiotics in Republic of North Macedonia are beta-lactam antibiotics, especially penicillin and cephalosporin derivatives. In conclusion, consumption of antibiotics in Republic of North Macedonia and EU countries is in significant growth that leads to bacterial resistance.

Key words: antibiotics, analysis, resistance, consumption