

## Consumption of antibacterials for systemic use (ATC group J01) in Ukraine in 2013-2018 compared to the United Kingdom

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### Abstract

**Statement of the Problem:** Researchers have reported that antibiotic resistance (ABR) is one of the biggest threats to global health, food security, and sustainable development today. An analysis of the relationship between the levels of antimicrobial drug consumption and the development of antibiotic resistance is one of the tools to contain the resistance.

The purpose of this study is to analyze the consumption in the community of antibacterials for systemic use (AB) (ATC group J01) in Ukraine (UA) in comparison with the United Kingdom (UK).

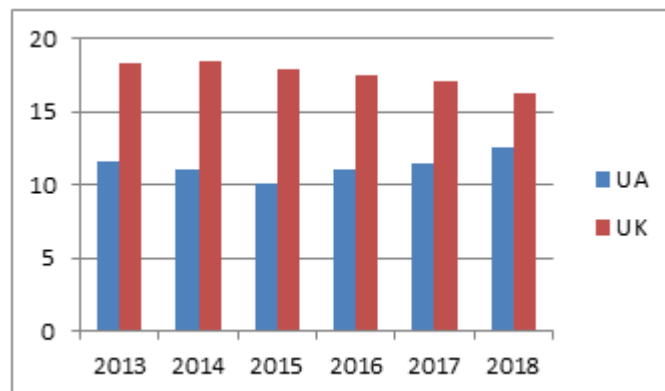
**Methodology & Theoretical Orientation:** The DDDs per 1000 inhabitants per day (DID) were used to calculate the consumption of antibacterial agents using the ATC / DDD methodology recommended by the WHO. The calculations were carried out according to the analytical system of the pharmaceutical market research "Pharmstandard" of "Morion" company. Consumption data for the UK were obtained from the Annual epidemiological report for 2018 (European Centre for Disease Prevention and Control).

**Findings:** Over the last 6 years, AB consumption in the UK has decreased from 18.3 DID in 2013 to 16.3 DID in 2018, despite a slight increase in 2014 (18.5 DID). Consumption indicators in UA decreased from 11.6 DID in 2013 to 10.1 DID in 2015 and increased from 11.1 DID in 2016 to 12.5 DID in 2018. The largest difference in AB consumption between the two countries was recorded in 2015 (1.8 times). In 2018, this difference was 1.3 times.

**Conclusion & Significance:** The ability to buy antibiotics without prescription in Ukraine does not play a significant role at the level of consumption.

This may indicate that low levels of financial support in Ukraine are forcing the population not to use antibiotics for treatment. Also a high fear of the side effects of antimicrobials contributes to their low use.

### Image



### Biography:

Larysa Iakovlieva is Doctor of Pharmaceutical Sciences, Professor. She has extensive experience in pharmacological and pharmacoeconomic research. In 2004, she opened the first pharmacoeconomic department in Ukraine. In 2012-2015, collaborated with WHO on antibiotic resistance. Larysa V. Iakovlieva is a member of the Expert Committee on the Establishment of the National List of Essential Medicines of the Ministry of Health of Ukraine.

### Speaker Publications:

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5. Iakovlieva L, Bahlai T; "β-lactam antibiotics in Ukraine: market and consumption analysis in 2013–2018"; ScienceRise: Pharmaceutical Science/ (2019) 2 (18). doi: <https://doi.org/10.15587/2519-4852.2019.165682>.

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