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MEETING ABSTRACT

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Consumption of antibacterial agents in outpatient and inpatient practice in Latvia

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Background: Antimicrobial resistance is one of the greatest problems in nowadays medical care. Excessive and inappropriate usage of antibacterial agents is one of the reasons that have led to bacterial resistance.

Objectives: The aim of this study was to find out prescribing and usage principles of antibacterial agents in ambulatory and stationary sectors and analyse the compliance with guidelines, observe the tendency of consumption of antibacterial agents in Latvia compared with other European countries.

Methods: The 793 prescriptions of three open-type pharmacies (01.10.2016–31.12.2016) and consumption data on the antibacterial agents issued in two closed-type hospitals' pharmacies over a two-year period (01.01.2015–31.12.2016) were analysed.

Results: The beta-lactams (ATC code J01C) were the widely used of all antibacterial groups (47.50%) in Latvia, tetracyclines (J01A) were 15.65% from prescribed antibiotics and macrolides, lincosamides and streptogramins (J01F) took the third place 15.52%. In closed-system outpatient pharmacies for enteral use the most often distributed antibacterial group was quinolones (J01M; 27.53%), but for parenteral use (other beta-lactam antibacterials, J01D; 16.65%). Analysis of prescription in community pharmacies showed that code of diagnosis was indicated only in 23.7% of prescriptions. 13.6% of prescriptions were redeemed longer than 4 days from prescribing. 54% of prescriptions with written code of diagnosis were prescribed by general practitioners, 10.1% by otorhinolaryngologists, and 8.5% by internists. The study found that 18.87% of prescribed antibacterial agents were not consistent with the guidelines.

Conclusions: The beta-lactams are the most widely used antibacterial agent group in ambulatory care in Latvia; in stationary care it was quinolones and other beta-lactams. It was found that code of diagnosis had been indicated only in a quarter of analysed prescriptions. General practitioners are the main prescribers of antibacterial agents and they most often had indicated a code of diagnosis comparing to other practitioners. It was observed that more than 10% of pharmacy clients did not start antibacterial therapy immediately; such an approach could rise the risk for medical outcome; however further research should be done to evaluate the background and reasoning. Almost 20% of prescriptions did not meet the guidelines, more strict control could be needed.

Keywords: antibacterial agents – resistance – tendency

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