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MEETING ABSTRACT

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Drug consumption in the treatment of obstructive lung diseases in the Republic of Serbia in the period from 2011 to 2020

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Background: Obstructive lung diseases include chronic obstructive pulmonary disease (COPD) and asthma. It has been shown that in the treatment of this pathology certain groups of drugs such as methylxanthines can cause numerous side effects. The aim of this study was to analyze the consumption of drugs used in the therapy of obstructive lung diseases in the Republic of Serbia in the period from 2011 to 2020, as well as to examine the relationship between the price of individual preparations and their consumption.

Methods: The consumption of drugs was monitored by the internationally accepted ATC/DDD methodology, as well as by the use of the DU 90% method. The total amount of consumed drugs was expressed as the number of defined daily doses per 1000 inhabitants per day (DDD / 1000 inhabitants / day). The relationship between drug consumption and price was examined by linear regression at the level of statistical significance of $p < 0.05$.

Results: In our research, a statistically significant correlation between the increase in the consumption of certain medicines and the decrease in their price was proven (salbutamol, formoterol, montelukast, fenoterol, ipratropium bromide). However, within subgroup R03, methylxanthines showed high consumption. Their consumption in the Republic of Serbia was 4 to 12 times higher than in Finland, Croatia and Norway.

Discussion: Such a large consumption of aminophylline in Serbia can be explained by the low price of this drug per DDD, which was between 0.15€ and 0.16€. The high consumption of methylxanthines should be replaced by some of the drugs with a better profile of side effects such as β_2 receptor agonists. The current situation is unfavorable and it is necessary to change the attitude and awareness of doctors and patients. However, the fact is that despite the large consumption of methylxanthines, the consumption of fixed combinations of beta agonists and corticosteroids, as well as beta agonists and anticholinergics, is increasing year by year.

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