Abstract

SSRI antidepressant consumption in Czech republic

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Introduction: Selective serotonin reuptake inhibitors increase the available amount of

neurotransmitter serotonin in synapses, resulting in their antidepressant and anxiolytic effect.

Objective: The objective of this diploma thesis was to evaluate the consumption of SSRI

antidepressants in the Czech Republic in the period from 01. 01. 2008 – 31. 12. 2018, based

on the data on consumption from the State Institute of Drug Control (SIDC).

Methods: The research consisted of a retrospective analysis of the SIDC database. The study

included all approved SSRI in the Czech Republic. Drug Utilization Review was used in the

thesis as a methodology. Drug consumption is calculated as the number of defined daily doses

per thousand inhabitants per day (DID). The data on the number of residents was acquired from

the Czech Statistical Office. Descriptive statistics and ATC/DDD methodology were applied.

Results: The consumption of sertraline and escitalopram increased significantly during the

period under review. For sertraline, the DID increased from an initial 8.623 to 15.513,

increasing consumption by 1.8 fold. The greatest increase in consumption was observed for

escitalopram, which increased from 3.81 DID to 15.037, an increase of 3.95 times. It was

possible to observe a decrease in the consumption of citalogram by 12 %, over the period

considered. Consumption values of paroxetine, fluvoxamine and fluoxetine are constant with a

slight decrease.

Conclusion: The results showed an increasing trend in sertraline and escitalopram consumption

in the period under review. Sertraline has been a leader in prescribing since 2010. Fluvoxamine

shows the lowest consumption with a decrease of 18 % compared to 2008. The largest decrease

in consumption (27 %) is recorded for fluoxetine, over the period considered.

Key words: SSRI, drug utilization, depression, anxiety disorders, adverse effect