https://doi.org/10.26800/LV-145-supl9-32

## Assessing the need for deprescribing benzodiazepines in older adults in primary care: analysis of a Croatian cohort from the EuroAgeism H2020 ESR7 project

Procjena potrebe za depreskripcijom benzodiazepina u osoba starije životne dobi u primarnoj zdravstvenoj zaštiti: analiza hrvatske kohorte iz EuroAgeism H2020 ESR7 projekta

Lucija Nežmah<sup>1</sup>, Dora Belec<sup>2</sup>, Margita Držaić<sup>2,3</sup>, Ingrid Kummer<sup>4</sup>, Iva Bužančić<sup>2,3</sup>, Maja Ortner Hadžiabdić<sup>2</sup>, Jovana Brkić<sup>4</sup>, Daniela Fialová<sup>4,5</sup>

**Introduction and aim:** Inappropriate and long-term use (longer than 12 weeks) of benzodiazepines (BZD) is associated with unfavourable outcomes, especially in sensitive groups of patients such as the older adults. In order to increase patient safety and improve outcomes, deprescribing should be suggested to patients with prolonged BZD use. Primary aim of this study was to determine the prevalence of BZD use in older adults in Croatian primary health care. Secondary aim was to estimate the need for their deprescribing.

Methods: Data for this observational, cross-sectional study were collected using structured, standardized questionnaire developed for the purpose of the EuroAgeism H2020 ESR 7 project in community pharmacies in two Croatian regions (Istria and Kvarner and City of Zagreb) between June 2019 and December 2020. To determine which patients could benefit from deprescribing BZD, four criteria for deprescribing were defined using Canadian (1), Australian (2), and Tasmanian (3) deprescribing guidelines, as well as the Summary of Product Characteristics of the drugs analysed.

Results: Final analysis included 264 participants who were predominantly female (64,8%) with a mean age of 74.49 (SD=6.81) years. Each participant used on average 5.97±3.17 medications with 90 of them (34.2%) using BZD. The most commonly used BZD was diazepam (n=41, 45.6%), followed by alprazolam (n=25, 27.8%). Insomnia (n=36, 40.0%), anxiety (n=26, 28.9%), and a combination of both (n=9, 10.0%) were the most common indications for BZD use. The majority of participants (n=63, 70%) used BZD for more than 12 weeks, which met the criteria for deprescribing. None of the patients used BZD for less than 12 weeks, and 30% of the patients exceeded the recommended maximum daily dosage for older adults. The results indicated that at least 75 participants (83.3%) could benefit from deprescribing BZD. Furthermore, all patients who participated in this study and used BZD should have their therapy reviewed and optimized.

Conclusion: The results of this study highlight the need for the rationalization of BZD use in older adults in primary care settings. There is a necessity to raise awareness about prescribing BZD medications to older adults and educate both, doctors and pharmacists, about alternative therapeutic options. Guidelines and criteria for deprescribing can serve as useful tools in rationalizing the usage of BZD medications among older adults.

**Grant support:** the EUROAGEISM H2020-MCSF-ITN-764632 project, INOMED project (CZ.02.1.01/0.0/0 .0/18\_069/0010046), PROGRESS Q42, Faculty of Pharmacy, Charles University (KSKF-2 Assoc. Prof. Fialová) and SVV 260417.

## REFERENCES

- 1. Pottie K, Thompson W, Davies S, Grenier J, Sadowski CA, Welch V, et al. Deprescribing benzodiazepine receptor agonists: Evidence-based clinical practice guideline. Can Fam Physician. 2018;64(5):339–51.
- 2. NSW Therapeutic Advisory Group. Deprescribing Guide for Benzodiazepines and Z-Drugs. 2018. [cited 2023 May 14]. Available from: https://www.nswtag.org.au/wp-content/uploads/2018/06/1.1-Deprescribing-Guide-for-Benzodiazepines-and-Z-Drugs.pdf.
- 3. *Primary Health Tasmania*. A Guide to the Use of Benzodiazepines in Older Adults. 2016. [cited 2023 May 14]. Available from: https://www.primaryhealthtas.com.au/wp-content/uploads/2018/09/A-guide-to-the-use-of-benzodiazapenes-in-older-people.pdf.

<sup>&</sup>lt;sup>1</sup> Mandispharm community pharmacy chain, Zagreb, Croatia

<sup>&</sup>lt;sup>2</sup> Faculty of Pharmacy and Biochemistry, University of Zagreb, Zagreb, Croatia

<sup>&</sup>lt;sup>3</sup> City Pharmacies Zagreb, Zagreb, Croatia

Department of Social and Clinical Pharmacy, Faculty of Pharmacy in Hradec Králové, Charles University, Hradec Králové, Czech Republic

<sup>&</sup>lt;sup>5</sup>Department of Geriatrics and Gerontology, 1st Faculty of Medicine, Charles University in Prague, Prague, Czech Republic mortner@pharma.hr