## **Posters**

## Scientific Presentation: Epid (Epidemiology)

157

PREVALENCE AND PATTERNS OF DRUG-DISEASE INTERACTIONS IN LONG-TERM RESIDENTS IN NURSING HOME FACILITIES IN THE CZECH REPUBLIC

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**Introduction**: Prescription of potentially inappropriate medications, non-geriatric doses and drug-disease interactions contribute to high prevalence of adverse drug events, geriatric syndromes and symptoms, and increased frailty in older adults. Despite serious health and socio-economic consequences, a very few studies have been published on phenomenon of

prescribing of drug-disease interactions (DDI) in older patients in Central and Eastern Furope.

**Methods**: This study aimed to investigate the prevalence of DDI and differences across nursing home (NH) facilities applying relevant parts of Beers 2012 criteria, Czech national consensus 2012 (CNC), and STOPP/START criteria vers.1. This is a retrospective cross-sectional study that analysed semi-implicitly InterRAI-LTC assessment protocols of 490 NH residents from 10 Czech NH facilities (N = 490, 65+) participating in the EU SHELTER project. Retrospective analyses were conducted in 2019 year.

Results: Prevalence of potentially inappropriate DDI ranged from 44.5% to 62.3% identified by STOPP criteria and CNC, respectively. The most common DDIs were long-term use of benzodiazepines in depressive residents (7.8%) and use of opioids in residents with chronic constipation without osmotic laxative treatment (7.4%). The prevalence of undertreatment identified by START criteria was 52.9%, mainly due to absence of statins in NH residents with diabetes mellitus and cardiovascular risk factors (9.8%) and the absence of anticoagulation therapy in patients with atrial fibrillation (7.1%).

Conclusions: Potentially inappropriate DDI were highly prevalent in Czech long-term NH residents with significant differences across NH facilities. Using method of semi-implicit medication reviews, we cannot judge the real quality of drug treatment, but there is a necessity to reduce the high prevalence of DDI in NHs in order to prevent potential adverse drug events. Grant support: InoMed project (reg. No: CZ.02.1.01/0.0/0.0/18\_069/0010046, 2019–2022), H2020-MCSF-ITN-764632, PROGRESS Q42 FoP, Charles University, FP7-HEALTH-F4–2008-201,917, SVV 260417.