

# Drug-related problems associated with the use of analgesics among the Polish elderly ? a preliminary study

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**Background** The proportion of the Polish population aged 65 and over has been increasing recently. Ageing often associates with polypharmacy. In addition to prescription drugs patients also use OTC medications, especially analgesics, increasing the risk of drug-related problems (DRPs).

**Purpose** This study aimed to identify and categorise DRPs associated with the use of analgesics in the elderly, as well as based on the conducted analysis, to develop recommendations increasing the safety of analgesic therapy.

**Method** The study was performed in 2018 and 2019 among Polish senior daycare centre participants aged 65 and over, who have agreed to be included in the survey. For identification of DRPs pharmacist-led medication use reviews were conducted. Outcomes were the number and type of DRPs associated with the use of analgesics according to the PCNE Classification, version 8.03.

**Findings** The study revealed the problem with extensive use of analgesic drugs among the Polish elderly, which may result in DRPs. Among 90 elderly that completed the study, there were 54 patients (60%) taking analgesics. Seventeen patients (19%) took more than one such medicine (2-5). Analgesics accounted for almost half (47%) of all OTC drugs used in the study group. A total of 61 DRPs associated with the use of analgesics were identified in 29 (32%) patients. The most common DRPs were related to the use of non-steroidal anti-inflammatory drugs (NSAIDs) and were associated with treatment safety. Sixteen patients (18%) used an inappropriate combination of drugs, mostly NSAIDs with angiotensin-converting-enzyme inhibitors or angiotensin receptor blockers. In 11 patients (12%), there was an inappropriate duplication of the therapeutic group within NSAIDs.

**Conclusion** The prevalence of analgesics, as well as DRPs associated with their usage among the studied elderly in Poland, was high. Appropriate pharmaceutical care could significantly improve the efficacy and safety of analgesic therapy in geriatric patients.