

## Role of community pharmacists in the detection of potentially inappropriate benzodiazepines prescriptions for insomnia

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### Abstract

#### Background

The appropriate management of chronic insomnia is crucial and prescribing of hypnotic drugs is common. Adverse events associated with the use of hypnotic drugs, are particularly harmful for elderly; long term benzodiazepine use in older patients is associated with an increased risk of dementia, mortality and other psychomotor impairments (daytime fatigue, ataxia, falls, and road traffic incidents). In 2012 updated Beers criteria for potentially inappropriate medication in older adults suggested to avoid all benzodiazepines in older adults to treat insomnia. In addition successful discontinuation may result in improvements on cognitive and psychomotor function, particularly in older people, but patients who have taken benzodiazepines on a long term basis should be withdrawn gradually over a number of months (e.g. six months).

#### Objectives

The main objective of the present study was to measure the prevalence rates of potential benzodiazepines inappropriate prescriptions for insomnia in primary care using updated Beers' criteria and to assess the role of community pharmacists in the detection of signal of inappropriate drug prescriptions.

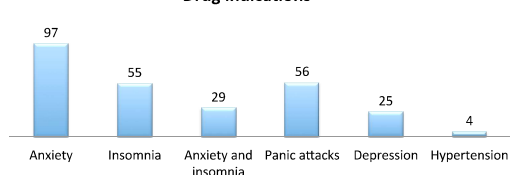
#### Methods

This is an observational study conducted in 8 community pharmacies. The study included a sample of patients receiving at least one benzodiazepine. They completed a questionnaire, which aim was to assess current insomnia medication, physician diagnosis and attempts to drugs discontinuation. Each pharmacist was asked to interview a sample of patients with the prescriptions of benzodiazepines. Specifically, the survey was "studied" to collect information about: socio-demographic characteristics, drug indication, duration of drug prescription, number of hypnotic-drugs, previous attempt to drug-discontinuation, preference of patients about benzodiazepines withdrawals, and modality of discontinuations.

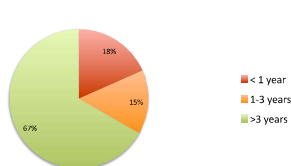
#### Results

About half of patients (n=84) reported to be treated for insomnia and 62% were elderly (mean age 68, range 27- 93). Fifty-eight patients (69%) were on long term treatment (> 3 years) and for 13 patients (15%) duration of treatment was between 1 and 3 years. Thirty-three patients were in favour of benzodiazepine-discontinuation and 17 of them have previously tried to stop the treatment with abrupt withdrawal but in all cases discontinuation was unsuccessful. Seven patients received more than one benzodiazepine for insomnia: two benzodiazepines in four cases, three in 2 cases and four in one cases. In all cases the treatment was chronic and six patients were elderly.

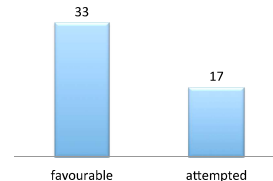
Drug indications



Insomnia



Withdrawal



#### Conclusions

Use of community pharmacy survey data allowed us to obtain informations about incorrect management of insomnia, long term treatment and inappropriate benzodiazepines prescriptions.

Chronic use and prescription of more than one benzodiazepines for insomnia are not supported by scientific evidence. Correct information about duration of treatment and drug-discontinuation are important for a safer use of hypnotics. Similarly, stricter adherence to evidence-based guidelines are essential for a rational use. These preliminary observations should be confirmed in further studies by community pharmacists that have a central role in the pharmacovigilance activity, by contributing to the prevention and identification of potential inappropriate drug prescriptions.

