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SHORT COMMUNICATION

# **Clonazepam tablets prescription in Santa Clara Municipality**

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### Abstract

**Introduction:** benzodiazepines are drugs used for anxiety and sleep disorders, as well as muscle relaxants and anticonvulsive. Despite being discouraged in prolonged treatments, some patients have chronic use, which is associated with the development of physical dependence, manifested in moderate to severe withdrawal symptoms when treatments is discontinued.

**Objective:** to characterize the consumption profile of clonazepam 1mg tablets in patients with outpatient prescription in Santa Clara Municipality.

**Methods:** a Medication Utilization Study was conducted aimed at assessing the prescription of the medication clonazepam 1mg tablets in the Santa Clara Municipality during the period from June 2021 to June 2023.

**Results:** an increase of 198% was evidenced with respect to the initial number of reported outpatients and a predominance of patients over 60 years of age.

**Conclusions:** the results showed the need to be more careful in the use of clonazepam due to the risk it presents in elderly patients together with the appearance of undesirable adverse effects.

Keywords: benzodiazepines, clonazepam, drug utilization review.

#### Introduction

Benzodiazepines are one of the most use pharmacological groups due to their anxiolytic, hypnotic, muscle relaxant and anticonvulsant effects. Their use frequently extends for periods that go beyond those recommended, which is why they continue to raise controversies worldwide. [1]

Based on the data report from the World Health Organization (WHO), benzodiazepinas are positioned as the group that is most frequently prescribed within psychotropic drugs and, considering the global number of drugs, they are only behind those used for the treatment of cardiovascular diseases. [2]

The perception of low risk and the irrational use of this therapeutic group have possibly contributed to its wide use, which could lead to an increase in the incidence of avoidable adverse effects and represent a public health problem. There is sufficient evidence that associates the use of benzodiazepines with an increased risk of traffic accidents, falls and fractures; the evidence about the risk of dementia that they

#### cause is increasing. [3]

An international committee endorsed by the World Health Organization (WHO), establishes the Anatomical Therapeutic Chemical Classification System (ATC) of medicines and their respective Defined Daily Dose (DDD). [4] In the case of clonazepam, the ATC classification systems classify it as an anticonvulsive and assign it a DDD of 8mg, this indication. However. according to the predominant use in adults is as an anxiolytic, in which case the doses are substantially lower. To appropriately reflect the contribution of clonazepam to the total population exposure to benzodiazepines, the literature that assigns an anxiolytic DDD of 1mg for this drug has been followed. [5, 6] A recent increases in its prescription has been reported in numerous studies. [7-10]

It is considered a benzodiazepine with a long half-life. According to the Beers criteria <sup>(11)</sup> and Screening Tool of Older Persons Potentially Inappropriate -Screening Tool to Alert Doctors to Right Treatment (STOPP-START) recommendations <sup>(12)</sup> indicate that it

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means a greater risk of prolonged sedation, confusion, balance disorder and falls.

## **Methods**

A study of the use of drugs of the Indication-Prescription type was carried out aimed at assessing the prescription of the drug clonazepam in the Santa Clara municipality, during the period June 2021 to June 2023. All patients included in the investigation were of the outpatient type. The study universe consisted of all patients with a prescription of clonazepam 1mg tablets in the Santa Clara Municipality. In addition, the sample was stratified by age group.

# **Results and discussion**

The sample at the initial moment (June 2021) was made up of 2939 patients, culminating in 5819 patients (June 2023) who presented prescriptions for clonazepam 1mg tablets in the Santa Clara Municipality, which represented an increase of 198%.

It was mainly used as an anxiolytic and the average dose was between 2 and 3mg daily, in contradiction with what is reported in the literature for these cases. Regarding the age groups, more than 50% corresponded to patients over 60 years of age, a group more susceptible to presenting more significant undesirable effects.

# **Conclusions**

Due to the high tendency to use benzodiazepines, mainly in elderly people, together with the appearance of undesirable effects with unfortunate consequences and their indication using therapeutic doses above what is reflected in the literature, their correct use becomes a matter of vital importance.

# Declarations

# **Conflict of interest**

The Author declares that have no conflicts of interest to disclose.

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