Oral Communication 19

## Drug poisoning profile in Portugal: a special focus on antipsychotics

<u>A. R. T. S. Araújo</u><sup>1,2,3,\*</sup>, E. Gallardo<sup>4,5</sup> and F. Rato<sup>6</sup>

<sup>1</sup> Research Unit for Inland Development (UDI), Polytechnic Institute of Guarda, Guarda, Portugal

<sup>2</sup> TOXRUN – Toxicology Research Unit, University Institute of Health Sciences, CESPU, CRL, 4585-116 Gandra, Portugal

<sup>3</sup> LAQV, REQUIMTE, Department of Chemical Sciences, Faculty of Pharmacy, University of Porto, Porto, Portugal

<sup>4</sup> CICS-UBI, Health Sciences Research Centre, University of Beira Interior, Covilhã, Portugal

<sup>5</sup> Laboratory of Pharmaco-Toxicology, Ubimedical, University of Beira Interior, Covilhã, Portugal

<sup>6</sup> Centro de Informação Antivenenos (CIAV), Instituto Nacional de Emergência Médica, Lisboa, Portugal

\* Correspondence: andrearaujo@ipg.pt

## Abstract

Background: Acute poisoning is a major public and preventable global health problem, contributing to morbidity and mortality in many parts of the world. Most patients with acute poisoning are treated as outpatients in hospital emergency departments. Acute poisoning occurs soon after exposure to either single or multiple toxic substances. Poisoning cases may be intentional or unintentional. **Objective:** The aim of the present study was to carry out a drug poisoning profile in Portugal with a special focus on the antipsychotic drugs. Methods: This work describes the retrospective and descriptive analysis of the information reported to Centro de Informação Antivenenos (CIAV) from 2019 to 2021 [1]. Data analysis focused on the main toxic involved in poisonings. Results: In Portugal there is a prevalence of nonintentional poisonings, affecting more adults than children, the overwhelming majority occurring by ingestion. The main agents involved were medicines (60.4%), domestic/industrial products (21.7), biocides/phytopharmaceuticals (5.6%), substances of abuse (5.5%) and cosmetics (2.7%). Regarding drug poisonings, it was verified that the pharmacotherapeutic groups most involved were anxiolytics and sedative-hypnotics (27.4%), antipsychotics (11.1%), antidepressants (10.5%), non-steroidal anti-inflammatory drugs (8.1%) and paracetamol (7.8%). There was an increasing trend of poisonings with Central Nervous System (CNS) drugs in these 3 years, from 44.2% and 64.6%. The antipsychotics occupied the second position, with emphasis for quetiapine. This drug has become widely used for a variety of indications because of its favorable side effect and safety profile. Patients with an acute overdose of quetiapine may demonstrate central nervous system depression, sinus tachycardia, prolonged QTc interval, hypotension, coma, and seizures [2]. Conclusions: Since drug intoxications represent a public health problem, it is of utmost importance to highlight to the rational use of the medicines, namely CNS drugs, and therefore the need of the improvement in the prevention and education in this field is mandatory.

Keywords: poisoning; drugs; central nervous system drugs; antipsychotics

## Acknowledgments

This research received no external funding.

## References

- 1. Serviço Nacional de Saúde, CIAV Instituto Nacional de Emergência Médica, https://www.inem.pt/category/servicos/centro-de-informacao-antivenenos/
- 2. Chen, J.A.; Unverferth, K.M.; Cheung, E.H. Delayed-Onset Seizure in a Mild Quetiapine Overdose: Report of a Case and Review of the Literature. *Case Rep. Psychiatry.* **2018**, *2018*, *1-3*.



In *Scientific Letters*, works are published under a CC-BY license (Creative Commons Attribution 4.0 International License at <a href="https://creativecommons.org/licenses/by/4.0/">https://creativecommons.org/licenses/by/4.0/</a>), the most open license available. The users can share (copy and redistribute the material in any medium or format) and adapt (remix, transform, and build upon the material for any purpose, even commercially), as long as they give appropriate credit, provide a link to the license, and indicate if changes were made (read the full text of the license terms and conditions of use at <a href="https://creativecommons.org/licenses/by/4.0/">https://creativecommons.org/licenses/by/4.0/</a>).