

Oral Communication 5

## Characterisation of the poisoning profile in the emergency department of Lamego Hospital

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### Abstract

**Background:** In clinical practice, the concept of poisoning refers to contact with substances that, depending on their physical and chemical properties, can disrupt the normal functioning of the body. Drug poisonings are becoming increasingly common and have become one of the most significant public health issues [1]. **Objective:** The main objective of this study was to characterize adult poisonings treated in the Emergency Department of Lamego Hospital (EDLH). **Methods:** This is an observational, descriptive, cross-sectional, and retrospective study. The data collected refer to cases of possible poisonings treated at EDLH between January 2021 and December 2022. A total of 136 possible poisoning cases were recorded at EDLH, of which 15 cases were excluded (13 because the individuals were underage and 2 due to incomplete data). Therefore, the study was based on a sample of 121 cases. **Results:** The majority of poisonings were alcohol-related ( $n=65$ , 53.7%), followed by drug poisonings ( $n=36$ , 29.8%), where in 2 cases there was concomitant ingestion of alcohol and drugs, with carbon monoxide poisonings ( $n=6$ , 5%) and chemical products ( $n=3$ , 2.5%) being less frequent. The predominant symptoms were related to the central nervous system (83.4%). A higher incidence was observed among males (52.1%), and the average age was 43 years. Regarding drug poisoning, the most involved pharmacotherapeutic group was anxiolytics, sedatives, and hypnotics ( $n=26$ , 68.4%). The predominant route of contact was oral, and most poisonings were voluntary. Individuals who suffered from drug poisonings were older (mean age 48 years) than those who suffered from alcohol poisonings (mean age of 38 years). Alcohol poisonings were more common in males (40.6%) compared to females (13.2%), while drug poisonings were more frequent in females (26.5%) compared to males (3.3%). Of the cases studied, 25% ( $n=30$ ) of the individuals had concomitant diseases and were undergoing chronic treatment. In terms of treatment, fluid therapy was the most used intervention ( $n=79$ , 65%), and antidotes were administered in 8 cases (6.6%). **Conclusions:** The obtained results highlight the need for community health intervention strategies, raising awareness for the rational use of medications as well as for moderate alcohol consumption.

**Keywords:** poisonings; medicines and alcohol; hospital emergency

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### References

1. Braitberg, G. Drugs and Antidotes in Acute Intoxication. *Critical Care Nephrology* (Third Edition) **2019**, *1*, 574-588.e3, doi: 10.1016/B978-0-323-44942-7.00098-4



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