

JBP

Journal of Biochemicals and Phytomedicine

eISSN: 2958-8561



## Prevalence and Trends of Tricyclic Antidepressant Poisoning in Ilam: A Comparative Analysis

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### ARTICLE INFO

**Article Type:**  
Research

### Article History:

Received: 11 Oct 2024

Revised: 29 Nov 2024

Accepted: 15 Dec 2024

Available online: .....

### Keywords:

Depression,  
Tricyclic antidepressants,  
HPLC,  
Physicians,  
Poisoning

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### ABSTRACT

**Introduction:** Tricyclic antidepressants (TCAs) are widely prescribed for treating depression, but they are also associated with a significant global mortality rate due to their overuse by healthcare providers. Given the severe side effects and high mortality associated with TCA poisoning, as well as the frequent occurrence of poisoning cases involving various drugs, including TCAs, this study aims to examine the prevalence of TCA poisoning in symptomatic patients referred to the poisoning department of Shahid Mostafa Khomeini Hospital in Ilam City during 2021 and 2022.

**Methods:** This study reviewed poisoning cases from 2021 and 2022 at the poisoning department of Shahid Mostafa Khomeini Hospital in Ilam City, Iran. Data collected included patient age, gender, and TCA levels in blood samples. Statistical analysis was performed using SPSS software, with the Mann-Whitney test employed for data comparison.

**Results:** The analysis of 2,217 poisoning cases in 2021 and 1,120 cases in 2022 revealed a TCA poisoning rate of 6.4% in 2021 and 2.6% in 2022. Nortriptyline was identified as the most commonly involved drug in poisoning incidents, with the highest frequency observed in individuals aged 20-35, across both genders.

**Conclusion:** TCA poisoning remains prevalent, especially among individuals aged 20-35, with nortriptyline being the most frequently implicated drug. The observed decline in poisoning cases in 2022 compared to 2021 may reflect changes in prescribing practices or the implementation of preventive measures. These findings underscore the importance of careful TCA prescription management and increased monitoring to minimize associated risks.

Journal Pre-proof

**Please cite this paper as:**

Ghaneialvar H, Heydarizadeh H, Zamanian G, Abbasi N, Saki K, Tahmasebi M. Prevalence and trends of tricyclic antidepressant poisoning in Ilam: A comparative analysis. Journal of Biochemicals and Phytomedicine. In press. doi: 10.34172/jbp.2025.x