

## **Evaluation of Rodenticide Poisoning Distribution Based on Demographic Characteristic, Poisons, Causes of Intoxication, Duration of Hospitalization and Mortality Rate**

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### **Abstract**

**Introduction:** Due to dissimilarities in the availability of poisons in different areas and lack of enough control over the purchase and sale of some dangerous rodenticides, it is prudent to establish the distribution of rodenticide poisoning in each region. Therefore, this study was performed to evaluate the demographic factors, types of poisons, duration of hospitalization and mortality of patients in Isfahan, Iran.

**Material & Methods:** In this cross-sectional study, the sex, age, type of poison, duration of hospital stay, and fatal outcomes of rodenticide poisoning patients who were admitted in the two poisoning referral centers of Isfahan (Noor and Ali Asghar hospitals) were evaluated through a 6-month-period. For statistical analysis, Chi square test using SPSS software was employed.

**Results:** Totally, 128 cases of rodenticide poisoning were hospitalized. The most common types of poisons were arsenic (43) and Warfarin (31) respectively. Poisoning was more common in males, especially between the ages 15 to 40. Suicide was the prevailing cause of poisoning. Two deaths occurred which were owing to phosphide consumption. There was no correlation between sex and the cause of poisoning, yet age had a significant influence (P Value = 0.025).

**Conclusion:** Differences in the incidents of rodenticide poisoning could be due to differences in availability. Strict measures for control over these substances, particularly the ones with high toxicity, and informing the public of the hazards and the proper method of their storage would reduce poisonings

**Keywords:** Poisoning, Rodenticide, Warfarin, Arsenic, Strychnine, Phosphides

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