



# Epidemiology of Poisoning in Children Admitted to Imam Khomeini Hospital in Esfarayen (2018-2023)

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## ABSTRACT

**Introduction:** Poisoning in childhood is a significant global issue and one of the most common reasons for visits to medical facilities. In addition, poisoning is a leading cause of death among children. Consequently, prioritizing children's health is a crucial indicator of overall societal health, necessitating further research in this area. This study aimed to investigate the epidemiology of poisoning in children admitted to Imam Khomeini Hospital in Esfarayen from 2018 to 2023.

**Methods and Materials:** In this cross-sectional study, the records of all individuals under 18 who referred to Imam Khomeini Hospital in Esfarayen between 2018 and 2023 were examined. Data were collected from archives of the hospital. The analysis was conducted using SPSS 26, and frequency and crosstab tables were used.

**Results:** The rate of poisoning in girls (59.9%) was higher than in boys (40.5%). Among 1,147 hospitalized children due to poisoning, 593 cases (51.7%) were older than 13 years, 84 cases (7.3%) were between 6 and 12 years old, and 470 cases (41%) were less than 5 years old. The most common cause of poisoning was drugs (54.8%), followed by opium (22.7%), methadone (5.4%), alcohol (4.4%), organophosphorus poison (3.4%), and detergents (9%). Other substances included tramadol (2.7%), carbon dioxide (0.9%), petroleum (0.8%), rat death poison (0.7%), amphetamine (0.6%), gasoline (4.0%), insecticide (0.3%), and poisonous plants (0.2%). Opium poisoning was the highest among children under five years of age (48.1%), and drug poisoning was the most prevalent poisoning in the age groups of 6 to 12 years (46.4%) and over 13 years (75.5%).

**Conclusion and Discussion:** Considering the high rate of drug poisoning, training on how to store drugs, drug sensitivities, as well as paying attention to family and psychological issues, especially for girls at puberty, seems necessary to prevent suicide. Also, considering the higher rate of opium poisoning in children under five years of age, welfare intervention to identify abused children or necessary counseling for families is very important.

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