Non-medicinal poisoning pattern in adults referred to the 5Azar hospital of Gorgan from 2008 to 2015

Mohammad Shokrzadeh¹, Reza Hoseinpoor², Amir Hajimohammadi³, Azam Delaram⁴, Yaghoub Shayeste⁵*

1. Associate Professor, Pharmaceutical Sciences Research Center, Department of Pharmacology and Toxicology, Faculty of Pharmacy, Mazandaran University of Medical Sciences, Sari, Iran
2. M.Sc. student of Epidemiology, Department of Biostatistics and Epidemiology, School of Public Health, Hamadan University of Medical Sciences, Hamadan, Iran
3. Assistant Professor, Department of Surgery, Faculty of Medicine, Golestan University of Medical Sciences, Gorgan, Iran
4. B.Sc of Medical Records, 5Azar Hospital, Golestan University of Medical Sciences, Gorgan, Iran
5. M.Sc. of Toxicology, Health Management and Social Development Research Center, Golestan University of Medical Sciences, Gorgan, Iran

Abstract

Background & Objective: Poisonings are of the major public health challenges. Non-medicinal poisonings are of the most common types and causes of referring to medical centers worldwide. The present study was aimed to determine the non-medicinal poisonings pattern in adults of Gorgan city.

Methods: The present cross-sectional study was conducted on all non-medicinal poisoned patients referred to the 5Azar hospital from 2008 – 2015. Data were collected on checklists using census data collection method and were analyzed by Stata 11.0 software using Pearson’s Chi-square test.

Results: Of all 800 admitted poisoning cases, 227 individuals were non-medicinal and mostly male (72.7%). The ages of 34.4% of cases were between 20 and 29 years. Moreover, 68.7% of all cases were living in urban areas, 57.7% were married and 27.8% were educated up to high school. Poisonings mostly occurred during summer (30%) and intentional (suicidal) poisonings were known as the major form (47.1%). Opium and aluminum phosphide were the most important poisoning agents (54.2%). Finally, 29 patients (12.8%) had passed away where aluminum phosphide poisoning was the main reason (55.2%).

Conclusion: Intentional poisonings by opium and aluminum phosphide were identified as the main causes of non-medicinal poisonings. It is necessary to emphasize on educational programs, prevention methods and general awareness.

Key words: poisoning, non-medicinal, opium, aluminum phosphide

Corresponding Author: Yaghoub Shayeste
Address: Health Management and Social Development Research Center, Golestan University of Medical Sciences, Gorgan, Iran.
E-mail: shayeste.yaghoub@gmail.com