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A STUDY OF ACCIDENTAL CHILDREN POISONING

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• Abstract

Background-Unintentional poisoning is one of the most important causes of mortality and morbidity among children in many parts of the world today.

Methods-In this descriptive retrospective study, medical records of 3895 patients (3790 out-patients) were studied from clinical and paraclinical point of view in 1995 at Loghman Medical Center, Tehran, Iran.

Results-Kerosene (Hydrocarbon) was found to be the most common cause of unintentional poisoning in children (23.5%). Two hundred and sixteen products were identified as various causes of children poisoning. Fifty eight percent of child poisoning was under the age of six, with a peak age of 2-3 years (25%).

Conclusion-Most children poisonings are due to available medications, hazardous liquids and house products.

Keywords • Unintentional • children poisoning • hydrocabons

Introduction

Accidental poisoning in children can result in life long disability and is responsible for about 7% of all mortalities. It is of false belief that accidents and poisoning are specific problems of developed countries. Investigations show that they are just as common in different countries and lack of effective strategies for their prevention and management makes it a serious problem. In Iran for example, accidental poisoning is the second most common cause of death after heart disease. ¹

Methods

This descriptive retrospective study was conducted by the collection of clinical and paraclinical data from the records of patients in a one year period. The data was then entered into a check list consisting of variables such as age, sex, description of the poison, clinical manifestations, management, and outcomes like mortality. Paraclinical data included WBC, U/A, level of drugs in blood, and chest X-ray report.

Results

Our sample consisted of 3895 patients, out of which 3790 (97.3%) were out-patients. Patients with mild and moderate toxicity were admitted and received ipecac syrup and underwent gastric lavage for 4-5 and 24-48 hours after ingestion of the poison, respectively. One hundred and five patients (2.7%) were hospitalized with severe toxicity.

Four patients died of kerosone, acetaminophen, organophosphates and unknown drug toxicities. Sixty percent of patients were male and forty percent female. Fifty eight percent were under age 6 with a peak age of 2-3 years. Up to 216 products were identified as various causes of children poisoning. Table 1 shows the most common causes of poisoning. It is seen that hydrocarbons are the most common cause of children poisoning (23.5%). Whitening products like liquid bleach (8.5%), benzodiazepines (8.5%), unknown drugs (6.1%), food poisoning (5.4%) and NSAIDs (4.9%) are other common cause of poisoning.

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Discussion

Children poisoning is common all around the world. In this study a high incidence of unintentional children poisoning was also found causing much morbidity in Tehran. According to a similar study by Marandian et al.⁶ on 3462 cases of hydrocarbon poisoning in 5 years a similar prevalence pattern as that of our study was shown.

In our estimate, there are almost 2000 cases of children hydrocarbon poisoning in Tehran annually⁷, out of which about a half are referred to Loghman Medical Center.

It is seen that most cases of poisoning are due to the common house-hold products and available medications. It is therefore necessary to educate the population on preventive measures.

In regards to the high morbidity rate seen in this study we recommend emergency centers to be equipped for managing and treating cases of child poisoning.

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