

## Poster Abstracts

### PO-71

#### EVALUATION OF DRUG-INDUCED APNEA IN CHILDREN ADMITTED IN LOGHMAN HAKIM HOSPITAL FROM APRIL 2012 TO APRIL 2013

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**Background:** Children are exposed to different environmental hazards, including poisons, which can cause irreparable effects and even be fatal for them. Poisoning in children is among the common and dangerous emergencies, but often is preventable and treatable. The purpose of this study is the evaluation of Poisonings that lead to apnea in children .

**Objectives:** The current study aimed to evaluate the prevalence of drugs and chemical poisoning leading to apnea. Also we detected type of drug that induced apnea among children.

**Method:** This study is a cross-sectional study done among patients less than 12 years old with complaint of acute poisoning leading to apnea referred to Loghman Hakim Hospital Emergency Centre ( a major center for poisoning treatment in Tehran,Iran) from April 2012 to April 2013>Data including demographic characteristics, history of the type and amount of substance used, the time between consumption and occurrence of apnea and para clinical findings was collected then the data collected from patients' files were entered into the data forms and the findings were analyzed using the , SPSS version 20 statistical software.

**Result:** During the study period, 96 cases of drugs and chemical poisoning leading to apnea were observed of which 51 (53.1%) were male and 45 (46.9%) female. The age range was from 25 days to 12 years old and the highest percentage (23%) was for 1 to 2 years olds . 21 cases (21.9%) had more than one apnea episodes. The mean interval between drug consumption and occurrence of apnea was 2.8 hours, with a minimum interval of half an hour and maximum of 38 hours and 8 cases (8.3%) had apnea after 10 hours of poisoning indicating a relatively long period of time from consumption to apnea occurrence.. In 40% of the cases of poisoning happened inadvertently by the child, 59% was given to the child by others and in 1% it was taken with for suicide intention (11 year old girl by methadone). The most common cause of drug toxicity was Methadone syrup 74% , then Opium 13%, the Baclofen (5.2 percent), Heroin (2.1%) and Diphenoxylate, Tramadol, Organophosphate , Scorpion bites and unknown (1%). 18 cases (18.8%) had a seizure too. The most common laboratory abnormalities were leukocytosis (31%) and hyperglycemia (24%).The mean duration of hospitalization was 3.1 +0.97 days with a maximum stay of 9 days and minimum of 1 day. The mortality rate was three cases (3.1%), and all three cases were by methadone poisoning. The relationship between time of consumption of substance and occurrence of apnea is statistically significant (P =0.012713).

**Conclusion:** The result of this research indicate a high prevalence of apnea and poisoning and the hazardous nature of methadone in children, which indicate the availability of this dangerous substance in homes due to faulty storage and distribution of this material that even hours after poisoning can lead to apnea. Therefore, any in child presenting with apnea, methadone poisoning should be considered and appropriate treatment be given.

**Key words:** poisoning; Apnea ; Pediatrics ;Methadone