

## PATTERN OF ACCIDENTAL PEDIATRIC POISONING IN TAIF REGION WESTERN KSA

Farihan Farouk Helmy<sup>1\*</sup>, Adnan Amin Alsulaimani<sup>2</sup>, Mattar Al-Malky<sup>3</sup>, Abeer Hagra<sup>4</sup>,  
Shrooq Tail AlKhodaidi<sup>5</sup> and Shahed Ali Alsofiani<sup>6</sup>

<sup>1</sup>Consultant Child Mental Health, Assistant Pediatric Professor, Faculty of Medicine, Taif University, KSA.

<sup>2</sup>Dean of Medical College, Taif University. KSA, Associate Prof. Consultant Pediatrician & Neonatologist-

<sup>3</sup>Consultant Pediatric Endocrinology, Taif Children Hospital, Taif, KSA.

<sup>4</sup>Assistant Professor of Forensic Medicine and Toxicology, Faculty of Medicine, Suez Canal University, Egypt. Taif University, KSA.

<sup>5,6</sup> Medical Student, Taif University, Saudi Arabia.

\* Corresponding Author Farihan Farouk Helmy

Consultant Child Mental Health, Assistant Pediatric Professor, Faculty of Medicine, Taif University, KSA

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### ABSTRACT

**Background:** Poisoning is the third most common emergencies of pediatrics leading to high social and economic burden. **Aim:** To describe the pattern of acute childhood poisoning in Taif region western Kingdom of Saudi Arabia. **Patients and Methods:** A cross sectional descriptive study was conducted on 314 children up to 12 years with acute poisoning who were referred to the Pediatric Emergency Department of the Children hospital, in Taif city, KSA from the beginning of July 2015 to the end of June 2016. Complete demographic and clinical data were recorded and analyzed. **Results:** Three hundred and fourteen of poisoned children were enrolled in this study. 51.6% were males and 48.4% females. Overall, 77.4% of children were resident in rural areas around Taif region. Children from 8 to 12 years were more liable to poisoning (51.0%). Mode of toxicity in all cases (100%) was unintentional. 62 cases (19.7%) were admitted to hospital with altered mental status. Non drug was the most frequent causes of poisoning in 184 cases (58.6%), out of which 160 (86.9%) were toxins through animal envenomation. Poisoning was common during the summer in 59.2% of cases. About 99 % of cases recovered with- out complications, and no fatalities occurred during the period of the study. Observation with supportive measures together with decontamination and specific antidote therapy whenever needed was sufficient. **Conclusion:** Causes of poisoning among all children were unintentional. The most frequent poisoning was due to non-drugs agents, scorpion sting, and snake bite.

**KEYWORDS:** Acute toxicity, children, Taif City, KSA.

### INTRODUCTION

Acute poisoning is one of the most common medical emergencies in childhood<sup>[1]</sup> As children are curious, put things in their mouths and are not aware of consequences of that so they are the age group most likely to be poisoned accidentally<sup>[2]</sup> Although success of some interventions to prevent accidental poisoning in the pediatric population, childhood poisoning still remains a major cause of morbidity in both the developed and the developing countries<sup>[3]</sup> As a consequences of poisoning, children may suffer from long-term psychological and physical side effects, it represents 10% of the total burden of unintentional injuries, and 6% of disability modulated life years in low- and middle-income countries<sup>[4]</sup>

Despite the unintentional poisoning statistics often group young children together but children aged 0–4 years do

not constitute a homogenous group in terms of toxicity, recent studies,<sup>[5,6]</sup> demonstrated that children aged 1–3 years' experience the highest levels of unintentional poisoning risk among children aged 0–4 years. However, younger children were more likely to be poisoned by non-medicinal or household substances than older children.<sup>[7,8]</sup>

Kerosene, petrol, medicines, insecticides, and household cleaning products had been identified as major hazards for poisoning incidents among young children<sup>[9,10]</sup> Although homes are supposed to be safe and secure, home accidents are the most frequent causes of injury<sup>[11]</sup> Risk factors include, non-safe keeping of toxic preparations, less strict supervision, less knowledgeable parents about danger, and finally in volatile families hunger may be stimulus to ingestion of harmful substances<sup>[12]</sup> Several studies from the developed

countries show that common household products, rather than pharmaceuticals, are now implicated in the majority of pediatric poisonings<sup>[13,14]</sup>

The pattern of incidence and the risk factors for children's acute poisoning change with time and vary from country to country, and even between geographical regions within the same country<sup>[15]</sup> Although in KSA,<sup>[7, 8]</sup> there are publications in different parts on accidental poisoning, no study has been done in Taif region which lies in western Saudi Arabia, and is approximately 1700 m above sea level. It is made of high altitude mountains, hills and vastly spread valleys, and is considered to be KSA summer capital, with a population of 521,273 at 2014.<sup>[16]</sup>

Taif children's Hospital is a referral hospital at the secondary care level in Western region, it receive children seeking medical help from Taif city and rural area of 400 square kilometers, It has approximately 80 beds in pediatric ward, 20 beds in intensive care unit (ICU), and 6 beds high durable unit (HDU).

Hence our study aims to investigate the characteristics of acute poisoning among children in Taif (KSA), according to which related preventive measures can be taken.

## 1. SUBJECT AND METHOD

### 1.1 Research setting

Pediatric emergency room (ER) in Children Hospital, Taif City, KSA.

### 1.2 Study design

A cross-sectional descriptive study was carried out on all children exposed to acute poisoning from the beginning of July 2015 to the end of June 2016. The study population consisted of acutely poisoned children up to 12 years of age who were referred to the Pediatric Emergency Department with acute poisoning. After doing first aid in emergency room depending on general condition, poisoned children presented with altered mental status, respiratory distress, cardiovascular instability (severe hypotension or cardiac arrhythmias) were managed in PICU, cases needed follow up were admitted to pediatric ward, while stable cases were discharged. Inclusion criteria were all pediatric cases referred to children hospital with acute poisoning during the period of the study, after taking care giver consent.

Exclusion criteria, children with chronic toxicity due to heavy metals and those who refuse to participate in the study by their guardian. The study protocol runs in compliance with the Helsinki Declaration and was approved by the scientific research committee of the Faculty of Medicine, Taif University, as well as Taif Directorate of Health, Ministry of Health, KSA.

### 1.3 Data collection

Guardians were approached by the staff in the ER after reassuring them about the confidentiality of the study and the information it contains, then an informed written consent was obtained from care giver that accepted to participate in the study. All parents or care givers were interviewed using a questionnaire that contained the personal data of poisoned patient, demographic data, causes of poisoning, time of poisoning, time of hospital arrival, presenting symptoms, first aid management at home.

Clinical assessment of the children included: general health condition, alert, response to verbal stimuli, response to painful stimuli, unconsciousness (AVPU) and clinical examination (temperature, pulse rates, blood pressure, mouth ulcers, skin color, pupil dilatation, respiratory rates, signs of respiratory distress and CNS manifestations), investigations, emergency measures, treatment was also recorded.

**Aim:** To describe the pattern of acute poisoning among children presented to emergency room (ER) at Taif Children Hospital, Taif city, KSA during a period of one year.

### 1.4 Data Management & Statistical Analysis

- Data was coded, entered and analyzed using Microsoft Excel software, and was imported into SPSS (Statistical Package for Social Sciences) software program version (16) for analysis.
- According to the type of data, the following tests were used to test differences for significance; Chi square for qualitative variables and student t-test for quantitative variables. Correlations between variables were carried out.
- Mean and standard deviation were calculated for quantitative data.
- The results were presented in the appropriate forms of tables and graphs.

## 2. RESULTS

During the study, period we received total n=332 cases, of children with acute poisoning, 314 cases of children completed the study (94.6 %) so the rest of cases were not included in our study. Among 314 cases of children 162 (51.6%) are males and 152 (48.4%) are females (Figure 1), their age ranged from (9m -12 y) (9 months - 144 m), majority of cases 160 (51.0%) were in age group 8-12y, moreover 243 cases of (77.4%) were resident in rural areas around Taif region. The number of members in the family is between 3 to10 (5.04±2.2), only 8 (2.5%) cases of children their parents were divorced, 268 of parents (85.4%) stated that, they had good martial relations. While only 26 (8.3%) of mothers were illiterate 68 (21.7%) and 94 (29.9%) of them were secondary and college graduated respectively. Accordingly 218 (69.4%) of them were working, 160 (73.4%) of them worked 6-8 hours daily (Table 1).

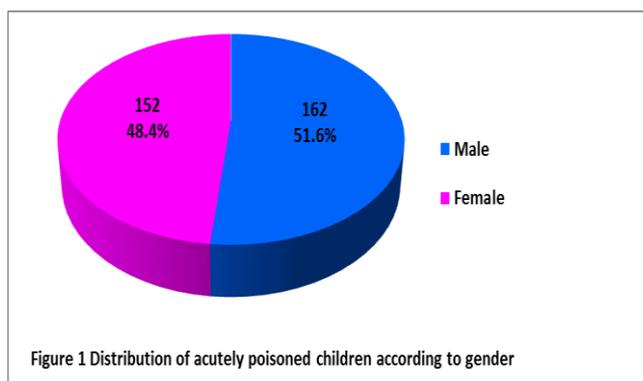


Table (1): Socio-demographic characteristics of the acutely poisoned children and their parents (n=314)

Characteristics	No. (%)
<b>Age (years)</b>	
• <2 years	• 44 (14.0)
• 2 – 4	• 76 (24.2)
• 4 – 8	• 34 (10.82)
• 8 – 12	• 160 (51.0)
<b>Age (in month)</b>	
• Min. – Max.	• 9.0 – 144.0
• Mean ± SD	• 32.77 ± 18.02
<b>Number of house member</b>	
• Min. – Max.	• 3-10
• Mean ± SD	• 5.04±2.2
<b>Residency</b>	
• Rural areas	• 243 (77.4)
• Urban areas	• 71(22.6)
<b>Mother and father</b>	
• Together	• 306 (97.5)
• Divorced	• 8 (2.5)
<b>If together</b>	
• The relation is good	• 268 (85.3)
• The relation is bad	• 46 (14.6)
<b>Father education</b>	
• Illiterate	• 10 (3.2)
• Primary	• 30 (9.6)
• Preparatory	• 44 (14.0)
• Secondary	• 102 (32.5)
• Collage graduation	• 128 (40.8)
<b>Mother education</b>	
• Illiterate	• 26 (8.3)
• Primary	• 96 (30.6)
• Preparatory	• 30 (9.6)
• Secondary	• 68 (21.7)
• Collage graduation	• 94 (29.9)
<b>Is the mother working?</b>	
• Yes	• 218 (69.4)
• No	• 96 (30.6)
<b>If yes how many hours she works (n = 218)</b>	
• <6	• 45 (20.6)
• 6 – 8	• 160 (73.4)
• >8	• 13 (5.9)

Qualitative data were described using number and percent, while normally quantitative data was expressed in mean ± SD.

Table (2) showing types of toxicity, non- drugs including (household products, insecticide and scorpion stings or snake bites) were shown to be the leading causative agents for toxicity in 184 cases of children (58.6%) – while scorpion stings, snake bites were implemented in 160 cases (86.9%), household products (corrosives and disinfectants) and insecticides constituted total of 24 cases (13%).

Table (2): Types of poisons among the acutely poisoned children (n = 314).

Type of poisoning (n=314)	No. (%)
<b>Drugs</b>	<b>100 (31.8)</b>
<b>Non drugs</b>	<b>184 (58.6)</b>
• House hold products	• 14 (7.6)
• Insecticide	• 10 (5.4)
• Other (scorpion sting, snake bite and unknown subject)	• 160 (86.9)
<b>Food poisoning</b>	<b>30 (9.6)</b>

Qualitative data were described using number and percent

Drugs were the second main cause of poisoning, it accounted for 100 cases (31.8%); of which syrup was the most common form in 76 cases (76.0%) (Figure2).

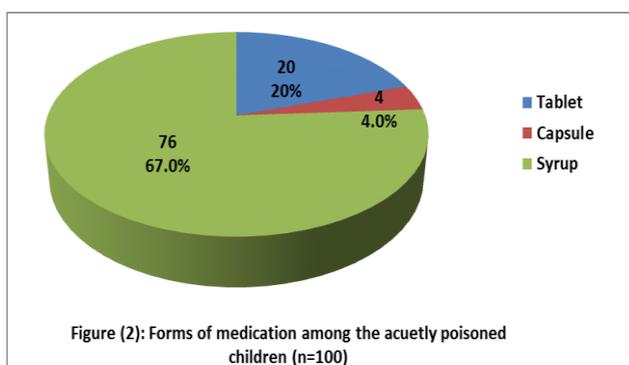


Figure (2): Forms of medication among the acutely poisoned children (n=100)

Regarding the relation between residency and route of poisoning, out of 160 acutely poisoned children by animal envenomation through the dermal route, 154(96.3%) of them resident in rural areas while 6

(3.8%) children resident in urban areas. On the other hand 154 children poisoned through oral route, out of them 89 (57.8%) cases resident in rural areas and 65 (42.2%) resident in urban areas, this result is statistically significant (Table3)

Table (3): Relation between Residency and route of poisoning among acutely poisoned children			
Residency	Route of poisoning among children		Total (n & %)
	Oral (n& %)	Dermal (n& %)	
Rural	89 (57.8)	154 (96.3)	243 (77.4)
Urban	65 (42.2)	6 (3.8)	71 (22.6)
<b>Total</b>	<b>154 (49.0)</b>	<b>160(51.0)</b>	<b>314(100)</b>
<i>Chi-Square = 1.143</i>		<i>P value = .000</i>	

Regarding seasonal toxicity the present study reported that the majority of acute toxicity among children 186 (59.2%) happed in summer months followed by spring

time in 72 (22.9%) of cases while the least flow of acutely poisoned children happened during winter 18 (5.7%) cases (Figure 3).

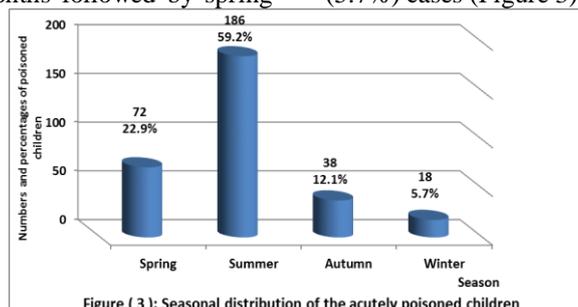
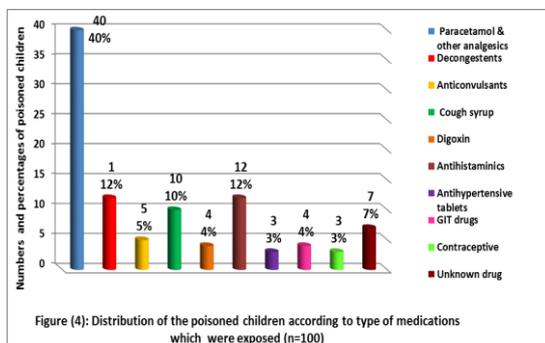


Figure (3): Seasonal distribution of the acutely poisoned children

**Concerning types of drugs**

from the total number of 100 acutely poisoned children paracetamol and other analgesics were responsible for 40% of all cases, while decongestants and antihistamines represent 12% each, cough syrup, anticonvulsants, and unknown drugs represent 10.0%, 5.0%, and 7.0%

respectively. Digoxin and GIT drugs each of them induced acute toxicity in 4.0% of children. Finally, antihypertensive drugs and contraceptive were responsible for 3.0% of all acutely poisoned children (Figure 4).



According to circumstances of occurrence of toxicity the study showed that, in 158 (50.3%) cases of children toxicity, time of exposure to poisonous was between 12am-8am, and in the majority of cases 220 children (70.1%), time of consultation was within less than 2

hours. While only 80 cases (25.4%) of cases the poisoning happened in parent house, 160 cases (50.9%) poisoning occurred in open places In the majority 87 (87%) of children poisoned by medication, it was put in a non- proof locker, and in 55 (55%) of cases the drug was prescribed to the poisoned child (Table 4).

**Table (4): Distribution of the acutely poisoned children, according to different circumstances of occurrence of toxicity (n = 314).**

Circumstances of occurrence of toxicity	No. (%)
<b>Time of exposure</b>	
• 8am – 4pm	• 62 (19.7)
• 4pm – 12am	• 94 (30.0)
• 12am – 8am	• 158 (50.3)
<b>Time of consultation</b>	
<2 hours	• 220 (70.1)
2 – 4 hours	• 74 (23.6)
4 – 6 hours	• 18 (5.7)
>6 hours	• 2 (0.6)
<b>Place of poisoning</b>	
Parents home	• 42 (13.4)
Grandparents home	• 12 (3.8)
Open places	• 260 (82.8)
<b>Mode of toxicity</b>	
• Unintentional	• 314 (100)
• Intentional	• 0.0
<b>Place of saving the medication (n= 100)</b>	
Child proof locker	• 13 (13)
Non Child proof locker	• 87 (87)
<b>For whom the drug was taken (100)</b>	
Father	• 10 (10)
Mother	• 25 (25)
Child himself	• 55 (55)
Others	• 10 (10)

Qualitative data were described using number and percent.

Although the majority of cases 170 (54.1%) were ill when admitted to ER, none of the cases were unconscious, however 60 children (19.1%) had altered mental status, and only 2 cases (0.6%) had convulsions. On admission only 14 (4.5%), 44 (14%) of cases had tachypnea and hypertension respectively (Table 5).

Table (5): Distribution of poisoned children according to finding of clinical examination of children (n = 314).

Finding of clinical examination	No. (%)
<i>General conditions</i>	
• Healthy	• 74 (23.6)
• Ill	• 170 (54.1)
• Dehydrated	• 16 (5.1)
• Shock	• 54 (17.2)
<i>CNS</i>	
• Alert	• 252 (80.3)
• Response to verbal stimuli	} altered mental status
• Response to painful stimuli	
• Convulsing	
• Unconscious	
<i>Sign of respiratory disease</i>	
• Normal	• 298 (94.9)
• Tachypnea	• 14(4.5)
• Respiratory rate (RR) <20	• 2 (0.6)
<i>Blood pressure</i>	
• Normal	• 270 (85.9)
• Hypertension	• 44 (13.9)

Qualitative data were described using number and percent.

Table (6) showed that while local procedure such as tying the site of sting, causing scratch, and applying ramides was done as first aid management by caregiver in 155 (49.36%) of cases, induction of vomiting was done for 129 (41.08%), meanwhile first aid done in ER the was giving the antidote for 160 of cases (50.9%), stomach wash done for 100 cases (31.8 %). On the other wise 192 cases (61.1%) were admitted in hospital, only 4 (1.27%) children of them developed complications.

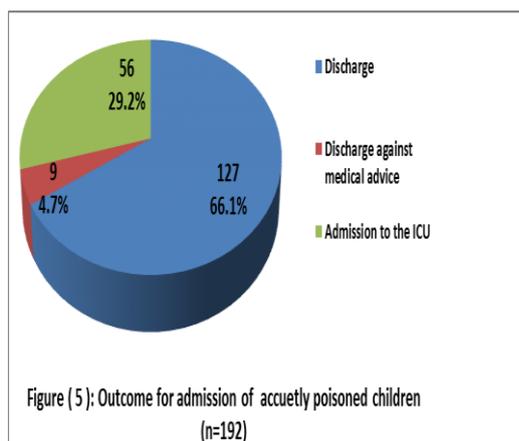
Table (6): Distribution of acutely poisoned children according to management's they received at home and at hospital (n = 314).

Managements done	No. (%)
<i>First aid at home</i>	
• Induced vomiting	• 129 (41.08)
• Drank milk and scrambled eggs	• 30 (9.55)
• Others	• 155 (49.36)
<i>Managements at ER</i>	
• Stomach wash	• 100 (31.8)
• Given charcoal	• 54 (17.2)
• Given	• 160 (50.9)
• CPR	• 0 (0.0)
• Intubated	• 0 (0.0)
<i>Was the patients admitted to the hospital?</i>	
• No	• 122 (38.85)
• Yes	• 192 (61.1)
<i>Did he developed any complications</i>	
• No	• 310 (98.7)
• Yes	• 4 (1.27)

Qualitative data were described using number and percent.

Concerning the outcome of admission of acutely poisoned children 192 (61.1%) of the total number 314 acutely poisoned children were admitted to the children

hospital (pediatric ward), out f them 127 (66.1%) were completely recovered and discharged, 9 cases (4.7%) were discharged against medical advice and 56 (29.2%) children were admitted to the ICU (Figure 5).



### 3. DISCUSSION

Accidental poisoning in children is an important health problem, and is one of the most important causes of admission to emergency units. Documentation and identification of epidemiological aspects in childhood poisoning are of great importance for the planning of proper preventive measures.<sup>[17]</sup> This study was carried out on acutely poisoned children attending the ER of children hospital in Taif, KSA, the total number of cases over period of one year was 314 cases, which is triple the number of cases in a similar study done in Asir region, KSA.<sup>[18]</sup> over the same period of time. This difference can be explained on the base that while in our study we included cases of scorpion stings and snake bites; it was not included in the latter study. Moreover, in a study conducted in military hospital in Hafer Al Batin (KSA).<sup>[19]</sup> Accidental poisoning in pediatric age constituted about 1.7% of the total number of admissions to the pediatric ward over a 7-year period. Owing to male gender hyperactivity, and less obedience to their parent orders compared to female gender, moreover in some cultures, girls are expected not to engage in outdoor activities or to adopt risk-taking behavior, our study showed the preponderance of male to female patients in the ratio of 1.1:1. This is ingoing with Egyptian study carried out in Zagazig University<sup>[20]</sup> to determine patterns of acute poisoning in childhood in Sharkia city, which reported a male predominance in all age groups

In agreement with other studies<sup>[18, 19]</sup> conducted in Saudi Arabia that showed high incidence of acute poisoning among children less than 4 years old, our study showed that 24.2% of poisoned children were in the age group 2-4 years. This can be attributed to the characteristic behavior of this age group being hyperactive and curious to explore the environment and putting everything in their mouths. The present study revealed that majority of cases were coming from rural areas, this was in contrast to a similar study about pattern of poisoning conducted in Makah Region Saudi Arabia<sup>[21]</sup> were the majority of cases resided in urban areas. This may be related to different in the route of poisoning, while in our study the majority of poisonings (51%) occurred via dermal route due to animal envenomation, in the study conducted in

Meka the oral route was the most common route of poisoning. On the other hand Hassan.<sup>[20]</sup> and O'Connor studies<sup>[22]</sup> found that poisoning admission rates have been consistently higher in rural areas than urban areas. This was probably due to the fact that physicians in the rural areas may err on the side of caution and refers children to hospitals even when this was unnecessary; also in urban areas many cases are treated in private hospitals. While our study revealed that acute childhood poisoning with medications was the second most prevalent agent after animal envenomation, other studies conducted in the United Arab Emirates.<sup>[23]</sup> Oman.<sup>[24]</sup> Turkey,<sup>1</sup> Greece.<sup>[25]</sup> and USA<sup>[26]</sup> that found drugs to be the major cause of accidental poisoning among children. Moreover, a study conducted in Al Majmaah region, Saudi Arabia<sup>[27]</sup> concluded that pharmaceutical drugs and household products were the main causes of poisoning in cases under 12 years old. The present study showed that non- drugs causes of acute poisoning constituted the majority of cases 184 cases (58.6%) of poisoned children. While household products and insecticides represented only (7.6%, 5.4%) respectively, animal envenomation (Scorpion stings, snake bites) represented 160 case (87%) of poisoned children. 154 (96.3%) of those children who exposed to animal envenomation lived in rural areas while only 6 children (3.8%) lived in urban areas and these result is statistically significant. This difference can be attributed to the environmental nature of Taif region, which consists of mountains and stony areas with multiple peaks and slopes, makes it a suitable for children exposure during their out- doors to scorpion sting and snakes bites. It is worth mentioning that although, in this study, children toxicity through insecticides represented the lowest number and percentages (10 cases, 5.4%) among all cases of acutely poisoned children Hassan 20 reported that pesticides were the most common agent implicated as a cause of poisoning among studied children, this can be explained by the fact that Zagazig area is one of the major agricultural areas in Egypt, so inappropriate usage of pesticides can be frequent and common.

This study showed that the largest number of acute toxicity among children happen in summer followed by

spring and the lowest number of acute children poisoned occurred during winter and this results is in agreement with the result of Mehrpour *et al.*<sup>[28]</sup> Rashid.<sup>[29]</sup> Al-Shehri.<sup>[18]</sup> The high prevalence of poisoning during summer months in the present study can be simply explained by the fact that Taif area is considered a popular summer resort for Saudi nationals and people from all over Gulf region, moreover it was found that the peak of stings incidence was in the summer months and the low incidence in winter is attributed to the fact that scorpions do not hibernate but become less active in winter.<sup>[27]</sup>

In the present study Paracetamol and other analgesics were the predominant medication in inducing medication poisoning among children. Decongestants and antihistaminic were the second cause of medication poisoning followed by cough syrup then unknown drugs. Analgesics are the predominant agents in USA.<sup>[26]</sup> and Oman.<sup>[30]</sup> In this study anticonvulsants accounted for the fifth position among medication implicated in poisoning, while it was the most predominant cause of accidental poisoning among children in an Egyptian study, 31 nonsteroidal anti-inflammatory drugs and analgesics were the second cause of poisoning in the same study. In the present study digoxin then GIT medications represent sixth positions followed by contraceptive and antihypertensive medication representing the last category in inducing childhood poisoning. These results were comparable to the Chien.<sup>[32]</sup> findings in Australia but different from those of Litovitz *et al.*<sup>[33]</sup>. Study in USA who reported that cosmetics and personal care products, cleaning substances, and plants were the most commonly involved substances.

In accordance with previous studies done in Saudi Arabia by Al-Sekait<sup>[34]</sup> Ghaznawi.<sup>[35]</sup> our study showed that syrup form of drug was found to be responsible for the majority of cases, most of which 55% were prescribed as a treatment for the child himself. It is worth mentioning that in 87 % of cases the syrup was not in child proof containers. Although this was in contrast with a study conducted in Riyadh, Saudi Arabia by Mahdi.<sup>[7]</sup> which concluded that majority of cases were poisoned with tablet form which were prescribed to one of the parents, similar to our study in majority of cases tablets were put in non-child proof containers. This should attract attention to the importance of using child proof containers in all form of drugs (syrup or tablets) as a way to prevent child accidental poisoning.

Our study showed that in majority of cases poisoning occurred in open places, between 12am-8am, this is contrary to a study conducted in Iraq 36 that found majority of cases occurred between 8am and 12 pm. This can be due to difference in cause of poisoning in both studies, while in the former, animal envenomation constituted (51%) of cases, which occurs mainly in outdoor environment at night time, when families go out in open places, and children are exposed to such type of

poisonings, while in the latter study Hydrocarbons mainly kerosene constitute the most common poisoning followed by drugs which occurs mainly in a home environment.

In concordance with other studies.<sup>[7,31]</sup> our study demonstrated that most of cases were usually presented to hospital within less than 2hours, although looked ill-were alert with normal signs and very few symptoms of poisoning. Anti-venom and stomach lavage was the first line of management done in emergency room in about 60%, 30% of cases respectively. Although the majority of cases were admitted to the hospital, about 99 % of cases recovered with- out complications, and no fatalities occurred during the period of the study.

Mainly animal envenomation (51%) (Mostly scorpion sting), drugs (31.8%) were the main two causes of poisoning in our study. This highlights two main points, primarily in consistent to a study done in Taif region KSA 2006<sup>[37]</sup> scorpion sting remains to be a major health problem in this area, secondly the epidemiological surveillance specific for each country is necessary to determine the extent and characteristics of the problem, according to which related preventive measures can be taken.<sup>[11]</sup>

**4. Conclusion and recommendations:** All cases of acute poisoned children were owing to accidental and not intentional type of poisoning. Non drugs toxicity (scorpion stings, snake bites) were implemented in most of non-drug causes of toxicity, with significant seasonal variation in favor of summer season. Good supportive care is the cornerstone of management of childhood poisoning. Poisoning can be reduced through the use of effective prevention strategies to combat the poisoning agent from the environment (e.g., eradication of poisonous snakes and scorpion).

On the primary preventive level, parents must be educated on the prevention of scorpion stings, (children should not walk bare footed and they should be away from stony open areas) they must also ensure that all medicates, household chemicals and toxic products should be kept in a safe place out of the reach of children. On the secondary preventive level, continuing education of parents and caregivers by the physician during visits to the Well Baby clinic about the importance of bringing the child to medical care shortly after exposure to any type of accidental poisoning, is recommended to help reduce the chances and complications of accidental poisoning. Legality should be implemented to ban over the counter selling of medications and to sell all drug forms potentially in child proof containers. Moreover, thanks to the national wide protocol application for treatment of scorpion stings and snake bites, that gave this excellent prognosis. The major cardiovascular complications including changes in blood pressure, reversible ECG abnormalities simulating myocardial ischemia have been significantly decreased

and modified by early or high-dose scorpion anti venom therapy<sup>[38]</sup>

Finally establishing poison control center in different parts of the country and ensuring continues and easy availability of antidotes is also recommended.

#### Declaration of Conflicting Interests

The Authors declare that there are not conflicts of interest.

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