

Child Safety Practices of Parents in Kirkuk City

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Abstract

Poisoning and road traffic accidents (R.T.A.) are considered nowadays a problem to the health authorities [Sznajder et al, 2001]. The majority of poisoning reported to the American Association Control Center result from ingestion; and children below 6 years old comprise 2.7 percent of facilities [Erickson, 2002]. The majority of poisoning reported to the American Association Control Center result from ingestion; and children below 6 years old comprise 2.7 percent of facilities [Erickson, 2002].

The aim of the study are to evaluate the safety practices applied by the parents for the storage of drugs, antiseptic, matches boxes, and kerosene in their home; to estimate the prevalence of road traffic accidents among children; and to find any association between it and some demographic factors. This study is a cross-sectional one done in Pediatric consultation unit of Azadi Teaching Hospital in Kirkuk city during the period 1st. Jan.-30th April 2011; where 200 parents (father or mother) having children 1-6 years old and attending the pediatric unit for solving health problem of their children and chosen randomly and interviewed by a special questionnaire and consist of information about age and educational level of the parents; whether the mother working outside the home or not, number of their children, and methods of storage of drugs, antiseptic substances, and kerosene in their home, and any previous history of poisoning or R.T.A. The study concluded that the majority of the families kept their drugs, antiseptic material, matches boxes, and kerosene in unsafe places (77.5 %, 75.5 %, 74%, and 10% respectively) and about 19% of children whose parents allowed them to play bicycle had history of R.T.A., and 15.3% of children play (unsupervised by their parent) in the street exposed to R.T.A.

Keyword: Child safety, Parents practices, Kirkuk city.

ممارسات الآباء للحفاظ على أبنائهم في مدينة كركوك

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الخلاصة

أجريت هذه الدراسة في وحدة العيادة الاستشارية لطب الأطفال في مستشفى آزادي التعليمي في كركوك للفترة الأولى من أيلول وحتى الثلاثون من نيسان من عام ٢٠١١ وتم اختيار العينة بصورة عشوائية حيث احتوت على مائتان أب أو أم راجعوا تلك العيادة لمعالجة أطفالهم. لقد تم مقابلة كل أب أو أم ذو أطفال أعمارهم (١-٦) سنوات، واستعملت استمارة استبيانته نظمت من قبل الباحثين. أظهرت نتائج البحث بان غالبية العوائل لا تحتفظ بالمواد الطبية والمطهرات وعلب الكبريت في أماكن آمنة وبنسبة ٧٧,٥ % ، ٧٤ % على التوالي وأن ١٩ % من الأطفال الذين تسمح لهم عوائلهم باللعب بالشارع بالدراجات الهوائية قد تعرضوا لحوادث الطرق وأن ١٥,٣ % منهم والذين سمحت لهم عوائلهم الطرق أيضاً. أكدت الدراسة حصول حوادث بنسبة ١٠ % لدى أطفالهم وان النسبة ازدادت إلى ٢٠ % للأطفال الذين أمهاتهم يشتغلون خارج المنزل. لقد كان هدف الدراسة هو تقييم الإجراءات الوقائية الخاصة بحفظ الأدوية، المطهرات وعلب الكبريت والنظف من قبل العوائل وهل توجد علاقة بين ذلك وبعض العوامل الديموغرافية وكذلك معرفة نسبة حدوث حوادث الطرق للأطفال العوائل المشمولين بالدراسة.

Introduction

Poisoning and road traffic accident (R.T.A.) are considered nowadays a problem to the health authorities and about 2.2 million poisonous cases were reported during 1988 [1], and nearly 2-4 million cases were voluntarily reported to the American Associated Control Center, where the unintentional ingestion are most affected those in the 1-5 years old and 90% were occurred in home and among low and middle income countries; meanwhile the most common agents responsible for poisoning are pesticides, prescription drugs, household chemicals and kerosene and patients with drug poisoning may initially have no symptoms or various degree of over intoxication [2,3,4,5, 6]. Currently R.T.A. rank ninth among leading causes of death in the world and bicycle injuries can occurred with traffic and without [7, 8]. It was found that There is a significant relationship between injury recurrence and problem related to education [9, 10].

The aim of the study is to study the safety practices of storage of drugs, household's chemicals, pesticides, matches boxes, and kerosene in their home, the prevalence of R.T.A., among their children, and to find any association between unsafe practices of storage and some demographic factors.

Subjects and Methods

This cross-sectional study was done in the pediatric consultation unit of Azadi Teaching Hospital/ Kirkuk during the period 1st. Jan.-30th.Apr. 2011. The sample study consist of 200 parents (father or mother) having children 1-6 years old and chosen by systematic random method. A special questionnaire form was designed for the purpose of the study and contain information such as: age and educational levels of the father and mother, number of children, method of safety practices of storage or location of drugs, antiseptic, match boxes, kerosene and other household products in the home, history of poisoning or R.T.A., and whether the mother working outside the home or not.

Results

The mean age of the father and mother was 35.4 and 29.9 years respectively. Table one shows the frequency distribution of the study sample by educational level; where 11.5% of the father and

7% of the mother were illiterate and just read or write; and the education of the father was better than that of the mother.

Table -1- Frequency distribution of the parents in the sample study according to their level of education

Level of Education	Father		Mother	
	No*.	%	No.	%
Illiterate	18	4,0	3	1,0
Read and write	10	7,0	11	5,0
Primary school	60	30,0	30	17,0
Secondary	48	24,0	04	2,0
Institute	27	13,0	23	11,0
College and above	42	21,0	74	37,0
Total	200	100,0	200	100,0

*No. : Number

The distribution of children of 1-6 years old is shown in table 2; where 32% of the study samples have two children, and 22.5% having three children while 18% of them having four children.

Table-2- Distribution of the sample study by number of children within families

Number of Children	Number	%
1	33	16,0
2	64	32,0
3	40	20,0
4	36	18,0
5	10	5,0
6	7	3,0
Total	200	100,0

Table 3 shows the practices of the families related to the storage or location of drugs, antiseptic, match boxes and kerosene, where 22.5%,31%, 26%, and 90% of the families kept drugs, antiseptic, match boxes, and kerosene respectively in a save places.

Table-3- Distribution of safety and unsafely storage of medication, antiseptic, match boxes, and kerosene by the parents in their home

Places for Medication	No.*	%
Refrigerator	113	56.5
Drawer	12	6.0
Table of counter	30	15.0
High places**	37	18.5
Locked cabinet**	8	4.0
Total	200	100.0
Places for Antiseptic	No.*	%
Floor of bathroom	131	65.5
Counter	7	3.5
High places**	49	24.5
Locked cabinet**	13	6.5
Total	200	100.0
Places for Match boxes	No.*	%
Table of counter	102	51.0
Drawer	46	23.0
High places**	34	19.5
Locked cabinet**	13	6.5
Total	200	100.0
Places for kerosene	No.*	%
Empty soft drink or food container	14	7.0
Unlocked container	6	3
Barrel with tap**		
Locked container**	63	31.5
Total	200	100.0

*No.: Number

** Safe place

Table 4 shows that 18.9% of the children whom parents allows them to play with bicycles in the street had previous history of R.T.A.($P < 0.05$), mean while the percentage decreased to 15.3%

among families who allowed their children to play unsupervised them in the streets ($P > 0.05$) and it was higher among the extended families ($P > 0.05$).

Table-4 Factors associated with history of Road Traffic Accident (R.T.A)

Factors	History of R.T.A				Total		P Value
	Present		Absent				
	No.*	%	No.*	%	No.*	%	
Allowance to play with bicycle in the street	Yes	14	18,9	81,0	74	100,0	0.021 P<0.05
	No	10	7,9	70,0 92,0 116	126	100,0	
Allowance to play in the street							
Yes	18	10,3	84,7	118	100,0	0.089 P>0.05	
No	6	7,3	100 91,7 76	82	100,0		
No. of Children							
1	3	9,1	90,9	33	100,0	0.28 p>0.05	
2	0	7,8	30	64	100,0		
3 and more	16	10,0	92,2 09 84,0 87	103	100,0		

Table 5 shows the factors associated with history of poisoning. The nuclear and extended families constitute 15.5% and 21.4% respectively of the study sample. The history of poisoning among the children of the families under study was higher among children of the extended families than of those belong to nuclear families ($P < 0.05$) and those whom mothers were working outside their home(20%) than those belong to home workers(10%); ($P < 0.05$).

Table-5- Factors associated with history of poisoning

Family type	History of poisoning	Total	
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	Present		Absent				P value
	No.	%	No.	%	No.	%	
Nuclear	10	10,0	82	82,0	97	100,0	0.283
Extended	22	21,4	81	78,6	103	100,0	P>0.05
Working mother							
Yes	20	20	80	80	100	100,0	0.047
Not	10	10	90	90	100	100,0	P<0.05

Discussion

Accidental poisoning and intestinal self poisoning results in many emergency department visit and most poisoning are dose related [11]. More than 94% of total poisoning occurred in low and middle income countries [12] and poisoning account approximately 1% of all pediatric hospitalization each year and it is most common in the 1-5 years old age group and 90% of them occurred in home [6].

Bicycle crashes results in many non fatal injuries and more than 340,000 injured youth; were treated in emergency department [9].

Accidents cause nearly 100,000 death and over nine million disabling injuries in the united state [13] .In this study it was found that the majority of families kept their medication, antiseptic materials and match boxes in unsafe places such as in the door of refrigerator or on the ground or bathrooms, making easily access of their children to them, and may result in accidental poisoning because of ignorance of the children about the container of the bottle or boxes. The results of the study are identical with similar study done in Baghdad [14] but in contrast with study done in Saudi Arabia [15] and this may be attributed to the awareness of the parent about the danger of unsafe storage of drugs and other household substances, and in addition to that the level of education has an effect in the difference.

The families in this study kept kerosene in a safe locked containers (barrel with locked tap),makes difficulty for their children to reach them and this may be related to better knowledge of the families about the kerosene poisoning, which was consider a problem in our locality in the previous decade as it found by a study done in Erbil province [16] and in Basrah [17] mean while one must not forget that not all cases of poisoning were registered because the parents deals with the problem within their home without consulting health personnel. This research shows that there was history of poisoning among the children and its percentage increased among extended

families (i.e. having more children) than among nuclear families and also among families in which the mothers working outside the home resulting in less care and supervision of the children by their mothers. The present study shows that the occurrence of road traffic accidents specially among families which allows their children to play with bicycle in the streets and the percentage of accident was increased among families that allowed their children to play unsupervised by them in the streets, and this result is identical

to a similar study done in Baghdad [14] but not identical with a study done in Saudi Arabia by [15] and [18] and these difference may be attributed to the type of living of families (Saudi & Kenya) where they lived in apartment making their children difficult to play in the streets ,and in addition to that the provision of special area outside their apartment for playing with bicycle and there was a line within the streets made especially for those riding bicycles.

Conclusion

1-The percentage of unsafe practices of storage of drugs, antiseptic, match boxes and kerosene among families in this study was 77.5% , 69% ,74% and 13% respectively.

2- About 18.9% of the families; their children had history of road traffic accidents among those playing with bicycle in the streets and 34.4% for those playing in the streets unsupervised by their parents.

3- History of previous poisoning among children constitutes 20% among the extended families and 10% among families in which the mothers working outside their home.

Recommendation

Involving the parents:

1-Educational program about the dangers that associated with drugs and household substances; and labeling word poison on any container of dangerous chemical substance looks to be an urgent necessity.

2-The children specially those in earlier ages must be taught by their parents about the danger of touching or ingestion of household chemicals, pesticides and medicine

3- Instructing parents to store the chemicals and medicine in locked cabinet, and kerosene in barrel with locked tap is important.

4-Discarding any unnecessary drugs or toxic substance; looks to essential.

References

- 1-Akintemi, O.: Poisoning: In: Roberts, K., and Manual of Clinical Problem in Pediatric 5th. Ed, Lippincott Williams and Wilkins, London, (2001), (55)p.
- 2-Erickson, T.: General Principles of Diagnosis. Diagnosis and Management. In: Strange, G., Ahrens, W., Lelyved, S., and Schafermegeyer, R. Pediatric Emergency Medicine 2nd.ed, McGraw-Hill, London. (2002), (55) p.
- 3-McMillan, J., Feigin, R., DeAngelis, C., and Jones, M.: OSKI Pediatrics Principles Vol.1, Lippincott Williams, New York. (2006). (747)p.
- 4-Stephen, J. and Lawrence , M.: Current Medical Diagnosis. McGraw Hill Medical, New York. (2007), (1639) p.
- 5-Brunton, L., Parker, K., Blumthal, D., and Buxton, L.: Manual of Pharmacology and Therapeutic. McGraw Hill Medical. New York. (2008),pp. (1119-1139).
- 6-Marcdonate, K., Kliiegman, R., Jenson, H., and Behrman, R.: Nelson Essential of Pediatric 6th.ed, Saaunders Elsvier. (2009), (158)p.
- 7-Vavilala, M. and Rivara, F: Trauma. In :Bergman,A. 20 Common Problems Pediatric. McGraw-Hill. London. (2011), (117)p.
- 8-Sznajder, M., Chevallier, B., and Leroux, G.: Frequency Of Childhood Injuries: First result of Boulge-Billan Cort Registry. Rev., Epidemiol Sante Publique, 49(2). (2001), pp.(125-134).
- 9-Green, T. Franklin, W. and Tanz, R.: Pediatrics just the Facts. Mc-Graw-Hill, Chicago. (2005), (61) p.
- 10-Suryankantha, A.: Community Medicine with Recent Advance. Jaypee Brothers Medical Publisher, New Delhi.(2009), (510)p.

11-Beers, M., Porter, P., Jones, T.Kapan, J., andBerkwits, M.: DIagnosis and Therapy.18th ed., Merch research Laboratories, USA, (2006) (2651)p.

12-Gupta, P., and Ghai,O.:Textbook of Preventive and Social Medicine 2nd.ed.,CBS Publisher and Distribution, New Delhi.(2007), (497)p.

13-Franchini, G.: Accidents. In:Serles, F., Behavior Science For Medical Students. Williams and wilkins , London. (1993), (339)p.

14-Ali, S., AL-Taweel, N., Nashiet, A.: Child safety practices of a group of Iraqi patients, Journal of Medical Sciences,30,1, (2004), pp.(89-92).

15-Jan, M., Hasanain, F., and AL-Dabbagh, A.: Infant and Child Safety Practices of Parents, Saudi Med. J. 21(12). (2000),pp.(1142-1146).

16-Mohammed, M., Hashim, H., and Najem , H.: Accidental poisoning of children in Erbil province. Annals of the College of Medicine. Vol. 14(1) (1988),pp.(55-57).

17-AL-Sadoon, I.,Yacoub, A., and Abull-Karim, N.: Accidental poisoning among children in Basrah., J.Fac.Med.,30(1), (1988) pp.(105-111).

18-Odero, W.: Road traffic accident in Kenya: An epidemiological appraisal.East.Afr.Med.J.72 (5). (1995), pp. (299-305).