

## Epidemiologic Evaluation of Child Abuse and Neglect in School-Aged Children of Qazvin Province, Iran

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### Abstract

**Objective:** This study was carried out to detect the prevalence of child abuse in three domains of physical, psychological and neglect among elementary school aged children of Qazvin Province, Iran.

**Methods:** In this descriptive-analytic and cross-sectional study, 1028 elementary school aged children of Qazvin Province selected through multistage cluster sampling were assessed for child abuse in all domains, except for sexual abuse through a researcher-made questionnaire. The questionnaire was standardized for validity and reliability. Gathered data was statistically analyzed and *P*-value less than 0.05 was considered significant.

**Findings:** Out of 1028 studied children, including 540 (52.5%) boys and 488 (47.5%) girls 679 (66.05%) cases declared at least one type of child abuse. The number of positive cases for each domain of emotional, physical and neglect was 618 (60.1%), 360 (35%) and 394 (38.3%) respectively. No significance was seen regarding the gender and/or regions of living in any of the domains and total prevalence.

**Conclusion:** Regarding the results of this study which showed a prevalence rate of 66% for child abuse; and since there are strong association between child maltreatment and its impacts in juvenile and adulthood periods in the forms of offending, mental health concerns such as suicide and homicide, substance abuse, school failure, employment difficulties, teenage pregnancy, adult attachment difficulties, family violence, intergenerational violence and so on, appropriate education to the parents, and the punishment laws for child abuse is recommended.

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**Key Words:** Child Abuse; Child Maltreatment; Emotional Disturbances; Child Neglect; Violence; Iran

### Introduction

Child abuse (child maltreatment) as one of the types of violence is a multifactorial problem affecting the health and well-being of large numbers of children worldwide<sup>[1]</sup>. In 1999, the WHO Consultation on Child Abuse Prevention

defined the following definition: "Child abuse or maltreatment constitutes all forms of physical and/or emotional ill-treatment, sexual abuse, neglect or negligent treatment or commercial or other exploitation, resulting in actual or potential harm to the child's health, survival, development or dignity in the context of a relationship of

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responsibility, trust or power.” Based on WHO classification four types of child abuse are defined: physical abuse, sexual abuse, emotional abuse and neglect. Physical abuse of a child is defined as those acts of commission by a caregiver that cause actual physical harm or have the potential for harm. Sexual abuse is defined as those acts where a caregiver uses a child for sexual gratification. Emotional abuse includes the failure of a caregiver to provide an appropriate and supportive environment, and includes acts that have an adverse effect on the emotional health and development of a child. Such acts include restricting a child’s movements, denigration, ridicule, threats and intimidation, discrimination, rejection and other nonphysical forms of hostile treatment. Neglect refers to the failure of a parent to provide for the development of the child – where the parent is in a position to do so – in one or more of the following areas: health, education, emotional development, nutrition, shelter and safe living conditions. Neglect is thus distinguished from circumstances of poverty in that neglect can occur only in cases where reasonable resources are available to the family or caregiver<sup>[2]</sup>. Prevalence data reveal that children are most at risk in the home for physical and emotional abuse and neglect. On the other hand they are at greater risk of sexual abuse outside the home, particularly in dating relationships<sup>[3]</sup>.

Different reports about prevalence of child abuse and its types and also deaths due to it are available from different countries over the world. The National Child Abuse and Neglect Data System (NCANDS) in USA indicated that neglect, physical abuse, sexual abuse and psychological maltreatment constituted 60, 20, 10 and 7 percent, respectively, of confirmed cases. The United Nations Children’s Fund (UNICEF) estimates that 3,500 children die annually from child abuse occurring in developed nations. Death rates range from 0.1 per 100,000 in Spain to 2.4, 3.0 and 3.7 per 100,000 in USA, Mexico and Portugal, respectively<sup>[4]</sup>. This is expected that higher prevalence can be seen in underdeveloped and or developing countries.

Many studies reveal links between child maltreatment and its impacts in juvenile and adulthood periods in the forms of offending, mental health concerns such as suicide and homicide, substance abuse, school failure,

employment difficulties, teenage pregnancy, adult attachment difficulties, family violence, inter-generational violence and so on. Therefore having some information about the prevalence of child maltreatment is important as predictive of later offending in community and understanding the differential impact of that is essential for developing targeted crime prevention strategies<sup>[4-12]</sup>.

This study was carried out to detect the prevalence of child abuse and some predisposing factors in three domains of physical, psychological and neglect among elementary school aged children of Qazvin Province, Iran.

### ***Subjects and Methods***

In this descriptive-analytic and cross-sectional study, performed in 2011, 1028 elementary school aged children of Qazvin Province were selected through multistage cluster sampling to be assessed for child abuse in all domains, except for sexual abuse. Sexual domain could not be assessed because of some cultural limitations. All urban areas including twenty-five cities were classified in three economic classes of rich, middle and poor; and rural areas including 898 villages to deprived and non-deprived near the cities. Twenty-five schools, each one as a cluster, were selected systematically and based on their alphabetically obtained list from five above-mentioned economically classified regions, the number of clusters and the samples in each cluster was selected with regard to the ratio of total population of children in each group and the ratio of gender groups. Samples were selected through classified randomized sampling in each cluster from the students of grades 4 and 5 of elementary schools to make sure about careful understanding of the issue and accurate answering to the questions of the questionnaire. Some explanation around the study was given to all the cases in all clusters, and individuals who had not any tendency to participate in the study were excluded and replaced by other cases. There was no necessity to register any name or characteristics of the cases and it was assured that the data would remain confidential. After filling the

**Table 1:** The prevalence of child abuse in three domains of physical, emotional and neglect in Qazvin Province 2011

Domain of Child Abuse	Positive Number (%)	Negative Number (%)	No Response Number (%)
Emotional	618 (60.1)	387 (37.7)	23 (2.2)
Physical	360 (35)	648 (63.1)	20 (1.9)
Neglect	394 (38.3)	627 (61)	7 (0.7)
<b>Total (having at least one domain)</b>	<b>679 (66.05)</b>	<b>302 (29.38)</b>	<b>47 (4.57)</b>

questionnaires a gift was given to participating children. Collecting the data was through a researcher-made questionnaire containing 28 questions in three emotional, physical and neglect domains with 11, 11 and 6 questions, respectively. This native questionnaire was designed after studying several universal valid and standard questionnaires and receiving the opinion of related experts on the primary draft. To detect the content validity of the questionnaire, opinion of the related experts was requested which showed the quantities of 94.05, 83.6 and 100 percent for relevancy, clarity and comprehensiveness, respectively. Further-more, to assess the reliability of the questionnaire a pilot study on 24 cases through simple sampling and in two stages of two-week interval was carried out and the intra-class correlation (ICC) co-efficient for each question and each domain of child abuse separately and for all the questionnaire was calculated as 0.95, with Kronbach's alpha co-efficient range between 0.83 and 0.98 for three domains. For scoring the questionnaire children with positive answer to at least one question in each domain of emotional, physical and neglect were considered victims of that domain; children with positive answers to at least one question in each domain of emotional, physical and neglect were included in the total number of child abuse victims of all domains.

## Findings

Of 1028 studied cases 540 (52.5%) were males and 488 (47.5%) females. 749 (72.9%) and 279 (27.1%) were from urban and rural areas, respectively. 433 (42.1%), 575 (56%) and 20 (1.9%) of the cases were in the age group of 9-10, 11-12 and  $\geq 13$  years old, respectively. The prevalence of child abuse in three domains of physical, emotional and neglect are shown in Table 1. Although the number of children in families did not show any significance in emotional domain of child abuse, significant difference for this variable was observed in two other domains of physical and neglect ( $P < 0.001$ ) and also the similar significance in all domains, especially for the families having two children or more ( $P < 0.001$ ).

The comparison of child abuse prevalence regarding gender and the region of living is shown in table 2 and 3.

## Discussion

Regarding the results of this study, at least 66 percent of the children of Qazvin province declared the history of one or more of child abuse

**Table 2:** Comparison of child abuse prevalence regarding gender in Qazvin Province 2011

Domain of Child Abuse	Gender	Positive cases Number (%)	Total cases Number (%)	P. value
Emotional	Female	293 (29.2)	480 (47.8)	0.5
	Male	325 (32.3)	525 (52.2)	
Physical	Female	159 (15.8)	482 (46.9)	0.8
	Male	201 (19.9)	526 (51.2)	
Neglect	Female	188 (18.4)	486 (47.3)	0.5
	Male	206 (20.2)	508 (52.8)	
Total	Female	321 (32.7)	473 (48.2)	0.3
	Male	358 (36.5)	508 (51.8)	

**Table 3:** Comparison of child abuse prevalence regarding the living region in Qazvin Province 2011

Domain of Child Abuse	Region	Positive cases Number (%)	Total cases Number (%)	P. value
Emotional	Urban	446 (44.4)	732 (72.8)	0.5
	Rural	172 (17.1)	272 (27.2)	
Physical	Urban	252 (25)	736 (73)	0.1
	Rural	108 (10.7)	272 (27)	
Neglect	Urban	276 (27)	745 (73)	0.09
	Rural	118 (11.6)	276 (27)	
Total	Urban	486 (49.5)	718 (73.2)	0.08
	Rural	193 (19.7)	263 (26.8)	

types. No significance was seen between the prevalence and gender and/or region of living, but the prevalence was significantly higher in families with more children. It is guessed that the real prevalence is higher because although the individuals who did not respond to a few of questions seemed more likely to be positive cases, they were ignored and considered negative. On the other hand, despite all considerations to receive right answers it could be correctly

considered that some of positive cases had not enough trust to the researchers to give correct answers and also unawareness of child rights in responders may lead to incorrect answers; therefore the results of this study could be considered underestimated.

Several studies in different provinces of the country (Iran) and other countries which are carried out mostly on older cases than ours, have found different results, shown in Table 4. As the

**Table 4:** comparing some similar previous studies performed inside and outside the country (Iran)

Researcher	Place/ Year of study	Studied cases	Prevalence of different types(%)			Other Notes
			Emotional	Physical	neglect	
Vizeh et al <sup>[13]</sup>	Iran-Tehran/ 2007	738 high school students	49.46	17.5	36.4	No Significance between two sex
Namdari <sup>[14]</sup>	Iran-Korramabad/ 1999	240 cases / 12-15Yr-Old	91.6	58.2	No studied	-
Miri et al <sup>[15]</sup>	Iran-Bam/2003	562 high school students	33.61	20.02	24.59	-
Zargar et al <sup>[16]</sup>	Iran-Isfahan/ 2004-2005	251 abused 6mo.-18Yr-old children	35.9	29.9	25.9	No Significance between two sex
Khooshabi et al <sup>[17]</sup>	Iran-Tehran/ 2006-2007	1530 students of grades 6-8	62.5	38.3(mild) 35.9 (severe)	20.5	Significance between two sex
Nowrouzi <sup>[18]</sup>	Iran-Tehran/ 1992	Students of high schools	23	43	32	-
Mohammad-khani et al <sup>[19]</sup>	Iran-Tehran/ 1999	Students of guidance schools	83.1	2.6	14.2	-
Andirouyan <sup>[20]</sup>	Iran- Ahvaz/ 1996	Students of guidance schools	45.8	31.78	3.73	Study only in girls
Mousavi & Rogers <sup>[21]</sup>	Iran-Tehran/ 2001	2240 Students of high schools	23	43	15.5	Physical: No sig. And P<0.001 for Emotional & Neglect (F>M)
Zoltor et al <sup>[22]</sup>	four countries of Colombia, India, Russia and Iceland	571 students from 11 to 18 years old	66	55	37	The results are related to child abuse and neglect just at home
Ibrahim et al <sup>[23]</sup>	Jaddeh-KSA/ 2007-2008	1897 girl university students	50.6	45.1	No Answer	Totally prevalence in this study was 68.3%
Machado et al <sup>[24]</sup>	Portugal/2004	2391 under 18- year-old children	22.4	12.3	No Answer	-
De Vooght K. et al <sup>[25]</sup>	USA/ Oct.2007- Sep 2008	Children of: <5 years old 5-17 years	6.4 8	14.7 19.6	79.3 66.8	Based on US national report from NCANDS Child File FFY2009

\*No Answer

mentioned data in table 4 show, results of similar studies in different points of the country and also in other countries had been various and different; partly due to different culture in different regions and partly because of some other factors including different consideration of child abuse concept, ignoring of mild cases in some studies and considering that in other studies, diversity in methods/questionnaires/cases of target groups and so on.

Gilbert et al. announced that every year, about 4–16% of children were physically abused and 10% neglected or psychologically abused in high income countries<sup>[25]</sup>.

According to the report by USA Department of Health and Human Services in 2009, child neglect was the most common type of maltreatment in the USA and their data had indicated over 794,000 substantiated victims of child maltreatment in 2007 and 59.0% of them were victims of neglect<sup>[26]</sup>. Two national surveys in USA in 2003 and 2008 focused on the trend of child abuse showed significant declines in psychological and emotional abuse, whereas this decline was not observed for physical domain of child abuse<sup>[28]</sup>.

What these and many other similar studies show is a wide spectrum of prevalence among communities which seems to be culture-dependent. Regarding studies by Oveisi et al in the same region of our study, there was a little knowledge in general population about child maltreatment and its aspects and education was effectively achieved to change the attitude in parents. On the other hand they found that many of the parents believed that some types of punishment (which could be classified as physical and/or emotional child abuse and also neglect) were of parents' rights for training the children<sup>[27,28]</sup>.

The most important limitation in this study was assessment of sexual aspect of child abuse that we ignored.

## Conclusion

As conclusion and regarding the results of this study which showed a prevalence rate of at least 66% for child abuse; and since there are strong

relationships between child maltreatment and its impacts in juvenile and adulthood periods in the forms of offending, mental health concerns such as suicide and homicide, substance abuse, school failure, employment difficulties, teenage pregnancy, adult attachment difficulties, family violence, intergenerational violence and so on, appropriate informing and educating the community, especially the parents is recommended. On the other hand, because of different cultures and socio-economic situations over the country and since the prevalence may be different in various regions of the country, similar studies in other regions are recommended.

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**Conflict of Interest:** None

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