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Research Article



Child Abuse Perpetrators of Iranian Adolescents

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Abstract

Background: Child abuse is a main health problem all over the world.

Objectives: The aim of this study was to extend our understanding about offenders of child abuse in different domains.

Methods: The study was designed as a cross-sectional survey on 700 students in secondary schools using multiple cluster sampling in Yazd, Iran in 2013. We applied 2 self-reported questionnaires: a standard self-reported valid and reliable questionnaire for recording child abuse and DASS (depression anxiety stress scales)-42 for assessing mental disorders and another part about perpetrators (parents, relatives, friends or classmates, school teachers and coaches, strangers). The collected data was analyzed using SPSS software. P values < 0.05 were considered as significant.

Results: School parents, more than the other groups were guilty in severe forms of all domains. Parents neglected totally 97 (26.7%) students in a variety of intensity, abused psychologically 90 (28.3%), physically 58 (25.6%) and even sexually in 29 (15.3%) cases. Moreover, parents were also responsible for severe physical abuse of 69 (30.4%) and strangers in severe sexual of 105 (55.5%) students (P value < 0.05). Psychological abuse was more probable in girls (OR: 2.3, P value < 0.001) and physical in boys (OR: 1.5, P value: 0.01). The students who had parents with substance abuse problem reported neglect 3.1, psychological 2.1, physical 2.07 and sexual abuse 2.04 more than other adolescents (P value < 0.05).

Conclusions: Understanding about offenders of child abuse would reveal findings that could be an alarm for decision makers' intervention programming aimed at reducing child abuse.

Keywords: Child Abuse, Child Neglect, Studenta

1. Background

Child abuse is a main health problem all over the world with serious adverse effects (1). Prevalence estimations of child abuse are different worldwide. Among the children confirmed as victims by child protective services (CPS) agencies in 2011, 681,000 children were victims of abuse and neglect by the nationwide and this number is likely to underestimate the width of the problem (2). In Iran this is in a range between 4.7 to 91.6% according to type of maltreatment and places of studies (3-7). Evidence shows that child abuse and neglect are related to various problems in adolescence, which include mental disorders, psychological and behavioral problems, substance abuse, poor physical health and adverse effects on academic achievement (8-14).

Risk factors associated with child abuse are different. For instance, perpetrators factors such as psychiatric or medical problems, substance or alcohol abuse, intimate-

partner violence and having experience of being exposed to child abuse in parents (15, 16) and socio-economic factors included in parental unemployment, low educational level and socio-economic conditions (7, 13, 16, 17) are considerable.

In child abuse and neglect domains, a perpetrator is a person who has been determined to have caused the maltreatment of a child. Most sources define perpetrators of child abuse and neglect as parents and other caregivers who have damaged a child in their care (18).

Existing research indicates that children are most likely to be killed within the family and usually by a parent. In records from 32 substantiated cases of fatal child abuse in the United States Air Force (USAF) perpetrators were predominantly male and the biological fathers of the victims (19). In epidemiologic study among children younger than 6 years in Jefferson County, Alabama, USA, offenders were more likely to be male (64%), black (73%) and a parent of victims (53%) (20).

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In data containing 1,037 cases of child sexual abuse two western Canadian cities, results showed: earlier onset, longer duration, higher level of intrusion, and greater physical and emotional injury for intra familial victims (21).

2. Objectives

In Iran we don't know sufficient about perpetrators. Our overall objective was to extend our understanding about offenders of child abuse in different domains. Maybe dispelling this gap in knowledge would yield findings that could be as an alarm for health professionals and decision makers for prevention and intervention programming aimed at reducing both child abuse and poor mental health outcomes in adolescents.

3. Methods

3.1. Material and Methods

Details of method for this cross- sectional survey were explained in previous article (13). The collected data was analyzed using SPSS software and chi-square test, independent t-test and logistic regression analysis. In order to identify predicting factors for child abuse in different domains, logistic regression analysis was used. In the univariate analyses, each variable was entered separately and in the last step for multivariate analyses, those variables entered which were significant in the univariate analyses to find the set of best predictors of child abuse and neglect in adolescents using forward conditional model. Goodness of fit was checked in each model based on Hosmer and Lemeshow test. P values < 0.05 considered to be as significant.

Considering the importance of the issue and the necessity of taking students' satisfaction and trust to cooperate honestly in responding to the questions, at first, nature and purpose of the questionnaire were explained to students and anonymity was also emphasized. Based on the last ethical committee, at the top of every questionnaire a short notice was brought which suggested filling it consulting their parents at home and returning without answer if they didn't wish to complete it. In the next day all questionnaires were collected in a box which was placed at the middle of the class

4. Results

Of the 700 respondents aged 12 to 18 years (mean: 13.3 years; SD: 0.9), 57% were females. The majority (92.8%) of students didn't have another job and few of them (3.8%)

said they had a problem with alcohol or drug. Among the adolescents 6.5% were single child in the family whereas 40.7%, 21.7% and 31.1% were first, mid and last born, respectively. Other aspects of the family environment are summarized in Table 1.

 Table 1. Family Environment Characteristics of Adolescents Included in the Study for Detecting the Perpetrators of Child Abuse and Neglect

Variable	No. (%)
Parents' marital status (n = 656)	
Living together	637 (97.1)
Divorced or separated	19 (2.9)
Parents alive (n = 665)	
Both alive	617 (92.8)
Father died	44 (6.6)
Mother died	4(0.6)
Mother's level of education (n = 678)	
University educated	75 (11.1)
Diploma and less	603 (88.9)
Fathers level of Education (n = 681)	
University educated	120 (17.6)
Diploma an less	561 (82.4)
Parent drug and/or alcohol addiction (n = 677)	
Yes	118 (17.4)
No	559 (82.6)

School parents, more than the other groups were guilty in severe forms of all domains based on the students' answers. Parents neglected totally 97 (26.7 %) students in a variety of intensity, abused psychologically 90 (28.3%), physically 58 (25.6%) and even sexually in 29 (15.3%). Moreover, parents were also responsible for severe physical abuse in 69 (30.4%) and strangers for severe sexual abuse for 105 (55.5%) cases (P value < 0.05). Perpetrators of child abuse and neglect in different severity are shown in Table 2.

We found that there is statically a significant relationship between types of perpetrators and outcomes of mental problems severity. In neglected students, severe and very severe depression and anxiety were seen in adolescents who were abused by their parents (P value < 0.05). School parents were known responsible for severe and very severe depression in 17 (33.3%) psychologically abused students. In physically abused adolescents, the most frequent severe and very severe depression was present in 17 (41.5%) cases who were abused by parents, and sexual abusing by strangers caused severe and very severe stress in 15 (62.2%) students (Tables 3 and 4).

Logistic regression analysis was done to determine predicting factors of abuse in different domains. So based on the results of simple logistic regression, related variables were candidate to enter in multivariate analysis in four

	Parents or First Degree Relatives	Relatives	Friends and Classmates	School Par- ents	Strangers	More Than One Group	No Re- sponse	Total	P Value
Neglect									< 0.001
Mild	1(0.3)	4 (1.1)	6 (1.7)	11 (3)	2(0.6)	5 (1.4)	1(0.3)		
Moderate	23 (6.3)	11(3)	13 (3.6)	17 (4.7)	14 (3.9)	12 (3.3)	2 (0.6)		
Severe	28 (7.7)	21 (5.8)	34 (9.4)	69 (19)	47 (12.9)	10 (2.8)	28 (7.7)		
Total abused	52 (14.3)	36 (9.9)	53 (14.6)	97 (26.7)	64 (17.6)	29 (8)	32 (8.8)	359 (50.8)	
Not abused								341 (49.2)	
Psychological									
Mild	42 (13.2)	14 (4.4)	41 (12.9)	56 (17.6)	63 (19.8)		-	-	0.002
Moderate	8 (2.5)	2(0.6)	5 (1.6)	8 (2.5)	5 (1.6)	-	-	-	
Severe	2 (0.6)	1(0.3)	0(0)	3 (0.9)	0(0)		-		
Total abused	55 (17.3)	18 (5.7)	67 (21.1)	90 (28.3)	88 (27.7)	-	-	298 (39.1)	
Not abused								400 (60.9)	
Physical									< 0.001
Mild	14 (19.4)	2(0.9)	9 (4)	23 (10.1)	13 (5.7)				
Moderate	1(0.4)	0(0)	0(0)	4 (1.8)	3 (1.3)				
Severe	1(0.4)	0 (0)	0(0)	1(0.4)	0(0)				
Total abused	69 (30.4)	6 (2.4)	45 (2.6)	58 (25.6)	49 (21.6)			194 (17.9)	
Not abused								506 (82.1)	
Sexual									0.024
Mild	5 (2.6)	10 (5.3)	8 (4.2)	7 (3.7)	45 (23.7)				
Moderate	1(0.5)	1(0.5)	2 (1.1)	0(0)	2 (1.1)				
Severe	0(0)	0(0)	0(0)	1(0.5)	1(0.5)				
Total abused	12 (6.3)	12 (6.3)	32 (16.8)	29 (15.3)	105 (55.3)			83 (11.8)	
Not abused								617 (88.1)	

^aValues are expressed as No. (%).

models. In total, female and substance abuse by parents were considered as predicting factors. Psychological abuse was more probable in girls (OR: 2.3, P value < 0.001) and physical in boys (OR: 1.5, P value: 0.01). The students who had parents with substance abuse problem reported neglect 3.1, psychological 2.1, physical 2.07 and sexual abuse 2.04 more than other adolescents (Table 5).

5. Discussion

In our study parents of abused adolescents and their school parents had a significant role as the main perpetrators in severe forms of psychological and physical domains respectively, but in sexual abuse strangers were the main culprits.

Many studies have shown that younger children, particularly those under 1 year, are more likely to be abused severely within the family (22) and fathers were more likely fatal child abusers, whereas mothers are the most likely to

be involved in less violent manners of physical abuse (19). We didn't have access to sufficient documents on abuse of adolescents by school parents; however, in our findings they had a significant role in severe physical abuse of the students. And in severe sexual abuse the role of strangers was noticeable. Reports about perpetrators of sexual abuse are various in different studies, they may occur intra or extra familiar (21). Finkelhore et al. (2014) reported that sexual abuse in female adolescents occurred 3% - 5.5% by family perpetrators and 0.6% - 3% by strangers (23).

Recently several evidences demonstrated that child abuse and neglect is associated with alterations in neuroendocrine and neurotransmitter systems, and proinflammatory cytokines. Specific changes in brain are associated with mood regulation (24) and medical disorders (cardiovascular disease, diabetes, irritable bowel syndrome, asthma) (25, 26).

Adults misbehaved in childhood showed more symp-

	Parents or First Degree Relatives	Relatives	Friends and Classmates	School Par- ents	Strangers	More Than One Group	No Re- sponse	Total	PValue
				Neglect					
Depression									< 0.001
Normal and mild	24 (10.9)	21 (9.5)	30 (13.6)	67 (30.5)	45 (20.5)	7 (3.2)	26 (11.8)	220 (100)	
Moderate	12 (17.4)	8 (11.6)	12 (17.4)	11 (15.9)	9 (13)	13 (18.8)	4 (5.8)	69 (100)	
Severe and very severe	16 (25.4)	6 (9.5)	9 (14.3)	15 (23.8)	7 (11.1)	9 (14.3)	1(1.6)	63 (100)	
Anxiety									0.006
Normal and mild	31 (13.3)	26 (11.2)	26 (11.2)	71 (30.5)	39 (16.7)	14 (6)	26 (11.2)	233 (100)	
Moderate	5 (8.2)	6 (9.8)	9 (14.8)	16 (26.2)	14 (23)	7 (11.5)	4 (6.6)	61 (100)	
Severe and very severe	15 (23.1)	4 (6.2)	17 (26.2)	9 (13.8)	11 (16.9)	7 (10.8)	2 (3.1)	65 (100)	
Stress									0.14
Normal and mild	32 (12.5)	26 (10.2)	31 (12.2)	73 (28.6)	51 (20)	16 (6.3)	26 (10.2)	255 (100)	
Moderate	9 (15.5)	6 (10.3)	11 (19)	15 (25.9)	7 (12.1)	5 (8.6)	5 (8.6)	58 (100)	
Severe and very severe	10 (21.7)	4 (8.7)	10 (21.7)	8 (17.4)	6 (13)	7 (15.2)	1(2.2)	46 (100)	
			Psych	ological Ab	ıse				
Depression									0.001
Normal and mild	25 (12.3)	7(3.4)	47 (23)	62 (30.4)	63 (30.9)	-		204 (100)	
Moderate	16 (29.1)	7 (12.7)	13 (23.6)	8 (14.5)	11 (20)	-	-	55 (100)	
Severe and very severe	13 (25.5)	4 (7.8)	5 (9.8)	17 (33.3)	12 (23.5)	-	-	51 (100)	
Anxiety						-	-		0.42
Normal and mild	33 (15.7)	13(6.2)	45 (21.4)	64 (30.5)	55 (26.2)	-	-	210 (100)	
Moderate	7 (13.7)	1(2)	13 (25.5)	13 (25.5)	17 (33.3)	-	-	51 (100)	
Severe and very severe	14 (26.4)	4(7.5)	8 (15.1)	12 (22.6)	15 (28.3)	-		53 (100)	
Stress						-	-		0.6
Normal and mild	36 (15.7)	11 (4.8)	50 (21.8)	69 (30.1)	63 (27.5)	-		229 (100)	
Moderate	13 (26.5)	4 (8.2)	7 (14.3)	11 (22.4)	14 (28.6)	-	-	49 (100)	
Severe and very severe	5 (14.7)	3(8.8)	7 (20.6)	9 (26.5)	10 (29.4)	-	-	34 (100)	

^aValues are expressed as No. (%).

toms of depression, anxiety, and impairment of mental health, alcohol and substance abuse (27, 28), impact on educational outcomes in school age children (29) and even unwanted pregnancy after sexual abuse (30).

In one study results indicated that sexually abused females showed deleterious bio psychosocial sequels such as earlier onset of puberty, cognitive deficits, depression, dissociative symptoms, mal adaptive sexual development, asymmetrical stress responses, more major illnesses and persistent posttraumatic stress disorder and so on (31). Another study reported that child victims of sexual abuse showed higher PTSD (post-traumatic stress dis-

order) scores and disruption in coping strategies. The effects of avoidance strategies were stronger in continued than in isolated abuse, and in intra familial than in extra familial abuse (20, 32). In this study we didn't asses the above mentioned mental biopsychological sequels, but we found statistically significant relationship between sexual abuse and stress as a mental outcome in that special domain.

In present study it seemed that the outcome of child abuse directly depends on who is the perpetrator in different domains. For instance, in neglected students, severe and very severe depression and anxiety were seen in adolescents who were abused by their parents and in physical

Table 4. Perpetrators of Child Physical and Sexual Abuse and Mental Health Outcome^a

	Parents or First Degree Relatives	Relatives	Friends and Classmates	School Parents	Strangers	Total	P Value
		Phy	ysical Abuse				
Depression							0.003
Normal and mild	29 (20.9)	3 (2.2)	33 (23.7)	40 (28.8)	34 (24.5)	139 (100)	
Moderate	21 (51.2)	0(0)	5 (12.2)	7 (17.1)	8 (19.5)	41 (100)	
Severe and very severe	17 (41.5)	3(7.3)	6 (14.6)	10 (24.4)	5 (12.2)	41 (100)	
Anxiety							0.098
Normal and mild	34 (22.8)	4 (2.7)	33 (22.1)	44 (29.5)	34 (22.8)	149 (100)	
Moderate	15 (45.5)	1(3)	5 (15.2)	7 (21.2)	5 (15.2)	33 (100)	
Severe and very severe	19 (43.2)	1(2.3)	7 (15.9)	6 (13.6)	11 (25)	44 (100)	
Stress							0.42
Normal and mild	42 (26.1)	3 (1.9)	33 (20.5)	44 (27.3)	39 (24.2)	161 (100)	
Moderate	16 (42.1)	1(2.6)	7 (18.4)	8 (21.1)	6 (15.8)	38 (100)	
Severe and very severe	10 (37)	2 (7.4)	5 (18.5)	5 (18.5)	5 (18.5)	27 (100)	
		Se	xual Abuse				
Depression							0.097 ^b
Normal and mild	5 (4.2)	4 (3.4)	21 (17.6)	20 (16.8)	69 (58)	119 (100)	
Moderate	3 (10.3)	3 (10.3)	8 (27.6)	4 (13.8)	11 (37.9)	29 (100)	
Severe and very severe	4 (10.3)	5 (12.8)	3 (7.7)	5 (12.8)	22 (56.4)	39 (100)	
Anxiety							0.27 ^b
Normal and mild	6(5)	6 (5)	18 (14.9)	20 (16.5)	71 (58.7)	121 (100)	
Moderate	1(3.4)	3 (10.3)	9 (31)	5 (17.2)	11 (37.9)	29 (100)	
Severe and very severe	4 (10.3)	3 (7.7)	5 (12.8)	4 (10.3)	23 (59)	39 (100)	
Stress							0.007 ^b
Normal and mild	5 (3.6)	5 (3.6)	25 (18)	23 (16.5)	81 (58.3)	139 (100)	
moderate	5 (19.2)	4 (15.4)	4 (15.4)	5 (19.2)	8 (30.8)	26 (100)	
Severe and very severe	1(4.3)	3 (13)	3 (13)	1(4.3)	15 (65.2)	23 (100)	

^aValues are expressed as No. (%).

 $\textbf{Table 5.} \ Results of \ Multiple \ Logistic \ Regression \ Analysis \ of \ Child \ Abuse \ and \ Neglect \ Related \ to \ Variables$

	Neglect		Psychological ^a		Physical ^b		Sexual	
Variables	OR (Upper-Lower)	P Value	OR (Upper-Lower)	P Value	OR (Upper-Lower)	P Value	OR (Upper-Lower)	P Value
Sex				< 0.001		0.01		
Female		-	2.3 (1.6 - 3.3)		Referent		-	
Male		-	Referent		1.5 (1.09 - 2.08)		-	
Substance abuse by parents		0.003		0.007		< 0.001		0.001
No	Referent		Referent		Referent		Referent	
Yes	3.1 (1.4 - 6.6)		2.1 (1.2 - 3.7)		2.07 (1.3 - 3.1)		2.04 (1.3 - 3.1)	

^a Hosmer and Lemeshow test: Chi square (2) = 0.6, P value = 0.7, A total of 83.6% of subjects were correctly classified.

abused adolescents, the most frequent severe and very severe depression was seen in cases abused by parents, and sexual abuse by strangers due to the most severe stress in the students.

Based on the results of regression analysis, female gender and substance abuse by parents were considered as common predicting factors for all abuse domains. In some

studies poverty, unemployment, minimal education and partner's psychological abuse were repeatable characteristics in the lives of all types of child abusers (33) and problem behaviors such as alcohol and/or drug abuse (34), history of violence (35), and mental health problems have also been demonstrated as related factors for different domains of abuse (36).

^bChi square (Monte Carlo).

^bHosmer and Lemeshow test: Chi square (2) = 2.09, P value = 0.3, A total of 76.1% of subjects were correctly classified.

We have a variety of reports on frequency of different types of abuse in girls in comparison with boys. In one study lifetime experience of 17-year-olds with sexual abuse and sexual assault in girls was more than boys (26.6% vs 5.1%) (23) and in other studies boys and girls were equally likely to be the victims of fatal child abuse which occurred at home (37). Substance abuse by parents has also been considered as a strong risk factor for all domains of abuse in some studies (38, 39).

Evidence has shown that allocating more money to support and caring at-risk children who have been removed from their homes, assigning permanent home, promoting their wellbeing and placing in foster care can modify the adverse effects of child abuse and neglect and break the faulty cycle (40).

5.1. Conclusions

In the present study parents of abused adolescents and their school parents had significant role as the main perpetrators in severe forms of psychological and physical domains, but in sexual abuse strangers were the main culprits. Analyzing the data showed that, female gender and substance abuse by parents were considered as common predicting factors for all abuse domains. These findings could be as an alarm for health professionals and decision makers for prevention and intervention programming aimed at reducing both child abuse and poor mental health outcomes in adolescents.

5.2. Strengths and Limitations

A limitation of this study might be that we had not frequency of all abuse domains by father and mother separately. Instead of that we used "first degree relatives" as a general term. In present study several types of child abuse and mental conditions were assessed. However, the data from that were cross sectional and retrospective in nature. Despite that the sexual domain of our questionnaire was an advantage, since most similar studies in Iran did not included this part. It is clear that assessment of sexual abuse based on self-report will not be complete because some offenses will be forgotten and some will not be disclosed because of shame and distrust (41). Another limitation of the study was underestimating of the results, probably because the parents didn't premise their children to answer the questions if they really abused them. Finally, in our study we didn't have any analysis about economic abuse because of the low ratio of working students.

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