Original Article

Identification of Child Maltreatment in Iranian Children with the Parent-Child Conflict Tactics Scale

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Abstract

Background: Child abuse and neglect is a worldwide problem and varies across many sociodemographic characteristics. **Aim:** The aim of this study was to examine the prevalence of different types of child maltreatment in Iranian kids according to the reports of their caregivers. **Subjects and Methods:** In this cross-sectional study, 562 mothers with the last child aged between 1 and 12 years were recruited based on purposeful sampling method in one pediatric referent Mazandaran province, Iran. Child maltreatment among eligible participants was assessed by a validated version of conflict tactics scale for parent and child. Data were analyzed using Pearson Correlation coefficient and one-way ANOVA. **Results:** Prevalence of emotional assault, physical assault, and child neglect were respectively 90.6% (509/562), 82.9% (466/562) and 78.8% (443/562), which were more frequent in preschool age children. Furthermore, different kinds of child maltreatments were correlated with each other ($P < 0.001$). **Conclusion:** Assessment of all forms of child maltreatment should be an important focus of evaluation in cases with one kind of child maltreatment. This is an important issue in preschool age children. Furthermore, this paper has some implications for health care providers in order to check some simple items to identify child abuse.

Keywords: Child abuse, Child neglect, Maternal behavior

Introduction

Child abuse and neglect consists of any acts of commission or omission by a parent, caregiver or other adult that results in harm, potential for harm, or the threat of harm to a child (0-18 years of age) even if the harm is unintentional.[1] An estimated 872,000 children were victims of child abuse or neglect in 2004. However, reported and substantiated cases of maltreatment are a fraction of the actual instances of abuse and neglect.[2] Also in the first study presented to the National US Data on the occurrence of serious injuries due to physical abuse in hospitalized children in 2012, the incidence was 6.2/100,000 children <18 years of age, and there were 300 children who died in the hospital due to physical abuse.[3]

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Parents' abusive behavior is hurting child personality and their psychological functioning.[4,5] Psychological abuse has been implicated as an important contributor to children's behavioral problems, and it was associated with problems in child adjustment too.[6] Children who are the victims of violence may exhibit their ensuring distress through increased externalizing (e.g. aggression) and internalizing (e.g. withdrawal) behavior.[7,8] Furthermore, potential outcomes for neglected children including: Behavior problems, low self-esteem, poor-school performance, and maladjustment are a major area of public concern.[9] Also, it is revealed that both emotional neglect and emotional abuse were associated with increase aggression and social withdrawal in middle childhood.[10]

Few data are available on how parents and other caregivers discipline children, especially in low and middle income

countries. This makes it difficult to describe the nature of child disciplinary practices, their extent and their consequences and to develop evidence-based strategies that can improve those practices. Additional data on the nature and prevalence of child disciplinary practices worldwide are needed to establish baselines, inform the development of strategies to prevent violent disciplinary practices and monitor progress. Such data could also guide the development and improvement of educational efforts to address norms, attitudes, and behaviors harmful to children and improve laws, policies, regulations and services that contribute to children's well-being and protection.[11]

Although Islamic Republic of Iran acceded the Convention on the Rights of the Child (CRC) on 1993 and Child Protection Law, which was ratified by the Parliament of Iran on 2002 stated that all kinds of abuse leading to physical, mental or moral damage to the child endangering their physical or mental health is prohibited,[12] yet, some studies reported different kinds of child abuse in Iranian children.[13-15] Data on those who abuse children is limited in Iran. The main source of evidence is from child abuse and neglect prevalence studies and hospital/forensics statistics of criminal offences relating to child physical and sexual assault. As these statistics are based on reported cases of child abuse and neglect; they are unable to provide an accurate picture of the total incidence of abuse and neglect. Researchers believe maltreatment varied across many sociodemographic characteristics.[15] Therefore, the aim of this study was to identify child maltreatment in different age groups of Iranian children according to their care givers' report.

Subjects and Methods

In this cross-sectional study from January to December 2008, child maltreatment among eligible participants was assessed. Target respondents were mothers with the last child aged between 1 month and 12 years. They were selected based on purposeful sampling method from Amirkola Referral Children's Hospital in Mazandaran province, in the North of Iran receiving health care services for their children. To calculating sample size we consider mean prevalence of 50% for child abuse as shown in previous studies.[16] By considering the statistical error = 0.05, which is an acceptable error, and the precise = 0.005, sample size must be at least 400. In this way, we included all eligible mothers (562 mothers) in order to assess child maltreatment in different age groups from infancy to school age.

The instruments for collecting data were a checklist of sociodemographic characteristics and a validated Persian version of conflict tactics scale for parent and child (CTSPC). The original version of this scale with an acceptable reliability (average 0.70) developed by Straus *et al*. to assess parental child abuse.[17,18] It had been validated in some countries[19,20] and like this, had been justified for Iranian culture.[21] Because the CTSPC measures parental behavior rather than injury, and to avoid confusion with the use of the term abuse to indicate an injured child, the CTSPC scale is identified as measures of maltreatment**.** This instrument contains some questions about abusive behaviors including: Emotional and physical assault as well as child neglect that were committed by the mother to her last child during the past year. Physical assault included minor assault (four questions), severe assault (four questions) and very severe assault (four questions). In this way, emotional abuse in the form of either nonviolent discipline (four questions) or psychological aggression (five questions) was used to measure verbal and symbolic acts by the parents intended to cause psychological pain or fear on parts of the child. Finally, five questions were used to assess child neglect.

For eligible participants, one of the personnel explained how to fill out the self-completed questionnaire. They were asked to determine the times that they have used each kind of abusive behaviors on their last children in the past year on a six-point Likert scale (0 = never, 1 = it happened before last year, 2 = 1-2 times, 3 = 3-5 times, 4 = 6-10 times, 5 = more than 10 times). The mean score of each abusive behavior was its average score based on Likert scale and the total score of physical assault was the average score of its components (minor, severe, and very severe assault). Similarly, the total score of emotional assault was the average score of its components (nonviolent discipline and psychological aggression). To report frequency of child maltreatment, those mothers who reported one or more instance of each abusive behavior during the last year, against the referent cases who reported none, were considered as a positive history of child maltreatment.

The collected data were analyzed by the Statistical Package for Social Sciences for Windows version 13.0 (SPSS Inc., Chicago, IL, USA). Mean and standard deviation were computed and reported. The association between variables was examined by Pearson correlation coefficient and one-way ANOVA. In this way, $P \leq 0.05$ considered to be significant.

Ethical consideration

All participants provided written informed consent before enrolment and responses were confidential. Furthermore, they were informed of the purpose and design of the study and that the participation was voluntary with concern for confidentiality and anonymity and they had right to withdraw the study at any time. The Ethics Review Board of the Mazandaran and Babol Universities of Medical Sciences approved the study.

Results

Respondents' mean age was 26.62 (6.24) and ranged from 18 to 36 years, and their mean marriage age was 20.71 (3.57) years. The demographic characteristics of participants are shown in Table 1.

In general, results showed that 90.6% (509/562) had committed emotional assault. After that, physical assault

by 82.9% (466/562) and child neglect by 78.8% (443/562) were the most frequent, respectively. As shown in Table 2 frequency and the mean score of child maltreatment items were presented. As shown in that, in the area of nonviolent discipline "explained why something was wrong" was the most frequent form, 73.33%, (412/562) and among psychological aggression, "shouted, yelled, or screamed at him/her" was the most common form, 72.46%, (407/562). In addition in minor assault domain; "spanked him/her on the bottom with your bare hand", in severe assault "slapped him/her on the face or head or ears" and in very severe assault "beat him/her up that is you hit him/her over and over as hard as you could" were the most maltreated behavior. In child neglect, the most frequent form was "were so caught up with problems that you were not able to show or tell your child", 26.65%, (181/562). From the results of the study the mean score of all maltreatments were higher in preschool age children than the others ($P < 0.001$) [Table 3].

Results also showed different types of child maltreatment were correlated with each other as follows: Physical assault was related to psychological aggression ($r = 0.70$, $P < 0.001$); nonviolent discipline ($r = 0.49$, $P < 0.001$) and child neglect ($r = 0.49$, $P < 0.001$). In this way, child neglect were positively related to nonviolent discipline ($r = 0.43$, $P < 0.001$) and psychological aggression ($r = 0.35$, $P < 0.001$). Furthermore, psychological aggression and nonviolent discipline were related too ($r = 0.33$, $P < 0.001$).

Table 1: Demographic characteristics of participants

Variables	Mean (SD)
Age (year)*	26.62 (6.24)
Marriage age (year)*	20.71 (3.57)
Education**	
Under diploma	68 (12.18)
Diploma	408 (72.61)
Graduated	86 (15.21)
Number of children**	
1-2	271 (48.22)
3-4	221 (39.32)
≥5	70 (12.46)
Marital status**	
Living with partner	553 (98.42)
Widow	6 (1.17)
Divorced	3 (0.57)
Occupational status**	
Employed	63 (20.05)
Housewife	499 (79.95)
The last children' sex**	
Boy	322 (57.37)
Girl	240 (42.63)
The last children' age (months)**	
1-12	144 (25.62)
13-36	151 (26.88)
37-60	135 (24.02)
>61	132 (23.48)

*Mean (SD), **Number (percentage). SD: Standard deviation

Statistical analysis found a positive correlation between some sociodemographic variables and child maltreatment score like: Mothers' age ($P = 0.02$) and family size ($P = 0.03$), although this relation was not probed about mothers' education ($P = 0.44$), mothers' occupation ($P = 0.65$), marital status ($P = 0.36$), and child sex as well ($P = 0.12$).

Discussion

This study is conducted to investigate the different kinds of child maltreatment according to caregivers' report in the sociocultural context of Iran. As participants in this study were recruited from a pediatric referral center, which its referents were attended from different provinces (named Semnan, Golestn plus Mazandaran) with different cultures and socio-economic situations; thus, the findings could broaden our knowledge about this health challenge in Iranian children.

The prevalence of child maltreatment in the present research from 78.8% in the area of child neglect to 90.6% in emotional assault is somewhat different from other studies conducted in Iran, which had shown this range is varied from 14.2% to 91.6%.[15] These differences probably stem from ongoing disagreements regarding definitions and measurement of child maltreatment and how abuse and neglect are operationally defined[22] as well as target respondents' age. Furthermore, it's mentionable, we included mothers with a child not exceeding the age of 12 years as a result of this age was set to match the age limit of pediatric patients. Hence, the inclusion of others with a child until 18 years, according to CRC definition of the child, would have resulted in an overall decrease in the rate of maltreatment among our sample.

Our study showed that the majority of mothers had committed emotional assault to their children, especially in the form of nonviolent discipline. This is supported by others that found children were more emotionally/psychologically abused than physical abuse[15,23] and the high prevalence of child neglect appeared to be reflected primarily in the prevalence of frequent emotional neglect.[24,25] It's speculated that, parents think nonviolent discipline is necessary for nurturing the child and to provide a better future for them. This issue is an acceptable child-rearing and disciplinary practice in some societies[23,26] like Iran.[15]

High frequency of child maltreatment in preschool age children in this study is in accordance with the other studies,[23,27] may be related to this fact, children in this age are more curious, hyperactive and are away from mothers' obedience. Another explanation is that, in Iranian context when a child is hurting him/herself unintentionally, some mothers show up their concern toward their children's health as a symbolic act in the form of minor assault and using some sentences like "why did you do it", with an angry gesture, or even "hit him/her by bear hand". Hence, mothers perceive children to be more

Table 2: Frequency and mean score of child maltreatment in Iranian children

Child maltreatment statements	Number (%)	Mean (SD)
Emotional assault		
Nonviolent discipline		
Explained why something was wrong	412 (73.35)	2.56 (1.98)
Put him/her in "time-out"	266 (47.33)	1.30 (1.71)
Took away privileges or grounded him/her	209 (37.27)	0.95 (1.52)
Gave him/her something else to do instead of what he/she was doing wrong	356 (63.31)	2.18 (2.05)
Psychological aggression		
Threatened to spank or hit him/her but did not actually do it	368 (65.54)	2.16 (1.95)
Shouted, yelled, or screamed at him/her	407 (72.46)	2.61 (2.10)
Swore or cursed at him/her	163 (29.00)	0.85 (1.51)
Called him/her dumb or lazy or some other name like that	126 (22.45)	0.62 (1.30)
Said you would send him/her away or kick him/her out of the house	160 (28.53)	0.65 (1.28)
Physical assault		
Minor assault		
Spanked him/her on the bottom with your bare hand	365 (64.91)	2.02 (1.81)
Hit him/her on the bottom with something like a belt, hairbrush, a stick or some other hard object	136 (24.91)	1.10 (1.48)
Slapped him/her on the hand, arm, or leg	156 (27.75)	1.06 (1.37)
Pinched him/her	195 (34.72)	0.97 (1.50)
Shook him/her	136 (24.27)	0.64 (1.31)
Severe assault		
Slapped him/her on the face or head or ears	170 (30.22)	0.80 (1.38)
Hit him/her on some other part of the body besides the bottom with something like a belt, hairbrush, a stick or some other hard object	55 (9.86)	0.22 (0.79)
Threw or knocked him/her down	50 (8.95)	0.18 (0.68)
Hit him/her with a fist or kicked him/her hard	93 (16.54)	0.47 (1.22)
Very severe assault		
Beat him/her up, that is you hit him/her over and over as hard as you could	98 (17.46)	0.46 (1.14)
Grabbed him/her around the neck and choked him/her	30 (5.34)	0.10 (0.55)
Burned or scalded him/her on purpose	21 (3.72)	0.08 (0.46)
Threatened him/her with a knife or gun	23 (4.15)	0.06 (0.31)
Child neglect		
Had to leave your child home alone even when you thought some adult should be with him/her	185 (32.74)	1.08 (1.69)
Were not able to make sure your child got the food he/she needed	133 (17.22)	0.53 (1.26)
Were so drunk or high that you had a problem taking care of your child	112 (19.65)	0.49 (0.98)
Were not able to make sure your child got to a doctor or hospital when he/she needed it	75 (13.00)	0.35 (0.99)
Were so caught up with problems that you were not able to show or tell your child that	181 (26.65)	0.83 (1.53)

SD: Standard deviation

Table 3: Mean score of child abuse and neglect in different ages groups of children

Age group	*n*	Physical assault[a]		Emotional assault[b]		Child neglect[c]	
		Mean (SD)	CI 95%	Mean (SD)	CI 95%	Mean (SD)	CI 95%
Infancy	144	6.99 (8.98)	5.51-8.47	15.12 (13.78)	12.85-17.40	7.01 (5.97)	5.63-8.36
Toddler	151	10.64 (10.20)	8.99-12.28	20.57 (14.08)	18.30-22.83	9.28 (8.70)	7.71-10.84
Preschool	135	17.20 (14.28)	14.77-19.64	30.17 (14.84)	27.61-32.72	12.01 (9.51)	10.28-13.73
School age	132	16.42 (14.68)	13.89-18.95	27.97 (13.67)	25.64-30.29	9.87 (7.61)	8.78-10.97
Total	562	12.64 (12.85)	11.57-13.70	23.21 (15.26)	21.94-24.47	9.80 (8.28)	9.07-10.52

[a]Mean physical assault score different by children's age group, df=3, $P<0.001$, [b]Mean emotional assault score different by children's age group, df=3, $P<0.001$, [c]Mean child neglect score different by children's age group, df=3, $P<0.001$. CI: Confidence interval, SD: Standard deviation

responsible for their misbehavior, perhaps as a consequence to endorse harsher punishment.[28] Finally, it is noticeable that most of the items of the CTSPC do not apply for young babies, and hence not surprising that means for this group are lower than for the other groups. With attention to these findings, it is logical to develop a culturally sensitive inventory in the future studies in order to provide more accurate information about various aspects of child maltreatment in different groups.

Our study is paired with prior research which showed the majority of families reported multi-type maltreatments as a combination of physical abuse and neglect.[29,30] It is shown

that any combination of child maltreatment has the greatest impact on children, affecting on their enjoyment of living and hopes for the future. As predisposing factors for child maltreatment are mostly common,[16] the importance of examining children's multiple experiences of maltreatment by their caregivers must be highlighted in practice and health care services. It means the presence of a single sign does not mean that child maltreatment is occurring in a family, but a closer look at the situation may be warranted when these signs appear repeatedly or in combination.

Finally, it is noticeable that majority of participants during the study period were living with their partners, in ANOVA test was found no found any relationship with marital status and child abuse score. Any further studies being conducted in other groups with different living experience, the role of this factor in child maltreatment may be more prominent.

Conclusion

The high frequency of child maltreatment in preschool age children points to the need for early qualified intervention and prevention services for them as they are prone to fantasy and unable to discriminate fact from fiction. To actualize these concepts, a preschool-based prevention program, including kindergarten, in addition an intensive media program needs to be more prominent. The findings also suggest that these children should be targeted for greater and closer emotional support in health care centers during growth and development monitoring periods. By considering the strong effect of the quality of the parental relationship on all measures of child maltreatment, training program on maternal skills to prevent child abuse are powerful resources. In addition, the practitioners working with children should be sensitive to the particularities of the specific context and the population they work within. Finally, this paper has some implications for health care providers in order to check some simple items to identify child abuse.

The present findings must be interpreted in light of some limitations. First, the retrospective nature of the survey design requires mothers to recall accurately past events, which may introduce some recall bias into the reporting of the occurrence of child maltreatment. Second, the results are based on parent-report only, and no observational measures in real-life based on certain situations under natural conditions were included in the study. Finally, only mothers from each family participated in our study, and it is likely that if fathers or other caregivers were also included, occurrence of all types of child maltreatment would be judged different.

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