

# Identification and Evaluation of Abused Children at Imam Hossein Hospital

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## Abstract

**Background:** Child abuse is a phenomenon that confronts the child, family, and society with irretrievable physical and mental injuries, and its negative effects continue until adulthood.

**Objectives:** The present study was conducted to identify and evaluate cases of abused children at a medical center.

**Patients and Methods:** This is a descriptive-analytic study. The subjects were all children and adolescents who were referred to Imam Hussein hospital within 6 months due to physical or psychiatric reasons and were diagnosed with child abuse and neglect by a child and adolescent psychiatrist. The number of these children was 73. Children and their parents were assessed by schedule for affective disorders and schizophrenia (SADS), Kiddie-SADS, and child abuse and demographic questionnaires. The statistical methods of mean and standard deviation were used to analyze the data.

**Results:** 56 cases (76%) were physically abused, 53 cases (72.6%) were emotionally abused, and 3 cases (12.3%) were neglected. The most common psychiatric disorder in abused children was ADHD (65.8%). The next most common were oppositional defiant disorder, obsessive compulsive disorder, general anxiety disorder, and enuresis. About 80% of the abused children had at least one psychiatric disorder. The most common psychiatric disorders in mothers were general anxiety disorder (34.8%) and depression (33.3%), and in fathers, it was substance abuse (19.7%).

**Conclusions:** Child abuse is a common phenomenon that relates to psychiatric disorders in the abused child or abuser parents. It seems that on-time identification and appropriate interventions can prevent further negative consequences for the child, family, and society.

**Keywords:** Child Abuse, Prevalence, Mental Disorders

## 1. Background

The victims of child abuse constitute a considerable percentage of all child psychiatric admissions, with lifetime incidence of physical and sexual abuse of 30% among child and adolescent outpatients (1) and more than 55% among psychiatric inpatients (2). Every year there are approximately 3 million reports of child maltreatment, out of which nearly one-third are substantiated (3). Various studies in Iran have also shown the prevalence of child abuse in Iranian families. Sayyari et al. (4) conducted their studies on children who were referred to three pediatric hospitals and found 12.2 percent of the children had been or were being abused (12.8% of the subjects experienced severe forms of child abuse and 87.2% moderate forms). In a survey done at schools in the city of Bam to study the rate of child abuse, 20.2% of the subjects had experienced physical abuse, 24.59% neglect, and 33.61% emotional abuse (5). Among substantiated cases of child abuse,

about 60% involve neglect, 20% physical abuse, 10% sexual abuse, and 10% other types of maltreatment such as emotional abuse, abandonment, and congenital drug addiction (3). It is usual to see multiple abuses in a child at the same time. The collaboration of certain types of maltreatment is more a rule than an exception (6). Although, all abused children are not involved in problems, but many will experience a chronic course of psychopathology (7). Different studies have reported a range of consequences for these children, including psychiatric problems (8), defects in social relations such as poor emotional control, distraction, negative emotions, disobedience, anxiety and depression (9, 10), aggressiveness (11), suicidal behaviors (12) and suicide attempts (13), and drug addiction (14). Moreover, physical abuse is associated with greater risk of psychiatric problems like ADHD, PTSD, and bipolarity (15). There are many risk factors involved in the oc-

currence of child abuse. Risk factors related to parents are age, low education, depression, stress (16-20), addiction and drug abuse (21, 22), poor parenting skills, and wrong attitudes to physical punishment (23, 24). Risk factors related to children are ADHD, conduct problems, physical aggression, antisocial behaviors, poor emotional control, distractibility, negative emotions, mood disorders, developmental delay, and physical disabilities. Among factors related to community, family environment characteristics such as socio-economic status (25, 26) are risk factors for child abuse. In the most cases, physical abuse is carried out by close guardians of the child, mostly parents (27-30). Children face maltreatment because of their very nature. They are dependent upon their guardians for their essential needs, do not have enough social power, and are physically more vulnerable than adults.

## 2. Objectives

One of the most important protective factors in the phenomenon of child abuse is to prevent its recurrence by on-time identification and diagnosis of abuse and associated risk factors. This helps us to prevent irrecoverable and uncompensated consequences of the abuse and neglect for the child, family, and community. Therefore, the present study was conducted to identify and evaluate the cases of child abuse in an Iranian sample.

## 3. Patients and Methods

This is a descriptive-analytic study. The subjects were children who came or were referred to the pediatric, emergency, and child psychiatric departments of Imam Hossein hospital due to psychiatric problems or physical reasons and were diagnosed with child abuse by the physicians. Next, they were introduced to the coordinator of the project. Before any medical or psychiatric intervention, demographic and child abuse questionnaires were filled out. Diagnostic interviews were conducted by a child and adolescent psychiatrist based on DSM-IV-TR (diagnostic and statistical manual of mental disorder, fourth edition text revision) criteria and K-SADS (Kiddie-SADS) for the children and DSM-IV-TR and SADS for the parents.

### 3.1. Questionnaires

#### 3.1.1. Child Abuse Questionnaire

This questionnaire was designed by two child and adolescent psychiatrists on the basis of definitions of the various types of child abuse (physical abuse, emotional or psychological abuse, sexual abuse, and neglect), intensity of abuse, as well as associated risk factors. Then, five child and adolescent psychiatrists reviewed the questionnaire and their views were taken into consideration. After a psychiatrist established a therapeutic relationship with the child and parents, based on observation, interviews, and examination, he/she filled out the questionnaire.

It was not possible to use self-report questionnaires on child abuse due to the age limitations of children (birth to 18 years). On the other hand, because most abuser parents conceal their child abuse, a therapeutic relationship needs to be established with the client in order to collect data. In this study, classification of the severity of physical abuse was as follows:

Mild: physical punishment beyond spanking, but without objects or fists and without marks or bruises; moderate: abuse with the use of objects, contact with fists, or contact resulting in marks or bruises, but not requiring medical treatment; severe: abuse that results in injuries requiring outpatient or hospital treatment (31).

#### 3.1.2. K-SADS and SADS Questionnaires

K-SADS: Kiddie Schedule for affective disorders and schizophrenia is a semi-structured interview that aims to evaluate the existence of disorders during life and present episode among school-age children. The questionnaire is for 6 - 18 year-old children and is filled out by a professional interviewer after interviewing a child (or adolescent) and his or her parents. The disorders are evaluated according to DSM-IV criteria. K-SADS is a suitable questionnaire in epidemiology studies, but does not have enough accuracy for evaluating therapeutic response. This questionnaire had a reasonable (acceptable) degree of validity in previous research in Iran (32). SADS: Schedule for Affective Disorders and Schizophrenia is designed based on diagnostic criteria of DSM (33) and its validity and reliability are confirmed by previous research in Iran (34).

## 4. Results

The total number of subjects was 73, out of which 43 (58.9%) were boys and 30 (41.1%) were girls. There was no significant statistical gender-based difference between the two groups. The mean age of the subjects was 6.90 with a standard deviation of 4.39. Physical and emotional abuse were the most common types of abuse, with 26% of the abused children experiencing severe forms of physical abuse. The most common form of physical abuse was hitting by hand, followed by pinching, pushing or throwing, and hitting by belt. Demographic data and other information about abused children and abusers are shown in Table 1.

According to the K-SADS questionnaire and psychiatrists' interviews, the most common psychiatric disorder in abused children was ADHD, found in 48 (65.8%) children, followed by oppositional defiant disorder, obsessive-compulsive, generalized anxiety disorder, and tic disorder. There were six patients who were referred from pediatric wards and medical clinics with a diagnosis of congenital addiction to drugs and substances. The frequency of psychiatric disorders in abused children is presented in Table 2.

Sixty-six parents (66 fathers and 66 mothers) participat-

ed in our study. The mean age was  $31.76 \pm 6.5$  for mothers and  $38.07 \pm 8.4$  for fathers. The maximum age range for mothers was 31 - 35 with a frequency of 26 people (38.80%) and for fathers was 36 - 40 years with a frequency of 25 people (37.31%). The youngest age for mothers and fathers was 23 and 25, respectively. Demographic data and other information about parents of abused children are presented in Table 3.

**Table 1.** Demographic Data of Subjects<sup>a</sup>

Characteristics	Statistics
<b>Mean Age</b>	6.9 ± 4.3
<b>Gender</b>	
Male	43 (74)
Female	30 (41.1)
<b>Type of abuse</b>	
Physical	56 (76.71)
Emotional	53 (72.6)
Neglect	29 (39.7)
Sexual	3 (4.1)
Congenital addiction to drugs and substances	6 (8.21)
<b>Intensity of physical abuse</b>	
Mild	12 (16.4)
Moderate	25 (34.2)
Severe	19 (26)
<b>Type of physical abuse</b>	
Hitting by hand	54 (74)
Hitting by leg/kicking	10 (13.7)
Hitting by belt	21 (21.8)
Hitting by stick/ruler	9 (12.3)
Pinching	27 (37)
Pushing/throwing	26 (35.6)
Burning/searing	11 (15.1)
Biting	8 (11)
<b>Emotional abuse</b>	
Verbal attack or abuse	48 (65.8)
Terrorizing	40 (54.8)
Exploiting	28 (38.4)
Rejecting	19 (26)
Ignoring	12 (16.4)
Corrupting	8 (11)
Isolating	4 (5.5)
<b>Abuser</b>	
Mother	10 (13.69)
Father	12 (16.43)
Both	32 (43.83)
Other guardians or siblings	2 (2.73)
Exclude case due to congenital addiction	6 (8.21)
Unspecified	11 (15)

<sup>a</sup>Values are expressed No. (%) unless otherwise indicated as mean (SD).

**Table 2.** Frequency of Psychiatric Disorders in Abused Children According to Psychiatrists' Diagnosis with a K-SADS Questionnaire and Psychiatric Interviews (n= 73)

Psychiatric disorder	Frequency, %
<b>ADHD</b>	48 (65.8)
<b>Oppositional defiant disorder</b>	26 (35.6)
<b>Obsessive-compulsive disorder</b>	11 (15.1)
<b>General anxiety disorder</b>	9 (12.3)
<b>Enuresis</b>	9 (12.3)
<b>Tic disorder</b>	7 (9.6)
<b>Bipolar disorder</b>	6 (8.2)
<b>Congenital addiction to drugs and substances</b>	6 (8.2)
<b>Separation anxiety disorder</b>	4 (5.4)
<b>Depressive disorder</b>	3 (4.1)
<b>Conduct disorder</b>	3 (4.2)
<b>Learning disability</b>	3 (4.1)
<b>Encopresis</b>	2 (2.7)
<b>PTSD</b>	1 (1.4)
<b>With psychiatric disorder</b>	58 (79.5)
<b>Without psychiatric disorder</b>	15 (20.5)
<b>With two or more psychiatric disorders</b>	54 (74)

**Table 3.** Demographic Data of Parents of Abused Children<sup>a</sup>

Demographic Data	Values
<b>Parents' mean age</b>	
Mothers	31.76 ± 6.5
Fathers	38.07 ± 8.4
<b>Mothers' education</b>	
Illiterate	3 (4.5)
Primary	7 (10.6)
Junior high school	19 (28.8)
High school diploma	289 (42.4)
Beyond high school diploma	9 (13.5)
<b>Fathers' education</b>	
Illiterate	2 (3)
Primary	12 (18.2)
Junior high school	20 (30.3)
High school diploma	25 (37.2)
Beyond high school diploma	7 (10.6)
<b>Mothers' occupation</b>	
Employed	11 (16.7)
Unemployed	55 (83.3)
<b>Fathers' occupation</b>	
Employed	61 (92.4)
Unemployed	4 (6.1)
Unspecified	1 (1.5)
<b>Receiving government benefits</b>	
Yes	3 (4.5)
No	63 (95.5)

<sup>a</sup>Values are expressed No. (%) unless otherwise indicated as mean (SD).

**Table 4.** Prevalence of Present Psychiatric Disorders in Parents of Abused Children Based on Psychiatrists' Diagnosis and SADS Questionnaire

Psychiatric Disorder	Frequency, %
<b>Mothers (n= 66)</b>	
Depressive disorder	22 (33.3)
Generalized anxiety disorder	23 (34.8)
Substance abuse	7 (10.6)
Obsessive-compulsive disorder	6 (9.0)
Bipolar disorder	4 (6.0)
Somatization disorder	3 (4.5)
Psychotic disorders	2 (3.0)
Previous suicide attempt	2 (3.0)
With at least one psychiatric disorder	44 (66.7)
With two or more psychiatric disorders	33 (50.0)
Without any psychiatric disorders	22 (33.3)
<b>Fathers (n=66)</b>	
Substance abuse	13 (19.7)
Generalized anxiety disorder	4 (6.0)
Depression	4 (6.0)
Adult ADHD	3 (4.5)
Obsessive-compulsive disorder	2 (3.0)
Tic disorder	2 (3.0)
Previous suicide attempt	2 (3.0)
Bipolar	1 (1.5)
With at least one psychiatric disorder	30 (45.5)
With two or more disorders	18 (27.3)
Without any psychiatric disorders	36 (54.5)

## 5. Discussion

Based on the outcome of the study, the most common type of child abuse was physical abuse, followed by emotional abuse, neglect, and sexual abuse. This finding is similar to other studies (35-37) But usually in different studies depending on the type and place of the study, the top-ranking abuse varies between physical abuse and neglect. In the Trocme and Chen study, neglect is in first place followed by physical abuse (36, 37), but in the Sidebotham study, the result is vice-versa (35). Our results show 91.7% of the children were physically abused by their mother, father, or both, which is compatible with the above-mentioned studies (4, 25, 27). In most cases of child abuse, close guardians of the child, usually the parents are responsible for physical abuse (4, 25, 27). 34% of the children in this study were moderately physically abused while 26% were severely abused, which corresponded with Sayyari's study (4). The most common form of abuse in the study of Sayyari et al. was also moderate physical

abuse. One of the factors in child abuse in most studies is known as the existence of risk factors, such as psychiatric and physical illnesses, in the child (12, 17, 22). The most prevalent psychiatric disorders in abused children are attention deficit hyperactivity disorder, oppositional defiant disorder, obsessive compulsion disorder, general anxiety disorder, enuresis, and tic disorders. About 80% of abused children suffer from at least one disorder and 74% suffer from two disorders. The results of a study on psychiatric disorders in Turkey (38) were consistent with this study, but the prevalence of disorders was higher in the present study. Our study indicates a high prevalence of psychiatric disorders and co-morbidities in abused children. Since our patients were referred from psychiatric departments and clinics, the outbreak of psychiatric disorders among this population was more than in other medical centers where children were referred to for child abuse or related physical injuries. In fact, our cases were mostly those who were referred to psychiatric hospitals or clinics for psychiatric reasons, and then they were diagnosed as abused. On the other hand, physicians, psychologists, and social workers who work at psychiatric centers are more experienced and more capable of diagnosing psychiatric disorders and also identifying child abuse cases that are not followed by physical injuries, i.e. neglect, emotional, and verbal abuse. But in other departments, children who come with physical injuries and are suspected of suffering from child abuse are studied and yet it is possible that many cases of emotional abuse are missed. In this study co-morbidity of psychiatric disorders in abused children was high. About 80% of the children had at least one psychiatric disorder and 13.7% had at least four psychiatric disorders as co-morbid. Psychiatric disorders can make children susceptible to child abuse and can also themselves be side effects of child abuse. For example, ADHD children, same as children with disability, are more abused (39). In this group of children, physical and emotional abuse can be followed by a possible increase in oppositional defiant disorder or behavioral problems. Abused ADHD children are at risk of drug abuse in adulthood (39), which highlights the importance of early diagnosis and appropriate intervention. Also in our study, 8% of child abuse cases consist of children who were congenitally addicted to drugs. This is compatible with other studies, which found that 10% of proven child abuse cases consist of emotional, withdrawal, and congenital addiction (40). Although intervention in child abuse is very difficult due to family structure, cultural issues, and economic problems, according to the experience of the researchers, exact surveys and medical intervention related to children who were the victims of drug abuse were more difficult. Factors such as single parents, rejection by both families, lack of support by parents or of parents by their families, economic problems, and the coexistence of psychiatric and physical diseases create some difficulties for appropriate assessment and intervention. More than 30% instead of

about 30% and the most common psychiatric disorder in fathers was addiction. One of the most important reasons for child abuse in most studies has been psychiatric disorders among parents. Depression and addiction are the two most common disorders that have been pointed out in other studies (16, 41, 42). The children of addicted parents are abused twice as much as other children (16). Mothers with depression usually have a low level of tolerance and are not able to control themselves against the improper behavior of children, which in return increases child abuse among these mothers (43). Indeed, it should be mentioned that a certain percentage of the children and parents did not receive any psychiatric label and the reasons for child abuse can be due to other factors such as low literacy, low-age parents, poverty, number of children, lack of knowledge of the principles of child development, and insufficient skills in anger management (12, 17, 19, 22). Since prevalence of psychiatric disorders based on genetics is high in families with children affected with psychiatric disorders compared to other children, it is possible that parents of our study's children are different in psychopathology and show higher psychiatric disorders compared to children who are referred to medical centers other than psychiatric ones due to child abuse. This issue should be considered in future studies, because identifying the curable reasons for child abuse can considerably reduce its prevalence and its irremediable consequences.

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## Footnotes

**Authors' Contribution:** Fariba Arabghol has conducted the design, execution, and management of the project, including writing and final approval of the manuscript; Firooze Derakhshanpour contributed in writhing the paper and translation to English; Lyili Panaghi has analyzed and interpreted the data and has also cooperated on writing the result section of the manuscript.

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