

*Original Article***A comparison study on child abuse by parents between healthy children and those with chronic diseases**

*Shohreh Ziaei**, *Nasrin Safari***, *Mehri Golchin****,
*Homayoon Naji*****, *Akbar Hasanzadeh******

Abstract

BACKGROUND: Child abuse is a big social and health problem. This study aimed to compare child abuse by parents among healthy children and those with chronic diseases.

METHODS: This was a descriptive comparative study between two groups carried out in 2007 in Isfahan. The samples included 212 children of 11 to 18 years old, 106 of them were referring to the health centers of the Isfahan University of Medical Sciences suffering from a chronic disease (asthma, epilepsy, cancer, thalassemia, hemophilia, etc). The healthy group included 106 children matched with the case group in age and sex as well as socio-economic class. Sampling was done by convenient method and data were gathered using a researcher-made questionnaire including demographic characteristics along with questions related to various types of abuse (neglect or physical, emotional and sexual abuse). Validity and reliability of the questionnaire were determined by content validity and Cronbach's alpha (0.78) and data were analyzed using SPSS software by descriptive statistics, chi square and independent t-test.

RESULTS: There was no difference between the two groups regarding sex, age, career, parents' education and birth rank. Independent-sample t-test showed no significant difference between total mean scores of abuse and mean scores of physical, emotional and sexual abuse in both groups. But there was a significant difference between the mean score of neglect in both groups ($p = 0.01$).

CONCLUSION: We found that the way our society pay attention to sick children is different from other societies' and it can be related to our culture.

KEY WORDS: Child abuse, parents, children, chronic disease.

IJNMR 2009; 14(3): 143- 149

Having a healthy strong society requires each member having a good childhood.¹ World Health Organization (WHO) identifies violence toward children as a main risk factor for psychological and physical disorders and complications such as depression, suicide, violence towards others, risky sexual behavior and post trauma stress disorder (PTSD). According to the WHO statistics, about 875'000 children and

adolescents under 18 years old lost their lives due to violence during 2002. In addition, there are millions of victims of violence who are living with various degrees of disabilities and psychological disorders.² Prevalence of child abuse in 2000 in the US was 250'000 cases, of which 2000 cases ended in child's death.³ It is estimated that every day, thousands of children around the world are emotionally and physically abused by their family members.⁴ In

* MSc, Department of Pediatric Nursing, School of Nursing and Midwifery, Isfahan University of Medical sciences, Isfahan, Iran.

** MSc in Nursing, School of Nursing and Midwifery, Isfahan University of Medical Sciences, Isfahan, Iran.

*** Department of Pediatric Nursing, School of Nursing and Midwifery, Isfahan University of Medical Sciences, Isfahan, Iran.

**** MSc in Nursing, Department of Operating Room, School of Nursing and Midwifery, Isfahan University of Medical Sciences, Isfahan, Iran.

***** MSc, Statistician, Department of Vital Statistics, School of Health, Isfahan University of Medical Sciences, Isfahan, Iran.

Correspondence to: Nasrin Safari, MSc.

E-mail: safari312@gmail.com

fact, violence is an important psycho-social phenomenon and studies in different countries show that except for active war zones, children are abused mostly at home and by the adults who are very close to them and the traditional belief about parents having total authority over their children worsening this problem.⁵ In general, many factors such as social isolation, lack of support systems, parents' drug abuse, unemployment, housing problems and lack of economic resources play important roles in child abuse and neglect.⁶ Laali cited from the WHO counseling center for preventing child abuse that chronic diseases and disabilities as well as high level of stress in the family are important causes of child abuse.⁷ Diverse studies carried out in Iran show that 10 to 15 percents of children suffer from chronic disease of asthma.⁸ Also, Karimi cited from the Iranian Foundation for Special Diseases that 22'000 Iranians are suffering from thalassemia, and a significant percentage of them are adolescents and youth.⁹ In Iran, the incidence of cancer among children under 15 years is 2.9 to 4.3 per 100'000 each year.¹⁰ Also, there are 2 to 3 millions of diabetics in Iran and 300 to 500 thousands of type I diabetes patients are under 30 years old.¹¹ Children's chronic diseases impose extra duties, responsibilities and care on families.¹² The child's activities and growth potentials will be disrupted by the disease, they would miss more days of school and be at risk of behavioral and emotional problems. Parents might lose many days of work and suffer from financial and economic problems as well as facing emotional and physical challenges while trying to adjust with their sick child's needs.¹³ Studies show that any personal characteristic that makes taking care of children a difficulty, would be a risk factor for abuse. Radmand suggests that ill-tempered children and infants who suffer from a disease are at risk of being abused.¹⁴ According to the studies in the USA, children suffering from a chronic disease are abused and neglected 1.7 to 2.2 times more than healthy ones.¹⁵ The study of Can et al on children with chronic diseases showed that 86.4% of mothers abuse their children in

different ways.¹⁶ Also, Allison et al showed that child abuse in girls who suffer from a chronic disease was 14.5%.¹⁷ It seems that in Iran there has not been any study on the child abuse towards the children with chronic diseases and we could not find any statistics. In addition, it seems that the children's diseases could lead to parents' feeling of guilt and as a result they give their sick kids too much care and protect along with pity. A study by Karimi on the experiences of adolescents suffering from thalassemia in Iran showed that they suffer from too much protect and pity because of their diseases.⁹ It seems that in one hand, there are cases of child abuse by families and there are many children in our society suffering from chronic diseases and their physical, emotional, psychological and social outcomes. In the other hand, the issue of child abuse in our country is under a shadow because of cultural, social and economic conditions as well as supporting organizations status and it is not easy to declare if such children are getting enough attention and care from their families or being abused by them. Therefore, this study aimed to determine and compare the total scores of child abuse as well as the scores of physical, emotional, sexual abuse and neglect by parents in children suffering from chronic diseases and healthy children.

Method

This was a descriptive comparative study. Data were collected in one stage from two groups of children, sick and healthy, in Isfahan in 2007. A total of 212 children participated in the study. The sick group included 106 children of 11 to 18 years old referred to the clinics and health centers of the Isfahan University of Medical Sciences and had medical files there. These children were suffering from chronic diseases such as epilepsy, asthma, diabetes, hemophilia, thalassemia, etc which was approved by physicians and their disease was diagnosed at least one year ago. The healthy group included 106 children of 11 to 18 years old living in the city of Isfahan, each of them from an area where the sick children were living. The two groups

were matched in age and sex as well as socio-economic class. All the children were living in the city of Isfahan and had Iranian (Persian) nationalities and could answer the study questions. The excluding criteria included being an orphan or having non-Iranian parents, being diagnosed for mental disabilities, having low consciousness (spaced-out, sleepy, etc) or suffering from a psychological disorder. Data were collected using a questionnaire completed by interview. The questionnaire had two parts. One on demographic data that included age, gender, birth rank, career and parents' education and the other included 41 questions measuring 4 areas of physical, emotional and sexual abuse, and neglect. It should be mentioned that the answers were organized based on Likert scale in 4 choices of never, sometimes, most of the times and always and the grading system was 0 to 3, so that higher grades meant more abuse and neglect. The total score ranged from 0 to 123. Zero meant no neglect and abuse and 123 was the most severe case of neglect and abuse. Since the number of questions in each area of abuse was not the same, to make the scores comparable, the score of each field were multiplied by 100 and then divided by the maximum score of the field. Therefore, all the scores were ranged from 0 to 100. Validity of the questionnaire was determined by content validity. The researcher prepared a questionnaire based on the objectives and variables of the study and by using various books and articles on the field and especially using Mohammadkhani et al scale for child abuse self-report.⁴ Then this questionnaire was given to 15 faculty members of the School of Nursing and Midwifery and several faculty members of School of Education and Psychology and the questionnaire was edited using their suggestions and comments. For the reliability, the researcher carried out a pilot study and gave the questionnaire on 20 children who met the entry criteria and completed the questionnaire by interview. Then, using SPSS software, Cronbach's alpha was calculated to be 0.78%. The pilot study samples were not included in the study

samples. Sampling was done using convenient method for both groups. The parents of children with chronic diseases who referred to health centers of Isfahan and met the entry criteria listened to the explanations and permitted their children to complete the questionnaire in a safe environment. Also, the researcher went to the residential areas of the sick children and asked their neighbors to find healthy kids with the same characteristics. If there was a child with the same age and gender of the sick child and had the entry criteria, they would complete the questionnaire and if not, the researcher tried next doors until finding a subject. Questions were clearly read by the researcher and the subjects' answers were ticked without any bias. The sampling took 3 months to finish.

The data were analyzed using descriptive statistics (frequency, mean and standard deviation) and inferential statistics (chi square and independent t test) via SPSS software. In this study, the error was considered to be 5%.

Results

A total of 212 sick and healthy adolescents in two groups were studied. Most of sick children (40%) were suffering from blood system disorders (thalassemia, hemophilia, leukemia, etc). The majority of each group were girls (51%) and 42.4% of participants' were between 11 and 13 years old.

Most mothers were housewives (48%) and their educational level was lower than high school diploma (62% for sick group and 48% for healthy group). Most fathers had private business (40% in sick group and 53.5% in healthy group) and under high school diploma (62.3% in sick group and 43.3% in healthy group). Chi square test showed that both groups were similar in birth order, parents' education and career ($p = 0.05$).

Independent-sample t-test did not show any significant difference between the mean of total scores of abuse and physical, sexual and emotional abuse in both groups of healthy and sick children ($p = 0.05$). But there was a

significant difference between the neglect scores in both groups ($p = 0.05$) (Table 1).

Table 1. The means and Standard Deviations of different types of abuse in the two groups of healthy and sick children

	Sick group				Healthy group				Result
	M	SD	Minimum score	Maximum score	M	SD	Minimum score	Maximum score	
Physical	19.4	17.8	0	5.55	14.3	97.8	0	5.55	$t = 0.947$ $p = 0.897$
Sexual	83.2	70.7	0	50	35.2	78.6	0	33	$t = 0.473$ $p = 0.637$
Emotional	02.14	58.10	0	49	15.15	46.10	0	49	$t = -0.783$ $p = 0.435$
Neglect	60.12	08.11	0	50	30.17	38.16	0	68	$t = -2.58$ $p = 0.01$
Total score of abuse	76.10	26.8	0	4.50	92.12	63.9	0	28.42	$t = -1.74$ $p = 0.082$

Discussion

The results showed no significant difference between the total score of abuse in the two groups of sick and healthy children. Studies in the USA showed that children suffering from a chronic disease are abused and neglected 1.7 to 2.2 more times than healthy ones¹⁵ and the most common abuse in this group is experiencing several ways of abuse at the same time.¹⁸ A study in India also reported that in children referred to hospitals 75% were physically, 20% sexually, and 5% were emotionally abused.¹⁹

In the present study, the results were totally different from studies in other countries and can be related to the cultural differences between Iranian society and other societies, and specifically the traditional and religious culture of the Isfahan city. However, a bigger size of sample might be needed for further studies.

Comparing the mean scores of physical abuse in both groups showed no significant difference, but the score of physical abuse in the sick group was higher than the healthy one. Can et al showed that mothers of enuretic children had tried various forms of physical violation toward their children so that 42.1% of enuretic children were kicked and 12.8% were severely beaten up.¹⁶ Also, Sullivan and Knutson showed that physical abuse in children

with communication problems were significantly higher than other abused children.¹⁸ Another study by Knutson et al showed that mothers of deaf children were more likely to select physical discipline in response to depicted child transgressions compared to mothers of healthy children.²⁰ Alizadeh et al also showed that parents of children with hyperactivity disorder were more likely to use physical punishments compared to mothers of normal children ($p = 0.01$).²¹ Knutson et al believe that brining up children with special needs is associated with a lot of stress compared to normal children and parents of these children might use direct and controlling behaviors, especially physical punishments and the special situation of these children might affect their parents disciplinary strategies.²⁰ Also, in the present study there was no significant difference between the mean scores of emotional abuse in the two groups of sick and healthy children, but in the study of Can et al, 4.5% of mothers of enuretic children said that they used absorbing pads for their children, which had harmful effects on psychological health and growth of their children and therefore is considered an emotional abuse.¹⁶ According to Baqeri, parents of disabled children because of emotional abuse, do not provide them constant love and

acceptance, fail to provide emotional security for their children and a great part of their parent-child relationship is cold and repulsive.²² It seems that the insignificant difference between these data and lower score of emotional abuse in sick children compared to the healthy ones does not mean lack of emotional abuse toward these children and it is likely that because of their special conditions, these children are more fragile and delicate than normal children in facing with even a little bit of emotional abuse. This finding can also reflex the belief in psychological and emotional support of patients in our culture and religion.

The results of this study showed no significant difference between the mean scores of sexual abuse in the two groups of healthy and sick children, but the mean score of sexual abuse in sick children was higher than healthy children (2.83 vs. 2.35) and sick children reported more cases of being touched by parents in the private parts of their body. The risk of sexual abuse can be increased by increasing child's dependence on those who take care of them and especially when they have physical and communicational problems.²³

Sullivan and Knutson also found in their study that children who suffer from hearing impairment are at a higher risk for sexual abuse compared to children with other disabilities. Also, children with more than one disability were at a higher risk for sexual abuse.¹⁸ These findings show that disabilities and the increase of dependency can be associated with sexual abuse. It should be mentioned that because of moral and cultural limitations not all types of sexual abuse were mentioned in the questionnaire in the present study and the questions in this field covered just a small limited part of sexual abuse. Therefore, we cannot compare the sexual abuse in the two groups of study.

The results of the study show a significant difference between the scores of neglect among the two groups of healthy and sick children and the mean score of neglect for healthy children is higher than the sick children. But in the study of Knutson and Sullivan, disabled children were

significantly more at risk for neglect compared to healthy children.¹⁸

In the study by Can et al also mothers of 40% of abused children said that enuresis was a natural problem in their view and therefore they deprived their children from medical treatments.¹⁶ However, in the present study neglect toward sick children was less than healthy ones, which is controversial to other studies and it seems that low scores of neglect in sick children is the sign of our culture and the frequent emphasis of Islam about taking care of patients. Islam has complete rules and regulations for the everyday life of Muslims and has lightened up the plan and road of life for human being in every field. Islam encourages nursing and caring for patients and being kind to them and the holly prophet of Islam (peace be upon him) said "enrich your religious, humanity and affection by visiting patients". It is reported in history that the prophet (peace be upon him) took care of Ali (peace be upon him) all the night and divided his night time for praying and nursing.²⁴ Imam Sadeq (peace be upon him) also said that nursing the patients is more valuable than praying in Masjid Al-nabi and emphasized on being nice and tolerant with patients' bad-temper and impatience.²⁵ He said that everyone who does not care for other Muslims is not a Muslim.²⁶

Carl Atkin et al study in Britain that aimed to understand the details of life experiences in young patients suffering from thalassemia major and sickle cell disorders showed that in one hand, most parents were protecting their children's from problems and in the other hand, the children were suffering that their parents were obstacles and limiting them compared to their healthy pals.²⁷ Also, a study by Karimi on the experiences of adolescents suffering from thalassemia in Iran showed that these adolescents were suffering from too much protection by their families and pity toward them. Karimi cited from Tanara Tanakorn that family system will face psychological and social changes during nursing a sick child and the parents' guilty feelings because of having such a child lead to too much supportive behaviors

and it can harm the family unit. In some chronic diseases, parents are too much worried about the sick children and supporting them make them disable to discipline and order the family.⁹ Most parents of sick children condemn themselves and it provides too much protection and anxiety.²⁸ These studies agree with the findings of our research. Considering the findings of this study, we may say that children suffering from diseases are at a higher risk for behavioral and psychological disorders compared to healthy children, and child abuse can pave the way for these disorders. As various studies have shown, being abused increases tension and leads to not following the treatment diet and weakens the child's control over the disease and leads to more complications and frequent hospitalizations and impose more expenses on the families and health system. Therefore, educating about child abuse and supporting and educating families and children can be effective steps toward improving health services for the patients. Since abuse can lead to severe complications and outcomes and impose social and economic burden on the society and considering the important role of nurses on educating the society, it is recommended to plan for a socially oriented education by nurses as well as supporting families who are at risk in order to decrease the

expenses of abuse outcomes.

The results of this study can help nurses, school teachers, psychologists, counselors and health teachers in schools to identify at risk children while doing their duties in schools, social communities, working places, counseling centers, day-care nurseries and other social institutions and plan for individual and group educations to develop parental skills, improve their effective parenting styles, smooth the communication between parents and children and improve the emotional connection between the family members. Also, according to the findings of this study about the significant difference of neglect in sick and healthy children, and the ambiguity that whether this result means too much protection or something else, we suggest further studies to explore it. We hope that the results of this study pave the way for further studies.

The Authors declare that have no conflict of interest in this study and they have surveyed under the research ethics.

References

1. Ziaei Sh, Abedi H. Children's right in the city of Isfahan. [Research Project]. Isfahan: Isfahan University of Medical Sciences, School of Nursing and Midwifery; 2006. (Persian).
2. World Health Organization. Prevention of child maltreatment. [online]. Available from URL: http://www.who.int/violence_injury_prevention/violence/activities/child_maltreatment/en/index.html
3. Pillitteri A. Study guide to accompany maternal and child health nursing: care of the childbearing and childbearing family. 5th ed. Philadelphia: Lippincott Williams and Wilkins; 2007.
4. Mohammadkhani P, Mohammadi MR, Nazari MA, Dogaheh ER. Self-esteem and traumatic symptoms in Iranian abused and non-abused children. Proceedings of the Mental Health Care Practices in the Gulf. 2003 Dec 8-10; Kuwait. New York: International Journal of Mental Health and Addiction; 2004.
5. United Nation Children's Fund (UNICEF). Convention on the rights of the child. [cited 2008 August 26]. Available from URL: <http://www.unicef.org/crc>
6. Saduk B, Saduk V. Summary of Caplan's psychiatry. vol 3. 9th ed. Trans. Rafiei H. Tehran: Arjmand; 2003. (Persian).
7. Laali M. The effect of being abused by parents during childhood on anxiety and depression of patients referring to counseling centers of Isfahan city compared to normal people. [MA Thesis]. Isfahan: Isfahan University, School of Psychology and Education; 2003. (Persian)

8. Nekui A. The effect of massage therapy on the lung functions of children suffering from asthma in health centers of Isfahan in 2005. [MS Thesis]. Isfahan: Isfahan University of Medical Sciences, School of Nursing and Midwifery. 2006. (Persian).
9. Karimi M. Life experiences of adolescents suffering from thalassemia. [MS Thesis]. Isfahan: Isfahan University of Medical Sciences, School of Nursing and Midwifery; 2003. (Persian).
10. The society for supporting cancer stricken children (Mahak). Support services. Available from URL: <http://www.mahak-charity.org/internal.php?section=zh>
11. Amini M. The condition of type 1 diabetes in the city of Isfahan. Proceedings of the Second Congress of Pediatric Endocrinology; 2007 July 11-12; Isfahan, Iran. (Persian).
12. Hockenberry MJ, Willson D, Winkelstein ML, Kline NE, Wong DL. Wong's nursing care of infants and children. 7th ed. Philadelphia: Mosby; 2003.
13. Arzumanians S. Children and family crises in severe, chronic and killing diseases. Tehran: Nour Danesh; 2002. (Persian).
14. Radmand M. Validity and reliability of trauma symptom checklist for children (TSCC-a) for abused children (escaped from home) in comparison with normal children. [MS Thesis]. Isfahan: Isfahan University, School of Psychology and Education; 2003. (Persian).
15. Allen PJ, Vessey JA. Primary care of the child with a chronic condition. 4th ed. Philadelphia: Mosby; 2003.
16. Can G, Topbas M, Oken A, Kizil M. Child abuse as a result of enuresis. *Pediatric International* 2004; 46(1): 64-6.
17. Briscoe-Smith AM, Hinshaw SP. Linkages between child abuse and attention-deficit/hyperactivity disorder in girls: behavioral and social correlates. *Child Abuse and Neglect* 2006; 30(11): 1239-55.
18. Sullivan PM, Knutson JF. The Association between child maltreatment and disabilities in a hospital-based epidemiological study. *Child Abuse and Neglect* 1998; 22(4): 271-88.
19. Jamshidi E. Relationship between violent behavior and history of physical and emotional abuse in children of guidance schools supervised by the population research database of Tehran University of Medical Sciences. [MS Thesis]. Tehran: Tehran University of Medical Sciences, School of Nursing and Midwifery; 2004. (Persian).
20. Knutson JF, Johnson CR, Sullivan PM. Disciplinary choices of mothers of deaf children and mothers of normally hearing children. *Child Abuse and Neglect* 2004; 28(9): 925-37.
21. Alizadeh H, Applequist KF, Coolidge FL. Parental self-confidence, parenting styles, and corporal punishment in families of ADHD children in Iran. *Child Abuse and Neglect* 2007; 31(5): 567-72.
22. Baqeri N. A study on mothers' responsive methods toward their mentally ill children and healthy ones. *Disabled Children Research Journal* 2002; 2(2): 191-204. (Persian).
23. Taremi MH. Child abuse etiology. *Pegah-e-Hozeh* 2009; 252: 26-9.
24. Asadi A. An Islamic attitude toward nursing culture. 1st ed. Qom: Qom Islamic Research Center for Devotees; 1996. (Persian).
25. Kazemi M. Vasayel al-shia fi Ahkam al-sharia. Vol 9. p 400. Available from URL: <http://simorgh.cgie.org.ir/simwebclt/WebAccess/SimWebPortal.dll/DubFullRec>. (Persian).
26. Koleini M. Osool-e- Kafi. Trans. Hassan zadeh S. Tehran: Ghaem Ale Mohammad Publication; 2006. p. 163. (Persian)
27. Atkin K, Ahmad WI. Living a normal life: young people coping with thalassaemia major or sickle cell. *Social Science and Medicine* 2001; 53(5): 615-26.
28. Taylor C, Lillis C, Lemone P. Study guide to accompany fundamentals of nursing: the art and science of nursing care. 4th ed. Philadelphia: Lippincott Williams and Wilkins; 2001.