

ORIGINAL ARTICLE

The Impact of Education, Based on the BASNEF Model, on Maternal Attitudes toward Child Abuse in Shahrekord Health Centers, 2012

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ABSTRACT

Background

As childhood is considered to be the infrastructure for growth and progress, experiencing misconduct may leave behind a heritage of imbalance and unrest which may be manifested in any situation in some form of mental disorder (neurotic attack). This problem leads to physical and mental disorder in children and inflicts heavy social and economic damages to the society. This research aims at evaluating the impact of education, based on BASNEF model, on maternal attitude towards child abuse.

Methods

The current research is based on an interventional study on 95 mothers referred to the Shahrekord health center. They were randomly selected and divided into two groups of test and control, and education was conducted in four sessions based on structures of BASNEF model. Finally their obtained information was analyzed using paired t-test, independent t-test, Mann-Whitney and Chi-square statistical tests.

Results

The mean score in beliefs was 77.73 ± 7.27 , attitudes 87.01 ± 8.1 , subjective norms 85.55 ± 8.4 and enabling factors 82.77 ± 10.64 in the test group. There was a significant difference in the average marks of the structures of the BASNEF model (beliefs, attitudes, subjective norms, and enabling factors) between the control and intervention groups after the training process

Conclusion

Model-based training has a positive effect on improving attitudes; therefore, instead of traditional methods, applying a planned training program is suggested so that its effects can be reliable.

KEYWORDS: Child abuse; BASNEF model; Attitude

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INTRODUCTION

Childhood, which is the basis of physical and mental growth, is the most important stage in an individual's life which marks his future and acts as the infrastructure for growth and progress. Although child education is one of the primary duties of any parent and quality life leads to the development of capable and creative human beings,¹ there are some parents who, knowingly or unknowingly, resort to incorrect training methods, which end in child abuse. Child abuse includes inflicting repeated physical harm to the child by his/her parent or guardian.² It can be witnessed in all human societies, irrespective of color, race or social and cultural standing, and is concomitant with a wide range of psychological symptoms such as anxiety, depression, risk of suicidal behavior and physical diseases due to trauma and malnutrition and lack of adequate growth.¹ Among the major disorders which may result from a child abuse due to abusive behavior of the parents are feelings of guilt, depression, stress and shame.¹ Studies have shown that the increase in abusive behavior is due to stresses from modern lifestyle, a family's inability to cope with life's pressures, economic matters, issues concerning marriage and employment. Three characteristics can be held responsible in causing abusive behavior towards children, one of which is the parental profile. The evidence proves that the parents who have faced child abuse in their childhood period are likely to be abusive themselves. Open violence is a permanent characteristic of these families.³ In most cases, child abuse should be considered as a sign of disorder in the whole family, which can be eliminated by just understanding the factors which are involved in such events.⁴ Some children, like immature children who need extra care, mentally retarded children or those with physical disabilities, healthy children who are deemed as abnormal by their parents (like children who have low growth rate and are ill-tempered and hyperactive), and unwanted children are more likely to be abused than the others.⁵ In a study, it has been reported that of every 970 thousand children reported to the

American child protection centers, 52% are related to neglect, 24% to physical abuse, 12% to sexual abuse, and 6% to emotional abuse.⁶ Abusive behavior towards children comes in various forms such as physical, behavioral, spiritual and social abuse, and in all these, the most important reason for child abuse is economic problems of the family.⁷ A study showed that 70% of the children under study had experienced child abuse such as biting and burning at least once in a month.⁸ According to the statistics of the welfare organization, in Iran 66% of the child abuse is done by men and the girls are more likely to be abused than the boys; 50% of the parents in Iran believe punishment is necessary for children and 40% tend to use physical punishment.⁹ Studies show that since mothers spend longer hours with their children; hence, most of the child abuse is implemented by them.¹⁰ Results of a study in Hong Kong show that child abuse rate is higher among children aged 2-8, which may be due to difficulties concerning their evolution process.¹¹ As the members of the medical team, nurses are responsible for various tasks such as education. By guiding and educating families on proper upbringing of children, applying the principles of effective discipline and preventing abusive behavior towards children, nurses can play an important role in reducing the dilemma of child abuse.¹ The educators have to be aware of the factors for affective training in order to achieve success in changing and consolidating healthy behavior. Frameworks and behavioral theories are for realization of learning and behavior patterns of the people.¹² BASNEF is one of the models used in the health education where attitude towards behavior, norms, social pressures, purpose of behavior and other factors capable of affecting the behavior such as adequate knowledge and guidelines on appropriate behavior with children, providing consultations and involving families are examined.¹³ Therefore, by reviewing the educational programs and developing new models and practices, it is hoped that families would adopt the proper methods of child upbringing by establishing close contact and

arranging counseling sessions for the entire family. This research aims at determining the impact of education, based on the BASNEF model, on the maternal attitude towards child abuse in the Shahrekord health centers.

MATERIALS AND METHODS

This study, which was conducted in spring 2012, after approval of the ethics committee of Shahrekord Medical University, a list of all the health centers in Shahrekord was prepared; health centers were randomly selected for the study and according to the number of health files divided into test and control groups using a random digit table.

Inclusion criteria of the study were literate parents with ability to read and write, lack of parental divorce and parental addiction, mothers without mental problems, children without disabilities or other medical conditions, women with children aged between 2 and 6 covered by the center, and a telephone number for further follow ups.

Exclusion criteria of the study were lack of willingness to participate in the study or change in centers.

People were contacted by phone and invited to take part in the study. Participation in the study was required signing an informed consent and each person was assured of the confidentiality of the collected information. The samples were then grouped according to social, economic and cultural stances of affairs in two test and control groups. The two groups were matched according to parental occupation, parental education, and social and cultural status. The sample size was calculated by $2[(z_1+z_2)^2s^2]/d^2$. In this formula, we designed the level of statistical significance=1.96 for 95%, Standard deviation $n=5$, the difference in means=10 and desired power=1.28 for 90% power).

According to the sample size formula, 50 people in each group entered the study phase. Five participants did not continue until the end of the study, 95 patients were studied in the main analysis including the intervention

($n=45$) and the control ($n=50$) groups. The instrument for collection of data consists of a questionnaire based on BASNEF pattern (beliefs, attitudes, subjective norms, and enabling factors); it was designed through the study of scientific books, various articles, etc., and used on the groups in two phases, before and two months after the sessions. This questionnaire comprised of six parts; the section on demographic information has 7 questions including those on parental age, parental education, parental occupation, number of children in family, age of the last child, the sex of the last child and reference for decision-making, information and education. 13 questions are on beliefs about behavioral outcome, 8 on attitude towards behavior, 5 on abstract norms, 12 on belief norms, and 7 on enabling factors. Likert's scale was used, with five options to answer from "I totally agree" to "I totally disagree". The scores range from 0-4 and were then converted into percentage (0-100%). For scientific validation of the data collection tool, the questionnaire was analyzed by 7 experts of child psychology and health and their views were applied. The questionnaire was then given to 15 separate housewives-matched with the sample group, and its clarity and comprehend ability were studied. The content of each questionnaire was discussed and revised. For reliability, the questionnaire was completed by 15 other researchers who had no connection with the ongoing research, and the reliability of the questions was determined through Cronbach's α . For questions on beliefs about behavioral outcome, we obtained $\alpha=0.71$, attitude towards behavior $\alpha=0.73$, belief norms $\alpha=0.82$, and enabling factors $\alpha=0.70$. After completion of the questionnaire by these two groups, a training program was designed based on the results. In order to increase the quality of the training program and for easy administration, the people in the test group were further divided into two groups and each was given a separate training program (60 sessions of 40-50 minutes at 9-10 AM

and 10-11 AM). The training was conducted by the researcher on a direct basis and by using speech method on various topics such as introduction to the stages of child development, various forms of child abuse, effects of emotional abuse, effects of neglect, the parental role and expectations and correct behavior with a child. Indirect training was implemented through distribution of educational pamphlets. The people in the control group received routine education of health centers, and two months after the last session, the questionnaire was again completed by both groups.

The data was then analyzed in SPSS, version 16. To compare the average differences in the results (before and 2 months after the training session) in each group, paired t-test was applied. To compare the average scores between the two groups, independent t-test was used. To compare the literacy level of mothers and fathers, job of mothers and sex of children in these groups, Chi-square test and to compare the average age of the parents and children of the people in these groups, independent t-test were carried out, and a P value of <0.05 was considered as significant.

RESULTS

In the test group, the mean age of women, men and children were 31.02 ± 5.33 , 36.06 ± 4.61 and 4.62 ± 2.8 , and that of the control group they were 30.46 ± 5.47 , 35.33 ± 6.98 and 3.85 ± 1.72 , respectively. The mean age of the mothers, fathers and children, in these two groups, did not have any significant difference ($P > 0.05$). Twenty four people (53%) from the test group and 25 people (55%) from the control group had

daughters, ($P = 0.83$). The majority of the fathers in the test group (42%) had secondary level education and 48% of the fathers in the control group had university education ($P = 0.62$). Forty four percent of the mothers in the test group had secondary level education compared to 51% in the control group who held university degrees. The majority of the people taking part in this research had 2 children (test 55% and control 37%). 86% of the mothers in the test group and 82% in the control group were housewives ($P = 0.71$). Also, the difference between the social and cultural status of the two groups was not significant ($P > 0.05$). The importance of abstract norms for the mothers in both groups is shown in table 1, where a majority of them respect the decisions made by their councilors and husbands (table 1). The mean scores of the structures of the BASNEF model in both groups had no significant differences before the training session (table 2), but as it is shown in table 3, in the intervention group the situation changes and significant differences are observed in the mean scores of the structures of the BASNEF model after the training ($P < 0.05$).

DISCUSSION

Child education is considered to be the greatest mission of any parent. The quality childhood life will guarantee the development of a strong and creative personality in later life. Children who face neglect and abuse tend to grow up with major deficiencies and shortcomings such as trust, independence and initiative. These children are incapable of looking after themselves and are distrustful of others. Parental love and affection is needed to develop the spiritual and emotional foundations of a child; therefore, emotional shortcomings and abuse

Table 1: Frequency of abstract norms in both groups

Abstract norms Group	Test		Control	
	Number	%	Number	%
My husband's opinion on child care is important to me	43	95.6	38	84.4
The opinion of my husband's family on child care is important	19	42.2	17	37.8
My family's opinion on child care is important to me	23	51.1	24	53.3
The councilor's opinion on child care is important to me	42	93.3	35	77.8
My friends' opinion on child care is important to me	15	33.4	8	17.7

Table 2: Comparison of the mothers' mean scores obtained on BASNEF structure in the test and control groups before the educational intervention

Group BASNEF model structure	Test		Control		Results t-test
	Mean	Standard Deviation	Mean	Standard Deviation	
Opinions on behavioral results(beliefs)	56.45	13.74	58.07	12.18	P=0.230
Attitude towards behavior(attitudes)	78.46	4.16	70.27	16.85	P=0.118
Opinion on the norms (subjective norms)	58.88	20.40	59.86	16.05	P=0.802
Enabling factors	59.12	14.57	53.80	18.21	P=0.130

Table 3: Comparison of the mothers' mean scores obtained on BASNEF structure in the test and control groups after the educational intervention

Group BASNEF model structure	Test		Control		Results
	Average	Standard Deviation	Average	Standard Deviation	
Opinions on behavioral results (beliefs)	77.73	7.27	57.43	11.97	P=0.048
Attitude towards behavior(attitudes)	87.01	8.1	70.00	8.88	P=0.05
Opinion on the norms(subjective norms)	85.55	8.4	59.62	9.73	P=0.036
Enabling factors	82.77	10.64	53.77	12.64	P=0.03

will have adverse effects on their lives, to a point that researches have shown that most of the troubled children belong to these families.

This study is one of the first in its kind to deal with child abuse in Shahrekord, Iran. The average scores for attitude towards behavior changed after one month of training which shows the effectiveness of BASNEF based intervention on belief, continuity and promotion of maternal attitude in prevention of child abuse. The results of this study are similar to that of Oana et al.¹⁴ In this regard, the results of a study showed that the mean scores of parental attitude in the test group increased after the training session.¹⁵ A study showed that 97% of the mothers taking part in the research had a high level of knowledge and attitude towards child abuse.¹⁶ The results of this study are similar to those obtained by other researchers.^{8,11,17} The results of another study, which aimed at influencing parents who suffered from abusive behavior through educational programs, showed a decrease in behavioral problems in parents who took

part in the training sessions.¹⁸ A research was conducted with the aim of preventing child abuse in families with hyperactive children, showing that educational intervention has positive effects on child abuse.¹⁹ Results of a study, which aimed at prevention of aggressive behavior in preschoolers through educational programs, had positive effects.²⁰

As it can be seen in the BASNEF model, evaluation of behavior results precedes having tendency to act. When mothers have a positive assessment of the consequences of a behavior, they will be more motivated to perform such behaviors.

The average results of the beliefs in subjective norms increased after a month of training which shows their (parents and counselors) attention and also the effects of education and training on the research results.²¹ In another study that was aimed at analyzing different beliefs of people for participation in the program showed that one strategy to encourage people to participate is to have important people or families

to support the program.⁴ The enabling factors in this study include opportunity for educational counseling, support from husband or other family members on correct behavior and other misbehaviors that may cause a change in the maternal attitude, which increases dramatically when mothers attended training sessions. Average enabling factors in the experimental group increased immediately after training, because they had access to education classes, educational pamphlets and expert counselors.

Most of the research conducted based on the BASNEF model show that enabling factors play an important role in changing the intended conduct to healthy behavior.^{22,23} Results of other studies show that families are the most important abstract norms which play a key role in changing behavioral patterns of the people.²⁴ Finally, BASNEF educational models, with suitable structure, are able to improve the maternal attitude towards abusive behavior, which will play an important role in reducing child abuse and its complications on children. The biggest restriction on this research was for mothers to participate in the educational sessions, even though there was no lack of willingness.

CONCLUSION

Education, based on the BASNEF model, has had positive effects on maternal attitude towards abusive behavior with children; therefore, it could be hoped that continuation of such educational programs will increase children's health and natural progress in their future. It is suggested that future studies compare the effects of this model and other educational models. The results of the current study could extrapolate to other population groups. As this model was effective in mothers, it might be also appropriate for fathers.

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REFERENCE

- 1 Tavakol KH, Azimi SH, Sharifirad GH, et al. Attitude change toward child abuse after educating behavioral intention model to mothers referred to Falavarjan health homes. *Journal of Research in Behavioural Sciences*. 2008;6:37-43.
- 2 Ebrahimi Fallah Talab F, Ghorbani Samini M. Death due to child abuse – A case report. *Journal of Gorgan University of Medical Sciences*. 2009;11: 76-8.[In Persian]
- 3 Salmani N, Vahideh Hoseini S, Ahmadi F. Survey of effective factors in child abused and neglecton prevalence in students of nursing Islamic Azad university. *Journal of Uremia Nursing and Midwifery Faculty*.2007;5:112-6.[In Persian]
- 4 Madani S, Bayat M. Poverty and Child Abuse in Iran. *Journal of Social Welfare Quarterly*. 2010;9:271-300.
- 5 Kholasezadeh G, Bashardoost N, Ahmadi N, et al. Investigation of Prevalence of Child Abuse in Addicts Referring to the Addiction Withdrawal Clinic. *Journal of Shahid Sadoughi University of Medical Sciences and Health Services*. 2010;18:199-206.[In Persian]
- 6 Kliegman MR, Behrman RE, Arvin M. Nelson text book of pediatrics. 18th ed. Washington: Saunders; 2007.
- 7 Karen D, Susan J, Autumn G. When the Quick Fix Doesn't Work: Evaluating the Effect of Parent Education on Child Abuse. *Journal of Extension*. 2010;48:35-40.
- 8 Tavkar P, Hansen D. Interventions for families victimized by child sexual abuse: Clinical issues and approaches for child advocacy center-based service. *Journal of Aggression and Violent Behavior*.

- 2011;16:188-99.
- 9 Zolotora AJ, Runyana DK, Dunne MP. ISPCAN Child Abuse Screening Tool Children's Version (ICAST-C): Instrument development and multi-national pilot testing. *J of Child Abuse & Neglect*. 2009;33:833-41.
 - 10 Feng JY, Huang TY, Wang CJ. Kindergarten teachers' experience with reporting child abuse in Taiwan. *J of Child Abuse & Neglect*. 2010;34:124-8.
 - 11 Oveisi S, Ardabili HE, Dadds MR. Primary prevention of parent-child conflict and abuse in Iranian mothers: A randomized-controlled trial. *J of Child Abuse & Neglect*. 2010;34:206-13.
 - 12 Nasirzadeh R, Shairi MR. The relationship between children's perception of parent's violence in child rearing and children's religious beliefs. *Journal of Research in Behavioral Sciences*. 2010;8:57-68.[In Persian]
 - 13 Robert A. Child abuse potential in patient with histories of substance abuse. *J of child abuse and neglect* 2006;23:1225-38.
 - 14 Gavița OA, David D, Bujoreanu S, et al. The efficacy of a short cognitive-behavioral parent program in the treatment of externalizing behavior disorders in Romanian foster care children: Building parental emotion-regulation through unconditional self- and child-acceptance strategies. *Journal of Children and Youth Services Review*. 2012;34:1290-7.
 - 15 Palusci VJ, Crum P, Bliss R, et al. Changes in parenting attitudes and knowledge among inmates and other at risk populations after a family nurturing program. *Journal of Children and Youth Services Review*. 2008;30:79-89.
 - 16 Chen D, Michael MP, Han P. Prevention of child sexual abuse in china; knowledge, attitude and communication practices of parent of elementary school children. *Journal of Child Abuse and Neglect*. 2007;31:747-55.
 - 17 Champion JD, Collins JL. Comparison of a theory-based (AIDS Risk Reduction Model) cognitive behavioral intervention versus enhanced counseling for abused ethnic minority adolescent women on infection with sexually transmitted infection: Results of a randomized controlled trial. *International Journal of Nursing Studies*. 2012;49:138-50.
 - 18 Lyscha M, Erin M, Tyler C. Getting with the (evidence-based) program: An evaluation of the Incredible Years Parenting Training Program in child welfare. *Journal of Children and Youth Services Review*. 2011;33:747-57.
 - 19 Nazemi F, Mohammadkhani P, Khoshabi K. Parent management training used in abusive parent-child interaction in children with ADHD. *Journal of Procedia Social and Behavioral Sciences*. 2010;5:244-9.
 - 20 Pearl E. Parent management training for reducing oppositional and aggressive behavior in preschoolers. *Journal of Aggression and Violent Behavior*. 2009;14:295-305.
 - 21 Hazavehei MM, Khani Jyhouni A, Hasanzade A, et al. The Effect of Educational Program Based on BASNEF Model on Diabetic (Type II) Eyes Care in Kazemi's Clinic, (Shiraz). *Iranian Journal of Endocrinology & Metabolism* 2008;10:145-54.[In Persian]
 - 22 Glanz K, Rimer B, Lewis FM. *Health behavior and Health education Theory, Research and Practice*. 4th ed. San Francisco: Jossey-Bass publisher; 2008. p. 67.
 - 23 Duggan A, Caldera D, Rodriguezk, Burrell L, et al. Impact of a statewide home visiting program to prevent child abuse. *Child Abuse Negl*. 2007;31:801-27.
 - 24 Sharifirad G, Entezari MH, Kamran A, et al. The effectiveness of nutritional education on the knowledge of diabetic patients using the health belief model. *Journal of Research in Medical Sciences*. 2009;14:1-6.