Research Article

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The Effectiveness of Compassion-Focused Therapy on the Anxiety Level of Mothers with Hearing-Impaired Children

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Highlights

- Compassion-focused therapy (CFT) is a good method for reducing anxiety
- Mothers with hearing-impaired children have high levels of anxiety
- CFT improves anxiety in mothers with hearing-impaired children

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ABSTRACT

Background and Aim: One of the effects of having a disabled child on the parents is the experience of anxiety. Parents, especially mothers, blame themselves for their child's problems and disabilities, and this anxiety can endanger the child's mental health. The aim of this research was to investigate the effectiveness of compassion-focused therapy on the anxiety levels of mothers with hearing-impaired children.

Methods: This study was a quasi-experimental study with a pretest/post-test design using a control group. The study population consists of all mothers with hearing-impaired children aged 30–40 years studying at Naghme School for the hearing-impaired in Yazd, Iran. A total of 30 mothers were selected using a purposive sampling technique and were randomly assigned into groups of control (n=15) and intervention (n=15). The intervention group received eight 90-minute sessions of compassion therapy, while the control group received no treatment. The Cattle Anxiety Questionnaire (CAQ) was used to collect data. Data were analyzed using descriptive and inferential statistics.

Results: The mean and standard deviation of the pretest CAQ score was 63.25 ± 7.70 for the intervention group. After the treatment, the mean and standard deviation of CAQ score was 44.02 ± 6.32 for the intervention group. The results of ANCOVA showed an improvement in the cattle anxiety questionnaire scores of adolescents after intervention (p<0.001).

Conclusion: Compassion-focused therapy can improve the anxiety levels of parents with hearing-impaired children. Therefore, the use of this treatment method is recommended to specialists in this field.

Keywords: Hearing-impaired; anxiety; compassion-focused therapy



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Introduction

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earing-impairment is a sensorineural hearing loss that more than 120 million people worldwide suffer from, this disorder costs about 150 million dollars annually. One of the

goals of the World Health Organization is to encourage countries to prevent this disorder, which includes reducing the age of diagnosis and performing it at birth in the form of international plans [1]. This disorder is the most common sensorineural hearing loss and out of every thousand children, 1 to 6 children are born with severe to profound hearing loss [2]. Many studies and research have shown that one of the effects of the presence of a child with a disability in the family, such as hearing loss, is to create pressure, mental tension and anxiety in mothers, which threatens their mental health [3-6]. Therefore, one of the psychological characteristics of parents of hearing-impaired children is anxiety which can be affected by conditions and a problem caused by the child [7]. According to the Diagnostic and Statistical Manual of Mental Disorders (5th edition), anxiety is excessive and constant worry about one or more events or activities on most days, and during a period of at least six months, which has led to disruption in important areas of a person's life. It is difficult for a person to control worry and anxiety and it is associated with at least three symptoms including restlessness, concentration problems and sleep disorders [8]. Anxiety is a major public health problem. They are the most common class of mental disorders in Western societies, which are among the main causes of disability, and it has a huge personal and social cost [9]. Compassion is commonly defined as an emotional state that includes the motivation to help those who suffer or are in need and even if it was accompanied by helpful behaviors these behaviors come at a personal cost [10]. Compassion-Focused Therapy (CFT) is based on an evolutionary approach to psychological functioning. Based on this approach, the motivations and capabilities of compassion are related to evolved brain systems that underlie the behaviors of attachment, altruism and kindness. The natural function of compassion is to create loving behaviors and provide situations for connection, security, relief, participation, persuasion and support. The main focus is to encourage emotional and mental well-being through the development of compassion, which is defined as sensitivity to suffering in oneself and others with a commitment to working to reduce and prevent it [11]. Pipkin et al. showed in a study that CFT can modify psychological factors such as stress and rumination that play a role in mental health [12]. It is worth noting that, even though several studies have been conducted on CFT protocol, the effectiveness of this method among parents with hearing-impaired children has not been investigated so far, so there is still a research gap regarding the research topic. It is hoped that this research will be able to achieve new results by carefully examining the issue and providing a solution to reduce the anxiety of parents of hearing-impaired children. Since the treatment focused on compassion can help the parents to better accept the child with hearing loss and also make them have a compassionate view of themselves and their child, it can be said that this treatment has priority over other treatments.

Even with the prevalence of hearing loss, and the impact this problem has on the family, especially mothers, the effect of compassion-based treatment in children with hearing loss has not been investigated.

The purpose of this study was to investigate the effectiveness of compassion-focused therapy on the anxiety levels of mothers with hearing-impaired children.

Methods

Study design and participants

This research is quasi-experimental with a pre-test/ post-test design using the control group. The study population consists of all mothers with hearingimpaired children studying at Naghme School for the hearing-impaired in Yazd, Iran. The inclusion criteria for them were having children with hearing problems, consent to participate in research, and absence of acute psychiatric disorders and other sensory impairments and getting a score higher than 80 on the Kettle anxiety questionnaire. Exclusion criteria included suffering from psychological disorders, drug use, and lack of motivation to participate in therapy sessions. Since the minimum sample size in semi-experimental studies is 15 people in each experimental and control group, 30 mothers were selected using a purposive sampling technique and were randomly assigned into groups of control (n=15, mean age=35.6±4.41 years) and intervention (n=15, mean age= 36.23 ± 5.71 years). The experimental and control groups were matched in terms of age and education level.

Measure

The Cattle Anxiety Questionnaire (CAQ) is used to measure the level of overt and covert anxiety of people aged 14 and over. There is hardly anyone who has not experienced anxiety. Anxiety is considered an unpleasant and intense emotional state that has two main categories of symptoms, which are physical and psychological symptoms. This scale consists of 40 questions that make up the anxiety scale of the 16-factor Cattle personality test. The first 20 questions measure covert anxiety (attribute), and the second 20 questions measure overt anxiety (state). The reliability of this scale is reported as 0.94 based on the normative research reported. The validity of this scale in the study of Movahhedi Rad et al. 0.91 was reported [13]. The validity of this scale was reported and confirmed by Cronbach's alpha method in the research of Salarifar and Pouretemad for the small scale of trait anxiety 0.77 for the whole scale [14].

Intervention

The intervention group received CFT in eight 90-minute sessions (three sessions each week), while the control group received no treatment. The intervention was conducted by the first author who was an expert in family counselling. The intervention protocol was based on the CFT protocol proposed by Gilbert [15] which is shown in Table 1. The research participants performed mindfulness exercises in the interval between sessions as one of the components of compassion-based therapy. In addition, there were no participant drop out during the implementation of the research.

Data analysis

The collected data were analyzed in SPSS 17 software. Mean and standard deviation were used to describe the data. ANCOVA was used to investigate the effect of the intervention on the dependent variable (anxiety) by removing the pre-test effect. Levin's test and The Shapiro-Wilk test were used to evaluate the assumptions from ANCOVA, the results of which showed equality of variances and the normality of the data distribution for

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Session	Content of session
1	Getting to know the people of the group and making explanations about the meetings
2	Familiarity with the concept of mental health, the concept of compassion and love; The concept of self-compassion and self-love, the concept of valuing yourself.
3	The relationship of CFT with reducing the harm of parental anxiety and guilt caused by having a hearing-impaired child. Practicing kindness and compassion to build self-compassion and be able to discover the hidden fears and shame, healing pains with self- compassion, assigning homework, understanding that others have their own flaws and problem
4	Knowing the effects of CFT on anxiety and stress, teach mindfulness. practicing compassionate mind, learning to have compassionate language, searching compassion inside oneself, and practicing compassion
5	The effect of having CFT on coping with difficult situations in life (especially situations caused by a child's disability). exploring core values, practicing self-kindness and self-values, compassionate mind training (forgiveness, acceptance without judgment, tolerance), teaching to accept incoming changes and endure age-related challenging conditions according to core values, having different challenges, assigning homework
6	Getting to know the concept of resilience and understanding the relationship between this concept and CFT, teaching different ways of showing compassion (verbally, practically, intermittently, and continuously) and applying these methods in daily life and on the people around (spouse, children, relatives, friends), teaching to develop valuable self-transcendent emotions, assigning homework
7	Teaching subjects self-compassion. Practicing to express difficult emotions, practicing relaxation using mindfulness skills (not to be ashamed of), identifying the things that cause shame and trying to be calm, writing a compassionate letter to self and others
8	Summarizing the topics discussed in the previous meetings, solving the problems and answering the questions of the clients, performing the post-test

CFT; compassion-focused therapy

the study variable. In terms of ethical considerations, the researchers were careful about the implementation of the questionnaires, and the intervention was also implemented for the control group after the completion of the research. Also, ethical principles such as the right to participate in the research and confidentiality of information were explained to the participants.

Results

Themean of the pretest CAQ was 63.25 ± 8.07 in the intervention group and 62.84 ± 7.49 in the control group. In the post-test, the average of the intervention group was 44.02 ± 6.32 and the average of the control group was 63.01 ± 8.12 . The results of ANCOVA showed a significant difference between the pretest and posttest scores of the intervention group, $F_{(1,23)}=14.15$, p<0.001. Therefore, the CFT decreased the anxiety of mothers of children with hearing loss. The effect size indicated that 46% of the variances in anxiety were related to the intervention.

Discussion

This research was conducted with the aim of investigating the effectiveness of CFT on the anxiety of mothers with children suffering from hearing loss. These results are consistent with the findings of Boersma et al.'s research, which showed that compassionfocused therapy increased self-compassion and selfkindness, reduced self-criticism, shame, and anxiety, and the results were somewhat stable [16]. Also, the results of this study are in line with the results of the study of Neff and Faso, which showed that people with self-compassion have a higher level of psychological well-being, less stress, depression, and anxiety [17]. One of the psychological characteristics of parents of children with hearing loss that can be affected by the conditions and problems caused by the child is anxiety. The disability and problems of children with hearing impairment cause anxiety in their mothers. The findings of this research showed that self-compassion treatment can reduce the anxiety of mothers with hearing-impaired children.

One of the goals of this type of intervention was to create a rich and meaningful life with self-compassion in the clients. This approach helped the clients to have a positive attitude towards the uncomfortable thoughts and feelings that they have faced in life, to increase their optimism towards life, to try to be less anxious in different situations and to experience less anxiety and stress as a result of the child's problems. Mothers who have a more positive feeling about themselves, are kind to themselves and have a higher respect for themselves [18].

Based on the theoretical foundations of Neff, although compassion itself is related to positive emotions, this feature is not just a positive way of thinking, but the ability to keep negative emotions in a non-judgmental awareness without suppressing or denying the negative aspects of the experience. For example, it's not that people with self-compassion use fewer words that express negative emotions when describing their weaknesses, they just experience less anxiety when they consider their weaknesses. These people have a more positive attitude towards their future, they will have a longer life expectancy and with a positive attitude, they will have less anxiety and problems regarding their child's hearing problem [18].

In addition, CFT interventions, which are based on all three axes of compassion (from others, to others, and to self), have been shown to improve the ability to develop a flexible and soothing response to one's suffering, leading to a reduction of self-criticism. Having a compassionate attitude towards yourself and others helps people to feel less alone and ashamed of their suffering [19].

CFT implies that social motivations are different from non-social motivations and are called social mindsets. This leads to the creation of social interaction roles. Social motivations evolve from interactions with each other to create dynamic interaction patterns. If the parents do not have much ability to recognize the needs and discomforts of the baby and respond appropriately, the baby cannot increase the careseeking behaviors. Submissive communication cannot progress unless people in similar situations show their ability to recognize such signals and reduce tension [20]. The skills presented in the treatment course, including self-kindness, increasing awareness, reducing guilt, improving self-care, increasing respect for self and others, increasing peace, and improving security, reduced the level of guilt and anxiety in these mothers. CFT helps mothers of hearing-impaired children

to establish a better relationship with their child by identifying the values of life, identifying negative emotions, and increasing flexibility. CFT leads to a better acceptance of your child's problems and a more positive relationship with the child [21]. In addition, CFT can lead to the improvement of mothers' mental conditions by increasing a person's knowledge about their inner feelings and those around them, by creating more positive feelings and by accepting problems without judgment. As a result, it increased their problemsolving ability, self-control, belief in a favorable future, flexibility in facing obstacles, optimism, and positive feelings. This led to a positive effect on mothers' relationships with their children and reduce anxiety in mothers of hearing-impaired children.

Conclusion

Our study showed that compassion-focused therapy is effective in reducing the anxiety of mothers with hearingimpaired children, and this method is recommended to specialists for treatment. In fact, compassion-focused therapy leads to flexibility optimism and positive feelings, which directs a positive effect on mothers' relationships with their children and reduce anxiety in mothers of children with hearing loss.

Ethical Considerations

Compliance with ethical guidelines

It should be noted that this article has a code of Ethics from Academic Center for Education of Mashhad (IR. ACECR.JDM.REC.1401.088).

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Authors' contributions

SSY: Study design, acquisition of data, interpretation of the results; MS: Study design, interpretation of the results, and drafting the manuscript; PJ: Statistical analysis and drafting the manuscript; MA: Interpretation of the results.

Conflict of interest

The authors declare that they have no conflict of interest.

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