

## Post-Traumatic Stress Disorder in Children and Non-Pharmacological Therapies Strategies in Iran: A Review Study

Mohammadreza Khodabakhsh<sup>1</sup>, Mahboobeh Afshar<sup>2\*</sup>

<sup>1</sup>Assistant Professor, Department of Psychology, Neyshabur Branch, Islamic Azad University, Neyshabur, Iran.

<sup>2</sup>PhD Student of General Psychology, Neyshabur Branch, Islamic Azad University, Neyshabur, Iran.

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### ABSTRACT:

**Purpose and Background:** Post-traumatic stress disorder (PTSD) is a set of symptoms that appear after a severe traumatic stress. Children and adolescents experience an increase in potentially traumatic experiences. Many children subsequently develop mental health problems.

**Method:** A broad search was conducted in scientific databases and search engines such as Science Direct, PubMed, Cochrane, Medline, SID, Scopus, CINAHL, OVID, Iran Doc, and Magiran with Using the keywords "post-traumatic stress disorder", "non-pharmacological coping strategies", "children" alone or in combination with each other and their English equivalent was done. Articles that were published between 2000 and 2023 and were more related to the main focus of the research topic were selected. After a comprehensive review, nine studies that met the purpose of this study were selected.

**Findings:** The most important non-pharmacological treatment strategies in children included relaxation and hypnosis, acupuncture, neurofeedback, saikoikeishikankyoto (a herbal preparation) and exercise (yoga).

**Conclusion:** Therefore, the use of non-pharmacological methods as one of the effective methods in the treatment of these children's disorders can improve the quality of life of the family of these patients and the patient himself, as a result, administrators should encourage the patients' families by using non-pharmacological methods.

**KEYWORDS:** Pediatrics, Post-Traumatic Stress disorder, Non-pharmacological Therapies

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Post-traumatic stress disorder (PTSD) is a chronic psychiatric disorder that occurs as a result of an accident or life-threatening event (Lancaster et al., 2016). PTSD is a set of symptoms that appear after a severe traumatic stressor. A person may experience psychological problems through seeing or hearing or directly facing it. PTSD is one of the mental disabilities that follows the exposure to extremely intense traumatic stressors. Events that lead to PTSD usually involve interpersonal violence (such as rape, assault, and torture) or exposure to life-threatening events (such as motor vehicle accidents) or natural disasters (such as fires and earthquakes) (Pfefferbaum, 2000). The high prevalence of exposure to trauma and disasters, as well as their subsequent complications, both for survivors and for society as a whole, highlights the need for secondary prevention of PTSD (post-traumatic stress disorder). (Kearns et al., 2012)

Traumatic events have a different distribution of incidence in the world. However, in several geographic regions, specific populations are often exposed to traumatic experiences such as combat, organized violence, terrorism, and natural disasters (studies on PTSD show different trajectories in different populations due to different types of traumatic events, Life situations, psychological factors and methodological differences show et al., 2004). Schnurr ( The prevalence of PTSD in the United States is about 10% for women and 5% for men, and between 20 and 30% in the European population (Wittchen et al., 2009)). This disorder is associated with a variety of mental and physical discomforts and a high economic burden (Sepahvand et al., 2019)). However, approximately 90% of the general population endorses experiencing one or more traumatic events (with a given number of trauma exposures being 3), such as sexual or physical assault, war, motor vehicle accidents, and natural disasters (Kilpatrick et al., 2013).

Adverse childhood experiences have long-term consequences, stress and life-threatening trauma produce responses (avoidance, heightened psychophysiological arousal, flashbacks and re-experiencing events) in children very similar to those seen in adults. Moreover, such transient responses may persist into adolescence and adulthood Caffo & Belaise (2003). Exposure to adverse and traumatic experiences in childhood increases the risk of developing physical and mental illnesses as well as substance use disorders in adulthood, which leads to reduced social and economic opportunities and impaired role functioning. (Sonu et al., 2019)). The consequences of PTSD include increased risk of other mental disorders and suicide, significant impairment in role functioning,

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reduced social and economic opportunities, and earlier onset of chronic diseases, especially cardiovascular diseases (Smith et al., 2013).

In the case of teenagers, post-traumatic stress disorder can occur when a teenager experiences a shocking and unexpected event that is outside the scope of normal human experience. This trauma is usually so severe that it can break down their coping mechanisms and make them feel fearful and cause extreme helplessness. This traumatic event may be experienced directly by the individual. PTSD severity falling asleep. Irritability; Difficulty concentrating; hypervigilance; exaggerated startle reaction; Physiological response when faced with events that symbolize the event (Attari et al., 2006).

Symptoms of PTSD in children and adolescents include inability to speak, acting out during play, bedwetting and excessive clinging to an adult. Non-pharmacological methods to reduce complications (PTSD) are of particular importance. Post-traumatic stress disorder (PTSD) is a chronic psychiatric disorder that occurs as a result of an accident or life-threatening event (Lancaster et al., 2016). The high prevalence of exposure to trauma and disasters, as well as their sequelae, both for survivors and for society as a whole, highlights the need for secondary prevention of PTSD (post-traumatic stress disorder) (Kearns et al., 2012).

Traumatic events have a different distribution of incidence in the world. However, in several geographic regions, specific populations are often exposed to traumatic experiences such as combat, organized violence, terrorism, and natural disasters (studies on PTSD show different trajectories in different populations due to different types of traumatic events, Life situations, psychological factors and methodological differences show (Schnurr et al., 2004). The prevalence of PTSD in the United States is about 10% for women and 5% for men, and between 20 and 30% in the European population (Wittchen et al., 2009)). This disorder is associated with a variety of mental and physical discomforts and a high economic burden (Sepahvand et al., 2019)). However, approximately 90% of the general population endorses experiencing one or more traumatic events (with a given number of trauma exposures being 3), such as sexual or physical assault, war, motor vehicle accidents, and natural disasters ( Kilpatrick et al., 2013).

Nowadays, almost all people are familiar with the word stress, because it has become an integral part of human life and humans face stressful situations since childhood. One of the childhood disorders is anxiety and depression, which can be treated if diagnosed on time. Fear and anxiety are the basis of the prevalence of anxiety in children and if these fears are not pathological, they show themselves in a natural way. Being shy and aloof is one of the most common social anxieties of children that can disrupt their lives. Non-pharmacological methods to reduce PTSD complications are of particular importance. The emergence of PTSD is possible at any age, and although most of the studies related to this disorder were conducted on adults, a high rate of incidence has been recorded in children who have been victims or witnesses of fatal events, due to the establishment of a tolerance mechanism in children to face These mental and psychological injuries are not yet known. This study was conducted with the aim of "investigating post-traumatic stress disorder in children and non-pharmacological treatments in Iran".

### **METHOD**

Searching for articles through databases including Science Direct, PubMed, Cochrane, Medline, SID, Scopus, CINAHL, OVID, Iran Doc and Magiran using the keywords "post-traumatic stress disorder", "non-pharmacological coping strategies" ", "children" were done alone or in combination with each other and their English equivalents. Articles that were published between 2000 and 2022 and were more related to the main focus of the research topic were selected. The inclusion criteria of the articles included their publication in reputable scientific journals, publication in Farsi or English, access to the full text of the article.

### **RESULTS**

Therapeutic interventions in children and minors, in order to reduce the complications caused by trauma and improve the child's functioning, planning including external support: providing physical needs (food, shelter and support) and internal support: shaping therapeutic interventions in the context of the parent-child relationship and the source of attachment. And the fulfillment of Emotional needs. By creating a suitable environment, the internal sources of the feeling of danger and aggression and the main cause of the child's disorder symptoms can be reduced, also strengthening the parent's ability to help the child adapt to the event may be effective in reducing the symptoms of injury.

One of the most important non-pharmacological treatment strategies for post-traumatic stress disorder in children is cognitive therapy. This treatment includes exposure therapy and desensitization through eye movement and reprocessing. This behavioral therapy is effective in nightmares and flashbacks. In one approach, virtual reality programs are used that allow you to re-enter the space where you experienced the accident. In this method, exposure therapy is combined with a series of eye movements to help process painful memories and change your reaction to them.

- Psychotherapy.

In this type of treatment, the therapist tries to learn the ways of logical coping with the existing conditions and connecting the child's conflicts and adapting to the surrounding events with the child's language. At the same time, a lot of psychological pressure is removed from the child, at the same time, the parents are also taught how to behave correctly with the child so that their behavior is

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free from any absolute control, blaming and making the child feel guilty. be Controlling and promoting psychiatric disorders, physical diseases, intellectual function, poor learning and numerous family problems is very effective in controlling this disease, and environmental factors that increase stress such as very negative perceptions of the event, strong initial reactions to the event, The subsequent stressor and the lack of proper support such as physical, social and family support should be evaluated.

### DISCUSS

This review study was conducted with the aim of "post-traumatic stress disorder in children and non-pharmacological coping strategies in Iran". For limited or minimal response to initial management with psychotherapy with or without pharmacotherapy, we confirm the diagnosis, address stressors, and optimize psychotherapy, including psychotherapy to address specific symptoms. If symptoms persist despite these measures, we usually turn to trauma-focused psychotherapy (Perrine et al., 2000).

Trauma-focused psychotherapy is the first line for most people. Our preferred first-line treatment for most children and adolescents with posttraumatic stress disorder (PTSD) is with trauma-focused psychotherapy (eg, trauma-focused cognitive-behavioral therapy) rather than other psychotherapies or medication management ( Robert et al., 2008, Stoddard et al., 2011). The first step to treatment is talking to a knowledgeable physician for a referral to a specialist and arranging an evaluation. To be diagnosed with PTSD, symptoms must be triggered by a specific event. Because the event is distressing, children may not want to talk about it, so a clinician highly skilled in talking with children and families may be needed. After diagnosis, the first step is to make the child feel as safe as possible by enlisting the support of parents, friends, school, and minimizing the possibility of another traumatic event. General strategies to deal with stress include recognizing and examining stress in children, exercising and always being with them, laughing, feeling relaxed in the family environment, not leaving children to their own devices, children being free to choose (Mormoghii et al. , 2015).

Given that only three-fifths of youth with PTSD received first-line treatment (psychotherapy). More than one in 20 received drug treatment that appeared to be associated with the most severe and complex manifestations. More than a third of youth with PTSD received neither treatment nor medication, indicating a compromised quality of care. Future research should confirm factors associated with prescribing medication and explore ways to increase the use of psychotherapy in primary care (Soria-Saucedo et al., 2018). Relaxation methods, including relaxation and cognitive-behavioral hypnotherapy, are very important because they create relaxation, a pleasant feeling, and a feeling of well-being. In a meta-analysis study of 30 studies, Bisson et al. (2020) suggested six different approaches such as acupuncture, neurofeedback, saikokeishikankyo (a herbal preparation), physical experience, cranial magnetic stimulation, and yoga. In another meta-analysis study, scientific evidence of PTSD benefits for strong repetitive cranial magnetic stimulation and for acupuncture, hypnosis, meditation, and good visualization were stated. Evidence for biofeedback, relaxation, emotional freedom, and mind field therapies, yoga, and natural products was unclear or inconsistent, suggesting considerations for clinical applications and future research recommendations (Wahbeh et al., 2014).

### CONCLUSION.

Therefore, the use of non-pharmacological methods as one of the effective methods in the treatment of these children's disorders can improve the quality of life of the family of these patients and the patient himself, as a result, managers should encourage the patients' families by using non-pharmacological methods.

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