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The Effectiveness of Narrative Exposure Therapy on Pregnancy Concerns, Schemas Coping with Stress and Interpersonal Sensitivity in Pregnant Women with Pregnancy Anxiety

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A B S T R A C T

Objective: Pregnancy anxiety is often associated with fears of childbirth, the birth of a child with disabilities, and concerns about pregnancy-related changes. The purpose of this study was to determine the effectiveness of narrative exposure therapy on pregnancy-related worries, stress coping schemas, and interpersonal sensitivity in pregnant women with pregnancy anxiety.

Materials and Methods: The present research method was a quasi-experimental design with pre-test, post-test, and follow-up with a control group. The study population included all pregnant women with pregnancy anxiety attending Shahid Beheshti Hospital for Women and Childbirth in Nowshahr city in 2022. Using purposive sampling, 50 individuals were selected and randomly assigned to the narrative exposure therapy experimental group and the control group (25 each). Data were collected using the Parker Interpersonal Sensitivity Questionnaire (1989), Wong and colleagues' Stress Coping Schemas (2006), and Aldersey and Lynn's Pregnancy-Related Worries Questionnaire (2011). Data were analyzed using mixed analysis of variance and SPSS software version 26.

Findings: The results showed that narrative exposure therapy was effective on pregnancy-related worries ($F = 68.73$, $p < 0.001$), stress coping schemas ($F = 265.90$, $p < 0.001$), and interpersonal sensitivity ($F = 39.73$, $p < 0.001$) in pregnant women with pregnancy anxiety.

Conclusion: It can be concluded that narrative exposure therapy was effective on pregnancy-related worries, stress coping schemas, and interpersonal sensitivity in pregnant women with pregnancy anxiety.

Keywords: *Pregnancy, Stress Coping Schemas, Interpersonal Sensitivity, Narrative Exposure Therapy.*

1 Introduction

Pregnancy as a Stage of Female Identity Formation: Pregnancy is perceived by women as a stage that fulfills their fundamental need for narcissism, as it confronts them with the growth of another human being within themselves. However, this new period is accompanied by significant psychological, emotional, and physical stress, necessitating considerable physiological and psychological adjustments (Feyzi et al., 2017). Although pregnancy and childbirth are part of the natural evolutionary process in women, the reality is that despite advancements in the care and education of women during pregnancy, particularly in physiological aspects, the psychological dimensions of pregnant women have rarely been addressed. Pregnancy anxiety is the anticipation of future threats. It is mostly associated with fears of childbirth, fears of giving birth to a child with disabilities, and concerns about pregnancy-related changes (Hossein Khanzadeh et al., 2017). Pregnancy anxiety is a strong predictor of negative outcomes at birth (Karamoozian et al., 2017).

Sometimes, pregnancy anxiety is considered a natural mechanism for coping with a mother's mental worries about becoming a parent, preparing her for pregnancy and its accompanying changes. However, worry and anxiety can take the form of a disorder and become so severe that it affects the mental health of the pregnant mother (Feyzi et al., 2017). Various factors during pregnancy can contribute to anxiety, with each woman perceiving specific aspects of pregnancy as stressful. The frequency and intensity of anxiety depend on the woman's perception of stressors and her ability to cope with anxiety (Goudarzi et al., 2021; Tunnell et al., 2019). Factors causing anxiety in pregnant women include fear of pain, previous incidents, personality factors, psychosocial problems, feelings of helplessness in predicting the course of childbirth, anxiety about the child, lack of support, low literacy levels, hearing frightening stories from others and the media, and previous childbirth experiences (Hossein Khanzadeh et al., 2017).

Anxiety disorders are common during pregnancy and constitute a significant portion of health problems. Studies have shown that the prevalence of anxiety disorders during pregnancy is higher than 30%, which may have adverse effects on pregnancy outcomes and fetal health (Tunnell et al., 2019). More than 90% of perinatal mental health problems have been studied in high-income countries, while only about 10% of low- and middle-income countries have data in this area. Pregnancy anxiety may affect the fetus through a specific mechanism: firstly, stress hormones (adrenal steroids, catecholamines, and corticotropin-releasing hormone) are secreted due to maternal stress, which can affect fetal brain development during weeks 12-22 by crossing the placenta, and these hormones can also cause placental artery constriction, limiting oxygen and nutrition to the fetus (Karamoozian et al., 2017). During this period, mothers face biological, psychological, and social changes that require adaptation to these changes, which can itself be a source of problems and worries for them (Feyzi et al., 2017; Hossein Khanzadeh et al., 2017; Tunnell et al., 2019).

Women may use stress coping schemas to deal with pregnancy anxieties. Individuals use stress coping schemas to assess risk resources or to choose ways to cope with stress. Stress coping schemas are essentially a stress coping model based on ideas from positive psychology and cross-cultural psychology, emphasizing the role of cultural schemas and the diversity of patterns used to cope with stress (Bodenmann & Cina, 2006; Kılınç et al., 2023). Van Wijk-Herbrink et al. (2018) have proposed a new definition of creative and culture-focused coping. According to this model, coping styles are creative when they are consistent with the type of stress, personal resources available, and the cultural context in which the stress occurs. Also, according to this model, the choice of coping style is not a trial-and-error process, as in behavioral models; rather, it is believed that individuals use coping schemas to assess risk resources or to choose ways to cope with stress. Coping schemas are the product of efforts made by an individual in dealing with various life stresses and events and are considered stable cognitive structures that the individual uses to adapt to different life situations and solve problems (van Wijk-Herbrink et al., 2018).

Interpersonal sensitivity is a characteristic of pregnancy that can affect anxiety, depression, and aggression in pregnant women. At least 32% of pregnant women have interpersonal sensitivity (Brown et al., 2019; Mohammadi Zeidi et al., 2011; You et al., 2019). This prevalence is justifiable considering the changes in self-body image and mood swings in women during this period. Interpersonal sensitivity is described as general sensitivity to social feedback, increased concern in interactions with others, fear of personal incompetence and being criticized, and frequent misinterpretation of others' interpersonal behavior (Brown et al., 2019; Farahzadi et al., 2018; Mohammadi Zeidi et al., 2011; You et al., 2019). Individuals with these traits are described as excessively preoccupied with interpersonal

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relationships, alert and sensitive to aspects of interpersonal interactions. People with high interpersonal sensitivity tend to alter their behavior to match others' expectations to minimize the risk of criticism or rejection. Interpersonal sensitivity, also known as sensitivity to rejection, can cause psychological harm in adulthood and lead to maladaptive reactions (You et al., 2019).

Most mothers experience concerns about social and medical aspects during pregnancy, with these worries often intensifying after the first trimester. These anxieties vary based on environmental conditions and individual experiences. Such anxieties can affect mothers' sleep quality and overall quality of life, potentially leading to psychological outcomes like postpartum depression. Pregnant women also face the added stress of adapting to their new role as mothers, which can exacerbate their stress and anxiety (Feyzi et al., 2017). To address these concerns, mothers employ various coping strategies. One common strategy is seeking and finding social support systems from those around them (Alghamdi et al., 2015; Barrett & Stewart, 2021). Addressing psychological issues and educating women during pregnancy can have positive effects for both mothers and their infants. For instance, it has been shown that specialized pre-pregnancy education leads to greater use of labor pain coping strategies by women and increased participation of their partners in this process (Feyzi et al., 2017).

One of the effective treatments for reducing stress and life stress events is narrative exposure therapy (Adenauer et al., 2011; Alghamdi et al., 2015; Basharpoor et al., 2019). This therapy combines principles of cognitive-behavioral exposure therapy and treatment through narration. In narrative exposure therapy, individuals are asked to repeatedly recall and discuss a traumatic event in detail, focusing on the time and place of its occurrence, while re-experiencing all emotions, physical sensations, and parts of implicit memory related to the event (Volpe et al., 2017). This therapeutic approach allows most anxious individuals to experience and move beyond the emotional response to the traumatic memory through narrative accounts defined by memories (Basharpoor et al., 2019). The primary goal of this approach is to create a psychological treatment method that directly participates in combating stress, fears, and their consequences, and is healing for other recipients of these stories. It not only soothes the narrator's psyche but also allows others to empathize and externalize their suppressed emotions from the past by hearing or reading these narratives (Rajabi & Yazdkhasti, 2014). In the narrative exposure therapy approach, the participant collaborates with the therapist to construct a detailed, chronological account of their life. This method focuses on two points: reducing the symptoms of post-traumatic stress disorder through exposure therapy and constructing an accurate narrative of the event and its consequences (Alghamdi et al., 2015; Volpe et al., 2017). This research aims to determine the effectiveness of narrative exposure therapy on pregnancy-related worries, stress coping schemas, and interpersonal sensitivity in pregnant women with pregnancy anxiety.

2 Methods and Materials

2.1 Study design and Participant

The research method was a quasi-experimental design, conducted with a pre-test, post-test, and a two-month follow-up phase with control and experimental groups. After random allocation of the groups (experimental and control), the experimental group received narrative exposure therapy (seven 90-minute sessions), while the control group received no training or intervention. The study population included all pregnant women with pregnancy anxiety in Nowshahr city in 2020-2021, who sought treatment at Shahid Beheshti Hospital for Women and Childbirth. The number of women with medical records of pregnancy anxiety during the study was 178. Pregnant women with pregnancy anxiety were selected based on research entry criteria using purposive sampling. Pregnant women who visited Shahid Beheshti Hospital for Women and Childbirth in Nowshahr city and had formed medical records were given the Pregnancy Anxiety Questionnaire. Women scoring one standard deviation above the mean and willing to participate in treatment sessions were selected. Using purposive sampling, a sample size of 50 (at least 25 per group) was calculated, and then these 50 individuals were randomly assigned to two groups of 25 (narrative exposure therapy experimental group and control group).

Inclusion criteria for the study included being diagnosed with pregnancy anxiety based on the required score in the Pregnancy Anxiety Questionnaire, the willingness and consent of the subjects to participate in the study, complete filling of research questionnaires, commitment to attend all designated sessions, and having at least middle school education. Exit criteria from the study included unwillingness and lack of consent to participate in the research, incomplete filling of research tools, and absence from more than two predetermined sessions.

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Following the approval of the research, a visit was made to Shahid Beheshti Hospital for Women and Childbirth in Nowshahr. After coordinating with the authorities and explaining the research to the patients, participants were selected using purposive sampling from among those willing to participate in the study, adhering to the inclusion and exclusion criteria. They were then randomly assigned (via simple random sampling or lottery) to either the experimental or control groups. The pre-test phase was conducted first, followed by the designated sessions in one of the hospital's rooms on different days, ensuring that participants from the study groups could not meet or exchange information. After the training sessions, a post-test was conducted one week later, and a two-month follow-up was also carried out.

In line with ethical research principles to protect the rights of the participants, necessary explanations regarding the research objectives and procedures were provided to all participants. The voluntary nature of participation and the right to withdraw from the study were emphasized. Participants were assured that personal information collected would remain confidential, and the data published would be anonymized and analyzed collectively, maintaining the confidentiality of individual identities. Consent was obtained, and consent forms were signed before participation. Self-report questionnaires were distributed among the participants during the pre-test, post-test, and follow-up phases, and the necessary research data were collected. Several ethical principles related to participants' rights in intervention research were observed, including informed consent, the right to withdraw from the study, non-disclosure of personal information, privacy/confidentiality, and avoidance of harm due to participation in the research. It is important to note that informed consent should be voluntarily given under conditions where participants understand and agree to participate without any pressure, before the commencement of the research process.

2.2 Measures

2.2.1 Pregnancy Related Anxiety

Developed by VandenBerg in 1990, this questionnaire measures fears and worries related to pregnancy. It consists of 58 items, scored on a 5-point Likert scale ranging from 1 to 5. Thus, the total pregnancy anxiety score can range from 58 to 290. This questionnaire was used to identify women with pregnancy anxiety. Cronbach's alpha for all subscales throughout pregnancy has been reported to range from 0.66 to 0.76 (Karamoozian et al., 2017; Tunnell et al., 2019).

2.2.2 Interpersonal Sensitivity

Developed by Boyce and Parker in 1989, this questionnaire measures interpersonal sensitivity or sensitivity to social rejection. It contains 36 questions and 5 subscales: interpersonal awareness, need for approval, separation anxiety, timidity, and fragile self-esteem. It uses a 4-point Likert scale: strongly agree 4, somewhat agree 3, somewhat disagree 2, and strongly disagree 1. The total score of all questions gives the overall interpersonal sensitivity score, ranging from 36 to 144. Higher scores closer to 144 indicate higher interpersonal sensitivity, while lower scores closer to 36 indicate lower interpersonal sensitivity. Boyce et al. (1993) reported a reliability coefficient of 0.86 for the total score and between 0.55 to 0.76 for the subscales (Boyce et al., 1993). In their study, Todd et al. (1994) found Cronbach's alpha for the subscales of interpersonal awareness 0.76, need for approval 0.55, separation anxiety 0.67, timidity 0.63, fragile self-esteem 0.59, and the entire scale 0.86 (Todd et al., 1994).

2.2.3 Stress Coping Schemas Questionnaire

This questionnaire, created by consists of 74 questions scored on a Likert scale from 1 (never) to 5 (always). In the latest revised version of this questionnaire, 9 subscales representing different types of stress coping schemas have been identified: religious (9 items, questions 1-9), situational schemas (8 items, questions 10-17), emotional passivity (12 items, questions 18-29), social support (8 items, questions 30-37), acceptance (9 items, questions 38-46), active emotional expression (8 items, questions 47-54), tension reduction (8 items, questions 55-62), self-reconstruction (8 items, questions 63-70), and meaning-making (4 items, questions 71-74) (van Wijk-Herbrink et al., 2018). For assessing the reliability of the subscales of the Stress Coping Schemas Questionnaire, internal consistency was used. Accordingly, the alpha values for the subscales of religious, situational, emotional passivity, emotional support, acceptance-based, and active emotional coping were respectively 0.84, 0.80, 0.83, 0.72, 0.65, and 0.68, and Cronbach's alpha for all questions was 0.87 (Farahzadi et al., 2018).

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2.2.4 *Pregnancy-Specific Stress*

Developed by Alderdice and Lynn (2011), this questionnaire consists of 12 questions and measures stressors related to pregnancy, including maternal fears and worries during pregnancy, related to the health of the fetus and mother during pregnancy, relationships with others, and childbirth. Questions 1 to 5 relate to worries about childbirth and the child, questions 6 to 8 relate to worries about weight and body image, and questions 9 to 12 relate to worries about emotions. It uses a 5-point Likert scale and is employed to assess specific worries during pregnancy. This questionnaire has shown good criterion validity, test-retest reliability, and internal consistency (Alderdice et al., 2012).

2.3 *Intervention*

2.3.1 *Narrative Exposure Therapy*

Narrative exposure therapy sessions were conducted based on the protocol by Volpe et al. (2017) in seven 90-minute sessions as follows (Volpe et al., 2017).

Table 1

A Summary of Narrative Exposure Therapy Sessions

Session	Session Goals	Session Content	Homework
1st	Establish therapeutic alliance, state therapy goals, familiarize members with each other, present the logic and goals of educational sessions, and introduce the therapeutic educational model.	Forming the group, establishing a therapeutic alliance, setting rules for therapy sessions, explaining the logic of therapy and information about the problem, discussing pregnancy issues and sharing personal experiences, conducting a pre-test.	Reflect on the course of pregnancy and the accompanying feelings and emotions, prepare a list of experiences and feelings experienced since the beginning of pregnancy.
2nd	Create empathy and help the client express and start their life story.	Describe the life story according to history to identify the dominant story of the person's life.	Pay attention to and note situations that evoke feelings different from the negative emotions associated with the dominant narrative.
3rd	Detail the narrative related to the time of pregnancy and naming it.	Listen carefully to the details of the client's language, jointly name the problem considering the priority of words and metaphors used by the client, use the language of externalizing the problem, and review the narrative expressed by each member from the perspective of other group members.	Write an analysis of individuals' experiences of a stressful event that leads to high anxiety and try to change the narrative.
4th	Challenge the client's life story for a change in narrative and a new interpretation, provide an explanatory perspective outside of the problem to the individuals; in a way that they distinguish between themselves and the problem.	Challenge the story and provide an explanatory perspective outside of the problem to individuals in a way that they distinguish between themselves and the problem.	Practice and become aware of the topic of the present, past, future; practice how to return to the present time and reduce anxiety.
5th	Introduce therapeutic techniques to change the individual's narrative of the problem.	Redefine meaning and apply a new label to the problem, discuss alternative and preferred narratives, encourage members to behave contrary to the problem-laden story.	Ask the miracle question, externalize the problem, and present solutions to reduce the feelings of anxiety and stress associated with it.
6th	Teach effective verbal skills and communication.	Encourage each member to speak for themselves and express their own sensory information, strengthen listening skills.	Practice verbal communication about important issues and prepare a written piece on self-soothing and controlling internal emotions and thoughts.
7th	Replace the previous narrative with a positive and constructive one.	Discuss positive experiences and alternative narratives, validate and affirm alternative narratives, review presented topics, and conduct a post-test.	Rewrite the life narrative about the present, future, and give a new title to the life story.

2.4 *Data Analysis*

For data analysis, descriptive statistical methods such as mean and standard deviation of scores were used. Multivariate analysis of variance was employed to compare the effectiveness of the two therapeutic methods, and repeated measures were used to determine the persistence of the therapeutic interventions' effects. SPSS software version 26 was used for data analysis.

3 Findings and Results

The mean (standard deviation) age of participants in the narrative exposure therapy training group was 30.84 (3.69), and in the control group, it was 30.48 (3.57). One-way analysis of variance showed no significant difference in the age distribution of the research sample between the two groups. Descriptive indices of the research variables and their dimensions in the control and experimental groups are presented in Table 2.

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Table 2

The Results of Mean and Standard Deviation

Variable	Group	Pre-test Mean (SD)	Post-test Mean (SD)	Follow-up Mean (SD)
Interpersonal Sensitivity	Control	114.44 (4.52)	109.44 (4.42)	108.16 (5.81)
	NET	114.40 (5.70)	91.00 (4.32)	99.60 (6.66)
Pregnancy-related Worries	Control	45.96 (1.98)	44.68 (2.05)	47.48 (2.78)
	NET	46.08 (1.80)	37.80 (2.92)	39.72 (2.74)
Stress Coping Schemas	Control	200.52 (9.25)	185.88 (8.75)	173.76 (6.28)
	NET	185.48 (7.60)	215.04 (7.11)	204.56 (6.94)

According to Table 2, the Narrative Exposure Therapy (NET) group showed notable improvements compared to the control group. For Interpersonal Sensitivity, the NET group's mean scores decreased significantly from 114.40 to 91.00 post-test, and slightly rose to 99.60 at follow-up. Conversely, the control group saw minimal reduction from 114.44 to 109.44, and then to 108.16. In terms of Pregnancy-related Worries, the NET group's scores dropped from 46.08 to 37.80, then to 39.72, while the control group showed an increase from 44.68 to 47.48 post-follow-up. Lastly, Stress Coping Schemas improved in the NET group from 185.48 to 215.04, and remained higher at 204.56 at follow-up, indicating more effective stress coping strategies compared to the control group.

Before conducting the analysis of variance, it is necessary to examine its assumptions and screen the data. The Shapiro-Wilk test was used to assess the assumption of data normality, which indicated that the dependent data were normally distributed. The Box's M test was used to examine the assumption of equality of covariance matrices of the dependent variable, and the results indicated that the homogeneity of variance-covariance matrices was not established (Box's M = 43.415, $p < 0.01$), suggesting that Pillai's trace effect should be reported in interpreting the test results. The results showed that the Mauchly's test of sphericity was significant ($p < 0.001$), necessitating an adjustment of the degrees of freedom for interpreting within-group F-tests and using the Lower-bound correction for interpreting the results of F-tests on main within-group effects (test) and interactive effects. Additionally, before examining between-group effects, the assumption of homogeneity of regression of dependent variables should be assessed using the Levene's test. The results showed that the F-test for none of the within-group factors was significant ($p > 0.05$), indicating that the assumption of homogeneity of variance among the independent variable groups was met. After confirming the assumptions, the analysis was conducted. The results of the mixed analysis of variance are mentioned in the Table 3.

Table 3

Results Mixed Analysis of Variance

Variable	Source	Sum of Squares	Df	Mean Square	F	Significance	Eta Squared
Interpersonal Sensitivity	Group	9814.569	1.879	5222.369	336.726	.000	.824
	Time*Group	2316.178	3.759	616.223	39.733	.000	.525
Pregnancy-related Worries	Group	1810.427	1.767	1024.601	273.969	.000	.792
	Time*Group	908.453	3.534	257.067	68.737	.000	.656
Stress Coping Schemas	Group	14353.316	1.226	11711.040	260.878	.000	.784
	Time*Group	29259.298	2.451	11936.504	265.901	.000	.881

As observed in Table 3, the results of the within-group test indicated that the main effect of the type of test on the score of interpersonal sensitivity dimensions was statistically significant ($p < 0.05$). This means that there are significant differences between the different levels of the test variable (pre-test, post-test, and follow-up). The eta squared of 0.32 for the interpersonal awareness component indicates that 32% of the within-group variations are explained by the tests. The results of the within-group test indicated that the main effect of the type of test on the score of pregnancy-related worries was statistically significant ($p < 0.05$). This means that there are significant differences between the different levels of the test variable (pre-test, post-test, and follow-up). The eta squared of 0.79 indicates that 79% of the

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within-group variations are explained by the tests, and this significant main effect should be examined by follow-up tests. The interactive effect of time* group was significant ($p < 0.05$), meaning that the scores of pregnancy-related worries in the pre-test, post-test, and follow-up differ among the three groups, and the eta squared of 0.65 indicates that 65% of the changes created by the therapeutic interventions are explained. The results of the within-group test indicated that the main effect of the type of test on the score of stress coping schemas was statistically significant ($p < 0.05$). This means that there are significant differences between the different levels of the test variable (pre-test, post-test, and follow-up). The eta squared of 0.78 indicates that 78% of the within-group variations are explained by the tests, and this significant main effect should be examined by follow-up tests. The interactive effect of time*group was significant ($p < 0.05$), meaning that the scores of pregnancy-related worries in the pre-test, post-test, and follow-up differ among the three groups, and the eta squared of 0.88 indicates that 88% of the changes created by the therapeutic interventions are explained.

4 Discussion and Conclusion

The primary goal of this research was to determine the effectiveness of narrative exposure therapy on pregnancy-related worries, stress coping schemas, and interpersonal sensitivity in pregnant women with pregnancy anxiety. The findings suggest that narrative exposure therapy had a significant impact on the dimensions of interpersonal sensitivity in the study sample. This part of the findings is consistent with the previous research (Adenauer et al., 2011; Alghamdi et al., 2015; Basharpoor et al., 2019; Volpe et al., 2017).

Narrative exposure therapy can provide a platform for individuals to calmly revisit their traumatic memories and accept the details of events related to pregnancy anxiety without judgment, thereby altering their relationship with these events. This therapy is based on emotional disclosure in connection with traumatic events. During narrative exposure therapy, emotional disclosure occurs as the individual recounts the traumatic memory (Volpe et al., 2017). Therefore, this intervention, by providing an opportunity for re-evaluation of events, can influence a reduced focus on negative events and increased attention to pleasant events and a realistic assessment of these events. It can also be stated that the presence of intrusive and ruminative memories in pregnant women can cause mental disturbances, leading to emotional disorders and generally affecting social and interpersonal relationships. As Basharpour et al. (2019) concluded, narrative exposure therapy impacts interpersonal relationships and fosters improvement and deeper understanding of this index. Narrative exposure therapy, by creating an environment for greater expression and providing conditions for detailed expression related to pregnancy anxiety, can reduce the emotional burden for the individual involved and lead to the expression of emotions, both positive and negative. This therapy, by creating a safe, supportive, encouraging, and non-judgmental space, allows the client to explore themselves and their life, leading to a more realistic perspective and consequently the development of a positive personal and social identity (Basharpoor et al., 2019). Additionally, by unraveling the threads of their life, clients externalize their untold and intangible emotions and pains, and by recounting them, they discharge and organize them, reducing interpersonal sensitivity.

Given the findings, it can be said that narrative exposure therapy significantly impacted the dimensions of pregnancy-related worries in pregnant women with pregnancy anxiety in the study sample. This part of the findings aligns with the previous research (Adenauer et al., 2011; Alghamdi et al., 2015; Basharpoor et al., 2019; Volpe et al., 2017).

In narrative exposure therapy, by analyzing stories or individual narratives, underlying worries are identified through the review of narratives and externalization of problem-laden stories, and replaced with new, problem-free stories. If these therapeutic stages are carefully executed, the problem becomes separated from the person's identity and loses its power to control the individual's life (Adenauer et al., 2011; Alghamdi et al., 2015). Consequently, by changing the life story, the person changes, gaining new experiences and recognizing their abilities that were previously obscured by problem-laden stories, thereby improving their anxiety and experiencing less turmoil when facing situations previously perceived as dangerous or frightening.

Considering the findings, it can be said that narrative exposure therapy significantly impacted the dimensions of stress coping schemas in pregnant women with pregnancy anxiety in the study sample. This part of the findings is consistent with the previous research (Adenauer et al., 2011; Alghamdi et al., 2015; Basharpoor et al., 2019; Volpe et al., 2017).

Furthermore, the results showed that narrative exposure therapy had a significant effect on stress coping schemas in pregnant women with pregnancy anxiety. In explaining this

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finding, it can be said that the effort of narrative exposure therapy is to help individuals change their perspective on life and adopt a positive outlook. In this approach, individuals externalize their life stories, which have been influenced by negative events, and instead of attributing life problems to themselves, they come to understand that the problem is a problem and they are not the cause of these problems. When women with pregnancy anxiety, through recounting and deconstructing problem-laden narratives and increasing awareness, understand that negative life events are due to realities of life and lack of necessary training in dealing with the environment and problems, they can reduce the pressures and stresses (Basharpoor et al., 2019; Volpe et al., 2017). By establishing a balance between what they want and what is socially accepted, and as a result of this balance between the individual and society, stress is reduced. In narrative exposure therapy, while experiencing emotions, cognitions, physiology, sensory elements, and semantic content related to pregnancy anxiety, individuals repeatedly talk in detail about each traumatic event. This process helps individuals control their stress.

5 Limitations and Suggestions

One of the limitations of this study was the lack of follow-up of the mothers until childbirth. The occurrence of anxiety during pregnancy is a good predictor of such disorders in the postpartum stage. Therefore, the pregnancy period is an optimal time for screening and related diagnoses in this regard. It is imperative for all healthcare and medical staff to assist pregnant women with timely interventions and necessary guidance to maintain mental health and improve their quality of life, as these efforts ultimately contribute to the enhancement of community health. Empowering midwives with counseling approaches could be beneficial for improving care for mothers during pregnancy, especially in managing childbirth preparation classes. It is recommended that specialists dealing with pregnant women use narrative exposure therapy to reduce the suffering of these individuals during their pregnancy and develop specialized booklets in this area for pregnant women and their partners. Given the effectiveness of this research, it is suggested that practical exercises and skills of this method be made available to individuals in the form of training sessions, workshops, videos, and booklets for the prevention of psychological problems. Organizing training courses and workshops for counselors in organizations to familiarize them with group educational interventions of narrative exposure therapy and the necessity of using them in the field of reducing interpersonal sensitivity, stress, and anxiety are practical suggestions of this research. In this study, the researcher examined the most common concern of mothers, which was pregnancy anxiety. It is suggested that future studies explore other concerns (such as labor pain). Given that the research was conducted on a population of pregnant women, it is recommended that similar studies be conducted in other populations and the results be compared with those of this research. Since the current research is quantitative, it is suggested that future studies use a qualitative approach (grounded theory based on semi-structured interviews and using qualitative questionnaires and expert consultations). Future research should also compare these teachings with other types of training (mindfulness-based stress reduction, emotion regulation, etc.). Future studies should also control and adjust for socio-economic and cultural variables.

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Declaration of Interest

The authors of this article declared no conflict of interest.

Transparency of Data

In accordance with the principles of transparency and open research, we declare that all data and materials used in this study are available upon request.

Ethics Considerations

The study protocol adhered to the principles outlined in the Helsinki Declaration, which provides guidelines for ethical research involving human participants.

Authors' Contributions

In this article, Mandana Davoudi, Ali Pouladi Reyshahri, and Esmat Danesh made significant contributions to the field of mental health and pregnancy anxiety. Mandana Davoudi played a pivotal role in designing and conducting the Narrative Exposure Therapy (NET) intervention for pregnant women, which was a crucial component of the study. Ali Pouladi Reyshahri contributed by providing expertise in data analysis and statistical interpretation, ensuring the rigor of the research findings. Esmat Danesh

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played a vital role in data collection and participant recruitment, ensuring the study's practical implementation.

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