



The effectiveness of a one-day workshop based on cognitive behavioral therapy interpretation bias and meta-Emotions of women with Postpartum depressive disorder

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Abstract

Aim: The purpose of this research was to investigate the effectiveness of a one-day workshop based on cognitive behavioral therapy of interpretation bias and hyperexcitability in patients with postpartum depression. **Methods:** It was a quasi-experimental research design of pre-test, post-test and follow-up type with a control group. The statistical population of this study included all women with perinatal depression in Selmas city who were referred to health centers in 2021 to receive psychological services. The sample size includes 50 people (25 people in the experimental group and 25 people in the control group) from the statistical population were selected by available sampling method and divided into two control and experimental groups. For the experimental group, a one-day workshop based on cognitive behavioral therapy based on the Stark model (1996) was implemented, while the control group did not receive any training. The research tools included the Edinburgh Depression Questionnaire by Cox et al. (1996), the Ambiguous Scenarios Test for Depression by Brena et al. The data was analyzed using descriptive statistics and analysis of variance test with repeated measurements. **Results:** The results showed that the one-day workshop based on cognitive behavioral therapy on interpretation bias ($F=258.60, P<0.001$) and positive euphoria ($F=120.70, P<0.001$) and negative excitement ($F=56.79, P<0.001$) had a significant effect in the post-test and follow-up stages. **Conclusion:** The findings of this research provide useful information regarding a one-day workshop based on cognitive behavioral therapy, and counselors and psychologists can use this intervention to improve interpretation bias and hyper-excitement in postpartum depression.

Keywords: cognitive behavioral therapy, interpretation bias, hyperexcited, postpartum depression disorder.

Introduction

The postpartum period is known as a high-risk period for the development of various mood disorders, including postpartum depression, major depression, and postpartum psychosis (Tolosa et al., 2020). According to DSM-5, postpartum depression is one of the types of depressive disorders that can occur during pregnancy or during the 4 weeks after birth; However, most women experience postpartum depression in the first three months after giving birth (Citu et al., 2022).

According to the cognitive perspective, mood disorders, including postpartum depression, can be caused by negative cognitive processes such as interpretation bias, which plays an important role in the creation and stability of these disorders (Hirsch et al., 2016). Interpretation bias is defined as the tendency to interpret and interpret ambiguous situations in a completely negative and threatening way, which has two components: negative self-evaluation (self-related interpretation bias) and perception of negative evaluation by others (other-related interpretation bias) (Bar-Sella et al., 2022).

On the other hand, excitement can be mentioned among a large number of psychological components effective in the occurrence or recovery of various depressive disorders, including postpartum depression (Kucab, Barnas, & Blajda, 2022). Emotions affect different aspects of our lives, shape our relationships, motivate our activities, and have a significant impact on human cognitive processes, including perception, attention, learning, memory, reasoning, and problem solving. Therefore, it is important to learn to identify them and how people hide and express them (Tiang et al., 2017). One of the most important variables used in the case of emotions is excitement (Royeen, 2020). Farahijaan means organizing a set of thoughts and feelings about emotions; What emotion a person shows in response to their emotions (for example, guilt about anger) (Haradhvala, 2017). In general, meta-emotions are divided into two parts: positive meta-emotions (meta-compassion and meta-love) and negative meta-emotions (brightness and shyness) (Miceli & Castelfranchi, 2019). Negative emotion is a person's inability to accept his emotions. Positive emotion is a person's ability to accept his emotions (Ciucci, Baroncelli, & Toselli, 2015).

Although drug treatment is considered as an effective intervention in depression, the effect of non-drug treatments as complementary and alternative treatments has received special attention. Among non-pharmacological treatments, psychotherapy, especially cognitive behavioral therapy, is particularly important (Wang et al., 2022). This treatment is a psychological intervention that aims to help rebuild the thoughts, feelings, behaviors and physical symptoms of those seeking treatment (Dein, 2008). In recent years in Iran, many researches have been conducted in the field of postpartum depression, especially regarding the epidemiology and identification of postpartum depression risk factors, however, significant limitations are observed in the field of intervention programs and treatment. In addition, some mothers may not be willing to take medicine with the conclusion that taking medicine during breastfeeding will cause side effects in the baby (Barle & Spigset, 2011). Therefore, the present study sought to investigate the effectiveness of a one-day workshop based on cognitive behavioral therapy on interpretation bias and hyper-emotions in women with postpartum depression. The current research sought to answer the following questions:

1- Was the one-day workshop based on cognitive behavioral therapy effective on interpretation bias and hyper-emotions in women with postpartum depression in the post-test stage?

2- Was the one-day workshop based on cognitive-behavioral therapy on interpretation bias and hyper-emotions in women with perinatal depression stable in the follow-up phase?

Method

It was a quasi-experimental research design of pre-test, post-test and follow-up type with a control group. The statistical population of this study included all women with perinatal depression in Selmas city who were referred to health centers in 2021 to receive psychological services. The sample size includes 50 people (25 people in the experimental group and 25 people in the control group) from the statistical population were selected by available sampling method and divided into two control and experimental groups. For the experimental group, a one-day workshop based on cognitive behavioral therapy based on the Stark model (1996) was implemented, while the control group did not receive any training. The research tools included the Edinburgh Depression Questionnaire by Cox et al. (1996), the Ambiguous Scenarios Test for Depression by Brena et al. The data was analyzed using descriptive statistics and analysis of variance test with repeated measurements.

Results

The F value of the interaction effect of stages and group is significant for the components of interpretive bias (258/602), positive overexcitement (120/709) and negative overexcitement (56/798) ($P < 0.001$).

The results of the analysis of variance of repeated measurement of several variables among the studied groups in the variables of emotional processing and self-differentiation showed that the effect between the subject (group) is significant. This effect means that at least one of the groups differs from each other in at least one of their emotional processing and differentiation variables. The within-subject effect (time) was also significant for the research variables. That is, during the time from the pre-test to the follow-up, at least one of the average variables has changed. The Shapiro-Wilk test was used to check the normality of the distribution of scores. The results showed that the assumption of normal distribution in both groups was not rejected ($P > 0.05$). Levene's test was used to meet the covariance test assumptions. The results of Mochli's sphericity test showed that the significance level was less than 0.05, so the assumption of sphericity was rejected and the results related to the correction of the Greenhaus-Geisser test were used in the repeated measurement model. In this way, the necessary conditions for the covariance test are established.

In the interpretation bias variable, the average of the experimental group in the post-test and follow-up is significantly lower than the pre-test stage ($P < 0.01$), while the difference between the post-test and the follow-up stage is not significant ($01/01$). ($0P >$). However, in the control group, there is no difference between pre-test, post-test and follow-up ($P > 0.01$). According to Table 1 and Figures 2, the average of the experimental group in the positive overexcitement component is significantly higher in the post-test and follow-up, and in the negative overexcitement component, it is lower than the pre-test stage ($P < 0.01$). However, the difference between the post-test and the follow-up phase is not significant ($P > 0.01$). In the control group, there is no difference between pre-test, post-test and follow-up ($P > 0.01$). This finding means that the one-day workshop based on cognitive behavioral therapy not only led to the improvement of interpretation bias and hyper-excitement of women with perinatal depression in the experimental group, but this effect was also stable in the follow-up phase.

Conclusion

The present study was conducted with the aim of the effectiveness of a one-day workshop based on cognitive behavioral therapy on interpretation bias and hyper-emotions in women with postpartum depression. The results showed that a one-day

workshop based on cognitive behavioral therapy is effective on the interpretation bias of women with postpartum depression.

Cognitive behavioral therapy, by cognitive restructuring, challenges and replaces negative biases in information processing, reduces negative self-evaluations of social performance, focused negative bias, and others (Yazdandost et al., 2012). Cognitive restructuring plays an important role in breaking the cycle of dysfunctional cognitions and negative biases, and helps people change their dysfunctional negative beliefs through the challenge between therapists and clients during group sessions. In cognitive behavioral therapy sessions, after women with postpartum depression treat, understand, process and regulate their emotions without avoidance in a safe environment, they use less repetition thoughts such as rumination in order to avoid them. In the sequence of this path, depression and anxiety are reduced and along the path, the patient's self-esteem in an interaction helps to strengthen the natural mood and emotion. In addition, the use of adaptive emotion regulation solutions such as acceptance, refocusing on planning and coming to terms with the perspective will have a positive effect on the social functioning of the individual and will lead to the cognitive reconstruction of the problem and as a result improve mental health.

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