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RESEARCH ARTICLE

THE EFFECTIVENESS OF DEPTH THERAPY ON REDUCING ANXIETY IN PREGNANT WOMEN AT MELONG TENGAH PUSKESMAS, CIMAHI

EFEKTIVITAS *DEPTH THERAPY* TERHADAP PENURUNAN KECEMASAN PADA IBU HAMIL DI PUSKESMAS MELONG TENGAH KOTA CIMAHI

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ABSTRACT

Pregnancy is a significant period in the life of a woman, which brings many physical and psychological modifications. These changes may put people at increased risk of psychological problems including anxiety. The prevalence of anxiety has reached 71.9% in pregnant women in Indonesia. Another psychological intervention that might help mitigate negative emotions, anxiety included, is depth therapy. Objectives: This study investigated the effect of depth therapy on reducing anxiety in pregnant women. This study used a quasi-experimental design with a one-group pre-test–post-test. We recruited a sample of 22 pregnant women with anxiety, through total sampling. Primary data were collected using the Depression Anxiety Stress Scales-21 (DASS-21). Univariate analysis was used to describe frequency distributions, while bivariate analysis was conducted using the Wilcoxon test. The results showed that before the intervention, 50% of respondents experienced moderate anxiety, 27.3% severe anxiety, and 22.7% mild anxiety. After the depth therapy intervention, 40.9% of respondents experienced moderate anxiety, 18.2% mild anxiety, and 40.9% were within the normal range. Statistical analysis demonstrated a significant effect of depth therapy on reducing anxiety levels among pregnant women ($p = 0.0001$; $p < 0.05$). Healthcare providers are encouraged to consider depth therapy as an alternative therapeutic approach for managing anxiety in pregnant women.

Keywords: anxiety, depth therapy, pregnant women

ABSTRAK

Masa kehamilan merupakan tahap penting dalam kehidupan seorang perempuan yang

melibatkan berbagai perubahan fisik dan psikologis. Perubahan tersebut dapat meningkatkan kerentanan terhadap masalah psikologis seperti kecemasan. Di Indonesia, prevalensi kecemasan pada ibu hamil dilaporkan mencapai 71,9%. Salah satu intervensi psikologis yang dapat membantu mengurangi emosi negatif, termasuk kecemasan, adalah depth therapy. Penelitian ini bertujuan untuk mengetahui efektivitas depth therapy terhadap penurunan kecemasan pada ibu hamil. Penelitian ini menggunakan desain quasi-experimental dengan pendekatan one group pretest–posttest. Sampel penelitian berjumlah 22 ibu hamil yang mengalami kecemasan dan dipilih menggunakan teknik total sampling. Data primer dikumpulkan menggunakan kuesioner Depression Anxiety Stress Scales-21 (DASS-21). Analisis univariat dilakukan untuk menggambarkan distribusi tingkat kecemasan sedangkan analisis bivariat dilakukan menggunakan uji Wilcoxon. Hasil penelitian menunjukkan bahwa sebelum intervensi, sebanyak 50% responden mengalami kecemasan sedang, 27,3% kecemasan berat, dan 22,7% kecemasan ringan. Setelah diberikan depth therapy, sebanyak 40,9% responden berada pada kategori normal, 40,9% mengalami kecemasan sedang, dan 18,2% kecemasan ringan. Hasil analisis statistik menunjukkan adanya pengaruh signifikan depth therapy terhadap penurunan kecemasan pada ibu hamil ($p = 0,0001$; $p < 0,05$). Tenaga kesehatan diharapkan dapat mempertimbangkan penerapan depth therapy sebagai salah satu pendekatan terapi komplementer dalam menangani kecemasan pada ibu hamil.

Kata kunci: depth therapy, ibu hamil, kecemasan

INTRODUCTION

Pregnancy is an important phase in a woman's life that is accompanied by various physical and psychological changes.[1] These adjustments may increase susceptibility to mental health disturbances such as anxiety, stress, and depression.[2] When psychological problems during pregnancy are not properly addressed, they may negatively affect both maternal health and fetal development, potentially endangering the well-being of mother and baby.[3] Globally, mental health problems are estimated to affect around 10% of women during pregnancy and approximately 13% during the postpartum period.[4] The prevalence is even higher in developing countries, reaching 15.6% during pregnancy and 19.8% after childbirth. Anxiety among pregnant women in Indonesia has also been reported at considerable levels. One of study identified that 33.93% of primigravida women in the first trimester experienced anxiety. Other reports indicate that anxiety disorders affect 373 million individuals worldwide, with about 28.7% of cases occurring in women approaching childbirth.[4]

Pregnancy often brings various forms of internal conflict. It has been estimated that nearly one in five women experiences psychological disturbances during pregnancy or after delivery. Anxiety during pregnancy is frequently associated with other psychological conditions, including sleep disturbances, depression, increased stress levels, and even post-

traumatic stress disorder. If left unmanaged, maternal anxiety may lead to unfavorable outcomes for both mother and fetus, such as hypertension, prolonged labor, intrauterine growth restriction, preterm birth, low birth weight, and increased risk of maternal and neonatal mortality.[5,6] Therefore, efforts to manage anxiety during pregnancy are essential not only to improve maternal mental health but also to prevent further psychological complications such as postpartum depression.

One therapeutic approach that has been proposed to help alleviate emotional distress is depth therapy. Depth therapy is a psychological intervention designed to help individuals release negative emotions that may contribute to various physical, emotional, and behavioral complaints. Through addressing underlying emotional factors, this therapy aims to reduce symptoms and prevent their recurrence. The technique involves gently tapping several specific points on the body using two fingers for a short period of time.[7] The tapping process is believed to help release blocked energy within the body, particularly disturbances in the body's electrical or energy system that may occur during periods of anxiety. From a biochemical perspective, the body releases neuropeptide amino acid chains that may help regulate disrupted energy flow. Repeated tapping is thought to neutralize emotional disturbances and restore balanced energy circulation throughout the body. Individuals who undergo depth therapy often report immediate effects such as feelings of relaxation, emotional relief, improved mood, increased comfort, and greater mental clarity, sometimes accompanied by enhanced spiritual awareness.[8] Based on these considerations, this study aimed to analyze the effectiveness of depth therapy in reducing anxiety among pregnant women.

MATERIALS AND METHODS

This research applied a quasi-experimental design with a one-group pretest–posttest approach. The study was conducted at Melong Tengah Community Health Center, Cimahi City, between June and July 2024. The participants were pregnant women who attended antenatal care services during the study period and were identified as experiencing anxiety based on screening results using the Depression Anxiety Stress Scales-21 (DASS-21). Respondents who had received any form of anxiety management intervention within the previous three months were excluded from the study.

A total sampling technique was used to recruit participants who met the inclusion criteria, resulting in 22 respondents. Ethical approval for this research was obtained from the Health Research Ethics Committee

of the Faculty of Health Sciences, Universitas Jenderal Achmad Yani Cimahi with ethical clearance number 019/KEPK/FITKes-Unjani/V/2024.

Primary data were obtained by assessing the anxiety levels of pregnant women before and after the intervention. The intervention provided in this study was depth therapy, which involved a tapping technique applied to several meridian points of the body using two or three fingers. The procedure was carried out for approximately 15–40 minutes and was accompanied by relaxation exercises and positive affirmations intended to enhance emotional stability.

Anxiety levels were measured using the Depression Anxiety Stress Scales-21 (DASS-21), a self-report instrument designed to evaluate symptoms related to depression, anxiety, and stress. The DASS-21 is a shorter version of the original 42-item instrument developed by Lovibond and Lovibond (1995) and is widely used to differentiate the three psychological constructs while capturing the severity of symptoms.

Univariate analysis was conducted to describe the distribution of anxiety levels before and after the intervention in the form of frequencies and percentages. The normality of the data was examined using the Shapiro–Wilk test. The test results indicated that the data were not normally distributed (p-value > 0.05). Therefore, the Wilcoxon signed-rank test was applied to determine the effectiveness of depth therapy in reducing anxiety levels among pregnant women.

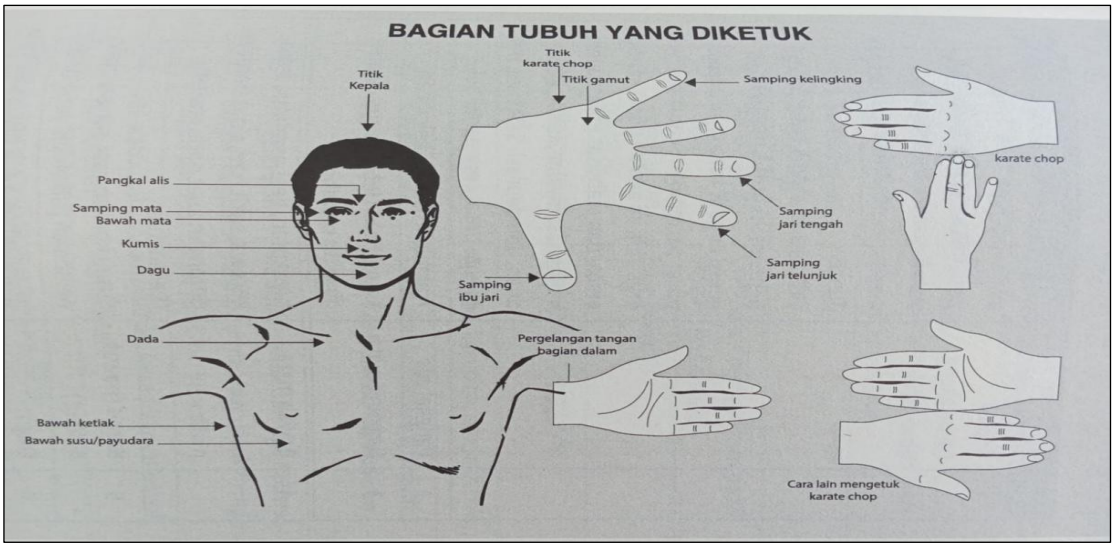

Figure 1 Body areas applied in the tapping technique.
Cited from: Maulidya, 2024

RESULT AND DISCUSSION

Table 1 shows the distribution of anxiety levels among pregnant women prior to the implementation of depth therapy. The findings reveal that most respondents experienced moderate anxiety. Specifically, 11 respondents (50.0%) were categorized as having moderate anxiety, while 6 respondents (27.3%) experienced severe anxiety. In addition, 5 respondents (22.7%) reported mild anxiety, and none of the participants were classified as having normal anxiety levels before the intervention.

Table 1 Frequency distribution of anxiety levels among pregnant women before the intervention

Anxiety Level	F (n)	%
Normal	0	0
Mild	5	22.7
Moderate	11	50.0
Severe	6	27.3
Total	**22**	**100.0**

*Primary data, 2024.

These findings show that all the participants in this study while pregnant and in the sample experienced anxiety of some form. Even though psychologically distressing situations can arise at any age, reproductive age psychologically distressing situations can arise at any age, reproductive age 20-35 years is generally considered the optimum, while within this age range, psychologically distressing situations can arise. Social and psychological factors influence the condition, such as the economic situation, health of the mother, complications during pregnancy, psychological readiness to become a mother, and relational distress with partner, family, and relatives. Other studies have noted that such anxiety during pregnancy has to do with maternal characteristics, such as number of previous births, education, and economic status. More pregnant women are concerned about the result of the pregnancy and the delivery if they have lower education and less economic resources: this situation is likely to increase anxiety.[9]

Moreover, as the anticipated delivery date draws nearer, anxiety is typically heightened. Women who are primigravida usually have no previous experience with childbirth, therefore, it is common for them to feel apprehension and uncertainty. In contrast, if previous labor experiences were especially painful or traumatic, women who are multigravida may feel anxiety due to the memories of those experiences.[10]

Emotional instability can also arise

from changes in hormones during pregnancy. Elevated amounts of the hormones estrogen and progesterone may affect the brain's neurotransmitters which can cause rapid changes in moods and also increases the chances of developing anxiety. There can also be psychological distress during pregnancy due to environmental factors, how one personally perceives their surroundings, and the buildup of unexpressed emotions such as anger or frustration.[11]

Pregnancy-related anxiety can have a number of negative effects. Studies show that pregnant women with moderate anxiety have a greater likelihood of developing hypertension. Stress increases the production of hormones that are active in blood pressure regulation and the resistance of the arterial uterus, causing blood pressure to go up and the arteries to the uterus to become harder. These bodily changes can lead to complications like premature births, low birth weight, restricted growth of a fetus, and a higher risk of morbidity for mothers and infants.[6]

Table 2 shows the distribution of anxiety levels after the depth therapy intervention. The results reveal that none of the respondents had severe anxiety after the intervention. Additionally, 9 respondents (40.9%) were classified as having normal anxiety levels. This suggests a significant improvement in psychological well-being among pregnant women after receiving the therapy.

The findings of this study showed that 18 out of 22 respondents felt less anxious after depth therapy. This improvement might be due to how the body regulates its stress response. Relaxation techniques can lower cortisol levels, a hormone linked to stress, which helps reduce anxiety symptoms.[12]

When we talk about neurotransmitters like dopamine and serotonin, which are known to boost our mood and keep our emotions in check, it's interesting to note that they can be triggered by both psychological and physical interventions. On top of that, our bodies can release endorphins, which are natural pain relievers that also promote feelings of calm and wellbeing. By influencing the limbic system and the pathways that regulate our emotions, these biological responses can play a significant role in easing anxiety.[13]

The study revealed that four participants didn't see a drop in their anxiety levels after the intervention. There could be several reasons for this, such as outside stressors like family issues, marital troubles, or financial hardships. Those who started with higher anxiety might need longer or more frequent interventions to notice any real change. Another thing to consider is how engaged the participants were during the therapy sessions. The success of depth

therapy often hinges on how willing participants are to follow the guidance and consistently use the techniques they learn. Plus, factors like physical health and the amount of social support available to pregnant women can also play a role in how effective anxiety management strategies are.[14]

Table 2 Frequency distribution of anxiety levels among pregnant women after the intervention

Anxiety Level	F (n)	%
Normal	9	40.9
Mild	4	18.2
Moderate	9	40.9
Severe	0	0
Total	**22**	**100.0**

*Primary data, 2024.

The statistical analysis shown in Table 3 reveals that the average anxiety score before the intervention was 13.36 (with a standard deviation of 5.07). After the intervention, this average dropped significantly to 8.45 (SD = 3.80). The results from the Wilcoxon signed-rank test yielded a p-value of 0.0001, which clearly indicates a meaningful reduction in anxiety levels following the depth therapy.

Depth therapy is all about helping people let go of those negative emotions that can lead to psychological discomfort. By digging into the emotional roots of what's bothering them, this approach aims to ease symptoms and boost overall mental well-being. It encourages individuals to explore their deeper feelings, thoughts, and internal struggles that might be affecting their mental state.[15]

When it comes to anxiety, unresolved negative feelings like fear, sadness, or past traumas can throw our psychological energy out of whack. Tapping techniques that target specific points on the body are thought to activate the body's energy system, helping to bring emotional balance back into play. This approach can be really helpful for people looking to manage their emotional stress and find a deeper sense of calm.[7,8]

Previous research has shown that various non-drug approaches can effectively help reduce anxiety in pregnant women. These include techniques like the Spiritual Emotional Freedom Technique (SEFT), Benson relaxation therapy, Qur'anic recitation therapy, guided imagery, and prenatal yoga. However, there's still a lack of studies specifically looking into how effective depth therapy is for pregnant women.[1,16,17]

Depth therapy is relatively easy to learn and can be practiced on your own with some professional guidance, which makes it a promising complementary tool in maternal health services. That said, additional research is necessary to enhance the scientific foundation for using depth therapy as a standard intervention for managing anxiety during pregnancy.[18]

Table 3 Effect of depth therapy on anxiety reduction among pregnant women

Variabel	**N**	***Mean***	***Std. Deviation***	***p- value***
Anxiety Before Depth Therapy	22	13.36	5.07	0.0001
Anxiety After Depth Therapy	22	8.45	3.80	

**Wilcoxon Signed-rank test*

To ensure this approach aligns with evidence-based practice, we can use a few strategies: (1) incorporating relaxation and mind-body techniques in therapy sessions to help reduce physiological anxiety responses; (2) applying depth or psychodynamic therapy to investigate emotional meanings, pregnancy-related fears, and past experiences that may come up around childbirth or maternal roles; and (3) merging depth therapy with perinatal counseling or psychological support specifically designed for pregnancy.[15,19–21]

CONCLUSION

The findings of this study indicate that depth therapy has a significant effect on reducing anxiety levels among pregnant women. A noticeable decrease in anxiety scores was observed after the intervention compared with the condition before therapy was administered. These results suggest that depth therapy may be considered a complementary therapeutic approach to help manage anxiety in pregnant women. The findings also contribute to the growing body of knowledge regarding non-pharmacological interventions that support maternal mental health during pregnancy. Healthcare providers, particularly midwives and maternal health practitioners, are encouraged to consider incorporating depth therapy as part of supportive care for pregnant women experiencing anxiety.

CONFLICT OF INTEREST

The authors declare that there is no conflict of interest related to the conduct of this study and the publication of this article.

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