



The Effectiveness of Emotional Freedom Techniques (EFT) on The Childbirth Anxiety in Primigravida in The Third Trimester of Pregnancy

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<p>Track Record Article</p> <p>Accepted: 08 October 2024 Revised: 28 October 2024 Published: 30 November 2024</p> <p>How to cite : R. M. M. S., & Limbong, M. H. (2024). The Effectiveness of Emotional Freedom Techniques (EFT) on The Childbirth Anxiety in Primigravida in The Third Trimester of Pregnancy. <i>Contagion: Scientific Periodical Journal of Public Health and Coastal</i>, 6(2), 1342–1351.</p>	<p style="text-align: center;">Abstract</p> <p><i>Pregnant primigravida women generally experience fear, anxiety, and worry during pregnancy and while facing childbirth and the postpartum period. Anxiety has been identified as a contributing factor in prolonged labour and fetal death. Stress and anxiety management strategies can be implemented using psychotherapy methods such as emotional freedom techniques which is fundamental principle of EFT is to activate and cessation wave through the stimulation of meridian spot to brain, usually tapping. This study employs a quasi-experimental methodology. The research method employed is a single-group pretest-posttest design, which lacks a standard group. This design demands measuring anxiety levels with a pretest conducted before the Emotional Freedom Techniques (EFT) intervention and a posttest conducted afterward. The population under investigation comprises all pregnant primigravida in Tapanuli Tengah Regency between April and August 2024. A purposive sampling technique was employed to obtain third-trimester primigravida without complications as respondents. A total of 30 respondents met the inclusion criteria. The research objective is to ascertain the levels of anxiety before and after the application of Emotional Freedom Techniques on pregnant primigravida women and to understand how the following works of EFT on their anxiety during childbirth. SPSS 25 is a helping tool to analyse the effect using a paired t-test. The results indicate that there is an effect of Emotional Freedom Techniques in lowering an uneasiness in pregnant primigravida women in their third term during childbirth, with a mean of 20.067 and a p-value of $0.000 < (\alpha = 0.05)$. Based on the research, it can be concluded that Emotional Freedom Techniques has an effect in lowering an uneasiness in pregnant primigravida women in their third term during childbirth.</i></p> <p>Keywords: <i>Anxiety, Emotional Freedom Technique, Primigravida Pregnant Woman.</i></p>
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INTRODUCTION

Pregnant women experience anxiety when facing the childbirth process, which can be caused by various situations that may arise during labor, the well-being of both the mother and baby during the process, costs after delivery, as well as whether the mother will give birth normally or via a Cesarean section or being a new mommy with sleep disorder and breastfeeding pressure (Robbins et al., 2024).

Stress is an essential issue that necessitates cautious attention and early diagnosis and treatment due to the detrimental impacts it can exert during the perinatal period (Şanlı & Aypar Akbağ, 2022). Concerns and anxiety in pregnant women can have physical and psychological effects on both the mother and the fetus. Anxiety in pregnant woman significantly increased risk of preterm birth 1.49 times greater risk to those without anxiety (Suparno et al., 2021).

Anxiety is contribute to trigger cortisol, which is known as stress hormone, which can affect uterine contractions and overall labor progression (Sari et al., 2022; Suparno et al., 2021).

The impact of anxiety on mothers can result in weakened uterine cramp at birth due to the release of stress hormones, which can impede the secretion of oxytocin. Weakened uterine contractions can lead to prolonged labor, increasing the risk of infection and exhaustion in the mother. Additionally, this is also associated with post-parturition depression due to emotional instability both before and after childbirth (Baroah et al., 2020). Maternal anxiety is linked to prolonged labor duration that can lead to uterine atony (failure of uterus to contract effectively), increase risk of lacerations, and maternal fatigue (Sari et al., 2022). Meanwhile, the effects of anxiety during pregnancy on infants is associated with the occurrence of premature and low birthweight as its impact to altered placental blood flow and affecting fetal nutrition (Fawcett et al., 2019; Suparno et al., 2021).

The investigate on 45 pregnant women showed that 88.5% of those experiencing moderate anxiety would develop Stage I hypertension. This is due to anxiety increasing the production of vasoactive hormones, which ultimately raises the risk of hypertension and increases uterine arterial resistance, potentially affecting fetal growth, leading to preterm birth, low birth weight (LBW), and unexpectedly death for both the mother and the baby (Isnaini et al., 2020).

Stress and anxiety management strategies can be implemented using psychotherapy methods for stress and anxiety control, which are very important as they pose no harm to the mother or the fetus and have no allergic effects or drug-related side effects. Various studies have been conducted regarding the effectiveness of Emotional Freedom Techniques (EFT) on different subjects. Emotional Freedom Techniques combine vitality and mindset (Asmawati et al., 2020) The fundamental principle of EFT is to send initiation and termination signals to the brain by inducing meridian points, usually through tapping (Feinstein, 2019).

EFT commonly known as tapping, is an alternative therapeutic approach that combine constituent of cognitive behavioural therapy (CBT) such as focusing on identifying emotional or physical issue and acupressure (Blacher, 2023). EFT is a psychotherapeutic approach that integrates elements of cognitive and behavioural therapies. It also incorporates the innovative technique of finger prick therapy, which entails the practice of tapping the fingertips on acupuncture spot (Church et al., 2018). This process aims to balance the body's energy system, which proponent believe can alleviate emotional and physical distress.

Prior research has demonstrated that EFT is a statistically significant method for addressing psychological stress, according to more than 98% of related studies. Additionally,

it has been significant in treating clinical condition, depression, fatigue, stress management, and can demonstrated clinical effect (Feinstein, 2019, 2021). Research by Simbolon & Sitohang (2022) found that EFT effectively reduced psychological responses related to depression, anxiety, and stress. A study by Isnadiya et al., (2019) on the influence of Emotional Freedom Technique (EFT) on patients prior to PCI was shown to reduce patients' anxiety when faced with the intervention.

While EFT is a simple technique to learn, cost-effective, and no need for a therapist then CBT cost often more expensive due to the need for ongoing structured therapy session and automatically requires more time (Guy-Evans, 2024). Similar to CBT is Mindfulness-Based Stress Reduction (MBSR).

The Indonesian Ministry of Health (Kemenkes) recorded a maternal mortality rate of approximately 183 per 100,000 live births in 2022. The incidence of anxiety can complicate the labor process in about 10-15% of cases (Rakizah, 2017). In Indonesia, the number of pregnant woman is estimated to be 373.000, and 107,000 (28.7%) of them experience anxiety when facing childbirth (Kementerian Kesehatan RI, 2017). Anxiety has been identified as a contributing factor in prolonged labour and dead-born. Prolonged labor accounts for 5% of the causes of maternal mortality in Indonesia (Mayasari & Mustika, 2021). In order to overcome the problems, Indonesia has establish policy context through Antenatal Care to help pregnant woman with their pregnancy (Pamungkas et al., 2024). In addition, EFT can practically done in ANC to help screening and offering mental health services for those who need it.

METHODS

This study uses a cross-sectional approach with a one-group pretest and posttest design without a control group. A pretest is conducted before the administration of Emotional Freedom Techniques then each respondent will receive instruction in EFT, and the efficacy of this intervention will be evaluated over a five-day period. On the sixth day, a posttest will be conducted. The research was carried out at the Central Tapanuli Regency Community Health Centre between April and August 2024. The population for this study consists of 30 pregnant primigravida women in their third trimester. The sample size and number of groups were selected based on the number of expectant mothers at the research location. The measurement of anxiety levels can be done using the Hamilton Rating Scale for Anxiety (HARS). HARS is used to assess the severity of anxiety disorders, consisting of 14 items corresponding to anxiety symptoms (Rifa'i, 2021). Each symptom group is scored from 0 to 4, as detailed below: 0 = no symptoms at all, 1 = mild symptoms (if 1 of all symptoms is present), 2 = moderate symptoms

(if half of the symptoms are present), 3 = severe symptoms (if more than half of the symptoms are present), and 4 = very severe symptoms (if all symptoms are present). Data was analysed using a SPSS 25 software programme which is the analysis of the univariate data is to manage variables descriptively, presented in distribution tables. Bivariate analysis is used to determine the effect of EFT on anxiety in pregnant primigravida women facing childbirth, using a paired t-test. This research has been approved by the Health Research Ethics Commission with the number 01.25617/KEPK/POLTEKKES KEMENKES MEDAN 2024.

RESULTS

Univariate Analysis

Table 1. Demographic Characteristics of Respondents

	f	Percentage (%)
Age		
1. < 20 year	0	0
2. 21-35 year	30	100
3. > 35 year	0	0
Education		
1. Junior High School	0	0
2. Senior High School	12	40
3. Higher Education	18	60
Occupation		
1. Employed	19	63,33
2. Unemployed	11	36,66

According to the research findings, the following were identified that 100% of the respondents were pregnant primigravida women in their third trimester aged 21-35 years. The majority of the respondents, 60%, had a higher education background. Furthermore, 63.33% of the pregnant primigravida women in their third trimester were employed.

Table 2. The Frequency and Percentage Distribution of Anxiety Levels Pre-Test and Post-Test

Anxiety Level	Frequency	Percentage (%)
Pretest		
1. No anxiety	0	0
2. Mild anxiety	0	0
3. Moderate Anxiety	0	0
4. Severe Anxiety	30	100
5. Very severe anxiety	0	0
Post Test		
1. No anxiety	9	30
2. Mild anxiety	8	26,66
3. Moderate anxiety	13	43,33
4. Severe anxiety	0	0
5. Very severe anxiety	0	0

The research revealed that the majority of respondents, pregnant primigravida women in their third trimester, had a heavy level of anxiety (Pre-Test) at 100%. In the Post-Test, the majority of respondents had a moderate level of anxiety at 43.33%

Bivariate Analysis

Table 3. Effectiveness of Emotional Freedom Techniques (EFT) in Alleviating Anxiety in Pregnant Primigravida in Their Third Trimester Facing Childbirth

		Paired Differences					t	Sig. (2-tailed)
		Mean	Std. Deviation	Std. Error Mean	95% Confidence Interval of the Difference			
					Lower	Upper		
Pair 1	Pretest EFT – Posttest EFT	20.067	7.358	1.343	17.319	22.814	14.938	.000

The findings of the research showed that, after conducting statistical analysis, it was found that there is an effect of Emotional Freedom Techniques (EFT) on anxiety in pregnant primigravida women in their third trimester facing childbirth with a p-value of $0.000 < (\alpha = 0.05)$.

DISCUSSION

The researcher first conducted a pre-test, finding that the anxiety levels of pregnant women were categorized as severe. The researcher then taught the pregnant women to perform EFT and observed their progress daily for 5 days. On the 6th day, the researcher conducted a post-test for anxiety in pregnant primigravida women. The post-test results showed that the anxiety levels of the pregnant women decreased to moderate and mild. This finding is in line with the study by Handayani (2024), which reported that the majority of pregnant respondents had a moderate level of anxiety. Thus, it can be posited that the administration of EFT treatment will result in a reduction in anxiety levels. According to the study by Simbolon et al. (2022), there is an effect of Emotional Freedom Techniques (EFT) in reducing anxiety in pregnant women. The results of the pre-test and post-test in this study indicate that the asymptotic significance (2-tailed) is 0.001. This result is indicating a significant psychological difference in anxiety responses between the pre-test and post-test. Given the substantial reduction in anxiety and the simplicity of the technique, which is employed safely in any context, it can be concluded that EFT is an appropriate intervention for inclusion in maternal and child programmes at health centres.

In this study, most of the respondents were between the ages of 21 and 35 years, which is consistent with Dwiwanto et al., (2021) who stated that the majority of pregnant women were between the ages of 21 and 35 years (88.1%). Age between 21 and 35 years is the productive

age for pregnancy and childbirth (Delbaere et al., 2020). The optimal age for a woman to be pregnant is between 20 and 35 years, as at this age the uterus is able to support a pregnancy both psychologically and physically, making the childbirth process safer (Asmariyah et al., 2021). Women under 20 years of age or over 35 years of age are associated with pregnancy anxiety due to their physical condition. The reproductive organs of women aged <20 years are not fully formed, while those aged >35 years are at higher risk of facing obstetric complications (Suandari et al., 2023).

Anxiety is one of the causes of prolonged labor and fetal death. Prolonged labor contributes 5% to the causes of maternal mortality in Indonesia (Asmariyah et al., 2021). Stress and anxiety management strategies can be implemented using psychotherapy methods for stress and anxiety control, which are very important as they pose no harm to the mother or the fetus and have no allergic effects or drug-related side effects. Various studies have been conducted regarding the effectiveness of Emotional Freedom Techniques (EFT) on different subjects. Emotional Freedom Techniques combine energy and psychology (Mayasari & Mustika, 2021).

Based on Table 3, after conducting statistical analysis, it was found that there is an effect of Emotional Freedom Techniques (EFT) on anxiety in pregnant primigravida women in their third trimester facing childbirth, with a mean of 20.067 and a p-value of $0.000 < (\alpha = 0.05)$. Previous studies have also proven that EFT is statistically significant in addressing psychological stress based on over 98% of related studies (Abdullah et al., 2024; Agustini et al., 2024; Irmak Vural et al., 2019; Isnaini et al., 2021; Marzban et al., 2024). Additionally, it is significant in reducing anxiety, depression, fatigue, stress management, and fear (Feinstein, 2019). Maesaroh et al. (2019) conducting research on the effect of hand tapping on anxiety in mothers who are about to give birth, where hand tapping is a component of EFT. The average anxiety score for mothers before hand tapping was 66.87 with a standard deviation of 8.228, indicating severe anxiety, and was moderate (59.63) after EFT with a standard deviation of 9.212.

This research significantly shows improvements in anxiety levels among primigravidas, however several limitations warrant consideration. These include the absence of a control group, the relatively small sample size, and the evaluation being conducted at the pre- and post of the intervention. The lack of a control group precludes an evaluation of the impact of EFT on outcomes when compared to a scenario without EFT. The limited sample size increases the potential for bias in the research outcomes and assessments conducted solely on a pre- and post-intervention basis can not demonstrate statistically significant improvements immediately

following the intervention. However, when considered on a larger scale, this research can be implemented through the community health worker and in collaboration with obstetricians or maternity nurses in order to evaluate its impact.

CONCLUSIONS

From the research results was found that the majority of respondents, pregnant primigravida women in their third trimester, had a heavy level of anxiety (pre-test) at 100%. In the post-test, the majority of respondents had a moderate level of anxiety at 43.33%. After the implementation of Emotional Freedom Technique (EFT), the results showed that there is an effect of EFT in reducing anxiety in pregnant primigravida women in their third trimester during childbirth, with a mean of 20.067 and a p-value of $0.000 < (\alpha = 0.05)$.

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