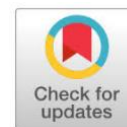


Five-finger hypnosis and foot-soaking therapy to reduce anxiety in pre-eclampsia mother



Dini Kurniawati¹, Eka Afdi Septiyono², Rhozy Sadya Mangrasah³,
Fahma Ilmi Nawa Tama⁴

¹Department Of Maternity Nursing, Faculty of Nursing, Universitas Jember, Indonesia, dini_psikunej10@yahoo.com

²Department Of Maternity Nursing, Faculty of Nursing, Universitas Jember, Indonesia, eka.afdi@gmail.com

³Department Of Maternity Nursing, Faculty of Nursing, Universitas Jember, Indonesia, rhozysadya@gmail.com

⁴Department Of Maternity Nursing, Faculty of Nursing, Universitas Jember, Indonesia, fah.tama@gmail.com

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ABSTRACT

Depression and anxiety in early pregnancy are associated with the risk of pre-eclampsia. Anxiety management can be a variety of ways, including pharmacological and non-pharmacological therapy like non-pharmacological therapies such as five-finger hypnosis and foot-soaking therapy. This study aims to determine differences in anxiety levels in five-finger hypnosis and foot-soaking therapy in pregnant women with pre-eclampsia. The study design used pre-experimental Method: Sampling techniques used cluster sampling with 120 respondents with the characteristics of pregnant women with pre-eclampsia who underwent treatment at the health center in the Besuki Raya. The instrument for measuring maternal anxiety used the Hamilto Rating Scale for Anxiety. Data analysis used an independent t-test with a significance level of 0.05. The results of the Independent T-test stated that there was a difference between the average anxiety of the respondents who carried out five-finger hypnosis interventions and foot-soaking interventions. The average anxiety of mothers with pre-eclampsia after a five-finger hypnosis intervention or foot soak states the lowest average anxiety is after a five-finger hypnosis intervention. Intervention hypnosis five fingers and a foot soak is a complementary therapy that has many benefits, and there are no harmful side effects.

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Corresponding Author:

Dini Kurniawati

Department Of Maternity Nursing, Faculty of Nursing, Universitas Jember, Indonesia, Telp/Fax: (0331) 323450

Email: dini_psikunej10@yahoo.com

INTRODUCTION

Pre-eclampsia is hypertension developing after 20 weeks gestation and the coexistence of one or more of the following new-onset conditions: Proteinuria, Other maternal organ dysfunction (renal insufficiency: creatinine >90 u mol/L; liver involvement: elevated transaminases and/or severe right upper quadrant or epigastric pain; neurological complications: examples include eclampsia, altered mental status, blindness, stroke, or more commonly hyperreflexia; hematological complications: thrombocytopenia, DIC, hemolysis), and Uteroplacental dysfunction (1). Pre-eclampsia is a cardiovascular disease involving many systems that can increase maternal and perinatal morbidity and mortality. Pregnant women with pre-eclampsia have asystolic/diastolic blood pressure $\geq 140 / 90$ mmHg (2,3). One of the risk factors that cause preeclampsia is depression and anxiety (4,5).



Depression and anxiety in early pregnancy are associated with the risk of pre-eclampsia (4,6). Mothers with anxiety disorders are associated with an increased risk of pre-eclampsia. Mood disorders are often experienced by pre-eclampsia mothers and even doubled compared to mothers with normal pregnancies without complications of pregnancy. The most severe condition that is often experienced by pre-eclampsia mothers is that pre-eclampsia mothers experience anxiety, compared with normal pregnancies. Anxiety in pre-eclampsia mothers will cause danger to the mother and baby to the impact on death, and it will often cause excessive concern for the mother (7).

Incidence of pre-eclampsia worldwide reached 0.51% - 38.4%, developed countries the incidence of pre-eclampsia was 5% -6% and developing countries were 1: 100 to 1: 1700. Mother died 50,000 of pre-eclampsia (8). In Indonesia, the incidence of pre-eclampsia ranges from 3-10%. The prevalence of pre-eclampsia in East Java is 30.90% or 165 people. The incidence of pre-eclampsia can be said to be a public health problem if the Case Fatality Rate (CFR) of pre-eclampsia he / eclampsia reaches 1.4% -1.8% (9).

The incidence of anxiety in Indonesia in pregnant women reaches 373,000,000 (10). Anxiety in pre-eclampsia mothers amounted to 86.7%. Anxiety in pregnant women is caused by feelings of unclear concern that can cause emotional, cognitive, behavioral, and physical symptoms (11). Pregnant women who experience anxiety are characterized by anxiety, trembling, sweating, difficulty breathing, heart beating fast, fatigue, chills, and irritability (12).

Limitations of the management of pre-eclampsia that is only focused on monitoring maternal blood pressure and symptom symptoms and close monitoring (13). Very little attention has been paid, especially to the psychological consequences of pre-eclampsia (14). Anxiety if it does not get the attention it can develop into postpartum depression and reduce the initiation and duration of lactation (15,16).

Anxiety management can be a variety of ways, including pharmacological and non-pharmacological therapy. Pharmacological therapies such as anti-anxiety drugs (anxiolytic) can help reduce anxiety but have a dependency effect, while non-pharmacological therapies such as five- finger hypnosis and foot-soaking therapy. Five-finger hypnosis is an autogenic training technique for dealing with psychological disorders. Pregnant women with pre-eclampsia who are given five-finger hypnosis will experience relaxation so that it affects the body's system and creates a feeling of comfort and a feeling of calm. Non-pharmacological therapy else that can be provided to mothers with pre-eclampsia is therapeutic foot soaking with warm water. The therapy is very important to women who experience anxiety because of the warm water can reduce symptoms of cardiovascular, symptoms of lung and symptoms of gastrointestinal as symptoms suggestive of anxiety both anxiety mild and moderate. Warm water foot bath therapy can reduce blood pressure which physiologically functions to dilate capillaries (17).

The importance of nurses understanding the concept of handling anxiety in pregnant women with pre-eclampsia is therefore expected to minimize the effects caused by anxiety in pregnant women with pre-eclampsia. The solution to the problem that helps overcome anxiety, researchers are interested in knowing the differences in nursing interventions in five-finger hypnosis and foot soaking the level of anxiety in pregnant women with pre-eclampsia.

METHOD

The study design used pre-experimental. Sampling techniques used cluster sampling with 120 respondents with the characteristics of pregnant women with pre-eclampsia who underwent treatment at the health center in the Besuki Raya. Cluster sampling was chosen because Besuki Raya consists of 5 districts (Jember, Lumajang, Bondowoso, Probolinggo, and Situbondo). This research was conducted in June-November 2019. Respondent criteria are pregnant women with preeclampsia. Respondents were divided into two different groups to test each of the five-finger hypnosis interventions and foot soaking. The

intervention was carried out three times and carried out for one week. Five-finger hypnosis is done by diverting one's mind by touching the fingers while imagining pleasant or likable things. Foot soaking therapy is done by soaking the feet in a container with warm water (37°C-39°C) for 10-20 minutes. The instrument for measuring maternal anxiety used the Hamilto Rating Scale for Anxiety. This research has passed the ethics feasibility test with Research Ethics Test Number 409 / UN25.8 / KEPK / DL / 2019 at the Faculty of Dentistry, University of Jember. Data analysis used independent t-test with a significance level of 0.05. Statistical analysis was performed using SPSS software. The level of statistical significance was set at 0.05.

RESULTS

Table 1. Characteristics Of Pregnant Mothers In Besuki Raya Karisidenan

Characteristics of Respondents	five- finger hypnosis		foot-soaking therapy	
	F	%	F	%
Age				
< 20 years	48	80.0	20	33.3
20-35 years	12	20.0	40	66.7
Total	60	100.0	60	100.0
Education				
Elementary school	21	35.0	24	40.0
Middle school	18	30.0	28	46.7
High school	15	25.0	8	13.3
University	6	10.0	0	0.0
Total	60	100.0	60	100.0
Work				
Housewife	33	55.0	56	93.3
Civil Servants	21	35.0	0	0.0
Entrepreneur	6	10.0	4	6.7
Total	60	100.0	60	100.0
Parity				
Primipara	27	45.0	12	20.0
Multipara	33	55.0	48	80.0
Total	60	100.0	60	100.0

Table 1. shows the results of the analysis of the characteristics of research respondents based on age, last education level, work, and parity. The analysis showed that respondents in the study were 120 respondents, mostly mothers aged 20-35 on foot-soaking intervention and mothers aged <20 years in five-finger hypnosis interventions; most pregnant women with primary school education with five-finger hypnosis interventions and most with junior high school education with foot-soaking interventions; the majority of foot-soaking and five-finger hypnosis interventions are performed on respondent housewives; in the intervention of five-finger hypnosis most of them are primiparous and foot soaking are mostly done with mothers with multiparas.

Table 2 Statistical Results Based on Interventions on Maternal Anxiety with Pre-eclampsia

Intervention	Five- finger hypno		Foot-soaking therapy		N
	Mean	Std. Dev	Mean	Std. Dev	
Pretest	22,60	3,769	22,90	3,876	60
Posttest	17,00	2,610	21,73	3,443	60

Table 2. shows the results of the average anxiety of mothers with pre-eclampsia after a five-finger hypnosis intervention or foot soak states the lowest average anxiety is after a five-finger hypnosis intervention.

Table 3. Differences Test Of Different Hypnosis Intervention

Intervension	Levene's Test	t	df	sig	95% CI
Five- finger hypnosis	0.111	-8.485	118	0.0001	(-5.838) – (-3.629)
Foot-soaking therapy					

Table 3. Shows the results of the lavene test (homogeneity test) states that the data variance between the five-finger hypnotic intervention and foot bath is the same. The results of the Independent T-test stated that there was a difference between the average anxiety of the respondents who carried out five-finger hypnosis interventions and foot-soaking interventions.

DISCUSSION

Anxiety experienced by pregnant women with pre-eclampsia includes self-anxiety, which includes fear of death, fear of separation from the baby, anxiety about health, possible complications. Pregnant women experiencing anxiety can cause blood pressure to rise (18). Pregnant women with pre-eclampsia who have thoughts such as childbirth followed by pain will cause an increase in sympathetic nervous system work, in this situation, the endocrine system which consists of glandular glands, such as adrenals, thyroid, and pituitary (gland control center), release expenditure each hormone into the bloodstream in an emergency so that the autonomic nerve activates the adrenal glands which affect the system on the epinephrine hormone. The impact of physiological responses on pregnant women becomes irritable or offended, restless, unable to focus attention, doubt, even wanting to run away from the reality of life (5,19).

Decreased anxiety levels of pregnant women with pre-eclampsia due to this five-finger technique has a way of working by bringing the brain to alpha waves, which are waves with a frequency of 14-30 Hz. In this condition, the brain is relaxed, relaxed, conscious and does not or almost sleep, when the body secretes the hormones serotonin and endofrin so that pregnant women relax and anxiety decreases (17). Before the five-finger hypnosis therapy, pregnant women with pre-eclampsia claimed to feel worried about their pregnancy, but after being given five-finger therapy, the mother felt calmer in the face of labor. The success of hypnosis therapy five fingers also dips e influenced by several factors, including the good cooperation with the respondent, quiet atmosphere while doing therapy.

Soaking-feet therapy of water using warm water therapy is a type of hydrotherapy by way of foot soak into the container at a temperature 37°C-39°C to carry blood circulation and provide a relaxing effect (20). Warm water makes blood vessels to widen, so the blood that carries oxygen will quickly achieve network. Warm-water foot bath therapy is a non-pharmacological therapy that is able to provide a relaxing effect by increasing the sensation through sensation on the surface of the feet and can reduce anxiety on anxiety (21). Soaking-foot therapy using warm water with a duration of 10-15 minutes for 3x in one week on anxiety in third trimester pregnant women showed a decrease in anxiety (21).

Current research provides warm water foot bath therapy with a duration of 15-20 minutes and is carried out for 3x in one week. The relaxation response felt by pregnant women with pre-eclampsia affects psychology. The relaxing effect resulting from foot-soaking therapy is obtained from the warm effect that gives effect to dilate blood vessels, especially to the body. Warm water foot bath therapy can stimulate the pituitary gland in the body to stimulate the endorphin hormone, which will reduce the strength of the sympathetic

nerves resulting in vasodilation. Vasodilation is the dilation of blood vessels which makes the body feel relaxed so that there is a decrease in the hormone cortisol (21).

The difference in the average results in this study between five-finger hypnosis intervention with foot-soaking intervention states that the intervention of five-finger hypnosis can reduce anxiety more. The series of relaxation starts from muscle relaxation, breathing relaxation, relaxation of the mind and inculcation of positive sentences, communication with the fetus causes the mother's condition to relax so that the body responds to the release of endorphin hormones which makes the mother calm. While foot-soaking intervention reduces not directly to the psychological of pregnant women but reduces anxiety by vasodilation of blood vessels and in the end, the mother feels relaxed.

CONCLUSION

Intervention hypnosis five fingers and a foot soak is a complementary therapy that has many benefits, and there are no harmful side effects, the presence of this study are expected to provide literature in providing knowledge interventions hypnosis five fingers and a foot soak in a nursing intervention in reduction anxiety mothers with pre-eclampsia. Hypnosis five fingers interventions have a lower rate of anxiety reduction than foot soaking therapy.

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