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Effectiveness Combination of Belly Dance with Traditional Music on Anxiety toPrimigravida Pregnant Women in the Third Trimester (study in rangkasbitung area)

DitaCahyaPratiwi*[1], DiyahFatmasari*[2], Sri Wahyuni*[3]

[1] *Midwifery Student, Master Applied of Health, PoltekkesKemenkes Semarang, Central Java, Indonesia*
[2] *Midwifery Lecturer,Master Applied of Health, PoltekkesKemenkes Semarang, Central Java, Indonesia*
[3] *Midwifery Lecturer, PoltekkesKemenkes Surakarta, Central Java, Indonesia*

***Corresponding author: DitaCahyaPratiwi**
E-mail: ditacahyaa@gmail.com

ABSTRACT

Anxiety in pregnant women has increased, especially in the third trimester in the face of childbirth. Childbirth is getting closer resulting in anxiety experienced during pregnancy including fear during childbirth the mother will experience bleeding, fear of the baby who will be born with disability, complications during childbirth. Belly dance and traditional music are non-pharmacological methods, help in providing calm, this study uses belly dance combined with traditional music to help reduce anxiety. The purpose of the study was to analyze the effectiveness of the combination of belly dance with traditional music on anxiety.The research design used a quasi-experimental design with a pre-test post-test design with a control group, a sample of 30 primigravida pregnant women in the third trimester using a random sampling technique, there were two treatment groups and a control group. HRS-A anxiety measurement. Statistics using Wilcoxon test and Mann Whitney test. The results of the study The combination of belly dance and traditional music was more effective in reducing anxiety compared to the control group (mean anxiety from the first week to the third week is 3.26; p <0.05; effect size is 0.757. The conclusion is that the combination of belly dance with traditional music can reduce anxiety in primigravida pregnant women in the third trimester.

Keyword: Pregnant, Belly dance, Traditional Musik, Anxiety

INTRODUCTION

According to the World Health Organization (WHO) in 2017, the Maternal Mortality Rate (MMR) is very high, reaching around 295,000 women during pregnancy, after pregnancy and childbirth, where every day there are around 830 maternal deaths in the world. Indonesia's Maternal Mortality Rate according to the Inter-Census Population Survey (SUPAS) in 2018-2019 is still quite high, which is still around 305 per 100,000 live births. labor, high blood pressure during pregnancy and delivery (eclampsia or preeclampsia)[1].

Anxiety in pregnant women is a reaction due to changes that occur in pregnant women and the environment so that they bring feelings of displeasure or discomfort caused by prejudice or threats that threaten, placing themselves in a sense of insecurity, balance or in social life and social scope[2–4]. Anxiety experienced during pregnancy can have an impact on the mind, feelings of tension and physical and psychological changes[5].

Anxiety will be experienced by pregnant women, both in the first, second and third trimesters. Most pregnant women in the third trimester (28-40 weeks) will experience anxiety due to the approaching delivery, this anxiety can be felt in both primiparous and multiparous women. This trimester is often referred to as the waiting period, where pregnant women experience vigilance and anxiety in waiting for the presence of the baby to be born[6].Anxiety experienced during pregnancy can be caused by worrying about management and physical health, fetal health, changes in appearance, changes in interpersonal relationships, complications during pregnancy, during childbirth and the postpartum period in caring for and caring for children.[7,8].

Dealing with anxiety can be done by pharmacological and non-pharmacological methods. In pharmacological therapy, drugs that can reduce anxiety are given such as buspirone, benzodiazepines[9]. One of the non-pharmacological therapies to reduce and prevent psychological disorders is dancing. Dancing or dancing is an art that is intended to be displayed, but dancing is also able to provide a healing effect and treatment for someone who has a psychological disorder[10].

Belly dance or Belly dance for pregnant women is a dance that can provide a calm, give strength to the pelvic and abdominal muscles, help reduce stress or anxiety in pregnant women, reduce or overcome pain, provide positive energy for the mother so that the mother can face her problems or complaints during her pregnancy. Belly dance is a dance that is safe, supportive and effective for mothers during pregnancy and childbirth[11].

Research studies using music can have an effect on reducing anxiety by changing the sound of existing music into a vibration or vibrations will be sent to the brain by going through stages in the limbic system. This stimulus will channel the autonomic system related to endocrine hormones so that it can have an effect on reducing anxiety and stress and can provide a comfort effect in a person through activated endorphine hormones[12]. Sundanese traditional music has an effect on reducing anxiety that occurs in pregnant women in the third trimester[13], patients with chronic kidney failure undergoing hemodialysis[14].

Research studies on belly dance that have been conducted at BPM ranting 3 Semarang City to primigravida pregnant women showed that pregnant women who received family support and performed belly dance could reduce anxiety in third trimester pregnant women[15]. In another study, it was said that there were primipara pregnant women who entered labor when the mother performed an upright position by tilting the pelvis and swinging the hips forward and backward forward and backward, the results showed that dance is a therapy that can help reduce pain, and the mother can feel satisfaction with care during childbirth[16].

Belly dance can be done by combining it with music. Music is ideally combined with belly dance, the musical accompaniment given during belly dance can increase and stimulate beta endorphins[17], making it effective in reducing anxiety and stress during pregnancy[18]. Music is a form of distraction technique or a technique of shifting focus to other stimulation. Music itself is a form of universal language for human beings so that it is easy and effective in providing treatment[19]. Cultural factors and the popularity of music can provide additional relaxation compared to music that has less popularity[20].Factors from culture and a popular music can distract and help relaxation compared to foreign music that has never been heard[21].

Based on this background, it can be concluded that third trimester pregnant women experience a sense of anxiety and fear so that it can have an influence at the time of delivery. Therefore, researchers need to conduct an objective clinical trial on the effectiveness of the combination of belly dance and music on reducing anxiety in primigravida pregnant women in the third trimester III.

METHODS

This is quasi-experimental with pre-test and post-test with group control design. The research was conducted after receiving a letter from the Ethics Commission of the Great Islamic University of Semarang regarding ethical feasibility. Result of ethical license number 74/III/2021/Bioethics Commission. Researchers maintain the confidentiality of respondents and use informed consent as a form of consent. This research was carried out at the Clinic Mutiara Medikafrom March to April 2021.

The sampling technique used was random sampling, with 30 respondents, divided into two groups, namely the treatment group and the control group with a minimum number of 15 respondents per group. Inclusion criteria for respondents who live in the Rangkasbitung area, age 20-35 years, gestational age in the third trimester of 28-36 weeks, mothers with normal pregnancies, history of ANC at least 4 times during the pregnancy period, can communicate well. willing to be a respondent. Pregnant women in the control group received standard ANC examinations, and were given a combination of belly dance with traditional music, and in the control group they were given standard ANC and Belly dance examinations. The study was conducted once a week for 30 minutes for 3 weeks.

This study measures anxiety using the HRS-A (Hamilto Rating Scale Anxiety) questionnaire, this instrument assesses the level of anxiety using a numeric 0-4. Total score <14 no anxiety, 14-20 mild anxiety, 21-27 moderate anxiety, 28-41 severe anxiety, 42-56 very severe anxiety. Anxiety was measured every week at the beginning before the intervention was given and after the intervention every week, both the treatment group and the control group. Data were analyzed using the Wilcoxon test in the paired group and the unpaired group the Mann Whitney test because the data were not normally distributed.

RESULTS

The results of the study on thirty third trimester primigravida pregnant women, with 15 people in each group.

Table 1: Characteristics of Respondents

No.	characteristics	Group		*p-value**	*p-value***
		Treatment	control		
1.	**Age (Year)**				
	Mean	24,867	24,333	0,358	0,928
	Median	24	23		
	SD	2,669	3,222		
2.	**Education**				
	SMP	1 (6,7%)	2 (13,3%)	0,861	0,827
	SMA	11 (73,3%)	10 (66,7%)		
	PT	3 (20,0%)	4 (20,0%)		
3.	**gestational age**				
	Mean	31,800	31,800	0,940	0,957
	Median	31	32		
	SD	1,859	1,859		
2.	**employment**				
	work	2 (13,3%)	3 (20,0%)	0,345	0,624
	Doesn't work	13 (86,7%)	12 (80,0%)		

**Levene Test, **Chi Square Test*

The results of Levene's test and Chi-square test on age, education, gestational age and occupation in the treatment group and control group obtained p value greater than 0.05, this indicates that the intervention group and control group have the same sample characteristics.

Table 2: Differences in anxiety in the treatment group and the control group before and after being given treatment

Variable		*Mean*	SD	Delta	Z hitung	*p-value**
Treatment Grup						
1st Week	Pre	26.133	1.959	2.533	-3.493	0.000
	Post	23.600	2.165			
2nd Week	Pre	23.600	2.165	3.333	-3.475	0.001
	Post	20.267	1.792			
3rd Week	Pre	20.267	1.792	3.267	-3.436	0.001
	Post	17.000	1.890			
Totality	Pre	26.133	1.959	9.133	-3.477	0.001
	Post	17.000	1.890			
Control Grup						
1st Week	Pre	26,800	1,821	2,067	-3,497	0,000
	Post	24,733	1,981			
2nd Week	Pre	24,733	1,981	2,200	-3,497	0,000
	Post	22,533	1,959			
3rd Week	Pre	22,533	1,959	1,600	-2,916	0,004
	Post	20,933	2,685			
Totality	Pre	26,800	1,821	5,867	-3,424	0,001
	Post	20,933	2,685			

** Wilcoxon Test*

Based on the results of the Wilcoxon test in the treatment group and the control group from week one to week three, the p-value <0.05, indicating a difference in anxiety between weeks 1 to week 3.

Table 3: Analysis of differences in anxiety at week 1 to week 3 in the treatment group and the control group

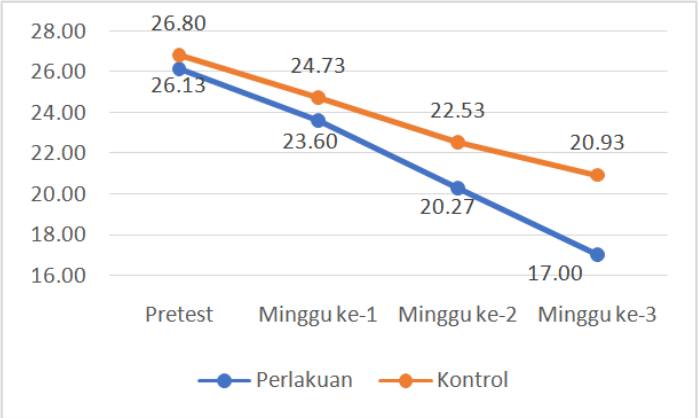
Variable	Weeks/Time		Treatment Mean ± SD	Control Mean ± SD	Delta	*p-value**	Cohen's d	*Effect size*
anxiety	1st Week	pre	26,133±1,959	26,800±1,821	0.667	0.213	0.644	0.306
		Post	23,600±2,165	24,733±1,981	1.133	0.067		
		Selisih	2,533±0,640	2,067±0,799	0.467	0.063		
	2nd Week	pre	23,600±2,165	24,733±1,981	1.133	0.067	1.286	0.541
		Post	20,267±1,792	22,533±1,959	2.267	0.003		
		Selisih	3,333±0,976	2,200±0,775	1.133	0.001		
	3rd Week	pre	20,267±1,792	22,533±1,959	2.267	0.003	1.352	0.560
		Post	17,000±1,890	20,933±2,685	3.933	0.000		
		Selisih	3,267±1,033	1,600±1,404	1.667	0.001		
	Totality	pre	26,133±1,959	26,800±1,821	0.667	0.213	2.320	0.757
		Post	17,000±1,890	20,933±2,685	3.933	0.000		
		Selisih	9,133±1,060	5,867±1,685	3.267	0.000		

**Mann Whitney Test*

Based on the analysis results, the average anxiety in the treatment group after being given the intervention at week 1, week 2 and week 3 was lower than the average control group at week 1, week 2 and week 3. The results of the Mann Whitney test week 1 obtained a p-value value is greater than 0.05, this indicates that there is no difference in anxiety in the intervention group and the control group after (post) treatment. While the results of the Mann Whitney test week 2 and week 3 obtained p value <0.05, this indicates there is a difference in anxiety in the treatment group and the control group after (post) treatment is given.

The difference in anxiety in the intervention group at week 1, week 2, week 3 and overall (9.133) was higher than the difference in anxiety in the control group. The results of the Mann Whitney test in week 1 obtained p-value > 0.05, this indicates that there is no difference in the difference in anxiety in the treatment group and the control group, while the results of the Mann Withney test at week 2, week 3 and overall p value < 0.05. This shows that there is a difference in anxiety in the intervention group and the control group after (post) treatment.

The results of the calculation of the difference in data obtained that the overall effect size obtained an effect size of 0.757, this indicates that the combination of belly dance intervention with traditional music can reduce anxiety by 75.7%.



Anxiety description weeks 1 to 3 weeks before and after the combination of belly dance with traditional music in the treatment group and the control group.

DISCUSSION

The combination of belly dance with traditional music can reduce anxiety significantly (p<0.05), with an overall effect size difference of 0.757, the combination of belly dance with traditional music can reduce anxiety by 75.7%..

Anxiety and worry experienced by pregnant women in the third trimester in the face of childbirth will be a stressor, in a state of stress this will provide stimulation to the sympathetic nervous system which will then be transmitted to the adrenal medulla for the release of catecholamines (neropinephrine, dopamine, and epinephrine) into the bloodstream. At the same time, the system that functions to release corticotropin from the hypothalamus will stimulate the anterior pituitary gland to release adenocorticotropin hormone (ACTH), where ACTH will stimulate the adrenal

cortex to secrete steroid hormones, especially cortisol[22]. in primigravida pregnant women that the higher the perceived stress received will significantly correlate with depression syndrome in third trimester pirmigravida pregnant women, this supports the theory of its importance in reducing perceived stress during pregnancy. can prevent depression syndrome in mothers[23].

Belly dance is a slow and rhythmic dance that can help prevent stimulation of the sympathetic nerves to produce steroid hormones, especially cortisol[22]. This is supported by studies that have been conducted on women with breast cancer that can improve quality of life, reduce fatigue, and reduce symptoms of depression[24]. Another study on belly dance in women with chronic low back pain can reduce pain felt in the waist area and function in female organs[25].

Sundanese traditional music is very simple so that the data is combined with belly dance, the strains of music are familiar to the ears of the Sundanese people, Sundanese music is easier to give and accept by respondents[21].

The combination of belly dance with traditional music is a dance that is accompanied by traditional Sundanese kecapi flute music with a beat speed of 60 - 80 / minute with a fixed and regular tone, harmonious and in tune[26,27]. sound waves received by the mother will be received by both ears which will be received by the auditory nerve, at the same time will be received by the brain or temporal lobe as a form of sound sensation, sound will help stimulate the release of endorphins and have an influence on the work of the limbic diamiglada as an emotional regulator and mood[28]. This is supported by research that has been conducted on women giving birth that traditional dance and music can reduce pain and anxiety during childbirth, another study on post sectiosecaria women that traditional Sundanese kecapisuling music can reduce pain levels in post cesarean section mothers[29]. reduce anxiety in patients in the intensive care unit[30], and help reduce nausea and vomiting in breast cancer patients undergoing chemotherapy[21]. Spiritual needs are needed in addition to reducing anxiety in primiravida pregnant women[31].

The combination of belly dance with traditional music helps in shifting focus to primigravida pregnant women in the third trimester, Movement with a slow and regular rhythm accompanied by the accompaniment of popular traditional music adds a sense of relaxation and calm to primigravida pregnant women so that the parasympathetic nerves increase which helps in producing endorphinehormones . Increases parasympathetic nerves and endorphins which can reduce anxiety

CONSLUSION

The combination of belly dance with traditional music can help reduce anxiety in third trimester primigravida pregnant women, given during the study every 1 week for 30 minutes for 3 weeks.

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