

## **The Effect Of Instrumental Music Relaxation Techniques To Reduce The Level Of Anxiety Of Pregnancy Women**

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### **Abstract**

Anxiety during pregnancy can affect the psychological development of the mother and the physical and psychological growth of the baby in the womb. Instrumental Music Therapy is one of the effective distraction techniques and is believed to reduce physiological pain, stress, and anxiety by diverting one's attention. Research Objectives To determine the effect of instrumental music relaxation techniques on reducing anxiety levels of pregnant women in the third trimester. The research method used Quasy Experimental Design. Sampling technique using Quota Sampling with the number of respondents 20 people. The results of the study before being given instrumental music therapy, all pregnant women felt anxious from mild to severe but after being given instrumental music therapy as many as 35% (7 people) pregnant women did not feel anxious. Conclusion There is an effect of instrumental music relaxation therapy on decreasing the anxiety level of third trimester pregnant women in PMB with a P value = 0.010. Suggestions are expected that health services can provide pregnant women to listen to instrumental music. Health services can provide pregnant women to listen to instrumental music in order to reduce anxiety, especially during the third trimester.

**Keywords: Pregnant Mother Anxiety, Instrumental Music Therapy, Relaxation Techniques**

## INTRODUCTION

Anxiety during pregnancy can affect the psychological development of the mother and the physical and psychological growth of the baby in her womb (Mardjan, 2016). There are thoughts of fear of giving birth which will always be followed by pain, and can cause an increase in the work of the mother's sympathetic nervous system, making her irritable, offended, restless, unable to concentrate, hesitant and even wanting to run away from the reality of life. Excessive stress hormones produced in pregnant women can disrupt the blood supply to the fetus and can make the fetus hyperactive (Hall, 2009 in Sukmaningtyas & Prahesti 2016:54).

Several developing countries in the world are ones that can cause a high risk of psychological disorders in pregnant women, namely 15.6% and postpartum mothers = 19.8%, including Ethiopia, Nigeria, Senegal, South Africa, Uganda and Zimbabwe (WHO, 2013). In Uganda as many as 18.2% of pregnant women experience depression or anxiety, in Nigeria as many as 12.5%, Zimbabwe as many as 19%, and South Africa 41% (WHO, 2008 in Rizqika, 2018). In Indonesia there are 373,000 pregnant women, and there are 107 thousand pregnant women who experience anxiety when facing childbirth,

namely (28.7%) (Ministry of Health of the Republic of Indonesia 2008 in Hajizah Simbolon 2018).

Age, parity of pregnant women, level of education and employment are causal factors that can lead to the emergence of anxiety levels in primigravida pregnant women (Handayani, 2015). The age of a pregnant woman will affect pregnancy. The safe age for pregnant women is between 20-35 years. Meanwhile, being educated will also influence the mother's response in dealing with something that comes from within the mother or from outside or the environment (Heriani, 2016).

## METHOD

This research uses a quantitative approach, with a Quasi-Experimental Design with a One Group pretest posttest design. The research was conducted in January 2021, the population in this study was 50 respondents from third trimester pregnant women with the sample in this study being third trimester pregnant women at the Independent Midwife Practice in South Tangerang City, totaling 20 people taken using the Quota Sampling technique, the analyst used was Wilcoxon Signed Rank Test.

## RESULT

### 1. Respondent Distribution Characteristic

**Table 1**  
**Age Distribution Frequency**

Minimal -Maximal Age	Mean	Std Deviation	95% CI
20-30	24.40	3.152	22,92-25,88

Based on table 1, it can be seen that the average age of respondents in this study is 24 years.

**Table 2**  
**Occupation Distribution Frequency**

No	Occupation	Frequency (n)	Percent (%)
1.	Not Working	17	85%
2.	Working	3	15%
Total		20	100%

Based on table 2, it can be seen that of the 20 respondents, the majority of respondents did not work, namely 17 respondents (85%)

**Table 3**  
**Education Distribution Frequency**

No	Last Education	Frequency (n)	Percent (%)
1.	Uneducated	0	0%
2.	Primary	0	0%
3.	Secondary	0	0%
4.	High School/College	16	80%
5.	University	4	20%
<b>Total</b>		<b>20</b>	<b>100%</b>

Based on table 3, it can be seen that of the 20 respondents, the majority of respondents had SMA/SMK education, namely 16 respondents (80%).

**Tabel 4**  
**Pregnancy Distribution Frequency**

No	Pregnancy	Frequency (n)	Percent (%)
1.	Nullipara (0 child)	0	0%
2.	Primipara (1 child)	13	65%
3.	Multipara (2-4 children)	7	35%
4.	Grande Multipara (≥5 children )	0	0%
<b>Total</b>		<b>20</b>	<b>100%</b>

Based on table 4, it can be seen that of the 20 respondents, the majority of respondents with primipara criteria (1 child) were 13 respondents (65%)

**Table 5**  
**Frequency Distribution of Respondents' Anxiety Levels Before Being Given Music Therapy**

No	Anxiety Level	Frequency (n)	Percent (%)
1.	No Anxiety	0	0%
2.	Low Anxiety	5	25%

3.	Mid Anxiety	14	70%
4.	High Anxiety	1	5%
5.	Severe Anxiety	0	0%
<b>Total</b>		<b>20</b>	<b>100%</b>

**Table 6**

**Distribution of respondents' anxiety levels after instrumental music therapy**

No	Anxiety Level	Frequency (n)	Percent (%)
1.	No Anxiety	7	35%
2.	Low Anxiety	4	20%
3.	Mid Anxiety	9	45%
4.	High Anxiety	0	0%
5.	Severe Anxiety	0	0%
<b>Total</b>		<b>20</b>	<b>100%</b>

Based on tables 5 and 6, it can be seen that the 20 respondents showed that there was an influence of providing instrumental therapy on the anxiety level of pregnant women in the third trimester. Before being given instrumental therapy, the majority of respondents experienced moderate anxiety, namely 14 respondents (70%), mild, 5 people (25%) and there were no

respondents who did not experience anxiety (0%), while the anxiety level of respondents after being given instrumental therapy changed, namely 9 people (45%) experienced moderate anxiety, 4 people (20%) had mild anxiety and 7 people (35%) had no anxiety.

**Distribution of the Effect of Instrumental Music on the Anxiety Levels of Pregnant Women in the Third Trimester in PMB X**

**Table 7**  
**Wilcoxon Signed Rank Test**

Anxiety	x	SD	P Value
<i>Pretest</i>	2,81	0,523	0,010
<i>Posttest</i>	2,10	0,912	

Table 7 shows the P value, namely 0.010 or smaller than  $\alpha$  (0.05), which means that  $H_a$  is accepted, so it can be concluded that there is an effect of providing instrumental music relaxation therapy on reducing the

anxiety level of pregnant women in the third trimester in the Midwife's Independent Practice. X.

Before being given instrumental therapy, the majority of respondents experienced moderate anxiety, namely

14 respondents (70%), mild, 5 people (25%) and there were no respondents who did not experience anxiety (0%), while the anxiety level of respondents after being given instrumental therapy changed, namely 9 people (45%) experienced moderate anxiety, 4 people (20%) had mild anxiety and 7 people (35%) had no anxiety. Of the 20 respondents when the pretest was carried out, there were no respondents who did not experience anxiety, but after the pretest there were 7 respondents who had no anxiety (an increase) while in the pretest there was 1 respondent who experienced severe anxiety and after the pretest there were no respondents who experienced severe anxiety. . These results indicate that respondents experienced a decrease in anxiety levels after the intervention of instrumental music therapy where there was an influence from changes in anxiety level scores.

In the third trimester of pregnancy, pregnant women often feel worried or afraid if the baby being born is not normal. A mother may begin to fear the pain and physical danger that will arise during childbirth. Primigravida mothers often have intrusive thoughts, as the development of anxiety reactions to the stories they receive. In the third trimester (28-40 weeks), primigravida mothers will experience anxiety about the time they give birth. At the age of seven months and above, the anxiety level of pregnant women becomes increasingly acute and intensive as the birth of their first baby approaches. In the third trimester, this is a period of high risk of premature birth, causing high anxiety in pregnant women.

Instrumental music makes the body, mind and mind healthy, while classical music is useful for making a person relaxed, creating a feeling of security and well-being, relieving feelings of joy and sadness, reducing pre-operative anxiety levels, relieving pain and reducing stress levels. Studies on mental health have shown that music

therapy is very effective in relieving anxiety and stress, can encourage relaxed feelings and relieve depressive conditions, music therapy can help people who have emotional problems express their feelings, make positive changes to their mood, help solving problems and fixing problems, music therapy is also one of the treatments for dealing with stress and anxiety (Aizid, 2011:16). Research conducted by Tuti Meihartati et al, 2018, with the title "The Effect of Instrumental Music on Reducing the Anxiety Levels of Pregnant Women in the Third Trimester" The method in this research is to use Pre Experimental with One Group Pretest and Posttest Design which uses the Total Sampling technique with the Wilcoxon Test based on The results of the research obtained significant results between music and reducing the anxiety of pregnant women with the result ( $P = 0.002$ ), namely ( $<0.05$ ), it can be concluded that there is an influence of instrumental music on reducing the anxiety level of pregnant women. Instrumental music therapy is an effective distraction technique and is believed to reduce biological pain, stress and anxiety by diverting a person's attention using certain sounds or rhythms.

Meanwhile, research conducted by Hajizah Simbolon 2018, "The Effect of Classical Music Therapy on Reducing the Anxiety Levels of Pregnant Women in the Third Trimester at PMB Afriana Am.Keb" can be obtained with results with a value of ( $Pvalue = 0.000$ ) or ( $P<0.05$ ) which can be concluded that there is a significant difference in the effect of classical music therapy on reducing the anxiety level of pregnant women before and after the intervention. It can be concluded from this study that providing classical music intervention is a technique that is effective in diverting a person's attention from excessive anxiety, making a person relax and can reduce stress levels. , so that it can cause a

decrease in anxiety, that is, it can affect the activity of brain functions through the nervous system.

And it can also be seen from research conducted by Wowor, Jeclin T.M et al (2013), entitled "The Effect of Providing Mozart Classical Music Therapy on the Anxiety of Pregnant Women in the Third Trimester in Facing Childbirth at the Pangian Community Health Center, East Passi District" obtained results with a value (Pvalue= 0.000) with ( $\alpha < 0.05$ ) which shows that Mozart classical music therapy has an effect on reducing the anxiety of pregnant women in the third trimester and there is a significant difference in the average figure between the reduction in anxiety of pregnant women in the third trimester before and after being given Mozart classical music therapy. The advantage of listening to Mozart classical music therapy is that it makes a person relax, in theory it produces calming alpha waves that can stimulate the limbic system of the brain's neuron network and reduce stress. Mozart is a type of classical music that does not cause sharp, up and down waves. Mozart is also not stiff. and flat but also not too soft to lull like a lullaby.

Performing binaural beats can induce the same mental states associated with meditation practice, meditation is an exercise in calming the random thoughts passing through it and regular meditation practice has been shown to reduce stress and anxiety, slow the rate of brain aging and memory loss, improve emotional health, and extend lifespan. attention, practicing meditation regularly can be very difficult so people have sought the help of technology (Jacquelyn Caffasso, 2018). Binaural beats between 1-30 Hz create brain wave patterns similar to those experienced during meditation. When listening to sounds with a certain frequency, the waves in the brain will be synchronized with that frequency, in theory binaural beats can help create the frequencies needed by the human

brain to create the same waves that are usually experienced during meditation practice, the use of binaural beats in this way is sometimes called brainwave entrainment technology (Jacquelyn Caffasso, 2018) For binaural beats to work both tones must have a frequency of less than 1000 Hz, and the difference between the two tones cannot be more than 30 Hz, so one must decide which brain waves correspond to the Binaural beats in the theta range ( 4 to 8 Hz) is associated with REM sleep, reduced anxiety, relaxation, and meditative and creative states. Theta waves can influence the rhythm of music which can enter the brain waves to reduce anxiety, namely with Binaural beats 4-8 Hz. From this research it can be concluded that pregnant women experience different levels of anxiety, which can be influenced by several factors, namely age, education, employment and parity.

In this research, the majority of respondents, namely young adults, will experience higher levels of anxiety and stress than older adults. This can be related to experiences or views on something. The older a person gets, the more mature their thinking and acting processes become in everything. . Work can also affect a person's anxiety because in this study the majority did not work, a person who is married is a task that drains physical and mental abilities and has a big responsibility to take care of the whole family for their daily needs as well as the needs of their husband and children. Parity can also influence the level of anxiety because an experience that is a traumatic birth or inexperience is a factor that can influence the level of anxiety because most of those in this study were primiparas, namely first-born children, so they felt excessive fear, fear of the baby being born abnormally, and Childbirth is considered to be a scary thing that causes feelings of anxiety, therefore the birthing process requires treatment that can involve bio-psycho-social and spiritual. One way to

overcome anxiety is to use music therapy, also known as distraction techniques, which are a way of diverting the focus of attention from instrumental music therapy. It can influence brain function activities through the nervous system and can restore psychological conditions such as emotions, feelings, thoughts and desires. can have a relaxing effect on tense nerves and muscles and instrumental music with its rhythm can make respondents feel relaxed and calm and their mood will be better.

### CONCLUSION

Based on the results of research on the effect of instrumental music therapy on reducing the anxiety level of third trimester pregnant women in PMB for 20 respondents. The average respondent in this study was 24 years old, most of them did not work, namely 17 respondents (85%), had a high school/vocational education, namely 16 respondents (80%) and those with primiparous parity status were 13 respondents (65%). Before music therapy, most respondents had a moderate level of anxiety, namely 17 respondents (70%) with an average score of 2.81. After music therapy, most respondents had a mild level of anxiety and 11 respondents (55%) had no anxiety with an average score of 2.10. There was an effect of instrumental music therapy on reducing the anxiety level of pregnant women in the third trimester with ( $P = 0.010$ ).

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