

Music Therapy Reduces Pain In Labor

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ABSTRACT

Labor and birth are normal physiological processes. Labor pain is a physiological condition. Pain that occurs can affect the mother's condition in the form of fatigue, fear, worry and cause stress. then an effort is needed to reduce pain in laboring mothers, one of which is Music Therapy. Music therapy can be done by laboring mothers. Music therapy is useful in laboring mothers in reducing labor pain. This study aims to determine the effect of classical music therapy on labor pain in the first stage. This type of research is quantitative research with quasi experimental Designs with One Group Pretest Posttest design. The population in this study were all 30 laboring mothers. Sample technique using total sampling. With a sample of 30 respondents. The research was conducted from March to April 2023. Data analysis used wilcoxon test. The results of the study obtained the pain intensity of respondents before the intervention was averaged 3.20 with a standard deviation of 0.610. While the average pain intensity of respondents after the intervention was 2.47 with a standard deviation of 0.507. From the statistical test, it can be concluded that there is a significant effect between pain intensity before intervention and after intervention (p value = 0.000 < 0.05). From the results of this study, it is known that music therapy is effective in reducing the intensity of pain in labor phase I.

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1. INTRODUCTION

Labor is the process of opening and thinning the cervix and the fetus descends into the birth canal. Normal labor and birth is the process of expelling the fetus that occurs in a full-term pregnancy (37-42 weeks), spontaneous birth with a back of the head presentation, without complications for both mother and fetus [1]. Labor pain is the experience experienced by the mother during labor about the physical sensations associated with stretching the uterus, opening the mouth of the uterus or the so-called cervix and lowering the fetal part during labor. The pain felt can cause an increase in blood pressure, pulse and muscle stretching [2]. Labor is a tense and emotionally evocative time for the mother and her family, and can even be a painful and frightening time for the mother. One of the factors that affect the course of labor is labor pain, where with increasing feelings of pain, mothers always ask that their labor be accelerated and want to be given painkillers [3]. The pain caused when facing labor is caused by uterine contractions that will push the baby out of the uterus gradually little by little. As a result of the thrust of these contractions, the cervix will gradually begin to open, stretching little by little, to make way for the baby's exit [4].

If this is not resolved, it will harm the mother and pose a risk of fetal distress which results in the death of the mother and baby, so that the handling and supervision of labor pain, especially in the active phase I, is very important, because this is the determining point whether a laboring woman can undergo normal labor or end with an action due to complications caused by severe pain [5]. Currently, there are various ways to deal with pain for the labor process either pharmacologically or using drugs or non-pharmacologically or without drugs. Pharmacological methods are the use of drugs such as the use of analgesia, which is a liquid that is inserted into the body so that it does not feel pain or contractions [6]. Music therapy offers a method of distraction that can reduce pain and increase a state of deep relaxation that can distract the mother from pain during labor. This therapy can be done by all health workers not necessarily with a specialized practitioner. Music acts on the autonomic nervous system, the part of the nervous system responsible for controlling blood pressure, heart rate and brain functions that control

feelings and emotions. Both systems react sensitively to music. When in pain, we become fearful, frustrated and angry which makes us tense the muscles of the body, resulting in severe pain [6].

Listening to music regularly helps the body relax physically and mentally, thus helping to heal and prevent pain. In the process of labor, music therapy serves to overcome anxiety and reduce pain because it is able to provide a pleasant sensory stimulus that causes the release of endorphin [7]. Measuring the pain scale by using the numerical rating scale (NRS), and experimentally, music therapy is a form of implementation by listening to music and songs in an integrated and directed manner to guide mothers during pregnancy with the aim that pregnant women feel relaxed, early stimulation of the fetus, and establish an emotional connection between the mother and her fetus. Music also affects the parasympathetic nerve or automatic nervous system, either directly or indirectly [8]. Efforts to overcome pain, many non-pharmacological methods to reduce labor pain that can be done by a nurse, including relaxation, breathing techniques, focus of attention, physical exercise, music therapy, massage, acupressure, acupuncture, aromatherapy, hypno-brithing [9]. One method for relaxation techniques that has never or rarely been applied in nursing practice is music therapy. Music therapy is one of the methods for relaxation techniques that are rarely applied in maternity nursing practice, even though music therapy is one of the effective distraction techniques that can reduce physiological pain, stress and anxiety by diverting one's attention from pain [10].

Giving classical music, especially Mozart music, which has purity and simplicity in melody and frequency can increase and stimulate endorphin (a hormone useful for reducing pain) and regulate stress-related hormones, namely adrenaline and cortisol. Music provides a pleasant sensory stimulus, causing the release of endorphins so that pain impulses do not reach the cerebri cortex and pain can be diverted so that the mother will feel more relaxed [11]. Based on this background, it is necessary to conduct research that aims to determine the effectiveness of music therapy on reducing pain in the first stage of labor.

2. METHOD

This research is a type of quantitative research using quasy experimental design type pre test-post test design. The sample in this study were normal laboring mothers totaling 30 respondents. Sampling technique with total sampling. Data analysis using wilcoxon test

3. RESULTS AND DISCUSSION

Table 1. Level of labor pain during the first stage before music therapy (n=30)

Labor Pain Level	Before music therapy	
	F	%
Mild pain	4	13
Moderate pain	16	53
Controlled weight	10	33
Uncontrolled weight	0	0

Based on table 1 above, the level of labor pain during the first stage before music therapy was performed, the majority of respondents were in moderate pain levels.

Table 2. Level of labor pain during the first stage after music therapy (n=30)

Tingkat Nyeri Persalinan	Setelah dilakukan terapi musik	
	F	%
Mild pain	18	60
Moderate pain	12	40
Controlled weight	0	0
Uncontrolled weight	0	0

Based on Table 2, it shows that after music therapy is performed on mothers with the results of labor pain in the first stage, the majority of respondents experience mild pain.

Analisis Bivariat

Tabel 3. Average level of labor pain in the first stage before and after music therapy (n=30)

Variabel	Mean	S. Deviation	N	Sig
Before music therapy	3,20	0,610	30	0,003
After music therapy	2,47	0,507	30	0,001

Based on table 3, the results of data analysis showed that labor pain before music therapy Mean was 3.20 with a standard deviation of 0.610. Experienced a decrease after music therapy on average of 2.47 with a standard deviation of 0.507. Then to determine the p value using the Wilcoxon test so that the results obtained sig (2-tailed = 0.000). This result is smaller than the specified significance of 0.05, which means that there is an effect on the level of labor pain in the latent phase 1 after giving music therapy.

The number of samples used in this study were 30 respondents before music therapy obtained the results of 4 people (13%) in mild pain intensity, 16 people (53%) moderate pain intensity, 10 people (33%) controlled severe pain intensity. From the respondent's data, it was found that the pain variation from mild pain to severe pain was controlled. The data shows that most of the respondents with labor pain in the first stage experienced moderate pain. The results of the research that the researchers conducted, it was found that there was an effect of pain before and after music therapy on labor pain during the first stage, the results obtained were 18 people (60%) in mild pain intensity, 12 people (40%) in moderate pain intensity.

Nonpharmacological methods to reduce labor pain that can be done by a medical staff, one of which is by using music therapy. One type of music to reduce labor pain is Javanese langgam music. In a study conducted by Safitri (2012) showed that Javanese langgam can reduce the level of pain and anxiety felt by laboring mothers. Javanese music is more effective in reducing pain and anxiety of laboring women, because the type of music with the appropriate tempo can affect the limbic system that gives an emotional effect on a person [12].

Music therapy in labor management is a form of activity that uses music and songs / songs in an integrated and directed manner in guiding the mother during labor to achieve the goal of relaxation for the mother when the contraction pain is felt or by using earphones according to the music that nature likes such as the atmosphere of a waterfall with gurgling water coming down, or with classical music. The music therapy method in mothers who are approaching childbirth will be very beneficial for mothers in diverting pain stimuli when contractions are felt, but with different pain thresholds, a mother can perceive pain depending on the mother's self-defense mechanism. Therefore, it is necessary to prepare the mother physically and mentally well for the mother in waiting for a healthy love fruit so that later it can strengthen harmony in the family [13].

Music therapy is an effective method especially for respondents who experience labor pain. According to Robbert (2002), music affects pain perception by distraction, relaxation and creating a sense of comfort. Music can reduce the perception and experience of pain and increase tolerance to acute and chronic pain. Music distracts patients from pain, breaks the cycle of anxiety and fear that increases pain reactions, and diverts attention to pleasant sensations. This is supported by the release of endorphins which produce a palliative effect [12].

The results of pain intensity before and after music therapy then carried out the Wilcoxon test found that in the implementation of music therapy on latent phase I labor pain there was a decrease in Mean (average) pain levels before music therapy of 3.20 with a standard deviation of 0.610 and after music therapy the Mean value became 2.47 with a standard deviation of 0.507. After the Wilcoxon test was carried out, the sig (2-tailed) = 0.000 was obtained which was smaller than the specified significance of 0.05. This means that there is an influence on the level of labor pain during the first stage after being given music therapy. This means H_0 = rejected and H_a = accepted. The results of this study prove that music therapy is very effective in reducing labor pain during the first stage.

This study is in accordance with the results of research (Kurnia 2010) Music therapy can reduce the pain scale. The intensity of pain before being given classical music therapy is moderate pain with a scale of 4-6 (100%), after being given classical music therapy now the intensity of pain is 59.1% who

experience moderate pain and 40.9% who experience mild pain [14]. Efforts to deal with maternal pain during labor, especially in primiparous mothers, are one of the solutions that are beneficial to the mother and her fetus. The methods for controlling pain during the labor process take place, namely by using pharmacological and non-pharmacological methods. Pharmacological methods, for example by administering analgesic drugs, while non-pharmacological methods are also very important for controlling pain in labor because this method does not harm the mother or fetus and has no allergic effects or drug effects. Among them are the provision of distraction techniques, relaxation, massage and many other ways [15].

4. CONCLUSION

Music therapy is one of the distraction techniques, the benefits of music therapy in the labor process here are very functional to overcome anxiety and reduce pain. As for sufferers of chronic pain due to a disease, music therapy is proven to help overcome pain. Further research needs to be done with a larger sample size. The mean value of the latent phase I labor pain level before being given music therapy is 3.20 with a standard deviation of 0.610 and the mean value of labor pain after being given music therapy is 2.47 with a standard deviation of 0.507. There is a significant influence between pain intensity before and after music therapy (p value = 0.000 < 0.05) which means there is an influence on the intensity of labor pain in latent phase I before and after being given music therapy. This shows that music therapy is effective in reducing the pain of respondents in labor phase I.

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