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EFFECTIVENESS OF MUSIC THERAPY FOR FIRST STAGE LABOR PAIN IN PMC HOSPITAL PEKANBARU CITY

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ABSTRACT

Death during childbirth is the main cause of female mortality during the reproductive period. Childbirth is a process that begins with uterine contractions which cause pain during the labor process. One effort that a midwife can make is a relaxation technique which is very useful for dealing with labor pain, namely by using music therapy. To overcome pain, you can use non-pharmacological methods carried out by midwives, including relaxation, breathing techniques, physical exercise, music therapy, massage, acupressure, acupuncture, aromatherapy, hypno-brithing. Music therapy is an effort to improve physical and mental quality with sound stimulation consisting of rhythm, melody, harmony, form and style which is organized in such a way that it can maintain physical and mental health. One type of music used in this research is classical music. This research was conducted with the aim of determining the effectiveness of music therapy in reducing labor pain during the first stage of the active phase. The design of this research is descriptive research, using quasi-experimental research with a sample size that meets the inclusion criteria in this research, totaling 30 people. The data analysis used was the Wilcoxon test. From the research, it is known that the majority of 30 respondents experienced moderate pain, 19 respondents (63.3%), and 8 respondents (26.7%) experienced severe pain before music therapy was carried out. Meanwhile, after music therapy, the majority experienced mild pain, 17 respondents (56.7%), 13 respondents (43.3%) experienced moderate pain and no more respondents experienced severe pain. The results of the analysis showed that labor pain decreased after music therapy was given an average of 2.47 with a p value (0.000), which means there was an influence on the level of labor pain during the first active phase after music therapy was given. And it is hoped that midwives can improve maternal care, one of which is reducing labor pain.

Keywords: Music therapy, labor pain

INTRODUCTION

Labor pain is a physiological condition. Labor pain begins to appear in the first stage of labor, the latent phase and the active phase. The first stage or opening stage is the first period of labor until the cervix opens completely. Stage I is divided into 2 phases, namely the latent phase and the active phase. The latent phase is a very slow opening phase from 0 to 3 cm which takes 8 hours. Pain comes from uterine contractions and cervical dilatation (Yanti, 2009).

In research on women giving birth in the United States, 93.5% reported experiencing sharp or tolerable pain, while

in Finland as many as 80% reported experiencing severe and unbearable pain (Baker, 2011). Meanwhile, research by Marpaung (2011) entitled Description of Labor Pain in Primigravida Mothers at the Sally Medan Maternity Clinic showed that the majority of primigravida mothers experienced severe pain, as many as 54% experienced moderate pain, and as many as 46% experienced mild pain.

At the Medical Record Hospital, the obstetric case data is known as follows: in 2008 there were 771 women giving birth and 46 people experiencing prolonged labor (6.47%), in 2009 there were 766 mothers giving birth and 54 people experiencing

prolonged labor. people (7.04%), in 2010 there were 740 mothers who gave birth and 57 people experienced prolonged labor (7.70%). If the pain is not resolved immediately, it can cause death in the mother and baby, because pain causes the mother's breathing and heart rate to increase which causes blood and oxygen flow to the placenta to be disrupted (Payne and Martin, 2002). Handling and monitoring labor pain, especially in the first stage, is very important, because this determines whether a mother in labor can undergo a normal birth or end with an action due to complications caused by very intense pain (Hermawati, 2009). Many factors influence an individual's perception and response to pain. For example, culture, anxiety and fear, birth experience, support system and preparation for childbirth (Maryunani, 2010).

In efforts to overcome pain, there are many non-pharmacological methods to reduce labor pain that can be carried out by a nurse, including relaxation, breathing techniques, focused attention, physical exercise, music therapy, massage, acupressure, acupuncture, aromatherapy, hypno-brithing (Judha, 2012). One method used to reduce pain during labor and which is rarely applied in midwifery practice is music therapy. Music therapy is an effort to improve physical and mental quality with sound stimulation consisting of melody, rhythm, harmony, form and style which is organized in such a way as to maintain physical and mental health (Purwanto, 2013). One type of music to reduce labor pain is classical music.

The results of research by Simavli (2014) entitled Effect of Music on Labor Pain Relief, Anxiety Level and Postpartum Analgesic Requirement: A Randomized Controlled Clinical Trial, mothers in the music therapy group had lower levels of pain and anxiety compared to mothers in the control group at all stages of labor ($p < 0.001$). From the results of this study, it is known that there is a significant influence

between the provision of music therapy and pain intensity.

Based on the results of Gokildiz's (2018) research entitled The effect of music on pain and anxiety of women during labor on first time pregnancy: A study from Turkey. Pain was statistically less in the experimental group. The anxiety scores of women in labor were similar for the experimental and control groups. After training, the mean anxiety score was lower in the experimental group and the correlation was statistically significant.

The results of a preliminary study through interviews with 5 patients showed that 3 people experienced severe pain during labor and 2 people experienced moderate pain. Based on this background, it is necessary to carry out research aimed at determining the effectiveness of music therapy in reducing pain in the first stage of the latent phase in hospitals. PMC through quantitative research.

RESEARCH METHODS

This type of research is quantitative research using a quasi-experimental design in the form of a pre test-post test design. the location of the research is This research was conducted at a hospital. PMC Pekanbaru. This research was conducted from May to July 2022. The population in this study were all mothers who gave birth normally in the hospital. There were 124 PMCs. The samples in this study were mothers who gave birth during the first active phase, namely 30 respondents. Sampling was taken using total sampling technique. Data analysis uses the Wilcoxon test.

RESULTS AND DISCUSSIONS

Tabel 1 Level of labor pain in the first stage of latent phase before music therapy (n=30)

Labor pain level	before doing music therapy	
	f	%
Mild pain	3	10
Moderate pain	19	63
severe Pain is Controlled	8	27

The pain level of the first stage of labor in the latent phase before music therapy was carried out by the majority of respondents was at a moderate pain level.

Table 2 Level of labor pain in the first stage of latent phase after music therapy (n=30)

Labor pain level	after doing music therapy	
	f	%
Mild pain	17	56,7
Moderate pain	13	43,3
severe Pain is Controlled	0	0

Table 2 shows that after carrying out music therapy for labor pain in the 1st stage of latent phase, it was found that the majority of respondents experienced mild pain.

Tabel 3 Average level of labor pain during the latent phase before and after music therapy (n=30)

Variabel	Mean	Std. Deviation	N	Sig (2-tailed)
before doing music therapy	3,20	0,610	30	0,003
after doing music therapy	2,47	0,507	30	0,001

The results of research data analysis showed that labor pain before music therapy was carried out. The mean was 3.20 with a standard deviation of 0.610. The average decrease after music therapy was 2.47 with a standard deviation of 0.507.

Then, to determine the p value, use the Wilcoxon test to obtain a sig result (2-tailed = 0.000). This result is smaller than the specified significance of 0.05, which means there is an influence on the level of labor pain in the 1st stage of the latent phase after giving music therapy.

The sample in this study was 30 respondents, the results obtained were 3 people (10%) with mild pain intensity, 19 people (63%) with moderate pain intensity, 8 people (27%) with controlled severe pain intensity. From the respondent data, it was found that variations in pain ranged from mild pain to controlled severe pain. These data show that the majority of respondents experiencing labor pain in the first stage of the latent phase experienced moderate pain. The results of the research conducted by the researchers, found that there was an influence of pain before and after music therapy on labor pain in the first stage of the latent phase. The results showed that 17 people (56.7%) had mild pain intensity, 13 people (43.3%) had mild pain intensity. currently.

Music therapy is an effective method, especially for respondents who experience labor pain. According to Robbert (2002), music influences the perception of pain by means of distraction, relaxation and creating a feeling 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 shifts attention to pleasurable sensations. This is supported by the release of endorphins which produce palliative effects.

The results of pain before and after music therapy can be seen are that before music therapy 3 people (10%) had mild pain intensity and after music therapy there was a change to 17 people (56.7%) with light pain intensity. Moderate pain before music therapy was 19 people (63%) and after

music therapy it decreased to 13 people (43.3%). Severe pain was controlled in the first stage of labor in the latent phase before receiving music therapy as many as 8 people (27%) and after music therapy no one experienced pain at controlled severe pain intensity. This proves that music therapy is effective in reducing labor pain during the first stage of latent phase in the hospital. PMC.

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

One of the non-pharmacological methods for reducing labor pain that can be carried out by medical personnel is using music therapy. One type of music to reduce labor pain is Javanese style music. Research conducted by Safitri (2012) shows that the Javanese style can reduce the level of pain and anxiety felt by mothers giving birth. Classical music therapy is more effective in reducing the pain and anxiety of mothers giving birth, because the type of music with an appropriate tempo can influence the limbic system which has an emotional effect on a person.

The mechanism of how music works as a therapeutic tool is that it affects all organ systems of the body. According to Candace Pert's (1974) theory,

neuropeptides and biochemical receptors released by the hypothalamus are closely related to emotional events. Its mild/relaxing properties are able to reduce levels of cortisol, epinephrine-norepinephrine, dopa and growth hormone in the serum (Nicholas & Humenick, 2002). Music that has entered the pituitary gland is able to provide an emotional response through negative feedback to the adrenal glands to suppress the release of the hormones epinephrine, norepinephrine and dopa which are called stress hormones. Mental problems such as reduced stress, calmness and relaxation (Djohan, 2009).

CONCLUSION

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

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