THE INFLUENCE OF MOZART MUSIC THERAPY ON REDUCTIONr OF DYSMENORHEA PAIN IN STUDENTS OF LEVELS I AND II DIPLOMA THREE MIDWIFERY STUDY PROGRAM STIKES BAKTI UTAMA PATI

Yuli Irnawati*

STIKes Bakti Utama Pati College of Health Sciences, Indonesia

Correspondence Address: yuliirnawati30@gmail.com

Abstract. Dysmenorrhea is acute pain experienced during menstruation. The heaviest pain usually only lasts for the first 24 hours of menstruation and begins to peak at the age of 15-16 years. MrsMenstrual erythema (dysmenorrhea) can interfere with daily activities, especially if it can reduce learning concentration. Non-pharmacological therapy can be used to reduce menstrual pain, one of which is the distraction of listening to Mozart's music. This music has a soft tone, the tone provides alpha wave stimulation, calm, makes the listener more relaxed, and reduces pain or pain. The purpose of this study was to determine the effect of Mozart's music therapy on reducing pain during dysmenorrhea on day 1 in grade I and II students of the Diploma Three Midwifery Study Program, Bakti Utama Pati College of Health Sciences.TypeThis research is experimental research, with a pre-experimental design (one group pretest-posttest). The total sample of 30 respondents was taken by purposive sampling using a pain scale observationvFLACC. Measurement of menstrual pain is done there was the first day of menstruation and the menstrual pain scale was measured again after classical music therapy (Mozart) using the same instrument. Statistical test using the Wilcoxon test. The results showed that there was an effect of Mozart music therapy on reducing the level of dysmenorrhea pain in Level I and II Students of the Diploma Three Midwifery Study Program, Bakti Utama Pati High School of Health Sciences, indicated by a p-value of 0.000 <0.05, which means that Ho is rejected and Ha is accepted. It is hoped that students will be able to apply Mozart's music therapy regularly so that the level of dysmenorrhea pain decreases

Keywords: Menstrual pain, music Mozart therapy

INTRODUCTION

A young woman's first menstruation is called menarche. The age of menarche is between 11-15 years (average 13 years), depending on various factors some experts say that girls with more fatty tissue experience menstruation faster than thin children, heavy athletic training can slow menstruation or interfere with menstrual function, chronic diseases especially those that affect food intake and tissue oxygen can delay menstruation. Generally, menstrual cycles range from 15 to 45 days apart, with an average of 28 days, with an average of 4-6 days. Blood menstruation usually does not freeze. The amount of blood loss per cycle ranges from 60-80 ml (Price & Wilson, 2006).

The incidence of primary dysmenorrhea in Indonesia is 54.89% while the rest are sufferers of the secondary type. Dysmenorrhea causes 14% of adolescent patients to often be absent from school and not carry out daily activities (Calis, 2011) and the classification of dysmenorrhea is divided into two, namely primary dysmenorrhea and secondary dysmenorrhea (Smiltzer & Bare, 2002). Reducing menstrual pain can be done in 2 ways, namely by pharmacological therapy and non-pharmacological therapy. One of the treatments for menstrual pain with non-pharmacological therapy can be done with Mozart music therapy. Music is the embodiment of certain arts such as sound art, dance, drama, poetry reading, and rhythmic movements. Meanwhile, music therapy is a business in the form of assistance which is a planned process using certain sounds or rhythms (Suriyana, 2012). At this time many types of music can be heard, but music that places its class as music with medical significance is classical because this music has an extraordinary magnitude in the development of health sciences, including having a soft tone, its tone provides alpha wave stimulation, calms, and makes the listener more relaxed (Dofi, 2010).

According to Turana in Aizid (2011), all types of music can be used as therapy, such as relaxation songs, popular songs, and classical music. However, what is most recommended according to him is music or songs with a tempo of around 60 beats per minute which are relaxing like classical music. Because, if the tempo is too fast, unconsciously, the incoming stimulus will make a person follow the rhythm, so that the optimal resting state is not achieved. Among these classical music that often become a reference for music therapy is the classical music of Mozart.

According to Proverawati and Misaroh, menstruation that occurs in early adolescents tends to be

irregular, but as you get older, menstruation will become regular. Early adolescence occurs at the age of 10-18 years, so at that age teenagers are at the tertiary level. Based on this, the researchers chose respondents from the Diploma III Midwifery Study Program, STIKES Bakti Utama Pati, who were on average 18-20 years old. A study was previously done by Dera Oktavia (2015) with results research shows that classical music therapy (Mozart) affects reducing the intensity of menstrual pain in young women at SMA Negeri 1 Pontianak. The average menstrual pain scale before being given therapy was 6.00 with a standard deviation of 1.633. In the measurement after being given therapy, the average menstrual pain scale was 3.21 with a standard deviation of 2.070. The results of the paired sample t-test statistic obtained a p-value before and after classical music therapy (Mozart), namely, p = 0.000 (p <0.05), which means there was a significant decrease between the menstrual pain scale before and after being given classical music therapy (Mozart). So it can be concluded that Ho is rejected and Ha is accepted, namely, classical music therapy (Mozart) affects reducing the intensity of menstrual pain in young women at SMA Negeri 1 Pontianak in 2015.

Based on an initial survey conducted in October 2020 on student level I of the Three Midwifery Diploma Study Program, Bakti Utama Pati High School of Health Sciences, a total of 10 students showed that 6 students always experienced dysmenorrhea during menstruation and 4 students sometimes experienced dysmenorrhea. When students experienced dysmenorrhea, as many as 5 students chose to take anti-pain medication to reduce their pain complaints, while 3 students chose to drink herbal concoctions to reduce their pain. Two (2) students applied warm compresses to the stomach when experiencing dysmenorrhea. All students did not know about Mozart's music therapy, so they never applied it when experiencing dysmenorrhea (STIKES BUP, 2020).

The purpose of this research is to analyze the effect of Mozart music therapy on reducing dysmenorrhea pain in first and second-level students of the Diploma III Midwifery Study Program, Bakti Utama Pati High School of Health Sciences

METHODS

This research was conducted in February - April 2021 using a quantitative design with a queasy experimental group pretest-posttest design. The Population is Sall Level I and II students of the Diploma Three Midwifery Study Program, Bakti Utama Pati High School of Health Sciences, totaling 30 students. A sample of 30 people was selected using purposive sampling with inclusion and exclusion criteria given Mozart’s music therapy. Data collection techniques with the FLACC pain measurement tool on the first day of menstruation before being given classical music therapy (Mozart) and measuring the menstrual pain scale again after classical music therapy (Mozart) using the same instrument on the same day with an interval of 1 hour after the first dysmenorrhea pain level measurement. The data analysis used is the Wilcoxon parametric test

RESEARCH RESULT

The results of the research on the effect of music Mozart on reducing dysmenorrhea pain in level I and II students of the Three Midwifery Diploma Study Program STIKes Bakti Utam Pati with a sample of 30 respondents are as follows

Table 1. Frequency-Based DistributionDysmenorhea Pain Before Performing Mozart Music Therapy (Pretest) in Level I and II Students of Diploma Three Midwifery Study Program Bakti Utama Pati High School of Health Sciences

Pain Level	Amount	Percentage (%)
No Pain	0	0
Mild Pain	19	63,3
Moderate Pain	9	30
Severe Pain	1	3,3
Serious Pain	1	3,3
Amount	30	100

Source: Primary data, 2021

Based on table 1 data, it is known what happened to students during menstruation before being given Mozart music therapy as many as 19 students (63.3%) experienced mild pain levels, 9 students (30%) experienced moderate pain levels

Table 2. Frequency-Based DistributionDysmenorrhea Pain After Performing Mozart Music Therapy (Postest) on Level I and II Students of Diploma Three Midwifery Study Program Bakti Utama Pati High School of Health Sciences

Pain Level	Amount	Percentage (%)
No Pain	0	0
Mild Pain	29	96.6
Moderate Pain	1	3,3
Severe Pain	0	0
Serious Pain	0	0
Amount	30	100

Source: Primary data, 2021

Based on Table 2 data, it is known what happened to students during menstruation after being given Mozart music therapy as many as 29 students (96.6%) experienced mild pain levels, and 1 student (3.3%) experienced moderate pain levels.

Table 3. The results of the analysis of the Wilcoxon Effect TestMozart's Music Therapy Against DeclineLevelDysmenorrhea Pain in Level I and II Students of Diploma Three Midwifery Study Program Bakti Utama Pati High School of Health Sciences

Variable	N	Means	Difference	p-Values
Pain scale before music therapy Mozart	30	3.7667	2.5334	0.000
Pain scale after music therapy Mozart	30	1.2333		

Source: Primary data, 2021

Based on Table 3, it is known that the statistical test results show that the average pain scale that occurs before being given Mozart music therapy has a range of3.7667 whereas after being given Mozart music therapy the average pain scale was 1.2333 so the difference obtained from both the pretest and posttest averages was 2.5334. The p-value is 0.000 <0.05, which means that Ho is rejected and Ha is accepted. This indicates that there is an effect of Mozart music therapy on reducing the level of dysmenorrhea pain in Level I and II Students of the Diploma Three Midwifery Study Program, Bakti Utama Pati High School of Health Sciences

RESULTS AND DISCUSSION

The results of the study showed that classical music therapy (Mozart) affected reducing the intensity of menstrual pain in young women in the Diploma Three Midwifery Study Program, Bakti Utama Pati High School of Health Sciences. The average menstrual pain scale before being given therapy, namely 3.7667. In the measurement after being given Mozart music therapy, the average menstrual pain scale was obtained1.2333. The results of the Wilcoxon test statistic test obtained a p-value before and after classical music therapy (Mozart), namely, p = 0.000 (p <0.05), which means there was a significant decrease between the menstrual pain scale before and after being given classical music therapy (Mozart). So it can be concluded that Ho is rejected and Ha is accepted so that there is an effect of Mozart music therapy on reducing the level of dysmenorrhoea pain in Level I and II Students of Diploma Three Midwifery Study Program, Bakti Utama Pati High School of Health Sciences. The results of this study are similar to the results of a study conducted by Eniwarti (2014) which stated that the results of the univariate analysis revealed that the average degree of pain before the Mozart music therapy was performed was 4.67 (moderate pain), the average pain degree after the Mozart music therapy was 3.72 (mild pain). The results of the bivariate analysis show that there is an effect of Mozart music therapy on reducing the degree of menstrual pain in Level I and II Students of the Diploma Three Midwifery Study Program, Bakti Utama Pati High School of Health.

Sciences, p-value = 0.000, and this study show that classical music therapy (Mozart) affects reducing the intensity of menstrual pain. According to Dofi (2010), this is because classical music has a soft tone, its tone stimulates alpha waves and makes the listener calm and relaxed to reduce the

perception of pain. According to Hendrik (2006), dysmenorrhea found an increase in levels of PGE and PGF2 alpha in the blood, which will stimulate the myometrium resulting in increasing uterine contractions and dysrhythmias. The result will be a decrease in blood flow and oxygen to the uterus and will result in ischemia. So that a response arises from nociceptors because there is a stimulus that is harmful and starts neural transmission by releasing substances that produce pain according to Bobak, Lowdermilk, and Jonsen (2004) that listening to music can produce endorphins substances (substances similar to morphine that the body supplies which can reduce pain). pain) which can inhibit the transmission of pain impulses in the central nervous system, so that the sensation of menstrual pain can be reduced, music also works on the limbic system which will be delivered to the nervous system which regulates the contractions of the body's muscles, to reduce muscle contractions.

Based on the results of the research and theory described above, according to a researcher of classical music therapy (Mozart), it affects reducing the intensity of menstrual pain in young women at Level I and II Students of Diploma Three Midwifery Study Program, Bakti Utama Pati High School of Health Sciences. Therefore therapy using classical music (Mozart) can be used as a method to reduce the intensity of menstrual pain (dysmenorrhea) in young women, especially in Level I and II Students of Diploma Three Midwifery Study Program, Bakti Utama Pati High School of Health Sciences

CONCLUSION

There is an effect of Mozart music therapy on reducing the level of dysmenorrhea pain in Level I and II Students of the Diploma Three Midwifery Study Program, Bakti Utama Pati High School of Health Sciences, indicated by a p-value of 0.000 <0.05, which means that Ho is rejected and Ha is accepted. It is hoped that the results of this study can be used as information that can be recommended to students to further motivate students to apply Mozart's music therapy independently.

REFERENCES

Aizid, R. (2011). Healthy and Smart with Music Therapy- Healthy Body, Intelligent Brain. Yogyakarta: Laksana.

Bobak, Irene. M., Lowdermilk., and Jensen. 2004. Textbook of Maternity Nursing. Issue 4. Jakarta: EGC.

Dofi, BA (2010). Music Psychology Health therapy. Jakarta: Golden Terayon Press.

Eniwarti. (2014). The Influence of Mozart's Music Therapy Against Decline *Degrees of Menstrual Pain in Young Girls at Padang Japan High School in 2014*. Retrieved June 12, 2021, from http://ejurnal.stikesprimanusantara.ac.id.

Hendrik. (2006). Menstrual Problems: An Overview of Islamic and Medical Sharia. Solo: Three Triads.

Octavia, Dera. (2015). The Effect of Classical Music Therapy (Mozart) on the Intensity of Menstrual Pain in Young Girls at SMA Negeri 1 Pontianak in 2015. Proners Journal Vol. 3 No. 1 accessed on March 20, 2021, from https://jurnal.untan.ac.id/index.php/ https://jurnal.untan.ac.id/index.php/ jmkeperawatanFK/article/view/10781

Price, &. Wilson. (2006). Pathophysiology Clinical Concepts Processes *Disease, vol.2, ed.6*.Jakarta: EGC.

Santrock, J. (2003). Adolescent Development Adolescence. Jakarta: Erlangga.

Smeltzer, &. Bare. (2002). Brunner Textbook of Medical-Surgical Nursing *& Suddarth, vol.2, ed.8*.Jakarta: EGC.

Suriyana. (2012). Music Therapy . Yogyakarta: Galang Press.