

THE EFFECT OF RELIGIOUS MUSIC THERAPY ON REDUCING THE DEGREE OF MENSTRUAL PAIN IN ADOLESCENT GIRLS

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ABSTRACT

Introduction: Dysminorrhea is a complaint of menstrual pain that is often experienced by adolescent girls, affecting their daily activities. Non-pharmacological interventions such as religious music therapy can be an alternative in reducing menstrual pain. **Purpose:** To determine the effect of religious music therapy on reducing the degree of menstrual pain in adolescent girls. **Method:** This study used a quasi experiment design with a one group pretest-posttest design. The sample amounted to 15 adolescent girls in RT 09 Kp. Mekar Baru, Tangerang Regency, selected by purposive sampling. Pain measurement used NRS scale, and the data were analyzed by Wilcoxon test. **Results:** There was a decrease in the degree of menstrual pain after religious music therapy intervention. Wilcoxon test results showed a p value = 0.001 ($p < 0.05$), which means there is a significant effect of religious music therapy on reducing menstrual pain. **Conclusion:** Religious music therapy effectively reduces the degree of menstrual pain in adolescent girls. Suggestion: Young women are advised to use religious music therapy as a non-pharmacological independent method to reduce menstrual pain.

Keywords: Dysminorrhea, Menstrual Pain, Religious Music Therapy

INTRODUCTION

Human growth and development into adulthood undergoes a stage called puberty. One of the signs that a woman has entered puberty is the onset of menstruation. Menstruation is periodic and cyclic bleeding from the uterus accompanied by exfoliation (desquamation) of the endometrium (Hall & Guyton, 2020). One of the disorders that occur during menstruation is dysminorrhea. Dysminorrhea is pain or during menstruation, this is one of the most common gynecological problems in adolescent girls (Kholisotin et al., 2021). Dysminorrhea is generally caused by increased prostaglandin hormones, an increase in prostaglandin hormones is caused by a decrease in estrogen and progesterone hormones causing the endometrium to swell and die because it is not fertilized. The increase in prostaglandin hormone causes the muscles of the womb to contract (Perry, 2022).

The incidence of menstrual pain according to the World Health Organization (WHO) is 55% among productive age, where 15% complain of limited activity due to menstrual pain. On average in the world, 50% in each country experience menstrual pain. The incidence rate in America is 59.7% in Sweden 72% (Napu et al., 2023). The incidence of dysminorrhea occurred in the Tangerang Provincial Health Office at the Tangerang Provincial Health Center in 2011, the total number of dysminorrhea patient visits was 237 cases, in 2012, the number increased.

There are many ways to eliminate or reduce dysmenorrhea, both pharmacologically, non-pharmacologically and combined. Behavior in overcoming dysmenorrhea pain in adolescents can be done in a non-pharmacological way, namely

religious music therapy (Pratiwi, 2024). Listening to music such as religious music can produce endorphins (a morphine-like substance supplied by the body that can reduce pain), when listening to music our brain will automatically produce a certain amount of serotonin so that we can feel calm and distract, music as a healing effort actually aims to activate inner healing in our body (Ba et al., 2024). Pain reduction using music is very effective because music can divert attention which can increase the intensity of pain or that felt by adolescent girls, by listening to music the brain stimulates the release of endoprine which functions to reduce the pain felt in the affected body part (Angkoontassaneeyarat et al., 2025).

Music as a healing endeavor actually aims to activate inner healing in our bodies. The rhythm of our body with the right movements and combinations of resonating sounds, which fill the space around us. There is no exception to the music law in the harmony of nature. This religious music also brings a relaxing effect on the human body and mind (Komariah et al., 2020). activates inner healing in our body. Pain reduction using music is very effective because music can divert attention which can increase the intensity of pain or that felt by adolescent girls, by listening to music the brain stimulates the release of endoprine which functions to reduce the pain felt in the affected body part (Ba et al., 2024). Music as a healing effort actually aims to activate inner healing in our bodies. The rhythm of our body with movement and the right combination of resonating sounds, which fill the space around us. There is no exception to the music law in the harmony of nature. This religious music also has a relaxing effect on the human body and mind (Huda et al., 2023).

Based on this, researchers are interested in conducting research on the effect of music on reducing pain during menstruation, because music therapy is easy to apply. In addition, researchers also want to provide a non-pharmacological alternative in reducing pain during menstruation, namely by using religious music therapy. The purpose of this study is to determine the effect of religious music therapy on reducing the degree of menstrual pain in adolescent girls as a non-pharmacological intervention.

METHODS

This study used a quasi-experimental design with a one group pretest-posttest design. The research location was carried out in RT 09 Kp. Mekar Baru, Tangerang Regency. This research was conducted from June to July 2022. The sampling technique used purposive sampling technique involving 15 adolescent female respondents with inclusion criteria, namely adolescent girls who experience pain during menstruation, aged 13-19 years, willing to become respondents and can communicate well.

Data collection using demographic questionnaires, questionnaires measuring menstrual pain scales using the NRS Scale (Numerical Rating Scale) where this instrument has been tested for validity and reliability in previous researchers. Data were processed using the Wilcoxon test with the help of SPSS version 22. This research has passed the ethical test by the institution.

The researcher obtained ethical approval by the Ethics Committee of the Faculty of Nursing, University of Indonesia, Number: SK-69/UN2.F12.DI.2.1/ETIK 2023 and the Ethics Committee of the Tangerang Regency Hospital Number: 445/003-KEP-RSUTNG. The researcher explained the procedures, objectives, benefits, risks, rights, and obligations of participants through the research

explanation sheet. Respondents' participation was voluntary as evidenced by the signing of the Informed Consent sheet.

RESULTS

The results of this study are presented to show changes in the degree of menstrual pain before and after religious music therapy intervention on respondents. Data presentation includes demographic characteristics, pain scale distribution, data normality test, and statistical analysis results using the Wilcoxon test to determine the effectiveness of the intervention provided.

Table 1. Respondent Characteristics

Characteristics	Frequency (f)	Percentage (%)
Age		
• 13-15 year	5	33.3
• 16-19 year	10	66.7
Education level		
• SMP	4	26.7
• SMA	11	73.3

Based on Table 1, the age characteristics of more than half of the respondents aged 16-19 years were 10 respondents (66.7%). education characteristics of more than half of the respondents with a high school education history as many as 11 respondents (73.3%).

Table 2. Differences in pain scale before and after intervention

Characteristics	Frequency (f)	Percentage (%)
Pain scale before intervention		
• Moderate	3	20
• Severe	12	80
Pain scale after intervention		
• Moderate	11	73.3
• Severe	4	26.7

Based on Table 2. Frequency Distribution of Pain Degrees Before Religious Music Therapy was performed, it was found that the category of menstrual pain before music therapy intervention with severe pain scores was 12 respondents (80.0%). The frequency of pain levels after religious music therapy was obtained in the category of more than half of the respondents experiencing mild pain as many as 11 respondents (73.3%).

Table 3. Normality Test

Shapiro-Wilk		
Statistic	df	Sig
.815	15	.006
.812	15	.007

Based on table 3, it can be seen that the results before being given music therapy sig value 0.006 after being given therapy sig value 0.007. From the acquisition value of the normality test above, it can be seen that the sig value <0.05 which means that the data variation is not normally distributed. So in analyzing the data using non-parametric tests, namely the Wilcoxon Test to determine the effect of reducing menstrual pain in adolescent girls.

Table 4. Wilcoxon Test on the Effect of Religious Music Therapy on Reducing the Degree of Menstrual Pain in Adolescent Girls

Pain levels	N	Median (Min maks)	Mean ± S.D	P Value
Pain scale before intervention	15	7,00 (6-2)	7,07 ± 0,704	0,001
Pain scale after intervention	15	3,00 (8-4)	3,00 ± 0,706	0,001

Based on Table 4. shows that the degree of menstrual pain before and after intervention in adolescent girls, the average degree of menstrual pain before the intervention was 7.07 then after the intervention was 3.00. With a p value = 0.001 (p value <0.05) which means that there is an effect in the provision of religious music therapy on reducing menstrual pain in adolescent girls, with the results of the mean difference in the decrease in the degree of pain which is 4.07.

DISCUSSION

In the study, the majority of respondents were teenage girls with junior high to high school education. Adolescence is a period of puberty characterized by significant hormonal fluctuations and physiological changes. WHO data classifies adolescence between 10-19 years of age as an important transitional period in reproductive and emotional development (Kholisotin et al., 2021). According to Kusmiran (2016), during this period, adolescents experience an increase in prostaglandin levels during menstruation which causes severe pain, especially in those who do not have sufficient experience and knowledge in dealing with the menstrual cycle. Therefore, age is an important factor that affects pain levels, both biologically and psychologically (Eltumi & Tashani, 2017).

On the other hand, education level has been shown to influence understanding of reproductive health and pain management strategies. Adolescents with higher education tend to have better access to information about non-pharmacological therapies, such as music therapy (Briggs, 2016). Study by Farotimi et al. (2016) revealed that good knowledge of menstrual pain management is directly related to more positive coping actions. This means that education not only shapes cognitive abilities, but also acts as a protector against the psychological impact of menstrual pain, especially in choosing safe and effective interventions.

Religious music therapy in this study was chosen because it can create relaxation and stimulate the release of serotonin, as well as endorphins which act as natural analgesics (Moulaei et al., 2023). This finding is in line with the Gate Control theory by Melzack and Wall, which explains that non-pain sensory stimulation such as music can close the "pain gate" in the central nervous system and reduce pain transmission to the brain (Hall & Guyton, 2020). By listening to religious music, especially those that contain spiritual values, respondents not only experience a physiological decrease in pain, but also gain inner peace which strengthens the therapeutic effect (Bradshaw et al., 2016).

Comparisons with previous studies such as by Godjali et al (2023) and Pratiwi (2024), reinforce that music therapy is effective in reducing menstrual pain. However, Pratiwi approach adds a religious dimension that strengthens the suggestive and spiritual effects of the therapy. This is in line with the opinion of de Diego-Cordero et al (2022) who emphasized that religious music as a spiritual therapy can improve emotional and physical well-being. It is this combination of audio therapy and spiritual values that sets this approach apart from regular music therapy, making it suitable for young women with a strong religious background.

CONCLUSION

Based on the results of the study, it can be concluded that there is a significant effect between the provision of religious music therapy on reducing the degree of menstrual pain in adolescent girls. This therapy is proven to be effective as a non-pharmacological intervention that is simple, safe, and easy to implement independently to reduce menstrual pain that often interferes with adolescents' daily activities. Therefore, it is recommended that young women make religious music therapy an alternative to menstrual pain management, especially for those who want to avoid the use of drugs. In addition, health workers, especially nurses, can also utilize this therapy as part of a holistic approach to menstrual pain management, while educating adolescents about the importance of healthy and spiritual pain management methods.

CONFLICT OF INTEREST

All authors have no conflict of interest related to this study.

ACKNOWLEDGMENTS

For the Nursing Academy Community of STIKes Widya Dharma Husada Tangerang and also RT 09 Kp. Mekar Baru Kab. Tangerang.

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