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The Effect of Classical Music Therapy on Pain and Anxiety in Hypertensive Patients at Otanaha Hospital

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ABSTRACT

Hypertension can be a serious threat to society because it can increase the risk of heart disease, stroke and other health problems. The treatment is carried out with non-pharmacology, namely listening to music, one of which is classical music. This study aims to determine the effect of classical music therapy on pain and anxiety in Hypertension patients at Otanaha Hospital. The research method uses pre-experimental with one group pre-test and post-test design approaches. The population of this study is hypertension patients who are in Otanaha Hospital in internal room 2. The number of samples in this study amounted to 50 respondents using a nonprobability sampling technique in the form of accidental sampling. The results showed that pain before being given music therapy was in the moderate category as many as 24 respondents (48%), heavy as many as 5 respondents (10%). After being given music therapy, which was moderate as many as 15 respondents (30%), light as many as 30 respondents (70%). Anxiety before being given music therapy was in the severe category of 7 respondents (14%), very severe as many as 43 respondents (86%). After being given music therapy, it was moderate as many as 45 respondents (90%), light as many as 5 respondents (10%). The results of the statistical test were obtained that there was an effect of classical music therapy on pain and anxiety in hypertensive patients at Otanaha Hospital using the Wilcoxon test for pain and anxiety using the Paired T-test with a p value of 0.000 (<0.05). Conclusion: the application of classical music therapy is able to reduce pain and anxiety in hypertensive patients. For people with hypertension, apply classical music therapy by modifying the environment that will be used so that the atmosphere is calm.

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INTRODUCTION

Hypertension is one of the significant health problems around the world, including in Indonesia. The existence of hypertension can be a serious threat to people's well-being, as it can increase the risk of heart disease, stroke, and other health problems (Amin et al., 2024). According to the latest report from the WHO in 2023, the prevalence of hypertension continues to increase globally, with more than 30% of the adult population worldwide affected. Based on data in Indonesia obtained from the latest Riskesdas in 2022, the incidence rate of hypertension reached 34.11%. This incidence rate has experienced a significant increase when compared to the data obtained from the previous Riskesdas results in 2019, obtained from the results of community blood pressure measurement and a significant increase occurred in the measurement of blood pressure over 60 years old, which is 25.8%. Death toll in Indonesia due to hypertension is 427,218 deaths (Rahmi et al., 2024).

Based on data from the Gorontalo Provincial Health Office in 2023-2024, the incidence of hypertension in Gorontalo is 93,932 people. With each regency/city area, namely Gorontalo City which is 21,174 people, Gorontalo Regency is 12,008 people, Boalemo Regency is 8,628 people, Bone Bolango Regency is 14,934 people, North Gorontalo Regency is 9,250 people, Pohuwato Regency is 7,938 people. Based on data from the city of Gorontalo with the highest presentation from Otanaha Hospital, it is a hospital

in the city of Gorontalo with the highest number of hypertension, namely 108 people. which can be detailed as follows, in 2023 January-March there are 22 people. Then in 2024, namely in May there will be 27 people, in June there will be 13 people, in July there will be 31 people, in August there will be 22 people and in September there will be 15 people.

Hypertension is a condition of high pressure on the blood vessels and is an incurable disease so good treatment and lifestyle modification is needed. Hypertension can cause vascular damage to blood vessels so that it can cause pain in the head to the nape of the neck. Structural changes in the small arteries and arterioles lead to blockage of blood vessels. If the blood vessels narrow, the flow of arteries will be disrupted or will cause circulation disorders in the brain. Circulatory disorders in the brain cause increased blood vessel resistance which will cause headaches (Asri et al., 2024).

Uncontrolled hypertension can lead to a variety of severity. The severity that arises greatly affects the psychological of the sufferer, the psychological problems of the hypertensive patient who are disturbed can cause feelings of anxiety and anxiety due to the illness experienced. Hypothesis with comorbidities has a close relationship with anxiety (Muna et al., 2024). Anxiety can lead to high blood pressure while an increase in high blood pressure can elicit an anxiety response in patients. Anxiety and anxiety in hypertensive patients are related to feelings of worry and fear of having hypertension for a long time and prolonged causing feelings of anxiety about their health and future. Anxiety causes the body to respond by releasing stress hormones in the body such as epinephrine, norepinephrine which have the effect of increasing heart rate and narrowing blood vessels (Muliyadi et al., 2023).

The treatment of hypertension is divided into pharmacological therapy and non-pharmacological therapy. Pharmacological therapy is in the form of administering medications, such as diuretic drugs, sympathetic inhibitors (methyldopa, clonidine and reserpine), betablockers (metoprolol, propanolol and atenolol). Non-pharmacological therapy is by implementing a healthy lifestyle, namely in the form of weight loss, exercise, quitting smoking, dietary modifications such as consuming fruits and vegetables, reducing salt intake, and reducing alcohol consumption. In non-pharmacological therapy, there is also complementary therapy where this therapy compared to the above has safe side effects compared to the side effects of chemical drug prescriptions. This therapeutic treatment can also improve the quality of life. According to Potter & Perry (2012). Non-conventional therapy is one of complementary therapies or can also be said to be an alternative medical therapy. Complementary therapy is all therapies used in addition to conventional therapies recommended by individual health care providers. Complementary therapies are known as traditional therapies incorporated in modern medicine. Complementary is the use of traditional therapies into modern medicine. Complementary medicine is carried out with the aim of complementing conventional and rational medical treatment that does not contradict the values and laws of health in Indonesia. The type of complementary therapy used is Music therapy, which is classical music therapy where classical music has a soft and regular tone, provides alpha wave stimulation, calmness, and helps listeners relax. Selection of classical music therapy

It is based on the belief of musicians, that the rhythm and tempo of classical music follow the speed of the human heartbeat, which is about 60 times per minute. According to Suryana (2017), Listening to classical music results in a significant decrease in anxiety, anger and increases relaxation. Some experts advise against using certain types such as pop, disco, rock and roll, and other loud rhythmic music, because the type of music with an anapestic beat (2beat short, 1beat long and then paused) is the opposite of the heart rhythm (Yohana & Dania, 2023).

Classical Music Therapy is a type of therapy that has the function of calming the mind and emotional cathars, and can optimize tempo, rhythm, melody, and harmony in a regular manner and can produce alpha waves and beta waves in the eardrum so as to provide calmness that makes the brain ready to receive new inputs, relaxation effects, and sleep. In addition, classical music functions to regulate hormones related to stress, including ACTH, prolactin, and growth hormone, and can increase endorphin levels so that it can reduce pain (Indah et al., 2024). Classical music therapy is also beneficial for lowering a person's anxiety because it can affect the brain by encouraging the secretion of endorphin hormones. This hormone can lower blood pressure, heart rate, and breathing rate so that it provides relaxation that can reduce fear and anxiety (Izzati et al., 2024).

RESEARCH METHODS

This research has been carried out at Otanaha Hospital in internal room 2 from January 15 to 24, 2025 with a type of quantitative research. Using a pre-experimental research design with a one-group pre-test and post-test design approach. The sampling technique used nonprobability sampling in the form of accidental sampling with a total of 50 hypertensive patients. The research instruments used were blood pressure observation sheets, pain observation sheets, and HARS anxiety questionnaires.

RESEARCH RESULTS Respondent Characteristics

Table 1 Distribution of Respondents by Age

No.	Age	Frequency (N)	Percentage (%)
1	ults (25-64 years)	46	92.0
2	erly (> 65 years old)		
		4	8.0
	Total	50	100

Source: Primary Data, 2025

Based on table 1, it is known that most of the respondents are in the adult age category (25-64 years), namely 46 respondents (92.0%). The small number are in the elderly age category (>65 years), which is as many as 4 respondents (8.0%).

Table 2 Distribution of Respondents by Gender

No.	Gender	Frequency (N)	Percentage (%)
1	n	22	44.0
2	man	28	56.0
7	Total	50	100

Source: Primary Data, 2025

Based on table 2, it is known that most of the respondents have gender in the male category, namely 22 respondents (44.0%) and women, namely 28 respondents (56.0%).

Table 3 Distribution of Respondents by Occupation

Yes	Work	Frequency (N)	Percentage (%)
1	t working	14	28.0
2	f employed	13	26.0
3	icher S	10	20.0
4		6	12.0
5		7	14.0
Total		50	100

Source: Primary Data, 2025

Based on table 3, it is known that most of the respondents are not working, namely 14 respondents (28.0%). The small number of them are teachers, namely 6 respondents (12.0%).

Table 4. Distribution of Respondents by Disease Suffered

No.	Diseases suffered from	Frequency (N)	Percentage (%)
1	pertension	24	48.0
2	pertension with other diseases	9	18.0
3	Hypertension	17	34.0
	Total	50	100

Source: Primary Data, 2025

Based on table 4, it is known that most of the respondents have hypertension, namely 24 respondents (48.0%). Some did not have hypertension but when blood pressure (tension) was checked, the patient had blood pressure above 140/90, namely 17 respondents (34.0%) consisting of Ispa with high blood pressure as many as 3 (6.0%), stomach acid with high blood pressure as many as 8 respondents (16.0%), pelvic pain with high blood pressure as many as 1 respondent (2.0%), abdominal pain with high blood pressure as many as 2 respondents (4.0%), cough, nausea, vomiting with high blood pressure as many as 1 respondent (2.0%), diabetes mellitus, nausea, vomiting with high blood pressure as many as 2 respondents (4.0%) And a small number have hypertension and other diseases, namely as many as 9 respondents (18.0%) consisting of

hypertension and diabetes mellitus as many as 3 respondents (6.0%), hypertension and gout as many as 1 respondent (2.0%), hypertension and acid reflux as many as 2 respondents (4.0%), hypertension and abdominal pain as many as 1 respondent (2.0%), hypertension and cough, cholesterol as much as 1 respondent (2.0%), hypertension and pelvic pain as much as 1 respondent (2.0%).

Univariate Analysis

Table 5 Distribution of Respondents by Blood Pressure Before and After the Intervention

No.	Blood Pressure Before	Quantity (N)	ercentage (%)
	Intervention		
1	pertension Grade 1 (140- 159/90-99	26	52.0
2	pertension Grade 2 (160- 179/100-109)	23	46.0
3	pertension Grade 3 (180- 209/110-119	1	2.0
	Total	50	100
No.	Blood Pressure After	Quantity (N)	ercentage (%)
	Intervention		
1	pertension Grade 1 (140-159/90-99	31	62.0
2	pertension Grade 2 (160- 179/100-109)	19	38.0
	Total	50	100

Source: Primary Data 2025

Based on table 5, it is known that before being given intervention, most of the respondents had blood pressure in the category of degree 1, namely 26 respondents (52.0%), consisting of 17 respondents who did not have hypertension, hypertension and diabetes mellitus as many as 3 respondents, hypertension and gout as many as 1 respondent, hypertension and acid reflux as many as 2 respondents, hypertension and abdominal pain as many as 1 respondent, hypertension and pelvic pain as many as 1 respondent, hypertension and cough, cholesterol as many as 1 respondent. A small number of them have blood pressure in the 3rd degree category, namely as many as 1 respondent (2.0%) consisting of hypertension. moderate hypertension had blood pressure as many as 23 respondents (46.0%), which consisted of hypertension. After being given the intervention, most of the respondents had blood pressure in the category of degree 1, namely 31 respondents (62.0%), consisting of 17 respondents who did not have hypertension, 3 respondents who did not have hypertension, 3 respondents who had hypertension and diabetes mellitus, 1 respondent who had hypertension and gout, 2 respondents who had hypertension and stomach pain, 1 respondent who had hypertension and abdominal pain, and 1 respondent who had hypertension and pelvic pain. hypertension and cough, cholesterol as many as 1 respondent, hypertension as many as 5 respondents. The small number have blood pressure in the 2nd degree category, namely 19 respondents (38.0%) consisting of hypertension as many as 19 respondents.

Table 6 Distribution of Respondents by Pain Before and After Intervention

S	Pain	Category	Frequency (N)	Percentage (%)
	Before intervention	Light	21	42.0
		Keep	24	48.0
		heavy	5	10.0
	Total		50	100
	After the intervention	Light	35	70.0
		Light Keep	15	30.0
	Total		50	100

Source: Primary Data, 2025

Based on table 6, it is known that before being given the intervention, most of the respondents had pain in the moderate category, namely 24 respondents (48.0%) consisting of hypertension as many as 21 respondents, hypertension and gout as many as 1 respondent, hypertension and abdominal pain as many as 1 respondent. The small number of respondents had pain in the severe category, namely 5 respondents (10.0%) consisting of hypertension as many as 3

respondents and hypertension with stomach acid as many as 2 respondents. Then after being given the intervention, most of the respondents had pain in the mild category, namely as many as 35 respondents (70.0%) consisting of 21 respondents who did not have hypertension, 11 respondents had hypertension and 3 respondents had hypertension with other diseases (gout, pelvic pain, abdominal pain). A small number of respondents had pain in the moderate category, namely 15 respondents (30.0%) consisting of 13 respondents had hypertension and hypertension with other diseases as many as 2 respondents (stomach acid).

Table 7 Distribution of Respondents by Anxiety Before and After Intervention

Anxiety	Category	Frequency (N)	Percentage	e (%)
Before intervention	Heavy	7	14.0	
	Very heavy	43	86.0	
Total	-1	50	100	
After the intervention	Light	5	10.0	
	Light Keep	45	90.0	
	Total	<u>'</u>	50	100

Source: Primary Data, 2025

Based on table 7, it is known that before being given the intervention, most of the respondents had anxiety in the very severe category, namely 43 respondents (86.0%) consisting of 17 respondents not hypertension, hypertension as many as 22 respondents, hypertension and acid reflux as many as 2 respondents, hypertension and pelvic pain as many as 1 respondent, hypertension and abdominal pain as many as 1 respondent. The small number of respondents had anxiety in the severe category, namely 7 respondents (14.0%) consisting of hypertension as many as 2 respondents, hypertension and diabetes mellitus as many as 3 respondents, hypertension and cough, cholesterol as many as 1 respondent, and hypertension and gout as many as 1 respondent. Then after being given intervention, most of the respondents had anxiety in the moderate category, namely 45 respondents (90.0%) consisting of 17 respondents who did not have hypertension, hypertension as many as 22 respondents, hypertension and acid reflux as many as 2 respondents, hypertension and pelvic pain as many as 1 respondent, hypertension and abdominal pain as many as 1 respondent, hypertension and cough, cholesterol as many as 1 respondent, and hypertension and gout as many as 1 respondent. The small number of respondents had anxiety in the mild category, namely 5 respondents (10.0%) consisting of hypertension as many as 2 respondents, hypertension and diabetes mellitus as many as 3 respondents.

Bivariate Analysis

Table 8 Effect of Classical Music Therapy on Pain in Patients at Otanaha Gorontalo Hospital

Variable	Pre-Test (Red \pm SD)	Post Test (Red ± SD)	P value
Pain	$4.14 \pm 1{,}498$	$3.04 \pm 1{,}428$	0,000

Wilcoxon Test

Based on table 8, it is known that the mean value before therapy is 4.14 and after therapy is 3.04. If viewed based on mean or average, the value of pain after therapy decreases. In this study, the Wilcoxon statistical test was used because one of the data obtained was not distributed normally. Based on the results of Wilcoxon's statistical test, a p value of 0.000 (<0.05) was obtained, so that there was an effect of classical music therapy on pain in patients at Otanaha Gorontalo Hospital.

Table 9 The Effect of Classical Music Therapy on Anxiety in Patients at Otanaha Gorontalo Hospital

Variable	Pre-Test (Red ± SD)	Post Test (Red ± SD)	P value
Anxiety	$43.62 \pm 2{,}194$	$23.80 \pm 2{,}399$	0,000

Based on table 9, it is known that the mean value before therapy is 43.62 and after therapy is 23.80. When viewed based on mean or average, the value of anxiety after therapy has decreased. In this study, a statistical test was used because the data obtained was distributed normally. Based on the results of the

statistical test, the t test obtained a p value of 0.000 (<0.05) so that there was an effect of classical music therapy on anxiety in patients at Otanaha Gorontalo Hospital.

DISCUSSION

Pain and Anxiety Before Classical Music Therapy

Based on table 7, it is known that before the intervention was given, most of the respondents had pain in the moderate category, namely 24 respondents (48.0%). A small number of them had pain in the severe category, namely 5 respondents (10.0%). Based on Table 4.9, it is known that before being given intervention, most of the respondents had anxiety in the very severe category, namely as many as 43 respondents (86.0%). A small number of respondents had anxiety in the severe category, namely 7 respondents (14.0%).

In this study, the researcher used pain scale measurement using the Numeric Rating Scale (NRS). The Numeric Rating Scale (NRS) is a simple scale that is used linearly and is commonly used to measure pain intensity in clinical practice. The reason the researcher uses the Numeric Rating Scale (NRS) is because it is simple and easy to understand, respondents can more easily interpret their pain through numbers. At the time of the study, respondents said that many of them felt pain such as stabbing, throbbing, headaches in the head and nape of the neck. From the results of this study, it was found that the respondents who were in the internal room 2 before classical music therapy was carried out, it was found that the respondent's pain was on a scale of 4-9 (moderate to severe pain). The measurement tool used was the Numeric Rating Scale (NRS) pain assessment. At the time of the study, respondents said that many of them felt pain such as stabbing, throbbing, headaches in the head and nape of the neck.

International Association for the Study of Pain (IASP) defines pain as an unpleasant sensory and emotional experience associated with actual or potential tissue damage, or described in terms of such damage. Pain is classified by type of pain, by time of pain, by lotion of pain, by degree of pain, pain by place, pain by its nature, pain by its nature (Srinivasa et al., 2021). In research (Rury & Deoni, 2024) said that the headache of hypertensive patients is caused due to vascular damage due to hypertension in all peripheral vessels that undergo structural changes in the small arteries and arterioles causing blockage of blood vessels. If the blood vessels narrow, the arterial flow will be disrupted. Disturbed tissues will have a decrease in 02 (oxygen) and an increase in CO2 (carbon dioxide) then there will be a stimulation of capillary pain sensitivity in the brain. If the pain occurs continuously and is not treated immediately, it will result in complications. This is a concern for health workers. in providing appropriate treatment for patient recovery. Treatment can be provided using pharmacological and non-pharmacological therapies.

In this study, researchers measured patients' anxiety levels using the Hamilton Anxiety Rating Scale (HARS) measurement. The HARS consists of 14 items, each determined by a series of symptoms, and measures psychic anxiety (mental agitation and psychological distress) and somatic anxiety (physical complaints related to anxiety). Before being given classical music therapy, respondents filled out the questionnaire first. In the questionnaire, the respondents filled in No. 8 the most where the respondent said that he felt pale, felt weak, blurred vision, felt stabbed, then No. 9 (tachycardia/rapid heartbeat, chest pain, in No. 13 (red face, sweating easily, dizzy head, heavy head, headache), No. 14 (restless, unsettled, shaking, frowning, calm face, muscle tension). From the question above, each respondent filled in with the number 3-4 where the symptoms felt by the respondent were severe symptoms to very severe symptoms.

Anxiety is an emotional state experienced by individuals for their basic emotional feelings, psychomotor sensations (perception), and cognition. Anxiety is also a fear of the manifestation of a future-oriented mood. According to the theory of Unarsa & Gunarsa (2008), Anxiety or anxiety is a feeling of worry or fear without a clear reason. Anxiety is a powerful force that motivates action. Both normal behavior and deviant and irregular behavior are expressions, incarnations, and manifestations of fear defenses. The level of anxiety in a person is divided into four levels, including mild anxiety (Mild anxiety), moderate anxiety (moderate anxiety), and severe anxiety (severe anxiety), and panic (Panic anxiety) (Manurung & Adrina, 2023).

According to Stuart's Theory (2006), patients who experience anxiety show symptoms of irritability, difficulty sleeping, restlessness, lethargy, crying easily and not sleeping well. According to Blackrun and Davidson's (1994) theory, theoretically the occurrence of anxiety begins with an individual meeting with a stimulus in the form of a situation that has an effect on forming anxiety (threatening situation) which directly results from the observation of the experience are processed through a cognitive process using schematics (the knowledge that the individual has about the schema The situation is real. Threatening from knowledge about his ability to control himself and the situation (Meldiati et al., 2024).

The results of this study are in line with the research of Laka (2020), which states that hypertension has a relationship with anxiety levels, where most respondents experience anxiety levels. Most of the 18 respondents (50%) experienced moderate anxiety and stage II hypertension as many as 16 respondents (44.4%). According to the behavioral view, anxiety or anxiety is the result of frustration from everything that

interferes with a person's ability to achieve the desired goals. Behavioral experts consider anxiety to be an impulse to learn based on a desire to avoid pain. Individuals who have been accustomed to excessive fear in their lives since childhood will show the possibility of severe anxiety in adulthood. Ahlli conflict theory views anxiety as a conflict between two opposing interests. He believes that there is a mutual relationship between conflict and anxiety. That is, conflict causes anxiety, and anxiety causes feelings of helplessness which will ultimately increase the perceived conflict (Nurfitri et al., 2021).

Pain and anxiety after classical music therapy

Based on Table 8, it is known that after being given intervention, most of the respondents had pain in the mild category, namely as many as 35 respondents (70.0%). A small number of respondents had pain in the moderate category, namely 15 respondents (30.0%). Based on Table 4.10, it is known that after being given intervention, most of the respondents had anxiety in the moderate category, namely as many as 45 respondents (90.0%). A small number of respondents had anxiety in the mild category, namely 5 respondents (10.0%).

In this study, it was found that respondents who were in internal room 2 after being given classical music therapy found that the respondents' pain was at moderate and moderate levels. Where the scale is 1-6. Respondents said that the pain felt could decrease little by little after being given classical music therapy, namely the Mozart Sonata for two pianos in D Major, K. 448 for 30 minutes. Then it was found that the respondents who were in internal room 2 after being given classical music therapy and the level of anxiety was measured using the HARS questionnaire, it was found that the respondent's anxiety was at number 2, which is moderate. Respondents said that they felt better than before they were given music therapy. They say that they no longer feel restless, uncalm, shaking. Respondents were given music therapy for 30 minutes and they listened to music 2 hours after being given medication.

According to the theory of Gate Control, music therapy can cope with pain, that pain impulses can be regulated or inhibited by defense mechanisms along the central nervous system. This theory states that pain impulses are delivered when defenses are open and impulses are inhibited when defenses are closed. One way to shut down this defense mechanism is to stimulate the secretion of endorphins that will inhibit pain impulses. Music itself can also stimulate an increase in endorphins, which are a morphine-like substance produced by the body, so that the effect is to reduce pain and can provide a feeling of calm and happiness (Rina & Al, 2022). The results of this study are in line with research conducted by Arif & Yuli (2020), saying that after Mozart music therapy intervention, more than half of the respondents had pain intensity in the moderate category, and Mozart therapy was effective in reducing pain intensity.

According to De Laune and Ladner (2002), music therapy is therapy that is carried out by providing musical stimulation, where the music enters the mind through auditory sensations. Soft sounds or music can reduce stress, pain perception, anxiety and feelings of isolation. Despite the many debates about the validity of music as a form of therapy, there is no denying that music therapy has been widely practiced and the results are quite amazing. This shows that music not only has an aesthetic aspect, but also a therapeutic aspect so that music is used to help heal, calm and improve the physiological condition of patients.

According to research conducted by Sari, Rohmawati, Faizah, Hasina, & Putri (2023), anxiety can cause various negative effects on the body, such as abnormal heart rate (arrhythmia), increased blood pressure, increased heart rate, and faster heart rate. This condition, if not managed properly, can lead to serious complications in patients, including an increased risk of coronary heart disease. Uncontrolled anxiety can worsen symptoms in patients who already have a heart disorder, increasing the risk of more severe complications. The study also found that there was a very significant association between anxiety and an increase in physical symptoms with a p-value of 0.000, which is much smaller than 0.05, indicating that anxiety plays an important role in worsening the condition of hypertensive patients. A number of studies have shown that music interventions can improve patients' symptoms such as anxiety and have a relaxing effect. The benefits of music therapy are said to lower blood pressure both systolic and diastolic. However, this depends on the tempo/speed of the music used. A slower pace of music can encourage relaxation and a faster rhythm encourages sympathetic nerve stimulation. Music with a slow tempo ranging from 25-80 bpm is an effective range in reducing anxiety. This is supported by research from Janthasila & Keeratisiroj, (2023) which uses music with 60 bpm and has been shown to be significantly effective in lowering anxiety in patients (Sunarti et al., 2024).

The Effect of Classical Music Therapy on Pain and Anxiety in Hypertensive Patients at Otanaha Hospital

Based on table 9, it is known that the mean value before therapy is 4.14 and after therapy is 3.04. If viewed based on mean or average, the value of pain after therapy decreases. Based on the results of Wilcoxon's statistical test, a p value of 0.000 (<0.05) was obtained, so that there was an effect of classical music therapy on pain in patients at Otanaha Gorontalo Hospital. Based on table 4.12, it is known that the mean value before therapy is 43.62 and after therapy is 23.80. When viewed based on mean or average, the

value of anxiety after therapy has decreased. Based on the results of the statistical test, a p value of 0.000 (<0.05) was obtained, so that there was an effect of classical music therapy on anxiety in patients at Otanaha Gorontalo Hospital.

In this study, classical music therapy was used where the music used was classical music, namely the Mozart Sonata for two pianos in D Major, K. 448 for 30 minutes using earphones.

Music has the power to treat illnesses and improve one's mental abilities. Music can enhance, restore and maintain physical, mental, emotional, social and spiritual health. Music has a great influence on the mind. This is evident from the effects created by the music, there is music that makes you happy, sad, moved, feels lonely, remembering the past, increasing concentration, and others. Music has three important parts, namely beet, rhythm and harmony. Beets can affect spirits. Every music that is listened to, even if it is accidentally listened to, will affect the brain. In this study, Mozart's classical music therapy was used, because this music has an extraordinary magnetude in the development of health sciences, including having a soft tone, providing alpha wave stimulation, calmness, and making the listener more relaxed. Hypertension is caused by a number of things including age, stress or anxiety. In this study, it was shown that almost all of the respondents were aged 51-60 years with the incidence of stage 1 hypertension.

The results of Sanjiwani & Dewi's research, (2022) physiologically music will mutate the brain so that it can release the process of analyzing the songs heard, music can be captured through the cochlear nerve and transmitted to the brain nerve by activating the parasympathetic nerve then it will affect the pituitary to release beta-endorphins, which are happiness hormones, lowering cortisol or anxiety-triggering hormones so that they can make a person calmer and provide a sense of security helps lower anxiety levels (Priest, 2023).

According to Campbell's Theory (in Melati, 2018) Mozart's music can stimulate the right hemisphere brain to increase one's creativity of thinking. Many previous studies have used Mozart's music to reduce anxiety, increase concentration, and even increase creativity. Music can give vibrations to the brain nerves to release feelings of happiness, happiness, as well as sadness and anxiety. According to Champell's (2011) theory, classical music therapy is a type of therapy that has the function of calming the mind and emotional catharsis, and can optimize tempo, rhythm, melody, and harmony in a regular manner and can produce alpha waves and beta waves in the eardrum so as to provide calmness that makes the brain ready to receive new inputs, relaxation effects, and sleepiness (Nuseha and Djaafar, 2011). In addition, classical music functions to regulate hormones related to stress, including ACTH, prolactin, and growth hormone and can increase endorphin levels so that it can reduce pain. Classical music therapy is a type of therapy that has the function of calming the mind and emotional cathars, and can optimize tempo, rhythm, melody, and harmony in a regular manner and can produce alpha waves and beta waves in the eardrum so as to provide calmness that makes the brain ready to receive new input, relaxation, and sleep. In addition, classical music functions to regulate hormones related to stress, including ACTH, prolactin, and growth hormone, and can increase endorphin levels so that it can reduce pain. One of the therapies that can be done to lower blood pressure is classical music therapy. The tempo of classical music is the most important factor, the type of music that is non-lyrical consists of a low pitch of 60-80 beats per minute and a volume level of 60 dB. Music can stimulate the body to produce molecules called nitric oxide (NO). This molecule works in the tone of blood vessels so that it can reduce blood pressure. Noviyanto & Prawesti said that music stimulation in classical music therapy is able to activate the limbic system related to emotions. When the limbic system is activated, the brain becomes relaxed, which triggers blood pressure to drop. Classical music Mozart It is believed to be able to have a positive effect on human life thanks to its melody. The influence of classical music therapy Mozart as Entertraining effect, learning support effect. Because classical music Mozart With a gentle rhythm affects the heart rate so that it creates calmness that is listened to through the ears will directly enter the brain and be processed directly so as to produce a very good effect on a person's health (Marina et al., 2022).

Music therapy can be given to patients who experience anxiety disorders. The elderly experience more anxiety than younger people. In old age, there will be conditions where degeneration factors decline such as intellect and knowledge. Education and work are also one of the factors that affect anxiety. An intervention that can be given to patients who want to perform cataract surgery is music therapy. Before therapy, patients experienced moderate anxiety, including 60-74 years old who had an average junior high school education and as retirees. Music therapy works to relax the muscles, calm and relieve tension due to the actions to be performed. This is also related to Yuniantari & Artana. (2022) that classical music can suppress the sympathetic nervous system resulting in a decrease in the body's response to stress. The rhythm of classical music can trigger the brain to release the hormone endophrine and help reduce anxiety. Anxiety is an emotion that arises when an individual is experiencing stress, worry and feelings of tension. Anxiety is influenced by factors and anxiety also has different characteristics. In line with research conducted by Rahmawati Ida, et al. (2020) shows that individuals before being given music will be assessed their anxiety level and then after getting the results will be given music therapy after being re-assessed which aims to find out the difference in anxiety levels before and after being given music therapy.

Based on the results of the study, researchers assume that the administration of classical music therapy in hypertensive patients has an effect. This shows that respondents experienced a decrease in pain scale in

respondents after being given Mozart classical music therapy. Then in anxiety after being given music therapy, there was a decrease. After being given classical music therapy, respondents looked calmer, relaxed, and more excited. This occurs due to a decrease in adrenocorticotropic hormone (ACTH) which is a hormone that triggers stress and anxiety that causes a person to become relaxed and calm. Classical music therapy can also affect the activity of the body's autonomic nervous system such as the appearance of some spontaneous responses, such as tapping fingers. So it can be concluded that the influence of classical music therapy on pain and anxiety in hypertensive patients at Otanaha Hospital has an effect.

CONCLUSION

Before being given the intervention, most of the respondents had pain in the moderate category, namely as many as 24 respondents (48.0%). A small number of respondents had pain in the severe category, namely as many as 5 respondents (10.0%) and before being given intervention, most of the respondents had anxiety in the very severe category, namely as many as 43 respondents (86.0%). A small number of respondents had anxiety in the severe category, namely 7 respondents (14.0%).

After being given the intervention, most of the respondents had pain in the mild category, namely 35 respondents (70.0%). A small percentage of them had pain in the moderate category, namely as many as 15 respondents (30.0%) and after being given the intervention, most of them

Respondents had anxiety in the moderate category, namely as many as 45 respondents (90.0%). A small number of respondents had anxiety in the mild category, namely 5 respondents (10.0%).

Based on the results of Wilcoxon's statistical test, a p value of 0.000 (<0.05) was obtained, with a mean value before therapy was 4.14 and after therapy was 3.04. If viewed based on mean or average, the value of pain after therapy decreases. So there is an effect of classical music therapy on pain in patients at Otanaha Gorontalo Hospital.

Based on the results of the statistical test, the t test obtained a p value of 0.000 (<0.05) with the mean value before being given therapy was 43.62 and after being given therapy was 23.80. When viewed based on mean or average, the value of anxiety after therapy has decreased. so that there is an effect of classical music therapy on anxiety in patients at Otanaha Gorontalo Hospital.

SUGGESTION

It is hoped that it can be considered or input information to the hospital in terms of knowledge about providing therapy using classical music, namely the Mozart Sonata for two pianos in D Major, K. 448 for 30 minutes for the treatment of hypertensive patients who experience pain and anxiety.

This study is expected to be used as a consideration for alternative therapies/non-pharmacological therapies to overcome or reduce pain and anxiety in hypertensive patients

It is hoped that for future research, it will deepen the research by using a control group and examine several factors that have not been researched such as nutritional intake and lifestyle factors of respondents.

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