

Conference Paper

The Effect of Murottal and Music Therapy on Reducing Blood Pressure in Palimanan Climbon

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Abstract

Complementary therapies in both music and murottal therapy are believed effective because the songs and Quranic verses can have a therapeutic effect through the mind and physiology of human. This study was to identify differences influence of murottal therapy and music therapy in lowering blood pressure. This study used a quasi-experimental with a pretest-posttest approach design. The sample used in this study were 30 respondents who are divided into 2 intervention groups, group 1 used murottal and group 2 used music therapy in hypertensive patients in Kepuh village of used Rw 04 and 05 Palimanan Cirebon sampling technique cluster random sampling. Statistical tests using t test. Results of data analysis showed there is significant difference between the blood pressure after murottal therapy with the blood pressure after music therapy in hypertensive patients, with p value 0,001. Age and gender factors are considered have influence in lowering blood pressure after murottal therapy. The results of this study are expected to be the basis of complementary therapies and can be implemented as an independent and innovative interventions in the nursing care of patients with hypertension.

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1. Introduction

In the 21st century it is estimated that there will be an increase in the incidence and prevalence of non-communicable diseases (PTM) rapidly, which is a major challenge to future health problems [1]. In 2008 there were 57 million deaths in the world caused by diseases, including 63% due to non-communicable diseases, and of these non-communicable diseases 48% due to heart disease including hypertension which is the 4th leading cause of death in developed countries and causes of death to -7 in developing countries [2].

In Indonesia the prevalence of hypertension is quite high. According to the National Basic Health Survey (2013), the prevalence of hypertension in the 15-24 years age group

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is 8.7%, ages 25-34 years 14.7%, ages 35-44 years 24.8%, ages 45-54 years 35, 6%, aged 55-64 years 45.9%, aged 65-74 years 57.6%, and more than 75 years was 63.8 percent [3]. Data in Indonesia shows that hypertension tends to increase. Based on the results of the Household Health Survey (SKRT) in 2007, it showed that 31.7% of the population suffered from hypertension and this showed an increase compared to 2001 by 8.3% of the population and in 2004 by 27.5% of the population [1].

Religious complementary therapy can accelerate healing, this has been proven by several experts as has been proven by Ahmad Al-Qodhi conducting research on the influence of the Koran on humans in physiological and psychological perspectives, these results show positive results that listening to the verses of the Koran has a significant influence in reducing tension [4].

Research on Al Qur'an murottal therapy has been done by Hamidatul Ilmi & Setiawan [5], which is about the difference between blood pressure before and after listening to murottal Al Qur'an therapy in patients with essential hypertension in Tanjung Sari Sumedang Health Center. Analysis of the data used was a t-test with a p value of 0,000 so there was a significant relationship between murottal therapy and essential hypertension

Research on complementary sound therapy besides murottal therapy is music therapy. Much research has been done relating to the effects of music therapy. One of them, music therapy can help people who have emotional problems in expressing their feelings, make positive changes in mood, help solve problems, and correct conflicts. The method used in music therapy is; singing, playing music, rhythmic movements and listening to music [5].

Related to hypertension, listening to classical music can lower blood pressure greater than those who do not listen to music in high school students [6]. And other research on music therapy is conducted in preschool children where this study aims to determine the effect of music therapy on pain levels while undergoing intravenous puncture in infusion. And the results obtained that music therapy can reduce the level of pain in preschool children who performed infusion [7]. Research on music has also been done to reduce pain in Open Reduction and Internal Fixation (ORIF) postoperative patients which shows the results of a significant influence between music therapy on reducing pain levels [7].

Preliminary study on August 18, 2014, the authors conducted interviews and blood pressure measurements on 15 people conducted in one of the taklim assemblies in Kepuh Village RT 03 RW 04 Palimanan District. It was found 10 people have systolic blood pressure ≥ 140 mmHg and 5 others have blood pressure ≤ 140 mmHg. While there

were only 3 people undergoing treatment at the puskesmas and clinic while 7 others did not undergo treatment despite knowing that they had hypertension. Of these 15 people all love music and murottal of the Koran but rarely do so for reasons not having time.

2. Methods

The design of this study was a quasi-experimental study with a pretest - posttest design approach (a re-design plan, a design that treats one intervention group and then observed before and after the intervention (Pratikya, 2011).

This study compared the effect of murottal therapy with music therapy on reducing blood pressure in two independent groups. The intervention group I received murottal letter Al Baqarah for 15 minutes, while the intervention group II received Indonesian religious music therapy according to the choice given for 15 minutes. The study was conducted for three days and blood pressure measurements were carried out before and after murottal therapy or music therapy.

3. Result

The study was conducted from May to September 2014. The number of samples in this study were 30 people, 15 respondents in RW 04 and 15 respondents in RW 05. Of these samples, 15 respondents were given murottal therapy intervention and 15 others were given music intervention. The intervention was carried out for 3 consecutive days for all respondents. Data obtained by measuring blood pressure on respondents before and after the intervention.

Analysis of average systolic blood pressure reduction after murottal therapy and after music therapy, analysis of average systolic blood pressure reduction after murottal therapy and after music therapy by comparing the independent t test in the following table 1:

Table 1 Average Distribution of Systolic Blood Pressure Decrease After Murottal Therapy and After Music Therapy in Kepuh Village RW 04 and 05 Palimanan District Cirebon District, 2014

From table 1 the average result of systole blood pressure reduction after murottal therapy is 10.07 mmHg with a standard deviation of 4.602 mmHg, while for music therapy the average decrease in systolic blood pressure is 3.67 mmHg with a standard deviation of 4.386 mmHg. Statistical test results obtained p-value 0.001 means that at

TABLE 1: Average Distribution on Systolic Blood Pressure after therapy (n = 15).

Intervention	Mean	SD	SE	p-value	total
Murottal Teraphy	10,07	4,862	1,255	0,001	15
Music Teraphy	3,67	3,67	4,386		15

5% alpha there was a significant difference in the average decrease in systolic blood pressure after murottal therapy and after music therapy.

Analysis of the average decrease in diastolic blood pressure after murottal therapy and after music therapy, analysis of the average decrease in diastolic blood pressure after murottal therapy and after music therapy with independent t test can be seen in Table 2 below:

TABLE 2: Average Distribution of Diastole Blood Pressure Decrease After Murottal Therapy and After Music Therapy in Kepuh Village RW 04 and 05 Palimanan District Cirebon District, 2014.

Intervention	Mean	SD	SE	p-value	total
Murottal Teraphy	7,60	3,135	0,809	0,001	15
Music Teraphy	1,40	4,564	1,178		15

From Table 2, the average blood pressure drop after diastole after murottal therapy was 7.60 mmHg with a standard deviation of 3.135 mmHg, whereas after music therapy the average blood pressure drop in diastole was 1.40 mmHg, with a standard deviation of 4.564. Statistical test results obtained p-value of 0.001, meaning that at 5% alpha there was a significant difference in the average decrease in diastolic blood pressure after murottal therapy and after music therapy.

4. Discussion

The results of this study indicate a difference in influence between murottal therapy and music therapy in reducing systolic blood pressure, and diastole in hypertensive patients. The results of this study are also supported by research by Arina Malia and Faradisi (2012), which shows that reading the verses of the Koran through murottal therapy has proven to be more effective than music therapy in reducing anxiety levels in patients with preoperative limb fractures. Murottal Al-Qur'an stimulants can be used as new therapeutic alternatives namely relaxation therapy even better than other audio therapies because Al-Qur'an stimulants can cause delta waves of 63.11% [5]. Khadi, President Director of the Islamic Medicine Institute for Education and Research in Florida, United States, at the XVII annual conference of the American Medical Association, Missouri Missouri region, Ahmad Al-Qadhi made a presentation on the results of his research

with the theme "The Effect of the Koran on humans in a physiological perspective and psychology". The results of the study showed positive results that listening to the verses of the Koran had a significant effect in reducing the tension of the reflective nerves and these results were recorded and measured quantitatively and qualitatively by a computer-based tool [5].

The results of this study are also supported by research conducted by Firman (2012) that the administration of murottal therapy is more effective in reducing anxiety levels in preoperative patients compared with music therapy, with a p-value of 0.001.

Murottal therapy has a greater effect on reducing blood pressure compared to music therapy because with murottal therapy the quality of one's awareness of God will increase, whether that person knows the meaning of the Koran or not. This awareness will lead to totality surrender to Allah SWT. And in this state the brain is in alpha waves, brain waves at a frequency of 7-14 Hz. This is a state of optimal brain energy and can get rid of stress and reduce anxiety which can ultimately reduce blood pressure [7].

While the results of psychological responses to music from several studies the results are indeed not convincing, maybe because of inadequate control of music stimulus. Psychological responses in question include heart rate, breathing, and blood pressure. While favorite music or likes, regardless of what type or type, is proven to reduce respondent tension. However, favorite music does not affect psychological responses. So these results indicate that the most dominant in influencing a person's emotional response is his type of music and not a favorite factor [7]. Therefore, the choice of type or type of music in the implementation of complementary therapy in reducing blood pressure is also important to note.

5. Limitations

1. This study does not examine anxiety and heredity factors that are likely to affect blood pressure
2. This research does not consider activities prior to the implementation of both murottal and musical interventions.
3. This research does not adjust the frequency and tempo of the song both in music therapy and murottal therapy
4. Time blood pressure measurement is not done in the same time (morning)

6. Conclusion

There is a difference in the effect of murottal therapy and music therapy in reducing blood pressure in hypertensive patients in Kepuh Village, Palimanan District, Cirebon Regency.

References

- [1] Rahajeng, E & Tuminah, S (2009, Desember 12), Prevalensi hipertensi dan Determinannya di Indonesia *Majalah Kesehatan Indonesia*, 580-587.
- [2] WHO. (2011). Non Communicable Disease Profile. Geneva: WHO Press
- [3] DEPKES RI. (2007). *Peraturan Menteri Kesehatan No. 1109 tentang penyelenggaraan pengobatan komplementer-alternatif*. September, 2012.
- [4] Aizid, R. (2013). *Ajaibnya surat-surat al-qur'an berantas ragam penyakit*. Yogyakarta: DIVA Press.
- [5] Ilmi, H., & Setiawan. (2012, March). *Differences between blood pressure before and after psychoreligy therapy (listening to murottal al qur'an) on client essential hypertension at district Tanjungsari*. Paper presented at 3rd International Nursing Conference, Bandung.
- [6] Darmawati, I., Setiawan, A., & Permatasari, H. (2015). Menurunkan Indeks Massa Tubuh Perempuan Dewasa dengan Kelebihan Berat Badan dan Kegemukan melalui Latihan Fisik Interval Training. *Jurnal Keperawatan Indonesia*, 18(2), 88-94.
- [7] Purwati, N.H., Rustina, Y., & Sabri, L. (2010). Penurunan tingkat nyeri anak prasekolah yang menjalani penusukan intravena untuk pemasangan infus melalui terapi musik. *Jurnal Keperawatan Indonesia*, 49 – 53.