Journal of Community Health Provision
Vol. 2, Issue 1, 2022
Page 49-62
DOI:

The Effect of Meditation on Blood Pressure Reduction in Hypertension Patients in the Batudaa Pantai Health Center Work Area

Abdul Wahab Pakaya[1], EuisHerawati Hidayat[1]

[1]Nursing Science Study Program, Faculty of Health, University of Muhammadiyah Gorontalo, Indonesia

Email: wahabpakaya01@gmail.com

Abstract. *Data, the incidence of hypertension in Gorontalo Regency in 2019 was 14,590 cases. Most hypertensive patients do not control their blood pressure and only treat their disease with traditional medicine. The purpose of this study was to analyze the effect of meditation on reducing blood pressure in patients with hypertension in the working area of Batudaa Pantai Health Center. This study uses a Pre Post Test with Control design with the type of Quasy Experiment research. The population is 67 respondents who suffer from hypertension and live in the working area of Batudaa Pantai Health Center with purposive sampling technique and the number of samples is 30 respondents. The results showed that there was a significant effect in the intervention group with a Mean systolic value of 6,000 mmHg and a Mean diastolic of 6667 mmHg, a control group with a systolic mean of 2.667 mmHg and a Meandiastolic value of 2.667 mmHg where p-value < 0.05. The conclusion in this study is that there is an effect of meditation on reducing blood pressure in patients with hypertension in the working area of Batudaa Pantai Public Health Center*.

Keywords: *: Meditation, Lowering Blood Pressure, Hypertension*

Received: November 19, 2021 Received in Revised: December 16, 2021 Accepted: January 11, 2022

INTRODUCTION

Hypertension is a degenerative disease that mostly affects not only the elderly, even young adults. It is even known that 9 out of 10 people who suffer from hypertension cannot identify the cause of death. According to the latest Guidline issued by the American Heart Association and the American College of Cardiology in 2017, the definition of hypertension is a condition in which systolic blood pressure (SBP) > 130 mmHg and diastolic pressure (DBP) > 80 mmHg.

Based on the prevalence data of the American Heart Association in 2017 that in the United States the problem of hypertension was found in 64.9 to 75.3 million people in the 45-75 year age group. This figure represents 63% of the total population in this age

group, while according to the 2017 National Center for Health Statistics, data on hypertension based on the 18-39 year age group is 7.5% of cases, the 40-59 year age group is 33.2%. and the age group 60 years and over as many as 63.1% cases of hypertension.

Meanwhile in Indonesia, according to the RI Ministry of Health's Riskesdas data in 2018, it was reported that cases of hypertension based on the results of measurements in the population aged more than 18 years, it was found that 34.1% of hypertension problems occurred in Indonesia. This result experienced a significant increase when compared to 2013 which reported the number of cases of hypertension as much as 25.8%.

Based on data on hypertension morbidity in Gorontalo Regency in 2015, the number of hypertension cases was 12,353 cases. In 2016 it increased to 13,631 cases of hypertension, and the number continued to increase in 2017 as many as 15,861 cases of hypertension. The latest data in 2018 decreased when compared to the previous year, namely 14,590 cases of hypertension. Even though there is a decrease, further research needs to be done to find out the causes of hypertension and appropriate treatment for hypertension so that there will not be an increase in hypertension cases in the following years.

According to Guyton & Hall (2006) in Islamiyah (2014), the decrease in brain wave activity and perceived psychological stress can stimulate the hypothalamus to reduce the secretion of the hormones cortisone, epinephrine and norepinephrine in the bloodstream. The decrease in the secretion of the three hormones above will then decrease the sympathetic activity in the blood vessels and this decrease in sympathetic activity is followed by the vasodilation effect of the blood vessels. The vasodilating effect of blood vessels will reduce peripheral vascular resistance which is then followed by a decrease in blood pressure.

Therapeutic management for hypertension consists of pharmacological and non-pharmacological therapy (Martin, 2016). One of the non-pharmacological therapies that can control hypertension that causes stress is complementary therapy in the form of meditation (Fuad, 2012).

Meditation is a concentration exercise on something to achieve higher awareness so that individuals can feel more positive which in turn improves body condition, provides psychological comfort and reduces stress levels in individuals (Pramudhanti, 2016). On the other hand, according to Hermanto (2014) meditation is a mental exercise that can balance a person's physical, emotional, mental and spiritual aspects which can direct the mind towards a state of consciousness that brings calm, clarity, and happiness.

According to Islamiyah (2014) meditation is classified into two major groups, namely self-employment meditation and initiation meditation. Meditation with one's own effort is meditation on one's own effort without anyone's help. Everything that is done aims to enter into a meditative state. There are several ways that are commonly used, namely: the concentration of thoughts referred to here is to get rid of all other thoughts that are considered disturbing and only think or do certain things.

While meditation with the initiation process, namely in this method, before doing meditation, one must get initiation or alignment. The function of initiation is to activate chakras, energy pathways, and harmonize relationships with the universe. The method

used in this meditation is to carry out rituals or without rituals. The meditation that was carried out in this study was using meditation with one's own efforts.

The specifications for the number of hypertension cases recorded at Batudaa Pantai Health Center in 2015 were 881 hypertension cases. In 2017 it increased to 1155 cases and decreased in 2018 to 760 cases of hypertension. This shows that the problem of hypertension remains a serious health problem and is often found in the community even though it has decreased in 2018 although it is not significant, but further research still needs to be done.

At the time of the initial observation on 5 people with hypertension, the researchers found the mean age varied from 36-65 years old, most of them did not control their blood pressure and only treated their disease with traditional medicine. A patient with hypertension said that he worked in a mining company which had a fairly heavy workload that caused tension both physically and mentally. Physical tension can trigger physiological changes in the body in this case blood pressure and mental tension can cause stress. He also said that he rarely controls blood pressure.

Based on the results of interviews with 5 respondents, it was found that the area where people with hypertension live is quite far from access to health services such as Puskesmas. 3 respondents complained that they had suffered from hypertension for a very long time and they did not take medication for the day. In addition, they do not know or have not been exposed to information about therapies that can control blood pressure or hypertension, in this case meditation therapy. Due to not knowing the therapy information, this is the benchmark for researchers to conduct research in the form of giving meditation therapy in controlling the respondent's blood pressure.

Based on the explanation above, researchers are interested in conducting research on "The Effect of Meditation on Lowering Blood Pressure in Hypertension Patients in the Batudaa Pantai Health Center Work Area"

METHODS

This research was conducted using a quasi-experimental type of research with a Pre Post Test with Control design. The population in this study were respondents who suffered from hypertension who lived in the working area of Batudaa Pantai Health Center, totaling 67 people. The samples in this study were 30 respondents consisting of 2 groups. 15 people for the intervention group and 15 people for the control group. The sampling technique used in this research is purposive sampling. This study uses the Paired T Test.

RESULTS AND DISCUSSION

Distribution of Blood Pressure Before and After Intervention in the Intervention Group

From the results of the research that has been done, the data on the distribution of blood pressure before and after the intervention was given to the intervention group is shown in the following table:

Table 1. Distribution of Blood Pressure Before Intervention was Given in the Intervention Group in the Batudaa Pantai Health Center Working Area

Not Responding	Blood pressure	
	Sistol (mmHg)	Diastol (mmHg)

1.	140	90
2.	180	100
3.	190	100
4.	150	90
5.	130	90
6.	160	90
7.	160	90
8.	170	90
9.	140	90
10.	130	90
11.	190	100
12.	190	100
13.	180	90
14.	140	90
15.	140	90
Mean	159.33	92.67
SD	22.509	4.577

Source: *Primary Data 2019*

From table 1. Distribution of blood pressure before being given the intervention in the intervention group, it is known that the average respondent's systolic blood pressure was 159.33 mmHg before being given the intervention in the intervention group and the respondent's diastolic blood pressure was 92.67 mmHg before being given the intervention in the intervention group. .

Table 2. Distribution of Blood Pressure After Intervention was Given in the Intervention Group in the Working Area of Batudaa Pantai Health Center

Not Responding	**Blood pressure**	
	Sistol (mmHg)	**Diastol (mmHg)**
1.	140	90
2.	150	100
3.	180	100
4.	150	60
5.	130	90
6.	150	80
7.	160	90
8.	160	80
9.	130	80
10.	130	80
11.	180	90
12.	190	100
13.	170	80
14.	140	90
15.	140	80
Mean	153.33	86.00
SD	19.518	10.556

Source: *Primary Data 2019*

ISSN 2776-1150 (Print), ISSN 2776-1169 (online)

From table 4.5 the distribution of blood pressure after being given the intervention in the intervention group, it is known that the average respondent's systolic blood pressure is 153.33 mmHg after being given the intervention in the intervention group and the respondent's diastolic blood pressure is 86.00 mmHg after being given the intervention in the intervention group.

Distribution of Blood Pressure Before and After in the Control Group Without Intervention

From the results of the research that has been done, the data on the distribution of blood pressure before and after in the control group without intervention is obtained in the following table:

Table 3. Distribution of Blood Pressure Before the Control Group Without Intervention in the Working Area of Batudaa Pantai Health Center

Not Responding	Blood pressure	
	Sistol (mmHg)	Diastol (mmHg)
1.	130	90
2.	180	90
3.	150	90
4.	170	100
5.	140	90
6.	130	90
7.	190	100
8.	170	100
9.	140	90
10.	130	90
11.	130	80
12.	160	100
13.	160	100
14.	180	100
15.	140	100
Mean	153.33	94.00
SD	20.931	6.325

Source: Primary Data 2019

From table 3. Distribution of blood pressure before in the control group without intervention, it is known that the average systolic blood pressure before the control group without intervention is 153.33 mmHg and diastolic blood pressure before the control group without intervention is 94.00 mmHg.

Table 4. Distribution of Blood Pressure After in the Control Group Without Intervention in the Working Area of Batudaa Pantai Health Center

Not Responding	Blood pressure	
	Sistol (mmHg)	Diastol (mmHg)
1.	130	90
2.	170	80
3.	150	90
4.	160	90
5.	140	90

6.	130	90
7.	180	90
8.	170	100
9.	140	90
10.	130	90
11.	130	80
12.	150	90
13.	160	100
14.	180	100
15.	140	100
Mean	150.67	91.33
SD	18.310	6.399

Source: Primary Data 2019

From table 4 the distribution of blood pressure after the control group without intervention, it is known that the average systolic blood pressure after the control group without intervention is 150.67 mmHg and diastolic blood pressure after the control group without intervention is 91.33 mmHg .

Table 5. The Effect of Meditation on Blood Pressure Reduction in Hypertension Patients in the Batudaa Pantai Health Center Work Area.

Group of Respondents	**Blood pressure**	***Mean***	**n**	**SD**	***p-value***
Intervention	Sistol Before	6.000	15	8.281	0.014
	After				
	Diastol Before	6.667	15	8.165	0.007
	After				
Control	Sistol Before	2.667	15	4.577	0.041
	After				
	Diastol Before	2.667	15	4.577	0.041
	After				

Source: *Primary Data 2019*

Blood Pressure Identification Before and After Intervention in the Intervention Group

From the results of research that has been conducted on 15 respondents, blood pressure before being given an intervention in the intervention group is known that the average respondent's systolic blood pressure is 159.33 mmHg then the respondent's systolic blood pressure drops to 153.33 mmHg after being given an intervention in the intervention group. . Blood pressure before being given the intervention in the intervention group was known that the average diastolic blood pressure of the respondents was 92.67 mmHg then the respondent's diastolic blood pressure decreased to 86.00 mmHg after being given the intervention in the intervention group. Based on the average systolic and diastolic blood pressure before and after the intervention, each intervention group decreased, namely systolic blood pressure of 6 mmHg as well as diastolic blood pressure of 6.67 mmHg.

The occurrence of a decrease in the average blood pressure in the intervention group was influenced by the provision of meditation. Meditation carried out on patients with hypertension can reduce systolic and diastolic blood pressure in respondents because meditation can provide a calming effect that can stabilize blood pressure. According to Dalimartha (2008) meditation can be used as a healing effort for people with hypertension because meditation contains elements of self-soothing that can stabilize blood pressure.

Based on research conducted by Marthayoga (2014) that the average systolic blood pressure in the treatment group was 150.40 mmHg and diastolic 96.80 mmHg. After being trained in meditation for 3 days the average blood pressure of the treatment group became 145.30 mmHg for systolic blood pressure and 91.90 mmHg for diastolic pressure. Each decreased systolic blood pressure of 5.1 mmHg and diastolic blood pressure of 4.9 mmHg after being trained in meditation for 3 days.

In this study, the meditation process was carried out 6 times in 1 day, 1 meditation for 20 minutes was carried out for 6 consecutive days for each respondent in groups. So that this can have a better effect, namely it can reduce systolic and diastolic blood pressure in the intervention group, there is more decrease because the frequency of giving meditation is done 6 times meditation for 6 consecutive days, namely the average decrease for systolic blood pressure is 6 mmHg and diastolic blood pressure of 6.67 mmHg.

According to Hermanto (2014) systolic blood pressure is influenced by psychology, so giving meditation will give you peace (relax) because meditation can suppress the autonomic nervous system, meditation will stimulate the parasympathetic system with stimulation of the parasympathetic can slow the heart rate, widen the diameter of the arteries. so that in a relaxed or calm state can lower blood pressure. So that people with hypertension who are given meditation will experience a decrease in blood pressure. While the diastolic blood pressure is bound to the coronary circulation if the coronary arteries have atherosclerosis, it will affect the diastolic blood pressure.

Meditation can provide a calming effect because by doing meditation a person will train to temporarily empty the mind of psychosocial problems so that it can reduce stimulation to stressors and can reduce the respondent's blood pressure. According to Islamiyah (2014) decreased stimulation to stressors is then responded by the hypothalamus by decreasing the regulation of the secretion of the hormones cortisone, epinephrine, and norepinephrine in the blood vessels. Lutfiati (2018) a decrease in the secretion of these hormones results in a decrease in sympathetic activity so that there is a vasodilating effect on blood vessels throughout the body. This vasodilating effect reduces peripheral resistance, resulting in a decrease in blood pressure and pulse.

Based on the results of research conducted by Martin (2016), it shows that meditation therapy is part of non-pharmacological actions that can reduce blood pressure, thus it can be concluded that there is an effect of meditation therapy on changes in blood pressure in the elderly with hypertension. There is a decrease in blood pressure in the intervention group after being given meditation because meditation can cause all organs, cells and substances in the body to function in a balanced way, work in an orderly state so that we can achieve a relaxed state, one of the effects of which can lower blood pressure. According to Sulistyarini (2013) when the body is tense or in an uncomfortable condition, the sympathetic nerves and blood vessel muscles will contract so that the

cross-sectional diameter of small blood vessels will decrease which results in increased blood pressure.

On average, most of the respondents in the intervention group were women with housewife jobs, this is because housewives have high stress pressure in addition to taking care of their children, housewives also have to take care of household chores such as washing and cooking. which can cause stress at home. According to Arifuddin (2018), the effects of stress can stimulate the adrenal glands to secrete adrenaline. Adrenaline will work in spurring a faster heart rate and has an impact on increasing blood pressure and emotional disturbances.

The majority of respondents who work as housewives in the intervention group are 36-45 years old and respondents who are 56-65 years old where high blood pressure usually increases with age, based on the results of research by Setiawan (2014) stated that the most Most high blood pressure is found in those over the age of 40, although many young people also have high blood pressure. As a person ages, the elasticity of blood vessels decreases.

According to Abbas (2016) normal blood vessels are elastic where their diameter can narrow and expand. This elasticity is useful in facilitating the process of distributing blood throughout the body. If the elasticity of the blood vessels decreases, the heart's work to pump blood throughout the body becomes heavy because the blood vessels cannot expand properly, this can lead to an increase in blood pressure.

In old age, respondents usually tend to have high levels of anxiety and are easily stressed. Stress due to thinking about other things such as taking care of household chores, by giving meditation will give the respondent peace of mind which will affect the decrease in blood pressure. Research conducted by Fuad (2012) suggests that the elderly are often anxious and afraid of death that is why the elderly are easily stressed and psychological disorders are followed by increased blood pressure but with dhikr meditation the elderly can be closer and surrender themselves to the creator.

The occurrence of a decrease in the average systolic and diastolic blood pressure before and after the intervention in the intervention group was influenced by the provision of meditation which was carried out for 6 consecutive days in groups where the average blood pressure of each systolic blood pressure decreased by 6 mmHg and diastolic of 6.67 mmHg. This is because respondents follow the meditation process well and focus on following the meditation process so that it can affect the decrease in blood pressure in respondents. Meditation requires a focused mind to achieve a calm state (relaxed) so that it will automatically lower the respondent's blood pressure.

Identification of Blood Pressure Before and After in the Control Group Without Intervention

From the results of research that has been conducted on 15 respondents, blood pressure before the control group without intervention is known that the average respondent's systolic blood pressure is 153.33 mmHg then the respondent's systolic blood pressure drops to 150.67 mmHg after the control group without given intervention. Blood pressure before the control group without intervention is known that the respondent's average diastolic blood pressure is 94.00 mmHg then the respondent's diastolic blood pressure drops to 91.33 mmHg after the control group is not given intervention. Based on the average systolic blood pressure and diastolic before and after

in the control group without being given intervention each decreased, namely systolic blood pressure of 2.66 mmHg as well as diastolic blood pressure of 2.67 mmHg.

The average respondent in the control group was 36-45 years old and 46-55 years old. In general, people with hypertension are people who are over 40 years old, but it is also possible that young people suffer from it. At their productive age they rarely pay attention to health such as eating patterns and unhealthy lifestyles such as smoking. The older you get, the greater your risk of developing hypertension. According to Anggara (2013) this is due to arterial pressure which increases with age, the occurrence of aortic regurgitation, and the presence of a degenerative process, which is more common in old age.

There was a decrease in the average systolic and diastolic blood pressure in the control group without any intervention in the form of meditation, namely the average systolic blood pressure decreased by 2.66 mmHg and diastolic blood pressure of 2.67 mmHg although there was no significant decrease as in the intervention group because the intervention group was given meditation while the control group was not given meditation, the thing that caused a decrease in the average blood pressure in the control group was related to the work of the respondents, the majority of respondents in the control group were male and worked as farmers where work affects a person's physical activity.

According to Anggara (2013), people who do not work do not have many activities so that it can increase the incidence of hypertension. In contrast, people who work a lot of physical activity can lower blood pressure. This theory is in line with research conducted by Prayitno (2013) which states that there is a relationship between work and the incidence of hypertension. Lack of physical activity will increase the risk of suffering from hypertension because it can increase the risk of being overweight. While a lot of physical activity will reduce the risk of hypertension because a lot of physical activity will reduce excess weight.

It is known that the majority of respondents who suffer from hypertension in the control group have jobs as farmers and the distance from their house to the garden can be reached by a distance of 3 km. Another physical activity carried out by the control group respondents that affected the decrease in blood pressure was the respondent's routine, namely as in this study the respondents traveled long distances on foot because the distance from the house to the garden could reach 3 km.

Based on research conducted by Rahadiyanti (2013) that hypertensive patients who practice walking regularly for at least 3 times a week and a minimum duration of 30 minutes each exercise have controlled blood pressure compared to those who do not walk. Controlled blood pressure in hypertension occurs because of a decrease in blood pressure because blood vessels are dilated and blood vessels relax.

The researcher assumes that the factors that cause the respondents' average blood pressure to decrease even though there is no intervention in the form of meditation are because the physical activities carried out by farmers are gardening and the routine of walking from the garden house which can reduce blood pressure. Regular physical activity helps improve the overall efficiency of the heart, which can affect lowering blood pressure.

Analysis of the Effect of Meditation on Blood Pressure Reduction in Hypertension Patients in the Working Area of Batudaa Pantai Health Center

From the results of research conducted on 15 respondents in the intervention group, blood pressure before being given an intervention in the intervention group is known that the average respondent's systolic blood pressure is 159.33 mmHg then the respondent's systolic blood pressure drops to 153.33 mmHg after being given the intervention at intervention group. Blood pressure before being given the intervention in the intervention group was known that the average diastolic blood pressure of the respondents was 92.67 mmHg then the respondent's diastolic blood pressure decreased to 86.00 mmHg after being given the intervention in the intervention group. Based on the average systolic and diastolic blood pressure before and after the intervention, each intervention group decreased, namely systolic blood pressure of 6 mmHg as well as diastolic blood pressure of 6.67 mmHg.

From the results of research that has been conducted on 15 respondents in the control group, before the control group's blood pressure was given without intervention, it is known that the average respondent's systolic blood pressure was 153.33 mmHg then the respondent's systolic blood pressure decreased to 150.67 mmHg after being in the control group. control without intervention. Blood pressure before the control group without intervention is known that the respondent's average diastolic blood pressure is 94.00 mmHg then the respondent's diastolic blood pressure drops to 91.33 mmHg after the control group is not given intervention. Based on the average systolic blood pressure and diastolic before and after in the control group without being given intervention each decreased, namely systolic blood pressure of 2.66 mmHg as well as diastolic blood pressure of 2.67 mmHg.

Based on table 4.8, the results of the paired t test were obtained, the p-value for systolic blood pressure in the intervention group before and after the intervention was given, namely p-value 0.014 <0.05, there was a significant effect between systolic blood pressure before and after the intervention was given. the intervention group, while for the diastolic blood pressure in the intervention group before and after the intervention, the p-value was 0.007 <0.05, so there was a significant effect between diastolic blood pressure before and after being given the intervention in the intervention group.

For systolic blood pressure before and after in the control group without intervention, it showed that p-value 0.041 < 0.05, so there was a significant effect between systolic blood pressure before and after in the control group without intervention, while for diastolic blood pressure before and after the intervention. after in the control group without being given intervention p-value 0.041 <0.05 then there is a significant effect between diastolic blood pressure before and after in the control group without being given intervention.

Giving meditation can lower blood pressure where meditation will provide a relaxed condition for the respondent, in a relaxed condition all systems in the body will work well and in balance so that blood pressure will be stable. According to Martin (2016) meditation is one method to help lower blood pressure. The decrease in blood pressure is due to relaxation meditation, in principle, is to position the body in a calm condition, so that it will experience a state of balance, thus relaxation meditation which is centered on breathing will increase oxygen circulation to the muscles, so that the muscles will relax, blood pressure will decrease. .

The average blood pressure of respondents in the intervention group who was given meditation decreased blood pressure. There was more decrease in blood pressure in the intervention group, namely systolic blood pressure decreased by 6 mmHg as well

as diastolic blood pressure of 6.67 mmHg. Blood pressure in the intervention group decreased because it was influenced by giving meditation to the respondents, because meditation can have a calming effect (relax) on the respondents so that it can reduce the respondent's blood pressure. According to Pujiastuti (2017) meditation has many benefits for health, including causing relaxation, lowering muscle tension, and refreshing or calming the mind.

One of the causes of the increase in blood pressure in respondents is influenced by the psychology of the respondent, by giving meditation it will give energy to the respondent so that the respondent's blood pressure will decrease. According to Sudiarto (2007), systolic blood pressure is influenced by psychological factors so that relaxation will result in calm and systolic pressure will decrease.

It is known that the majority of respondents in the intervention group are 36-45 years old and 56-65 years old. Blood pressure will increase with age. Due to increasing age, the flexibility of blood vessels will decrease which can cause blood pressure to rise. Plus, in old age, respondents are usually more stressed.

It is known that the majority of respondents in the intervention group are female and work as housewives. The routine work carried out by housewives such as taking care of children and doing other household chores such as washing and cooking can cause housewives to easily get stressed. According to Nurrahmani (2015) the existence of demands that exceed the limits of individual abilities causes a person to feel depressed in his life. According to Pramudanti (2016), most of the hypertension is also caused by stress factors.

In the control group, their average blood pressure decreased, namely systolic blood pressure decreased by 2.66 mmHg as well as diastolic blood pressure of 2.67 mmHg although there was no significant decrease in blood pressure as in the intervention group, which experienced a decrease in blood pressure. which is significant at 6 mmHg for systolic and diastolic blood pressure of 6.67 mmHg because it is influenced by the provision of meditation while the control group is not given meditation. The thing that causes the average blood pressure of the control group respondents to decrease is the physical activity carried out by the respondents so that it affects the decrease in blood pressure of the respondents. As stated by Hasanudin (2018) that regular physical activity helps increase overall heart efficiency. Those who are physically active generally have lower blood pressure and are less likely to develop high blood pressure. Those who are physically active tend to have better muscle and joint function, because these organs are stronger and more flexible.

The physical activities carried out by the respondents are such as working as a farmer, the journey from the garden house is reached by walking the distance from the garden house can reach 3 km. Activities in the form of movement or aerobic exercise are useful for improving and maintaining fitness, cardio-respiratory endurance. Examples of aerobic exercises are such as walking, jogging, swimming, cycling. Aerobic exercise makes the muscles of the body work. According to Rahadiyanti (2013) the habit of walking is an aerobic activity that is useful for increasing and maintaining cardiovascular and musculoskeletal endurance. With proper and regular physical exercise, the efficiency of the work of the heart will occur.

Therefore, giving meditation therapy to respondents is appropriate because meditation can have a calming effect and can reduce stress levels so that it can affect the occurrence of a decrease in blood pressure in respondents. In addition to giving

meditation, physical activity can also be applied to maintain fitness and stabilize blood pressure.

CONCLUSION

In the intervention group, the average respondent's systolic blood pressure was 159.33 mmHg, the respondent's systolic blood pressure decreased to 153.33 mmHg after being given the intervention, in the intervention group there was a decrease in systolic blood pressure of 6 mmHg. The average respondent's diastolic blood pressure was 92.67 mmHg, the respondent's diastolic blood pressure decreased to 86.00 mmHg after being given the intervention in the intervention group there was a decrease in diastolic blood pressure of 6.67 mmHg. In the control group, the average respondent's systolic blood pressure was 153.33 mmHg, the respondent's systolic blood pressure decreased to 150.67 mmHg after the control group without intervention experienced a decrease in systolic blood pressure of 2.66 mmHg. The average respondent's diastolic blood pressure was 94.00 mmHg, the respondent's diastolic blood pressure decreased to 91.33 mmHg after the control group without intervention experienced a decrease in diastolic blood pressure of 2.67 mmHg. After the paired t test was carried out in the intervention group, the p systolic (p = 0.014) and p diastolic (p = 0.007) values were obtained where p-value < 0.05 then there was a significant effect between blood pressure before and after the intervention was given. intervention group. Meanwhile, for the control group blood pressure, the p-systolic (p=0.041) and diastolic p-values (p= 0.041) where p-value <0.05 means that there is a significant effect between blood pressure before and after in the control group without intervention.

REFERENCES

Abbas, A dan Khobragade, Y. (2016). *Hypertension and meditation: can meditation be useful in preventing hypertension?. International Journal of Community Medicine and Public Health*. Volume 3 No 7 July 2016

American Heart Association. (2017). *Guidline For Prevention, Detection, Evaluation And Management Of High Blood Pressure In Addult.* American College Of Cardiology Foundation

Anggara. (2013). *Faktor-Faktor Yang Berhubungan Dengan Tekanan Darah Di Puskesmas Telaga Murni, Cikarang Barat.* STIKes MH Thamrin.

Arifuddin. (2018). *Pengaruh Efek Psikologis Terhadap Tekanan Darah Penderita Hipertensi.* STIKes Widya Nusantara Palu. Jurnal Kesehatan Tadulako. Volume 4 No 3 Oktober 2018

Dalimartha, S. dan Purnama, B. (2008). *Care Your Self Hipertensi.* Penebar Plus. Jakarta

Dinas Kesehatan Kabupaten Gorontalo. 2018. *Data Kesakitan Hipertensi Tahun 2015 – 2018*

El Manna, M. (2011). *Basmi Keluhan-Keluhan Kesehatan Harian Dengan Obat-Obatan Alami.* Flash Books. Yogyakarta

Filella, D dan Rovira, M. (2018). *Benefits Of Mindfulness Meditation In Reducing Blood Pressure And Stress In Patients With Arterial Hypertension.* Journal of Hypertension. Volume 36 No 1 June 2018

Fryar, C dan Ostchega, Y. (2017). *Hypertension Prevalence and Control Among Addults : United States, 2015-2016. National Center For Health Statistic*. United States

Fuad, M. (2012). *Pengaruh M*editasi *Garuda Terhadap Penurunan Tekanan Dara*h *dan Gejala Hipertensi Pada Pasien Hipertensi Usia Pertengahan di Desa Bulung Lor di Kecamatan Bulung Kabupaten Jember.* Universitas Jember

Hasanudin. (2018). *Hubungan Aktivitas Fisik Dengan Tekanan Darah Pada Masyarakat Penderita Hipertensi Di Wilayah Tlogosuryo Kelurahan Tlogoms Kecamatan Lowokwaru Kota Malang.* Universitas Tribhuwana Tunggadewi Malang. Volume 3 No 1 2018

Hermanto, J. (2014). *Pengaruh Pemberian Meditasi Terhadap Penurunan Tekanan Darah Pada Lansia Dengan Hipertensi Di Unit Sosial rehabilitasi Pucang Gading Semarang.* Jurnal Keperawatan STIKESNgudi Waluyo Ungaran

Hidayat, A. (2014). *Metode Penelitian Keperawatan dan Teknik Analisa Data.* Salemba Medika. Jakarta

Huda, S. (2013). *Terapi Komplementer Meditasi.*STIEKS Muhamadiyah Lamongan. https://id.scribd.com/doc/132916964/Makalah-Meditasi-Print. diakses pada tanggal 18 februari 2019 (10.25)

Islamiyah. (2014). *Pengaruh Meditasi Dzikir Terhadap Perubahan Tekanan Darah Pada Lansia Dengan Hipertensi Di Kelurahan Romang Polong Kabupaten Gowa.* UIN Alauddin Makassar

Kemenkes RI. (2018). *Hasil Utama Riset Kesehatan Dasar Tahun 2018.* Jakarta

Kemenkes RI. (2018). *Laporan Nasional Riskesdas Tahun 2018*. Jakarta

Kharisna.2012. *Efektifitas Konsumsi Jus Mentimun Terhadap Penurunan Tekanan Darah Pada Penderita Hipertensi.* Jurnal Ners Indonesia. Volume 2 No 2 Maret 2012

Khasanah, N. (2012). *Waspadai Beragam Penyakit Degeneratif Akibat Pola Makan.* Laksan. Jakarta

Lutfiati, P & Soesanto, E. (2018). *Pengaruh Meditasi dan Relaksasi Pasif Terhadap Tekanan Darah Pada Lansia Hipertensi Di Panti Unit Rehabilitasi Pucang Gading Semarang.* Jurnal Unimus Vol. 1, 2018

Marthayoga. (2014). *Pengaruh Meditasi Terhadap Tekanan Darah Pada Orang Hipertensi Di Desa Bungbungan Kecamatan Banjarangkan Kabupaten Klungkung*. Universitas Udayana

Martin, W & Mardian, P. (2016). *Pengaruh Terapi Meditasi Terhadap Perubahan Tekanan Darah Pada Lansia Yang Mengalami Hipertensi.* Jurnal Ipteks Terapan. Vol.10 (211-217)

Notoatmodjo, S. (2012). *Metodologi Penelitian Kesehatan.* Rhineka Cipta. Jakarta

Nurarif, A & Kusuma, H. 2013. *Aplikasi Asuhan Keperawatan Berdasarkan Diagnosa Medis dan NANDA NIC-NOC.* Media Action Publishing. Jakarta

Nurrahmani, U. (2015). *Stop! Hipertensi.* Familia. Yogyakarta

Nursalam. (2015). *Metode Penelitian Ilmu Keperawatan.* Salemba Medika. Jakarta Selatan

Pramudhanti, H & Mabruri, M. 2016. *Efektivitas Meditasi Transdental Untuk Menurunkan Stres Pada Penderita Hiperteni.* Universitas Negeri Semarang

Prayitno. (2013). *Faktor-Faktor Yang Berhubungan Dengan Tekanan Darah Di Puskesmas Telaga Murni Cikarang Barat.* STIKes MH Thamrin

Pujiastuti, T. (2017). *Pengaruh Pemberian Meditasi Terhadap Penurunan Tekanan Darah Penderita HipertensiDi Desa Sindumartani Ngemplak Sleman Yogyakarta.* STIKES Panti Rapih Yogyakarta

Pusat Data dan Informasi Kemenkes RI. (2014). *Hipertensi*.Jakarta

Pusat Kesehatan Masyarakat Batudaa Pantai. (2019). *Data Kasus Hipertensi tahun 2015-2018*

Rahardiyanti. (2013). *Hubungan Kebiasaan Berolahraga Jalan Kaki Dengan Kontrol Tekanan Darah Pada Pasien Hipertensi.* Jakarta. Universitas Islam Negri Syarif Hidayatullah.

Roadhah, S. (2012). *Penyakit Tidak Menular, Faktor Resiko dan Pencegahanya.* Alauddin University Press. Makassar

Santoso, I. (2011). *Hipertensi Pada lansia di Panti Sosial Tresna WerdaGau Kabupaten Gowa.* UIN Alauddin Makassar

Sardjono, B. (2011). *7 Meditasi Penyegr Hidup.* Kanisius. Yogykarta

Setiawan. (2014). *Pengaruh Seduhan Daun Alpukat Terhadap Tekanan Darah Di Desa Sedati Kecamatan Ngoro Kabupaten Mojokerto*. Mojokerto. Sekolah Tinggi Ilmu Kesehatan Majapahit. Skripsi

Sudiarto. (2007). *Pengaruh Terapi Relaksasi Meditasi Terhadap Penurunan Tekanan Darah Pada Lansia Dengan Hipertensi Di Wilayah Binaan Rumah Sakit Emanuel Klampok Banjarnegara.* Universitas Jendral Soedirman Purwokerto. Jurnal Keperawatan Soedirman. Volume 2 No 3 November 2007

Sugiyono. (2011). *Metode Penelitian Kuantitatif, Kualitatif, dan R&D.* Alfabeta. Bandung

Sulistyarini. 2013. *Terapi Relaksasi Untuk Menurunkan Tekanan Darah Dan Meningkatkan Kualitas Hidup Penderita Hipertensi.* Universitas Islam Indonesia. Jurnal Psikologi. Volume 40 No 1 Juni 2013

Wuryaningsih, *(*2011). *Keperawatan Jiwa 2, Panduan Praktikum & Logbook Mahasiswa*. Universitas Jember

Yang, H dan Wang, M. (2017). *The Effect of Three Different Meditation Exercises onHypertension: A Network Meta-Analysis*. *Evidence-Based Complementary and Alternative Medicine*. Volume 2017

Zhang, (2017). *Meditation and blood pressure: a meta-analysis of randomized clinical trials*. Journal of Hypertension. Volume 35 No 4 April 2017

