Effect of Praying Meditation: "God in a breath” on Reducing Blood Pressure in Hypertension Patients

Melkias Dikson, Agustina Sisilia Wati Dua Wida, Fransiska Aloysia Mukin
Health Sciences Faculty, Nusa Nipa University
Email: dlmelkias@gmail.com

Abstract

Hypertension is a disease called the silent killer because the symptoms are without complaint, only known after complications are discovered. Increased blood pressure in patients with hypertension can be overcome by using pharmacological and non-pharmacological treatments. Non-pharmacological therapy that can be done to reduce blood pressure in hypertensive sufferers is stress management using meditation therapy. Praying Meditation: “God In A Breath”. This study aims to determine the effect of Praying Meditation: "God In A Breath” on reducing blood pressure in patients with hypertension. This research was conducted in the working area of Puskesmas Koting District, Sikka Regency. This study used a quasi experimental design with a randomized pretest-posttest control group design approach, the study sample used a simple random sampling of 87 people. The analysis used univariate with frequency and percentage, bivariate using the Wilcoxon test, and statistical difference test (Mann-Whitney test). The results showed that the Wilcoxon test had a significant effect on the Praying Meditation: "God In A Breath” intervention on blood pressure with a p-value of 0.000 (<0.05). The results of the Mann-Whitney test showed a significant difference between the blood pressure of the intervention group and the control group with a p-value of 0.000 (<0.05). Prayer meditation has an effect on lowering blood pressure so that it can be one of the nursing interventions that can be given by nurses and can be continued by hypertensive patients independently.

Keywords: blood pressure, hypertension , praying meditation.

Abstrak

Hipertensi merupakan penyakit yang disebut silent killer karena gejalanya tanpa keluhan, baru diketahui setelah komplikasi ditemukan. Peningkatan tekanan darah pada penderita hipertensi dapat diatasi dengan menggunakan pengobatan farmakologis dan nonfarmakologis. Terapi nonfarmakologis yang dapat dilakukan untuk menurunkan tekanan darah pada penderita hipertensi adalah manajemen stres dengan menggunakan terapi meditasi. Meditasi Doa: “God In A Breath”. Penelitian ini bertujuan untuk mengetahui pengaruh Meditasi Doa “God In A Breath” terhadap penurunan tekanan darah pada pasien hipertensi. Penelitian ini dilakukan di wilayah kerja Puskesmas Kecamatan Koting Kabupaten Sikka. Penelitian ini menggunakan quasi eksperimental design dengan randomized pretest-posttest control group design, sampel penelitian menggunakan simple random sampling sebanyak 87 orang. Analisis menggunakan univariat dengan frekuensi dan persentase, bivariat menggunakan uji Wilcoxon, dan uji beda statistik (uji Mann-Whitney). Hasil penelitian menunjukkan bahwa uji Wilcoxon berpengaruh signifikan terhadap intervensi Praying Meditation: “God In A Breath” terhadap tekanan darah dengan p-value 0,000 (<0,05). Hasil uji Mann-Whitney menunjukkan adanya perbedaan yang bermakna antara tekanan darah kelompok intervensi dan kelompok kontrol dengan p-value 0,000 (<0,05). Meditasi doa berpengaruh dalam menurunkan tekanan darah sehingga dapat menjadi salah satu intervensi keperawatan yang dapat diberikan oleh perawat dan dapat dilanjutkan oleh pasien hipertensi secara mandiri.

Kata kunci: Hipertensi, meditasi doa, tekanan darah.
Introduction

Hypertension is a disease called the silent killer because the symptoms are without complaint, only known after complications are discovered. Hypertension is a common cause of cardiovascular system problems in developed and developing countries. Cardiovascular problems are the number one cause of death in the world. According to the World Health Organization (WHO) in 2015 about 1.13 billion people in the world suffer from hypertension. In Indonesia, the incidence of hypertension is 25.8%; the highest was in West Java at 30.0% and the lowest was in Papua at 16.8%. In addition, according to the 2016 National Health Indicator Survey, it shows an increase in the prevalence of hypertension among people aged 18 years and over by 32.4%. In NTT Province itself, the prevalence of hypertension based on doctor's diagnosis in people aged ≥ 18 years is 5.4%. While the results of the recapitulation of the work areas of 23 health centers in Sikka Regency, the number of hypertension sufferers was 3,366 people consisting of 1000 men and 2,366 women. One of the Indonesian government's hypertension control programs implements the Healthy Indonesia Program with the Family approach and the Healthy Living Community Movement (Germas) which is carried out by carrying out physical activity, healthy behavior, consuming healthy and nutritious food, carrying out prevention and early detection the quality of the environment to be better and increase education on healthy living. Germas can be done with Cerdik behavior (regular health checks, get rid of cigarette smoke, be diligent in physical activity, a healthy and balanced diet, adequate rest and manage stress). One way of managing stress can be applied in a holistic way which can be done by complementary therapy and other therapeutic approaches such as meditation therapy. Many studies have reported the benefits of meditation. One of the complementary nursing therapies that can be done to reduce complaints and reduce blood pressure in hypertensive patients is through prayer meditation. Prayer meditation to create a relaxed state that can control the nervous system which in turn can lower blood pressure.

Based on the results of a preliminary study conducted by interviewing several hypertensive patients in the Koting Health Center working area, it was found that 8 out of 10 patients said they used pharmacological and non-pharmacological therapies more often, such as the use of herbal medicines (cucumber juice). This study aims to determine the effect of praying meditation: "God in a breath" on reducing blood pressure in hypertensive patients in the working area of Puskesmas Koting, Sikka Regency. The goal of this research is to increase the patient's knowledge and ability to manage blood pressure with prayer meditation. Praying meditation: “God in a breath” is a nursing intervention in stress management that hypertensive patients can do without side effects and are easy to do.
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Method

This type of research used a quasi experimental randomized pretest-posttest control group design. The number of samples in this study were 82 respondents. Anticipating the possibility of respondents dropping out so that the possibility of reducing the sample will be added 5%. So that the number of samples in this study became 82 + 5 = 87 respondents (65 intervention groups and 22 control groups). The sampling technique used simple random sampling (randbetween with the Excel program). The inclusion criteria of respondents, namely patients who have a history of hypertension; and not getting pharmacological therapy; able to do moderate activities such as bathing, washing their own clothes, plates, glasses and exercise. Categories of mild and moderate hypertension. The exclusive criteria were hypertension patients with severe criteria (intervention group), comorbidities (diabetes mellitus, stroke, kidney failure); bedrest. The analysis used univariate with frequency and percentage, while bivariate to see the differences before and after the intervention. Meanwhile, to see the difference between the intervention group and the control group using the Mann-Whitney U test. Praying Meditation: "God In A Breath" is a religious prayer meditation practice by focusing on one object, namely God, for 30 minutes done 4 times every morning in 2 consecutive weeks. This activity is carried out together in the working area of the puskesmas. For the respondent's pre-test value the blood pressure was measured 5 minutes before the Praying Meditation: "God In A Breath" was carried out and the post-test blood pressure measurement was 5 minutes after the Praying Meditation was done: "God In A Breath". This study involved 3 researchers to measure blood pressure before and after progressive muscle relaxation exercises. and puskesmas nurses facilitate respondents who follow the prolanis to become research respondents.

Result

The general description of respondents is that the majority of respondents, namely 55 people (63.2%), are in the age range 55-74 years, the majority of respondents in this study were 59 women (90.8%), while 6 men ( 9.2%). The majority of respondents who suffered from hypertension in this study were from 0-3 years as many as 42 people (48.3%). The majority of blood pressure experienced by respondents in the intervention group before the intervention was mild (140-159 / 90-99) as many as 37 people (56.9%). And the distribution of the respondent's blood pressure after being given the intervention, it was found that the overall data of the respondents experienced changes in blood pressure. The majority of respondents were at normal blood pressure levels (<130 / <85) as many as 35 people (53.8%). While the blood pressure of all hypertensive respondents in the control group experienced an increase in blood pressure with the
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category of mild blood pressure (140-159 / 90-99) by 13 people (59.1%), and severe blood pressure (> 179 / > 109) by 9. people (40.9). The difference in blood pressure before and after being given intervention in the Praying Meditation: "God In A Breath" group with a non-parametric pair different test using the Wilcoxon test.

Table 1. Statistical Test Results Between Pre And Post Praying Meditation: "God In A Breath"

<table>
<thead>
<tr>
<th>No</th>
<th>Blood Pressure</th>
<th>Pre</th>
<th>Post</th>
<th>p-value</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>N</td>
<td>%</td>
<td>n</td>
</tr>
<tr>
<td>1</td>
<td>Normal (120-139/80-89)</td>
<td>0</td>
<td>0</td>
<td>37</td>
</tr>
<tr>
<td>2</td>
<td>Mild (140-159/90-99)</td>
<td>3</td>
<td>56.9</td>
<td>27</td>
</tr>
<tr>
<td>3</td>
<td>Moderate (160-179/100-109)</td>
<td>2</td>
<td>43.1</td>
<td>1</td>
</tr>
</tbody>
</table>

The results of the difference in the blood pressure of the respondents before and after the Praying Meditation intervention: "God In A Breath" can be seen in table 1, it is found that blood pressure. The majority of blood pressure experienced by respondents before the Praying Meditation intervention: "God In A Breath" is a mild level (140-159 / 90-99) as many as 37 people (56.9%). And the distribution of respondent's blood pressure after being given Praying Meditation: "God In A Breath" intervention obtained data that overall respondents experienced changes in blood pressure. The majority of respondents were at normal blood pressure levels (120-139 / 80-89) as many as 37 people (56.9%). This shows that statistically there is a significant effect with the Praying Meditation: "God In A Breath" intervention on blood pressure with a p-value of 0.000 (<0.05). The difference in blood pressure in the Praying Meditation: "God In A Breath" intervention group with the control group using the non-parametric independent difference test using the Mann-Whitney test.
**Table 2. The results of Independent Difference Test of Blood Pressure in the Praying Meditation: "God In A Breath" Intervention Group With The Control Group.**

<table>
<thead>
<tr>
<th>No</th>
<th>Blood pressure</th>
<th>Intervensi Praying Meditation: “God In A Breath”</th>
<th>Control</th>
<th>Total</th>
<th>P value</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>n</td>
<td>%</td>
<td>n</td>
<td>%</td>
</tr>
<tr>
<td>1</td>
<td>Normal (120-139/80-89)</td>
<td>37</td>
<td>56.9</td>
<td>1</td>
<td>4.5</td>
</tr>
<tr>
<td>2</td>
<td>Mild (140-159/90-99)</td>
<td>27</td>
<td>41.5</td>
<td>14</td>
<td>63.6</td>
</tr>
<tr>
<td>3</td>
<td>Moderate (160-179/100-109)</td>
<td>1</td>
<td>1.5</td>
<td>7</td>
<td>31.8</td>
</tr>
<tr>
<td>4</td>
<td>High (&gt;179/&gt;109)</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td></td>
<td>Total</td>
<td>65</td>
<td>100</td>
<td>22</td>
<td>100</td>
</tr>
</tbody>
</table>

Based on table 1.2 above, the difference in blood pressure after the intervention, the Praying Meditation: "God In A Breath" group with the control group obtained a p-value of 0.000 (<0.005). It can be concluded statistically that there is a significant difference between blood pressure in the group receiving the Praying Meditation: "God In A Breath" intervention and the control group. This means that the Praying Meditation: "God In A Breath" intervention can lower blood pressure.

**Discussion**

This type of research used a quasi experimental randomized pretest-posttest control group design. The number of samples in this study were 82 respondents. Anticipating the possibility of respondents dropping out so that the possibility of reducing the sample will be added 5%. So that the number of samples in this study became 82 + 5 = 87 respondents (65 intervention groups and 22 control groups). The sampling technique used simple random sampling (randbetween with the Excel program). The inclusion criteria of respondents, namely patients who have a history of hypertension; and not getting pharmacological therapy; able to do moderate activities such as bathing, washing their own clothes, plates, glasses and exercise. Categories of mild and moderate hypertension. The exclusive criteria were hypertension patients with severe criteria (intervention group), comorbidities (diabetes mellitus, stroke, kidney failure); bedrest. The analysis used univariate with frequency and percentage, while bivariate to see the differences before and after...
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Conclusion

The average blood pressure before Praying Meditation: "God In A Breath" was 2.43 mmHg, after doing Praying Meditation: "God In A Breath", the blood pressure could be lowered by 0.98 mmHg. There is a statistical difference in the decrease in blood pressure of 0.98 mmHg with a p-value (0.000), after doing Praying Meditation: "God In A Breath". This shows that there is a statistically significant effect with the Praying Meditation: "God In A Breath" intervention on blood pressure. Likewise, the difference in blood pressure in the Praying Meditation: "God In A Breath" intervention group and the control group obtained a p-value of 0.000 (<0.005). It can be concluded statistically that there is a significant difference between blood pressure in the group receiving the Praying Meditation: "God In A Breath" intervention and the control group. This means that the Praying Meditation: "God In A Breath" intervention can lower blood pressure.

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References


