

## The Effect of Quran-Recited Water Therapy on Lowering Blood Pressure among Elderlies with Hypertension

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### ABSTRACT

**Background:** Hypertension is a non-communicable disease that is still a global health problem. Hypertension is a condition where a person's blood pressure is 140 mmHg (systolic) and/or 90 mmHg. Apart from being a type of non-communicable disease, hypertension is also a major risk factor for other cardiovascular diseases. One way to prevent hypertension is by drinking water that has been read by the Qur'an.

**Objective:** to determine the effect of water therapy that has been read by the Qur'an on reducing blood pressure in the elderly with hypertension in Hegarmanah hamlet, Mangunjaya district, Pangandaran district.

**Methods:** The method in this research is pre-experimental design with one group pretest-posttest design. Sampling in this study used a total sampling of 20 respondents with hypertension in Hegarmanah Hamlet, Mangunjaya District, Pangandaran Regency. This research was conducted in March 2022.

**Results:** The results of the study state that there is an effect of drinking water that has been read by the Qur'an on reducing blood pressure in the elderly with hypertension in Hegarmanah Hamlet, Mangunjaya District, Pangandaran Regency.

**Conclusion:** There is a significant relationship between water therapy reading the Qur'an on decreasing blood pressure in the elderly with hypertension because  $t$  count  $>$   $t$  table = 16.502  $>$  2.093 and  $p$  value = (0.05  $>$  0.00).

### KEYWORDS

Alternative, blood pressure, complimentary, Qur'an recitation water therapy, hypertension.

## PENDAHULUAN

According to World Health Organization figures from 2013, China has 1.35 billion people, India has 1.24 billion, the United States has 313 million, and Indonesia comes in fourth with 242 million (Purwono, Sari, Ratnasari, & Budianto, 2020). According to the Central Statistics Agency (2018), the proportion of the population aged 60 and over was 24,754,500 (9.34%) in 2018 (Choirunissa, Suprihatin, & Prastika, 2020).

Elderly is a period in which an individual has reached maturity in the life process, and has shown the function of body organs over time. The World Health Organization (WHO) classifies the elderly into

4, namely: middle age (middle age) 45-59 years, elderly (elderly) 60-74 years, elderly 75-90 years and very old age (very old). old) above 90 years. According to the Republic of Indonesia government regulation number 43 of 2004, an elderly person is someone who has reached the age of 60 (sixty) years and over (Irawati & Lestari, 2017).

Hypertension increases the risk of cardiovascular and cerebrovascular illness. High blood pressure can cause damage to vital organs such as the heart, brain, kidneys, and blood vessels (Ariesti & P, 2018 ; Novianti et al., 2022). Hypertension can be avoided by avoiding the risk factors that cause hypertension, such as smoking, obesity, lack of physical activity, stress, estrogen

use, and one of which can cause hypertension is the pattern of salt consumption (Purwono et al., 2020 ; Kusumawaty, Marliany, Sukmawati, & Novianti, 2021).

The impact that will occur if hypertension is not managed properly can lead to more severe disease (Islani, Harun, & Barus, 2021). Continuous high blood pressure causes a person's heart to work extra hard, eventually this condition results in damage to blood vessels, heart, kidneys, brain, and eyes (Islani et al., 2021). Hypertension is a common cause of stroke and heart attack (Susanto, 2015).

Efforts that can be done by people with hypertension to reduce blood pressure are carried out in two types, namely pharmacological and non-pharmacological, pharmacological therapy can be carried out using antihypertensive drugs, such as: Ace inhibitors, diuretics, calcium antagonists and vasodilators. while non-pharmacological can be done with various efforts, namely: can reduce the causative factor, herbal therapy, and complementary therapy (Kiik, Sahar, & Permatasari, 2018).

Drinking water that has been read by the Koran is a non-pharmacological therapy that can be used. The congregation in the Suryalaya Islamic boarding school has used water as a medium of treatment in ritual activities as previously described, becoming an interesting phenomenon to study because it shows that the Suryalaya Islamic boarding school congregation already has the concept and method of treating water as medicine, through practice and habits (tradition) passed down from generation to generation based on the Qur'an and Sunnah (Sri Rijati Wardiani, 2017).

Based on the above background, the authors are interested in examining the effect of drinking water therapy that has been read by the Qur'an on reducing blood pressure in the elderly.

## **METHODS**

This research is quantitative research, using a pre-experimental design method. The research plan that was carried out is a one group pretest-posttest design. The population in this study were elderly people who experienced hypertension in Hegarmanah Hamlet, Mangunjaya District, Pangandaran Regency, totalling 20 people. Pangandaran totalling 20 people with sampling method total sampling. Inclusion criteria are elderly aged  $\geq 55$  years and suffering from hypertension; elderly who are Muslims and willing to be a respondent. This research was conducted by giving a pretest (initial observation) first before the intervention is given, then a posttest or final observation is given intervention, then posttest or final observation.

The data used in this study are primary data namely data obtained directly from respondents. The data collection in this study is by using the presence of doing therapy and the method of measuring blood pressure using an observation sheet on the elderly who experiencing hypertension. Instruments used in this study are a digital blood pressure measuring instrument, 600 ml bottle water, observation sheet including blood pressure check results before and after the intervention, attendance sheet to do therapy and instrument questionnaire. The data collection process in this study was carried out by checking blood pressure before and after the

intervention to get pretest data. After the blood pressure was measured, then given the therapy of drinking water that has been read Qur'an 30 juz as much as 600ml/day then the next day in the morning blood pressure measurement again to get data posttest, this study was conducted for 6 days

The bivariate analysis used was paired sample t-test to see the effect of Qur'anic recitation water therapy on lowering blood pressure in elderly people with hypertension in the intervention group.

## RESULTS AND DISCUSSION

### Respondent Characteristic

Table 1 summarized respondent characteristics including, gender, age and educational background. Majority respondent gender of is female (80%), age ranged from 55-64 years old (45%), and most of respondent had elementary school background (75%)

### Blood Pressure Condition before and after Water Therapy

In table 2. it is known that blood pressure before being given therapy is: as much as 55% are in the category of hypertension grade 2. Blood pressure after being given water therapy that has been read by the Qur'an is: as much as 55% are in the category of hypertension degree 1.

Table 1 Respondents Characteristic (N=20)

Characteristic	n	Percent
<b>Gender</b>		
Male	4	20,00
Female	16	80,00
<b>Age</b>		
55-64 Years	9	45,00
65-69 Years	3	15,00
Over 70 Years	8	40,00
<b>Level of Education</b>		
Elementary School	15	75,0
Junior High School	4	20,0
College	1	5,0

Table 2. Blood Pressure Values Before and after Treatment (N=20)

Category	n	Blood Pressure		%
		Pre %	Post n	
Hypertension Grade 2	11	55.0	4	20.0
Hypertension Grade 1	7	35.0	11	55.0
Pra Hypertension	1	5.0	3	15.0
Normal	1	5.0	2	10.0

Table 3. Comparison of Blood Pressure Before and After Water Treatment

Condition	Mean	SD	Mean t-Diff	p	
Before	152.70	21.573	7.2	16.502	0.00
After	145.50	21.627			

### Effect of Quran Recited Water Therapy

The Effect of Al-Qur'an Reading Water Therapy on Lowering Blood Pressure in Elderly People with Hypertension

Based on the table above, the mean value before being given Al-Qur'an reading water therapy was 152.70 and the mean value after being given Al-Qur'an reading water therapy was 145.50. then it was found that the increase in the mean after being given drinking water therapy that had been read by the Koran was 7.2 . The standard deviation value before being given Qur'an reading water therapy was 21,573 and the standard deviation value after being given Al-Qur'an reading water therapy was 21,627.

Based on the conclusions above, the value of  $t = 16,502$  and  $p$  value of 0.00 is obtained. There is a significant effect between water therapy reading the Koran on reducing blood pressure in the elderly who have hypertension because  $t$  count  $>$   $t$  table =

16.502 > 2.093 and > p value = 0.05 > 0.00.

Based on the results of the study before being given drinking water therapy that had been read out by the Qur'an, it was known that the respondents' blood pressure was in the category of hypertension degree 2 as many as 11 respondents (55%), in the category of hypertension degree 1 as many as 7 respondents (35%), while the category of prehypertension was 1 respondent (5%) and the normal category is 1 (5%). So it can be concluded that blood pressure before being given drinking water therapy reading the Qur'an, the majority of blood pressure is in the category of hypertension degree.

Warm water foot bath therapy has a physiological effect on the body, according to research. The first is the effect on blood vessels, where warm water improves blood circulation, and the second is the loading element in the water, which benefits the ligament muscles that affect the body's joints. Warm water foot soak activates the nerves in the foot, specifically the flexusvenosus nerve, which stimulates baroreceptors, which are the most essential reflex in defining regulatory control over heart rate and blood pressure. This is due to warm water's ability to enhance blood circulation by widening blood vessels and reducing muscle tension, as well as its calorific energy, which can accelerate blood circulation and stimulate nerves in the legs to activate parasympathetic nerves, hence lowering blood pressure. Warm water offers numerous advantages, including increased warmth, increased muscular relaxation, pain reduction, dilating blood vessels, increasing circulation,

relaxing connective tissue, and delivering a calming and therapeutic impact (Yuningsih, Anwar, & Anggraini, 2023).

Based on the results of the study after (post-test) given water therapy reading the Qur'an, it was known that the respondent's blood pressure was in the category of hypertension degree 1 as many as 11 respondents (55%), hypertension degree 2 as many as 4 respondents (20%) while prehypertension was 3 respondents. (15%) and normal as many as 2 respondents (10%). So it can be concluded that after being given the intervention of providing water therapy reading the Qur'an, the majority of respondents experienced a decrease in blood pressure from the majority of hypertension grade 2 to hypertension grade 1. This decrease could be caused by the provision of water therapy reading the Qur'an.

Therapy by using water reading the Qur'an is a therapy related to one's beliefs, and is one of the therapies that can be implemented, especially for Muslims in controlling stress and increasing blood pressure (Wirakhmi, Purnawan, & Utami, 2021). Al-Qur'an therapy is one way to maintain health. Health has a very important meaning in human life. If healthy, humans can carry out their functions as vicegerents of Allah on earth optimally.

According to the findings of research studies, the respondent's blood pressure is in the category 2 hypertension, which is 152.70 mmHg, and after drinking water therapy that has been read from the Qur'an, there is a change to the degree 1 hypertension, which is 145.50 mmHg.

The effect of Qur'an recitation therapy is in

the form of changes in electrical currents in the muscles, changes in blood circulation, changes in heart rate, and blood levels in the skin. These changes indicate a relaxation or decrease in tension reflective nerve fibres which results in the loosening of the pulse vessels and the addition of arteries and increased blood levels in the skin, accompanied by a with a decrease in heart rate frequency. This molecule will into their receptors in the body and will give feedback in the form of pleasure body and will give feedback in the form of pleasure or comfort (Wirakhmi et al., 2021; Yuningsih et al., 2023).

According to Table 2. The results of blood pressure research before and after water treatment reading the Qur'an in the elderly indicate  $p > p \text{ value} = (0.05 > 0.00)$ ,  $H_a$  is accepted, indicating that there is a substantial effect. Significant effect on blood pressure after receiving water therapy from the Qur'an.

Water is used as a medium for Qur'anic therapy because it has basic principles in medicine because water has waves and responses both inside and outside the body. Water crystals appear to become "beautiful" and "marvellous" when it receives a positive reaction from its surroundings, for example with joy and happiness, or kind and positive words. However, water crystal particles appear to become "ugly" and "unsightly" when they receive the negative effects of an unkind word. The possibility of someone recovering after drinking water that has been prayed over is because the water that has been prayed over conveys the message of the person who prayed over it. Research says water that has been given a prayer (divine energy) or bioenergy (human

energy) can heal everything, and cure all diseases caused by metabolic disorders (Aneng Yuningsih, Syamsul Anwar, 2022) .

The health benefits of water include removing body waste, regulating body temperature, and helping the brain and muscles function. In addition, another fact is that water is also important for the environment and economy. Water therapy using Qur'an recitation is a therapy related to one's beliefs, and is a therapy related to one's beliefs, and is one of the therapies that can be one of the therapies that can be done especially for Muslims in controlling stress and increased blood pressure (Jumatri, Jum.As, & Pane, 2022).

## CONCLUSION

The conclusion of this study is that there is an effect of drinking water therapy that has been read by the Qur'an on reducing blood pressure in landia who have hypertension.

## REFERENCE

- Aneng Yuningsih, Syamsul Anwar, D. A. (2022). Pengaruh Kombinasi Perendaman Kaki Air Hangat Dan Terapi Murottal Al-Qur ' An Untuk Menurunkan Tekanan Darah Pada Penderita Hipertensi : Tinjauan Sistematis The Effect of The Combination of Warm Water Foot Soaking and Murottal Therapy Of Al-Qur ' an for R. *Jurnal Ilmiah Keperawatan*, 8.
- Ariesti, E., & P, Y. P. (2018). Hubungan Self Efficacy Dengan Tingkat Kepatuhan Pengobatan Hipertensi Di Puskesmas Bareng Kota Malang. *Jurnal Keperawatan Malang (JKM)*, 3(1), 39–44.
- Choirunissa, R., Suprihatin, & Prastika, Ita U.

- (2020). Pengaruh Senam Kebugaran Terhadap Tekanan Darah Dalam Lansia Penderita Hipertensi di Puskesmas Tambah Subur Kecamatan Way Bungur Provinsi Lampung Tahun 2019. *Jurnal Ilmu Dan Budaya*, 41(66), 7825–7834.
- Irawati, P., & Lestari, M. S. (2017). Pengaruh Membaca Alquran Terhadap Penurunan Tekanan Darah Pada Klien Dengan Hipertensi Di Rsk Dr. Sitanala Tangerang. *Jurnal Ilmiah Keperawatan Indonesia*, 1(1), 35–45.
- Islani, G. U. Y., Harun, O., & Barus, S. U. (2021). Hubungan Pengetahuan Dan Sikap Dengan Kepatuhan Diet Hipertensi Pada Lansia Penderita Hipertensi. *Jurnal Kesehatan Budi Luhur*, 14(2), 465–469.
- Jumatri, N. F., Jum.As, A. H., & Pane, M. D. (2022). Pengaruh Terapi Murottal Al- Qur'an Melalui Media Audio Visual Terhadap Penurunan Tekanan Darah Pada Lansia dengan Hipertensi di Panti Sosial Tresna Wherda Minaula Kendari. *Jurnal Keperawatan*, 05(02), 1–7. Retrieved from <https://stikesk-kendari.e-journal.id/JK/article/view/755>
- Kiik, S. M., Sahar, J., & Permatasari, H. (2018). Peningkatan Kualitas Hidup Lanjut Usia (Lansia) Di Kota Depok Dengan Latihan Keseimbangan. *Jurnal Keperawatan Indonesia*, 21(2), 109–116. <https://doi.org/10.7454/jki.v21i2.584>
- Kusumawaty, J., Marliany, H., Sukmawati, I., & Noviati, E. (2021). Upaya Pencegahan Dan Penanggulangan Hipertensi Di Posbindu Rungki Cigembor. *Jurnal Pengabdian Kepada Masyarakat*, 2(1), 202–205. <https://doi.org/10.31949/jb.v2i1.685>
- Noviati, E., Sukmawati, I., & Kusumawaty, J. (2022). Happy Elderly in the Pandemic Period with Elderly Gymnastics and Counseling Methods. *ABDIMAS: Jurnal Pengabdian Masyarakat*, 4(2), 666–670. <https://doi.org/10.35568/abdimas.v4i2.1142>
- Purwono, J., Sari, R., Ratnasari, A., & Budianto, A. (2020). Salt Consumption Pattern With Hypertension In Elderly. *Jurnal Wacana Kesehatan*, 5(1), 531–543.
- Sri Rijati Wardiani, D. G. (2017). Aktualisasi Budaya Terapi Air Sebagai Media Pengobatan Oleh Jamaah Di Pesantren Suryalaya Pagerageung Tasikmalaya. *Dharmakarya: Jurnal Aplikasi Ipteks Untuk Masyarakat*, 6(1), 33–39.
- Susanto, Y. (2015). Hubungan dukungan keluarga dengan kepatuhan minum obat pasien hipertensi lansia di wilayah kerja puskesmas sungai cuka kabupaten tanah laut. *Jurnal Ilmiah Manuntung*, 1(1), 62–67.
- Wirakhmi, I. N., Purnawan, I., & Utami, T. (2021). Hipertensi Effect of Therapy Classic Music Mozart and Murotal Ar Rahman on Decreasing Systolic Blood Pressure in Women Hypertension. *Jurnal Kebidanan Dan Keperawatan Aisyiyah*, 16(2), 274–282. <https://doi.org/10.31101/jkk.1626>
- Yuningsih, A., Anwar, S., & Anggraini, D. (2023). Pengaruh Terapi Kombinasi Hidroterapi dan Murottal Al- Qur ' an terhadap Penurunan Tekanan Darah Lansia. 5(1).