# The Effect of Wet Therapy on Blood Pressure Reduction in Hypertension Patients in the Clinic Bekam Lahtahzaan Karanganyar

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Abstract— Hypertension and its incidence rate in Indonesia become a phenomenon. Based on the report of the development of the health status of the Indonesian people to the national and provincial levels. The purpose of this study to determine the effect of cupping therapy on the decrease in blood pressure in patients with hypertension. This research uses Quasi experiment method to find out whether or not the result of "something" is imposed on the subject under study. Analysis of data in this study use paired t-test. The total population in this study were 30 respondents. Sampling in this research is as many as 30 respondents taken using total sampling technique. Based on the result of paired t-test, the significant value of pvalue is 0.000 because (p < 0,05) it can be concluded that there is influence of wet cupping therapy to decrease of blood pressure in hypertension patient. in hypertensive patients.

Keywords— hypertension, therapy, blood pressure, clinic

### I. INTRODUCTION

High blood pressure cases are very common in different parts of the world, one of the main public health problems, as hypertension is common. High blood pressure is referred to as a silent killer, as this disorder is asymptomatic in the early stages, but can cause damage to vital body organs [1].

Blood pressure can occur in anyone, both men and women of all ages. The risk of hypertension increases from the age of forty. Worse, nearly 80% of high blood pressure cases are unknown. Even in most cases of hypertension there are no signs and symptoms (asymptomatic) [2].

The incidence of hypertension tends to increase with age. 65% of over-60s suffer from hypertension. The type of hypertension that often occurs in young and elderly people is isolated systolic hypertension. This type of hypertension occurs when the systolic value is high but the diastolic value is normal. Systolic blood pressure increases with age, while diastolic levels decrease up to 55 years later [3].

Hypertension and its incidence in Indonesia are becoming a phenomenon. Based on the results of reports on the development of the health status of the Indonesian population at national and provincial level. The basic health research in 2013 produced results, namely the prevalence of hypertension in Indonesia, which was increased by 25.8 percent by age  $\geq 18$  years. If the current population of Indonesia is 252,124,458 people, there are 65,048,110 people who suffer from high blood pressure. the highest in Bangka Belitung (30.9%). In absolute terms: 30.9% x 1,380,762 people = 426,655 people. Followed by South Kalimantan (30.8%), absolutely 30.8% x 3,913,908 inhabitants = 1,205,483 inhabitants. East Kalimantan (29.6%). In absolute terms 29.6% x 4,115,714 people = 1,218,289 people. And followed by West Java (29.4%). Absolutely 29.4% x 46,300,543 people = 13,612,359 people. Many people who suffer from high blood pressure prefer alternative treatments with cupping. The preliminary study was conducted on January 8, 2018 at the Bekaat Laatahzan Karanganyar Clinic. With 30 bruises (100%) a pressure drop was observed after a single incision. Against this background.

### II. METHOD

The research design used was quasi-experiment with a group pre-test and post-test design, a technique to determine the effect before and after treatment. The reason for this is that this design is used because this study was done to look for blood pressure (dependent variable) after moist cupping therapy (independent variable) [4]. The total population in this study was 30 respondents. The sample in this study included 30 respondents using techniques from the overall sample. The total sample is a sampling method in which the number of samples corresponds to the population. In this study, the independent variable (wet-cupping therapy), with the dependent variable (blood pressure) in the form of a categorical test. The statistic used is the bivariate analysis of the paired sample test to determine the effect of moist cupping with blood pressure.

III. RESULT

Table 1. Frequency distribution of respondents in the	
Bekaat Laatahzan Basah Karanganyar Clinic	

Occupation	Frequnce (n)	Prosentation (%)		
TEACHER	2	6,7		
FARMER	3	10,0		
PNS	9	30,0		
PRIVAT	15	50,0		
NOT	1	3,3		
WORKING				
Total	30	100,0		

The age-distribution distribution based on Table 1 shows that respondents between the ages of 46 and 60 have a higher frequency, which corresponds to 56.7%. Age factors are at risk for high blood pressure. As the respondent grows older, the risk of hypertension increases, and most research results in the elderly are proven to be due to the natural changes that occur in the human body, namely, structural changes.

The frequency distribution of the work in Table 3 shows that private respondents have 15 higher frequencies, which equals 50.0%. Almost all people experience stress in connection with their work. This can be influenced by excessive demands on work (too much work and often overtime) and the type of work that must provide an assessment of the appearance of the work of its subordinates or the activities for which human responsibility is required , Pain at work can lead to severe hypertension [5]. The frequency distribution of the work in Table 3 shows that private respondents have 15 higher frequencies, which equals 50.0%. Almost all people experience stress in connection with their work. This can be influenced by excessive demands on work (too much work and often overtime) and the type of work that must provide an assessment of the appearance of the work of its subordinates or the activities for which human responsibility is required , Pain at work can lead to severe hypertension [5].

 Table 2. Distribution of the frequency of training of respondents in the Bekaat Laatahzan Basah

Karanganyar Clinic			
Pendidikan	Frekuensi (n) (%)	Presentasi	
S1	10	33,3	
D III	2	6,7	
SPK	1	3,3	
SMA	10	33,3	
SMP	5	16,7	
SD	2	6,7	
Total	30	100,0	

The distribution of frequencies based on the formation in Table 2 shows that respondents with S1 and SMA training have 10 higher frequencies, which is 33.3%.

The level of education indirectly influences blood pressure. The level of education has an influence on lifestyle, namely smoking, alcohol consumption and physical activity [6].

 Table 3. Frequency distribution of the respondents'

 work in the Bekaat Basah Laatahzan Karanganyar

Clinic					
Doloniaan	Frekuensi	Presentasi			
Pekerjaan	<b>(n)</b>	(%)			
GURU	2	6,7			
TANI	3	10,0			
PNS	9	30,0			
SWASTA	15	50,0			
TIDAK KERJA	1	3,3			
Total	30	100,0			

The frequency distribution of the work in Table 3 shows that private respondents have 15 higher frequencies, which equals 50.0%. Almost all people experience stress in connection with their work. This can be influenced by excessive demands on work (too much work and often overtime) and the type of work that must provide an assessment of the appearance of the work of its subordinates or the activities for which human responsibility is required, Pain at work can lead to severe hypertension [5].

The frequency distribution based on the pre-release hypertension category in Table 4 shows that respondents with hypertension 1 had a higher incidence of 16 (53.3%). The frequency distribution based on the hypertension category after the survey shows that respondents with hypertension 1 have a higher frequency of 22 (73.3%). Hypertensive patients, who also perform cupping therapy in addition to lowering blood pressure, can remove toxins and food debris from the bloodstream, increase spinal cord

activity, overcome abnormal blood pressure disturbances and blood vessel calcification, reduce dizziness and cramping spasms and cramping in the muscles Relieve shoulder pain, chest pain and back pain caused by blood circulation when cupping becomes smooth [7].

 Table 4. Frequency distribution before and after

 recording by Laatahzan Karanganyar wet-setting clinic

Kategori hipertensi	Frekuensi (n)	Presentase (%)			
Tekanan darah					
	Sebelum				
Hipertensi grade 1	16	53,3			
Hipertensi grade 2	9	30,0			
Hipertensi grade3	5	16,7			
Tekanan darah sesudah					
Hipertensi grade 1	22	73,3			
Hipertensi grade 2	4	13,3			
Hipertensi grade 3	4	13,3			

#### Table 5. Average blood pressure of respondents before cupping at the Laatahzan Karanganyar Wet Cupping Clinic

In Table 5 it can be seen that the blood pressure of the respondent before the administration of a cupping therapy with a maximum systole of 200 mmHg and a minimum of 140 mmHg reached a mean value of 159.33 with a standard deviation of 16.595, whereas it was an average value for diastolic patients of 90.87 with a standard deviation of 6.067. The above results are then compared after comparing with the cup table if there is a change in mean and standard deviation.

The result of a univariate analysis of changes in systolic blood pressure and diastole before moist cupping is systole 168.80 with a standard deviation of 19,647 [8].

## Table 6. Average blood pressure of respondents after cupping in Laatahzan Karanganyar wet-setting clinic

Variabe	l n	Mi	n Ma	x Mean±SD
Sistolik	30	130	195	$152.80 \pm 17,847$
Diastolik	30	80	100	$88.40 \pm 4,538$

Table 6 shows that the respondent's blood pressure after moist cupping therapy with a maximum systolic value of 195 mmHg and 130 mmHg averaged 152.80 with a standard deviation of 17,847 and a diastolic value of 100 mmHg and a minimum of 80 mmHg had a mean of 88.40 with a standard deviation of 4.538. The results of Tables 5.6 and 5.6 show that the systolic and diastolic blood pressure changes when the interventional treatment of cupping therapy is performed taking into account the mean and standard subdivision. According to Rahman [8] the diastolic blood pressure after cupping was 91.40 with a standard deviation of 9.412. There was a decline from an average of 100.80 to 91.40 with a difference of 9.40

Table 7. Bivariate analysis of wet-dish therapy on I	olood
nressure before and after	

pressure before and after					
n	Mean ± SD	Max	Min	Р	
30	$159.33 \pm 16.595$	200	140	0.000	
30	$\begin{array}{c} 152.80 \pm \\ 17.847 \end{array}$	195	130	0.000	
30	$\begin{array}{c} 90.87 \pm \\ 6.067 \end{array}$	100	80	0.000	
30	$\begin{array}{c} 88.40 \pm \\ 4.534 \end{array}$	100	80	0.000	
	n 30 30 30	n Mean $\pm$ SD 30 159.33 $\pm$ 16.595 30 152.80 $\pm$ 17.847 30 90.87 $\pm$ 6.067 30 88.40 $\pm$	n Mean $\pm$ SD Max 30 $159.33 \pm$ 200 30 $152.80 \pm$ 195 30 $17.847$ 195 30 $90.87 \pm$ 100 30 $88.40 \pm$ 100	n       Mean $\pm$ SD       Max       Min         30 $159.33 \pm$ $16.595$ 200       140         30 $152.80 \pm$ $17.847$ 195       130         30 $90.87 \pm$ $6.067$ 100       80         30 $88.40 \pm$ 100       80	

Based on Table 7, which uses a pairwise sample test, it is shown that there are differences in blood pressure (systolic and diastolic) before and after surgery on cupping therapy. The systolic mean before and after (159.33-152.80) and for the systolic standard deviation values before and after (16,595-17,847). The mean diastolic value before and after (90.87 - 88.40) and for the diastolic standard deviation before and after (6.067 - 4.534). The results of the bivariate analysis using a paired sample test for cytolysis and diastolic showed a value of p = 0.00 (0.000 <0.005), then the hypothesis, Ho, rejected the influence of blood bowl therapy on hypertonic patients after wet-dish therapy.

According to Rosidawati [9], hypertensive patients had a significant influence on blood pressure before and after wet skincare therapy (systolic blood pressure with p-value = 0.001 < 0.050 and diastolic blood pressure with p-value = 0.000 < 0.050).

#### IV. CONCLUSION

The results showed that the average blood pressure of the respondent before a cupping treatment with a systolic maximum of 200 mmHg and a minimum of 140 mmHg had a mean of 159.33 with a standard deviation of 16.595, while with a diastolic maximum of 100 mmHg an average of Cupping with a systolic maximum of 195 mmHg and drinking 130 mmHg gives a mean of 159.33 at a standard deviation of 16.59, whereas at a diastolic maximum of 100 mmHg and a minimum of 80 mmHg Mean of 152.80 with a standard deviation of 17.847. The results of this study suggest that there is an effect of hypertension therapy in

hypertensive patients after wet cupping the rapy with a value of  $p=0.000\,{<}0.005.$ 

The results of this study can be used as a finding for patients who want to be treated at the Laatahzan Karanganyar wet-skinning clinic, that the cupping therapy has benefits for hypertensive patients. Proposals for Laatahzan Karanganyar Wet Curing Clinic always maintain sterility compared to performing a wet cupping clinic.

For educational institutions, it is recommended that Laatahzan Karanganyar Wet Cupping Therapy be used as one of the materials for the development of learning methods for the care of hypertensives. For further nursing research, it is recommended that research be continued and other ways of lowering blood pressure in hypertensive patients for a moment so that nursing can be properly developed. When it comes to problems. This research will then be recommended to other researchers to extend the research period with more samples. So the results of his research will be better.

The results of this study can be used as an intervention in care in the treatment of hypertension. This research can be used as an alternative treatment for hypertensive patients. The results of this study can be used by respondents and families to effectively and effectively lower blood pressure. Be wary of using chemical medications and try alternative treatments as a treatment option for primary hypertension.

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