

PKM Implementation of Complementary “Cupping” Nursing in Controlling Hypertension During Covid-19 Pandemic

Ahmad Kholid Fauzi^{1*}, Handono Fatkhur Rahman²,
Mohammad Alfian Faisol Mustaqim³, Fauzan Abdul Latif⁴,
Dwiki Qutsi Ali Multazam⁵, Anando Setyo Adiwirawan⁶,
Ahmad Labib Umam Musthofa⁷, Badrul Nurul Hisyam⁸

Universitas Nurul Jadid, Paiton¹²³
{handono.hfc@gmail.com¹, kholid0404@gmail.com²}

Submission: 19/12/2021 Received: 31/12/2021 Published: 31/12/2021

Keywords:

Wet cupping,
Hypertension,
Nursing

Abstract. *The number of sufferers infected with Covid-19 is increasing in Indonesia. Kompas states that there were 3,874 people infected with Covid-19 as of September 27, 2020. There are 275,213 people infected with Covid-19 to date. This case increase gives special attention to various government and scientific disciplines. Kompas 18 May 2020 stated that based on reports that around 35 % of Covid-19 patients are people with hypertension, diabetes mellitus, and other cardiovascular diseases. This community service staff will implement complementary nursing "wet cupping" in controlling hypertension during the Covid-19 pandemic. This service used the application of complementary nursing with wet cupping by pre-experimental method, namely one group pretest and posttest design. The people chosen were 16 participants who had hypertension problems. The community service participants will be measured their blood pressure before and after being given wet cupping. The final measurement was carried out after six hours of wet cupping. The instruments needed in this service are a set of cupping tools, a blood pressure meter, and an observation sheet. The evaluation results carried out on participants who had been given wet cupping were a decrease in blood pressure. After a statistical test was carried out, there was a significant effect of complementary "wet cupping" treatment on blood pressure with p-value at systolic = 0.004 and p-value at diastolic = 0.036. The p-value for systolic and diastolic blood pressure was smaller than the alpha value of 0.05. Wet cupping is a prophetic treatment method with benefits and does not cause bad side effects. So that this cupping can be a recommendation for people with hypertension to control blood pressure levels by undergoing cupping regularly and can increase good immunity for people with hypertension.*

Katakunci:

Bekam Basah,
Hipertensi,
Keperawatan

Abstrak. Jumlah penderita yang terinfeksi Covid-19 semakin meningkat di Indonesia. Kompas menyebutkan, hingga 27 September 2020 tercatat 3.874 orang terinfeksi Covid-19, hingga saat ini sebanyak 275.213 orang terinfeksi. Peningkatan kasus ini memberikan perhatian khusus pada berbagai disiplin ilmu dan pemerintahan. Kompas 18 Mei 2020 menyebutkan berdasarkan

laporan bahwa sekitar 35% pasien Covid-19 adalah penderita hipertensi, diabetes mellitus, dan penyakit kardiovaskular lainnya. Tenaga pengabdian masyarakat ini akan menerapkan keperawatan komplementer “bekam basah” dalam pengendalian hipertensi di masa pandemi Covid-19. Pengabdian ini menggunakan penerapan keperawatan komplementer dengan bekam basah dengan metode pra eksperimen yaitu one group pretest dan posttest design. Orang-orang yang dipilih adalah 16 partisipan yang memiliki masalah hipertensi. Peserta pengabdian masyarakat akan diukur tekanan darahnya sebelum dan sesudah diberikan bekam basah. Pengukuran akhir dilakukan setelah enam jam bekam basah. Alat yang dibutuhkan dalam pengabdian ini adalah seperangkat alat bekam, alat pengukur tekanan darah, dan lembar observasi. Hasil evaluasi yang dilakukan pada peserta yang telah diberikan bekam basah adalah penurunan tekanan darah. Setelah dilakukan uji statistik, terdapat pengaruh yang signifikan dari terapi komplementer bekam basah terhadap tekanan darah dengan nilai p pada sistolik = 0,004 dan nilai p pada diastolik = 0,036. Nilai p untuk tekanan darah sistolik dan diastolik lebih kecil dari nilai alpha 0,05. Bekam basah merupakan metode pengobatan profetik dengan manfaat dan tidak menimbulkan efek samping yang buruk. Sehingga bekam ini dapat menjadi rekomendasi bagi penderita hipertensi untuk mengontrol kadar tekanan darah dengan menjalani bekam secara rutin dan dapat meningkatkan kekebalan yang baik bagi penderita hipertensi.

1 Introduction

The number of patients infected with the coronavirus-19 increasing in Indonesia. Compass (2020) mentions patients infected with the coronavirus-19 as of 27 September 2020 there were 3,874 positive people. People infected with corona-19 so far totaled 275,213 people. This upgrade provides special attention to various areas of government and scientific disciplines. The number of COVID-19 sufferers who died as of 27 September 2020 there was an addition 78 people, so the total number of patients who died due to being infected with covid-19 so far totaled 10,386 people. And the number of Covid-19 sufferers who recovered increased by 3,611 people, bringing the total number of patients infected with covid-19 totaled 203,014 people.

The number of people infected with COVID-19 is higher than the number of Covid-19 sufferers healed every day. Many factors cause an increase in the number of Covid-19 sufferers, which consists of the community's lack of compliance in complying with health protocol by always applying washing hands, wearing a mask, and keeping your distance. Besides, people with comorbidities are very vulnerable to contracting COVID-19, and can make it worse-morbidities that already existed in the patient's body Covid-19

before. People with hypertension have a high risk of contracting the COVID-19 virus. Amanda (2020), in Kompas 18 May 2020 stated that based on existing reports, about 35 percent of COVID-19 patients are people with hypertension, diabetes mellitus and disease other cardiovascular.

People with hypertension have a higher risk of being infected with covid-19 and will show more severe symptoms if infected. People with hypertension can cause heart disease, stroke, and kidney failure complications. People with hypertension have low immunity, making it easier for Covid-19 to infect them. If people with hypertension are infected with covid-19, the prognosis of the disease will be multiple organ damage.

Hypertension is a condition in which the patients have a systolic blood pressure above 130mmHg and diastolic pressure above 80 mmHg (American Heart Association, 2017). Hypertension can also be interpreted where a person's condition is experiencing an increase in blood pressure above normal, resulting in morbidity and mortality death (Triyanto, 2014). High blood pressure becomes dangerous if the blood pressure is persistent because it makes the circulatory system and organs get a blood supply (including the heart and brain) tense (Palmer & William, 2001).

The prevalence of non-communicable diseases (NCD) in Indonesia South Sumatra increased 20% in one year. The head of the provincial health office stated the number of non-communicable conditions rose from 37% to 57%. Hypertension is the most common disease that causes stroke in the community, followed by diabetes mellitus. Due to the trends in healthy living, the development of illness has become fast (Sumselupdate, 2016).

Uncontrolled hypertension will cause various complications, so intervention is needed that are applicable and consume drug medicine. People tend to choose natural treatments without using chemical drugs in this modern era. It is caused by a lot of information in the media about various kinds of natural therapeutic benefits and does not cause side effects. But all of that still needs attention more deeply when choosing natural therapies that are safe and useful. Nursing complementary and modality are intervention methods that prioritize nursing naturally and are based on research. One complimentary nursing that benefits hypertensive patients is cupping (cupping).

Cupping is a complementary nursing technique by suctioning on a person's skin. Cupping consists of wet cupping and dry cupping. In this community service, choose cupping wet, providing more benefits than dry cupping. The purpose of this service is to control high blood pressure properly. The goal of this community service is for people with hypertension living in the Weighing Health Center work area.

2 Method

The dedication method used is an experiment with a pre-experimental design, one group pretest, and post-test design. This community service was carried out in the work area of the Puskesmas Paiton Probolinggo.

Participants were selected using the technique of purposive sampling. The inclusion criteria consist of being willing to become a participant, having hypertension, having a job in the district, and not being in the condition (open infection and chickenpox, blood disorders, hemophilia, hypotension, anemia, blood cancer).

Sixteen participants have complied with the established criteria. Respondents will be given one complimentary wet cupping treatment time. The media used are standard operational procedures and pre-test and post-test observation sheets. Participant blood pressure will be measured before being given cupping wet. Then the respondent is allowed to rest for six hours, then measurement of blood pressure.

3 Results

Statistical Test Results on Systolic Blood Pressure

Table 1. Wilcoxon analysis test results on blood pressure systolic

Tekanan Darah Sistolik	n		P Value
	Pre- Post Test	%	
<i>Negatif Ranks</i> (Penurunan)	13	81,25	0,004
<i>Positif Ranks</i> (Peningkatan)	3	18,75	
Total	16	100	

Table 1 describes the analysis test results using the Wilcoxon test on systolic blood pressure, i.e., there is a difference between before and after given cupping treatment on systolic blood pressure respondents with P-value <0.05.

Wilcoxon Statistical Test Results on Blood Pressurediastolic

Table 2. Wilcoxon analysis test results on blood pressure diastolic

Tekanan Darah Sistolik	n		P Value
	Pre-Post Test	%	
<i>Negatif Ranks</i> (Penurunan)	12	75	0,036
<i>Positif Ranks</i> (Peningkatan)	4	25	
Total	16	100	

Table 2 describes the results of the analysis test using the Wilcoxon test. There is a difference between before and after being given cupping treatment wet on the respondent's diastolic blood pressure with P-value < 0.05.

4 Discussion

Table 1 and Table 2 show the effectiveness of applying complementary nursing "wet cupping" against blood pressure. The result is that there are significant changes in systolic pressure and diastolic after being given wet cupping treatment. The P-value at systolic is 0.004, and the p-value diastolic

is 0.036, which means it is smaller than the error rate of 0.05. This result is in line with research conducted by Irawan and Ari (2012), which states that there is a significant effect of cupping therapy for blood pressure with a significance value of 0.001.

Research conducted by Sormin (2018) on the effect of cupping therapy on pressure significant hypertensive blood with p-value 0.000. Susanah, Sutriningsih, and Warsono (2017) also stated the effect of cupping therapy on decreased blood pressure in hypertensive patients was significant with a p-value of 0.000. The community service through nursing applications complementary "Cupping" is an accretion method of minor surgery using negative pressure on the skin's surface to lift the skin, which increases gradually depending on the viscoelastic individual skin. Then the skin will be incised and then made high pressure and tensile strength through the skin and capillaries to facilitate the excretion of interstitial fluid, including lymph and filtering capillaries containing a causative pathological substance (ElSayed, et al., 2013).

Wet cupping gave participants, besides controlling blood pressure, can also have a relaxing effect. The comfortable feeling participants feel when they have cupped can affect the release of happy hormones, namely endorphins. This hormone is also known as the happiness hormone. Because it can provide a relaxing effect for someone, someone who feels happy will have a system good immunity, compared to people who have bad emotions, because they can raise bad hormones, namely hormones too much cortisol. Research conducted by Subadi and Laswati (2014) who said that cupping can improve production of β -endorphins as endogenous morphine reduces pain.

This dedication is in line with research conducted by Rohatani, et al. (2015), which conveyed that there is a difference in systolic blood pressure and diastolic blood pressure after cupping. Cupping has a good effect on high blood pressure sufferers. Cupping can control blood pressure during the COVID-19 pandemic. By controlling blood pressure can increase the immunity of a person with hypertension. Good immunity can prevent the spread of COVID-19 for patients with hypertension. Because of the many cases infected with Covid-19 transmission, 35% of people have a history of hypertension.

Hypertension is not a major concern for immediate treatment among the general public. Hypertension rarely causes signs and symptoms early symptoms of increased blood pressure. Sometimes, the general public only takes medication when there is a complaint of illness headaches due to hypertension. And when hypertension has attacked the organs, other complications occur in the affected organ related to the heart, immediately people with hypertension are treated. So necessary proper education to the public about the importance of keeping blood pressure in normal and safe limits. By always doing both medical and complementary therapy to keep blood pressure under control.

5 Conclusion

After being given wet cupping, participants' systolic blood pressure changes are 13 people or 81.25% lower than before cupping. Participants' diastolic blood pressure changed.e. 12 people or 75% lower than before capped.

The analysis test results obtained the application complementary nursing " wet cupping " significantly affects blood pressure in participants with hypertension. You need to gradually measure your blood pressure by providing more wet cupping than once.

6 References

- Amanda, D. & Martini, S., (2018). Hubungan Karakteristik dan Obesitas Sentral dengan Kejadian Hipertensi. *Jurnal Berkala Epidemiologi*, 6(1), pp. 43-50.
- El Sayed, S., Mahmoud, H. & Nabo, M., (2013). Medical and Scientific bases of Wet Cupping Therapy (Al-Hijamah): in Light of Modern Medicine And Prophetic Medicine. *Alternative and Integrative Medicine*, 2(5), pp. 1-16.
- Irawan, H. & Ari, S., (2012). The Effect of Therapy Bruise to the Decrease of Blood Pressure in Hypertensive Clients. *Jurnal Ilmu Kesehatan*, 1(1).
- Palmer, A. & William, (2001). *Tekanan Darah Tinggi*. Jakarta: Erlangga.

- Rohatani, O., Maliya, A. & Ambarwati, R., (2015). *Efektivitas Pemberian Terapi Beka dan Terapi Pijat Refleksi Terhadap Tekanan Darah pada Penderita Hipertensi*. Universitas Muhammadiyah Surakarta.
- Sormin, T., (2018). Pengaruh Terapi Bekam Terhadap Tekanan Darah Penderita Hipertensi. *Jurnal Ilmiah Keperawatan Sai Batik*, 14(2), pp. 123-128.
- Subadi, I. & Laswati, H., (2014). Ekspresi B-Endorfin Pada Penurunan Nyeri Inflamasi Pasca Terapi Bekam Kering. *Vokasindo*, 2(2), pp. 79-85. Sumselupdate, (2016).
- Sumse Update. [Online] <https://sumselupdate.com/penyakit-tidak-menular-di-sumsel-meningkat-20-persen/> [Diakses 20 Desember 2019].
- Susanah, S., Sutriningsih, A. & Warsono, (2017). Pengaruh Terapi BEkam Terhadap Penurunan Tekanan Darah Pada Penderita Hipertensi di Poliklinik Trio Husada Malang. *Nursing News*, 2(3).
- Swari, R. C., (2019). *Hello Sehat*. [Online] <https://hellosehat.com/pusatkesehatan/hipertensi-tekanan-darah-tinggi/tes-darah-untuk-hipertensi/> [Diakses 20 Desember 2019].
- Triyanto, E., (2014). *Pelayanan Keperawatan Bagi Penderita Hipertensi Secara Terpadu*. Yogyakarta: Graha Ilmu.