

Conference Paper

The Effect of Cupping Therapy on Blood pressure: Literature Review

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Abstract.

Hypertension is one of the diseases with the highest risk in the world for cardiovascular disease, making it a primary factor in Indonesia as it causes damage to the heart, blood vessels, kidneys, lungs, and sensory-motor nerve cells, which may lead to death. This literature review aims to identify cupping therapy for clients' hypertension to decrease blood pressure according to results from studies from the last 5 years. Cupping therapy is one of the complementary therapies that is effective for prevention and treatment of some health problems in the body. The research method uses literature review designs as much as fifth journal from secondary databases, Google Scholar, and Science Direct on journals published between 2017 and 2022, according to keyword articles for a review. The article review uses the PICOS method in accordance with keyword of journal selection from the abstract, which include inclusion and exclusion criteria for the article to be reviewed. Overall, the journal research on cupping therapy intervention has shown results for patients with high blood pressure, so getting cupping therapy periodically can be effective in decreasing blood pressure.

Keywords: cupping therapy, hypertension, complementary

1. Introduction

National Medium Plan in part of community health and nutrition on year 2015-2019 was decrease hypertension prevalent from 25,8% on year 2013 become 23,4% on year 2019. The one effort for controlling hypertension disorder is early detection with tracing for target people, most of patient not aware that their have hypertension background that make happen died. Hypertension is primary risk in the world for cardiovascular disease and making primary factor in Indonesia as cause of to heart failure, blood vessel, kidney, lungs, sensor motor nerve cell, so it risks of died [1]. The most of hypertension patient have obesity problem, and according to recent study that people who have obesity problem make a higher risk amount 65-70 percentage occurrence of primary and secondary hypertension. Therefore, a life style and globalization period

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make increase the incidence of hypertension. Fast food consumption behavior with high cholesterol, high salt, and lack of sport activity, make increase the risk of hypertension [2]. According to health department, Banten Province that show regency or city area with highest percentage on year 2019 was Tangerang regency and Lebak regency have each amount 622.060 and 617.997 cases. The highest percentage was happened on women with amount 1.857.866 people, and while hypertension client to get health service only 50 % from whole client in Banten province. Tangerang city have 100 percentage of client to health service, and while Serang city have lowest health service for hypertension case is amount 17,8 percentage. The data from Indonesia health demography survey on year 2012, a long year 2007-2012 there was increase in the case of mortality in women in 2012. Mortality rate for mother reach out 359/100.000 people or increase of reach 57 percent, if it compared on year 2007, it was 228/100.000 people. this causes pregnant women with high risk developing hypertension during pregnancy [3] .

There are some treatment methods can resolve medic treatment as complementary therapy such as reflex massage therapy, acupuncture, cupping therapy, and another alternative therapy [4]. Cupping therapy is one of complementary therapy that is effective in overcoming high blood pressure in hypertension cases. Cupping is treatment method with blood out from skin surface the body to eliminate metabolism result (toxin accumulate). The kind of wet cupping method is more effective for healing from many diseases, especially in high blood pressure disorder [5].

2. Methods

The analysis strategies of journal review use PICOS framework and data resources for this research get from secondary database like survey database from Indonesia Health Demography Survey on year 2012, Basic Health Research on year 2018, and National Medium Plan on year 2015-2019. The keyword for searching of journal is cupping therapy, blood pressure, and hypertension, that journal suitable with inclusion and exclusion criteria in accordance PICOS framework from journal with topic a resolve high blood pressure problem who can access in full text. The range of journal publish is between 2017-2022 for references of literature review. Focus study of this research is affects complementary therapy (Cupping Therapy) to decrease blood pressure with hypertension disease. The collecting data resources is from secondary data, such as journal article from many researcher and book references.

3. Results

TABLE 1

Title, Authors, year	Population/Sample and Research Method	Result
Effect cupping therapy to blood pressure with hypertension disease. Researcher: Sormin, T.(2019) [6]	Population this research is all hypertension clients without complication amount 48 client and research sample amount 40 respondent. Research method is quasi experiment with approach pre-post-test only design. Sampling technique is accidental sampling. Statistic test is t-test dependent, that for to know different blood pressure before and after cupping therapy intervention.	The result of research that show average change measure result between the first and second measurements to systolic blood pressure before and after cupping therapy intervention is 18,25 (deviation standard 5,94), while it average change diastolic blood pressure before and after cupping therapy intervention for first and second measure is 6,50 (deviation standard 5,79). Bivariate analysis result obtained <i>p value</i> before and after cupping therapy intervention, for systolic and diastolic is 0,000 so there are different between systolic and diastolic blood pressure before and after cupping therapy intervention.
Effect cupping therapy to blood pressure with hypertension disease: Study quasy experiment. Researcher: Nuridah, N., & Yodang, Y. (2021). [5]	Population on this research is hypertension client in Kolaka community health center area accordance inclusion criteria, such as without complication, include from pre hypertension level until hypertension level II. The sample amount is 40 respondents, consist of 20 control group and 20 intervention group. This research used quasy experiment method with pretest and posttest approach with control group design. The procedure for intervention group with cupping to hypertension point amount one times for a month until duration for three months, while control group only observe blood pressure but not cupping method. The collecting sample data with purposive sampling.	Research result that showed cupping therapy intervention for three months continued, it can prove effective decrease to systolic and diastolic blood pressure with hypertension client compared with control group without cupping therapy. Analysis result pre and post intervention cupping therapy for each a month also cupping therapy can prove effective decrease to blood pressure with hypertension client. Statistic test is Friedman test, result of <i>p value</i> is 0,000
Cupping Therapy to decrease blood pressure. Researcher: Amaliyah, H., & Koto, Y. (2018) [7]	Population of this research is 64 respondent, and amount of sample is 38 respondent who client from BRC Clinic Pasar Minggu. This research is quantitative with pre-experiment design for one group pretest-posttest design. The collecting sample data with purposive sampling. Statistic test used Wilcoxon test.	Wilcoxon test result that shows different blood pressure (systole and diastole) before and after cupping therapy. Average of systolic blood pressure after cupping therapy is 153,16 (deviation standard 20,454). Average of diastolic before cupping therapy is 160,53, (deviation standard 20,475), while diastolic blood pressure after cupping therapy is average 101,32 (deviation standard 11,058). Average diastolic blood pressure before cupping therapy 96,89 with deviation standard 75. Wilcoxon test result that is <i>p value</i> for systolic dan diastolic blood pressure is 0,000.

TABLE 1: (Continued)

Title, Authors, year	Population/Sample and Research Method	Result
Effect cupping therapy for decrease blood pressure with hypertension client from cupping home clinic in Palembang. Researcher: Surahmat, R., & Damayanti, N. (2017). [8]	Sample this research is 75 respondents with accidental sampling technique. That sample is whole hypertension client come to cupping home clinic in Palembang. This research was used quantitative method with one group pretest and posttest design. Data collected using instruments and statistic test was used Wilcoxon test ($\alpha = 0,05$)	The result of research show decrease in blood pressure before and after the intervention cupping therapy with average value 3.47, and after cupping therapy with average value 2.05. Statistic test result with p value is 0,000, so the conclusion is there are effect cupping therapy for decrease blood pressure with hypertension client.
Effect cupping therapy to blood pressure in hypertension client. Researcher: Fatonah,S., Rihiantoro, T., & Astuti, T (2017) [9]	Sample this research is 30 respondents, with respondent have criteria level one and two, not consumption medicine anti hypertension in herbal or modern medicine minimizes twelve hours before or after for research process, have not history blood disorder, have not history heart failure and stroke, have not history of convulsive disorder. Design this research is pre-experiment, one group pretest and posttest designs. Sampling technique is consecutive sampling.	The result is cupping therapy have rapid effects to systolic blood pressure with p value = 0,00 and Mean Artery Pressure (MAP) with p value =0,007, while after cupping therapy nothing different between diastolic blood pressure with p value =0,031.
Bloodletting Cupping therapy in the Management of Hypertension Researcher : Moawia M. Al-Tabakha, FarahTariq Sameer, et.al (2017) [10]	Random sampling method, Quasy experiment design, Research analysis is one way analysis of variance (ANOVA)	Research result that show cupping therapy able to decrease blood pressure for three times cupping intervention with p value = 0.000
Effect Cupping Therapy to Decrease Blood Pressure with Hypertension in Malang Husada Clinic Researcher : Susi Susanah, Ani Sutriningsih, Warsono (2017) [11]	Purposive sampling method, Research design is quasy experiment with pretest-posttest one group design, Test research analysis is Wilcoxon test	Result of statistic test that show p value = 0,000 and it can be approved that decrease for mean value of systole (11,74) and diastole (7,39)
Effect Cupping Therapy to change blood pressure with hypertension in Tambak Rejo Village of Gayaman, Mojokerto, Indonesia Researcher : Yufi Aris Lestari, Aris Hartono, Ucik Susanti (2017) [12]	Total sampling method, Research design is quasy experiment, Research test analysis is pretest-posttest designs with control and intervention group, Research analysis is Wilcoxon test	Research result is cupping therapy after give to intervention group that blood pressure measure can effective decrease for hypertension

TABLE 1: (Continued)

Title, Authors, year	Population/Sample and Research Method	Result
Effect Cupping Therapy to blood pressure of patient hypertension in Asy-Syifa Clinic, Prabumulih, Indonesia Researcher : Suryanda (2017) [13]	Probabiity sampling method, Research design is quasy experiment, Research test analysis is pretest-poststest designs in with control and intervention group, Research analysis is paired t-test	The result of measure to 47 respondent that after given cupping therapy show difference average of is 9,36 mmHg and while diastole measure is 10,39 mmHg, so that cupping therapy make effective for blood pressure change
Effect Cupping Therapy to blood pressure of patient hypertension Researcher : Khairul Anam, Imam Fathoni, Agustina (2019)	Purposive sampling method, Research design is quasy experiment with pretest-posttest one group design, Test research analysis is Wilcoxon test	The respondent of pre hypertension grade and hypertension grade 1 show that blood pressure change with p value 0,005
The Effect Of Cupping Therapy on Blood Pressure with in Hypertension Patients in the Hospital Alternative Treatment Miftahusyifa, Bengkulu City Reseacher : Sardaniah, Hj Nurhasanah, Feny Marlina (2019) [14]	Purposive sampling method, Research design is quasy experiment with pretest-posttest one group design	The result of measure to 47 respondent that after given cupping therapy show mean value of systole is 12,143 and diastole is 8,267, so that cupping therapy can effective for blood pressure change
Wet Cupping Therapy for Hypertension Researcher: Shuting Lu, Shizheng Du, Anne Fish, et.al (2019) [15]	Convenience sampling method, Research design is observation studies	The research result is cupping therapy safety for hypertension

4. Discussion

Hypertension is one of disease as effect from a life style behavior is not health of the people. Hypertension usually nothing symptom because many people have health history of high blood pressure for a long time but they don't realize a symptom of hypertension. According to research result that show still many people who have hypertension not aware with health condition. Beside that, many people with hypertension did not discipline while treatment especially for a limitation salt consumption in daily living. So, the people can choose complement treatment program with cupping therapy for hypertension case in the community. Cupping therapy have many indication to blood pressure decrease as the best choice treatment complement therapy for hypertension disease. The people know that complement therapy is cost lower, not

contain chemical ingredient, and significant progress treatment effect [11]. Many of research to explain about cupping therapy can effective for blood pressure decrease with hypertension. According to literature review result for some journal that cupping therapy as intervention for a treatment patient hypertension in 3-4 times for each month regularly, it have give effect to heal blood pressure problem. The people think that cupping therapy is better than to drugs consumption every day. The first time, some respondents say feel afraid if look at a blood while cupping done to other people but after heard that they feel better because the symptoms like headache, pain of shoulder, cramp of the back neck are lost.

5. Conclusion

Literature review result from research journal with cupping therapy as a treatment for decrease systole and diastole value with hypertension disease. So, cupping therapy can make alternative treatment for problem solving to hypertension disease with low cost, minimize side effect dangerous from drugs, and make preventive for increase healthy. Besides that, according to research result that cupping therapy able to heal some health problem likes uric acid problem, diabetic, headache, etc. So, cupping therapy can make recommendations for people have hypertension problem for treatment regularly in one times a month.

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Conflict of Interest

The authors have no conflict of interest to declare.

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