

# Effectiveness of Alternative Therapy on Hypertensive Patients: A Quasi-Experimental Design

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## INTRODUCTION

High blood pressure or hypertension is found in both adults and children. The total number of persons expected to have high blood pressure but who do not know it is projected to be at least 10 million. Researchers in India discovered that approximately 25% of the population in cities and 10% in rural regions have hypertension. While estimates indicate that the overall frequency of hypertension in India is 66 million, India's metropolitan areas showed a much greater incidence of hypertension compared to rural areas, according to a survey done by the Association of Physicians of India (Agarwal-2001). Up to 20% of India's adult population has hypertension, making it the leading silent killer in the country. The vast majority of the cases (nearly 90 percent) are defined as having primary essential hypertension. Diets must be modified to treat and prevent complications caused by hypertension. Blood pressure can be reduced by making dietary changes and doing regular exercise. Worldwide prevention of hypertension helps. Nurses are an essential part of healthcare, and because of this, they have the ability to detect, assess, and identify the health needs of patients. In order to maintain an efficient control of hypertension, they also provide follow-up services to them. Before providing health promotion services, a nurse can aid in many settings in identifying and modifying the risk factors of hypertension.

## METHODOLOGY

To perform the literature review, the investigator used the tool, methodology, conceptual framework, and conceptual frame work to devise his or her technique. For the present study, the literature review was written to serve as a tool for writing this paper. It was organized under headings such as "studies on hypertension and management," "studies on garlic and health," and "studies on the effects of garlic on hypertension." For the study, we have utilized a CIPP model-based approach. This method aided the researcher in determining the change in blood pressure following ingestion of garlic. For the study, we chose an evaluative research approach. Research Design Used in the Present Study: A quasi-experimental design. It was a structured interview/observation schedule used in data collection. It was a feasible and reliable tool. Hypertensive patients and Kerala-based hospitals were used as subject locations for a preliminary test in this pilot study. The study's feasibility was proven.

A detailed analysis was done on a specific hospital's outpatient department in October 2018. Of those who satisfied the sample selection criteria, 40 hypertensive patients (20 in the experimental group and 20 in the control group) were selected using the quota sampling approach. Prior authorization was obtained from the authorities and agreement was given from study participants after the details of the study were explained. Credibility was guaranteed. Before and after garlic administration, blood pressure was evaluated in the experimental group. control group showed no changes in before and post-test blood pressure levels. A interval of 21 days separated the pre- and post-test measurements.

Inferential and descriptive statistics were used to examine the acquired data using the SPSS (Version 10) program.

## **FINDINGS**

Most participants in the study who were hypertensive were in the age range of 51 to 65, with 45% being females, 70% having a high school degree, and 30% being unemployed. Almost 65% of respondents stated that their employment was both physically and mentally challenging had non-vegetarian dietary habits for over five years 12(60%), had drugs administered on a regular basis (85% ), equally had naps under 8 hours, and no exercise (85 percent ). the majority of hypertension patients in the control group were 65 years of age or older, women, and men. 11 (55 percent ) said their employment was both physically and mentally demanding, with 7 (35 percent ) reporting they were a member of nuclear family, and 19 (95 percent ) said they had non-vegetarian dietary habits. exercising less than three times a week (75 percent ). To investigate the change in blood pressure among hypertension patients after they are given garlic supplements in a controlled experiment. In the experimental group, the mean systolic blood pressure was reduced significantly in patients with hypertension after garlic treatment. The mean diastolic blood pressure decreased after administration of garlic to hypertensive individuals in the experimental group, with a significant difference found at  $t = 7.11$  ( $P = 0.001$ ). To conduct a study to investigate whether there is a mean difference in blood pressure between patients who have hypertension in the experimental and control groups. Mean systolic blood pressure difference between hypertensive patients in the experimental group was greater than for patients in the control group, and this difference was statistically significant ( $t = 2.982$ ,  $P = 0.005$ ). Compared to a control group, hypertension individuals in the experimental group had a substantially higher mean difference in diastolic blood pressure ( $t = 2.867$ ,  $P = 0.007$ ).

The aim of this study is to see if the mean difference in blood pressure among hypertensive patients in the experimental group is associated with certain specified parameters. The following associations were seen: A significant correlation was found between sex ( $t=2.699$ ,  $p=0.036$ ), the nature of the work ( $t=2.575$ ,  $p=0.042$ ), the duration of illness ( $t=5.099$ ,  $p=0.002$ ), and exercise ( $t=3.371$ ,  $p=0.015$ ). T

Occupation was significantly associated with type of family, with hypertension patients exhibiting a much lower mean diastolic blood pressure than normotensive patients. Age, sex, employment type, length of illness, regularity of medication use, sleep hours, and exercise did not have a significant association with the mean difference in diastolic blood pressure among hypertensive patients.

## **CONCLUSION**

Apart from pharmacological treatment, a registered nurse can inform their patients about the necessity of having garlic in their diet in order to help lower their blood pressure. systolic blood pressure is linked to several other conditions, including the type of employment one does, the duration of illness, and the amount of activity one does. To execute the essential exercises, the client must also be urged to relax.

## **BIBLIOGRAPHY**

1. Banerjee .S.K,andMaulik S.K.,(2002), "Effect of garlic on cardiovascular disorder", Journal of nutrition, Vol 1.pp 4-5

2. Borek. C., (2006), “Garlic reduces dementia and heart-disease”, Journal of nutrition, Vol;136 pp810-812.
3. Colin.(2001).Fighting Heart Disease and Stroke. American Heart Association, Vol.3,pp 305.
4. Dhawan and Jain. S., (2005), “Garlic supplementation prevents oxidative DNA damage in essential hypertension” Journal of Molecular and Cellular Biochemistry vol;275(1-2), pp. 85-94.
5. Duda. G., et. Al., (2008), “Effect of short term garlic supplementation on lipid metabolism and antioxidant status in hypertensive adult”, pharmacological Report vol ;2 pp 163-170.
6. Ellen Tattleman. M .D.,(2003), “Health Effects of garlic”, Journal of the American Academy of Family Physician’s , Vol 72 no;1.
7. James p and Meschino ,D,C (2002) “Reducing High Blood Pressure with natural therapies”, Journal of massage Today. Vol..02,issue 02
8. Kyugas. H and Laddenprea .T., (1999) “Compliance of Patient with Hypertension and Associated Factors”, Journal of Advanced Nursing 29(4), 832-839
9. Mikung, et.al., (2003) “long term effect of vitamin c supplementation on blood pressure”, Journal of American Heart Association .
10. Miller et al (2002), “Effect of anti-oxidant vitamin supplementation on traditional cardio-vascular risk factors”, Journal of current hypertension Reports .  
Number-1, pp 27-30.