

# EFFICACY OF GARLIC THERAPY AMONG HYPERTENSIVE CLIENTS

Mrs Sunitha Peter, Research Scholar, Malwanchal university, Indore.

Mr. Jinu K Rajan, Research Scholar, Malwanchal University, Indore.

---

Hypertension, often known as high blood pressure, is a frequent condition among adults. It is believed that over 10 million people have excessive blood pressure yet are unaware of it. According to study conducted in India, approximately 25% of adults in cities and 10% in rural regions suffer from hypertension. The total number of hypertensive people in India is estimated to be 66 million. According to a survey done by the Association of Physicians of India, the country's metropolitan areas had a much greater incidence of hypertension (27-37%) than rural areas (2-8%). (Agarwal-2001). Hypertension affects around 20% of the adult population in India, making it the country's most silent killer. Almost 90% of the patients fall under the categories of primary as well as essential hypertension. Dietary changes continue to be important in the treatment of hypertensive patients and the avoidance of hypertension-related problems. Blood pressure can be reduced by lifestyle changes and food management. It contributes to the global reduction of hypertension incidence (Association of Physicians in India 2001). Nurses provide a significant percentage of health care and are responsible for identifying and analysing patients' health needs. They also provide follow – up services to help clients maintain excellent hypertension control. Before providing preventive health care, it is vital to analyse people's lifestyles and identify risk factors for hypertension. Nurses can assist in identifying and modifying risk factors for hypertension in a variety of settings.

## Methodology

The review of literature on relevant studies aided the investigator in developing the technique, conceptual framework, and instrument. For the current study, a literature review was conducted and provided under the headings of studies related to hypertension and management, studies related to garlic and health, and studies linked to the effect of garlic on hypertension. The current study's conceptual framework was built on the CIPP model. This model aided the investigator in determining blood pressure levels before and after garlic delivery. The study's research methodology was evaluative in character. The current study used a quasi experimental approach, namely a repeated measures time series design, to assess the effect of garlic on blood pressure in hypertensive patients. A structured interview / observation schedule was created and used to collect data. The tool was dependable and practical. The pilot study was carried out at selected hospitals in Lucknow, among and hypertensive patients who met sample selection criteria. The feasibility of the study was determined.

The main study was carried out in the outpatient departments of chosen hospitals beginning in October 2018. Among those who met the sample selection criteria, 40 hypertensive patients (20 in the experimental group and 20 in the control group) were chosen using the quota sampling approach. Individual informed consent was gained from the study samples after describing the goal of the study. Prior authorization from the authorities was sought and granted. Confidentiality was guaranteed. In the experimental group, blood pressure was measured before and after garlic administration. In the control group, blood pressure was monitored before and after the test without any intervention. The time between the pre-test and the post-test was 21 days. The collected data was analysed using the SPSS (Version 10) programme, which included inferential and descriptive statistics.

## Findings

The majority of hypertension patients in the experimental group were between the ages of 51 and 65 (9(45%)), were females (14(70%)), had a high school education (6(30%)), were married (16(80%)), and were unemployed. 13 (65%) said their jobs were both physically and psychologically demanding. 6 (30%), belonged to a nuclear family 19 (95%), had non-vegetarian eating habits 18 (90%), disease lasted more than five years 12 (60%) consumed drugs on a regular basis. 17 (85%) had both fewer than 8 hours of sleep (7 (35%)), and 8 hours of sleep (7 (35%)), had afternoon naps, and did not exercise 17 (85 percent ). The majority of hypertensive patients

in the control group were older than 65 years old (8(40%)), females (10(50%) and men (10(50%) were evenly distributed, had a high school education (9(45%)), were married (17(85%)), and were jobless. 11(55%) claimed that their work was both physically and psychologically demanding 7(35%), they belonged to a nuclear family 19(95%), they ate non-vegetarian foods 19(95%), and their disease lasted less than two years. 8 (40 percent), taking pharmaceuticals on a regular basis 13 (65 percent), sleeping fewer than 8 hours 11 (55 percent), not taking afternoon naps 13 (65 percent), no exercise 15 (75 percent). To compare blood pressure levels in hypertensive individuals in the experimental group before and after garlic administration. • Garlic therapy resulted in a significant drop in mean systolic blood pressure among hypertensive individuals ( $t = 7.179$   $P < 0.001$ ). • Garlic administration resulted in a significant drop in mean diastolic blood pressure among hypertension individuals  $t = 7.11$  ( $P = 0.001$ ). To compare the mean difference in blood pressure between the experimental and control groups of hypertensive individuals. • The experimental group's mean difference in systolic blood pressure was substantially greater than the control group's  $t = 2.982$  ( $P = 0.005$ ). • The mean difference in diastolic blood pressure between the experimental and control groups was substantially greater in the experimental group ( $t = 2.867$ ,  $P = 0.007$ ).

The purpose of this study was to see if there was a link between the mean difference in blood pressure and certain parameters among hypertensive patients in the experimental group. *f* There was a significant relationship between sex,  $t=2.699$ ( $p=0.036$ ), nature of employment,  $t=2.575$ ( $p=0.042$ ), duration of illness,  $t=5.099$ ( $p=0.002$ ), and mean difference in systolic blood pressure among hypertensive patients.

*f* There was no significant relationship between age ( $t=0.533$ ,  $p=0.613$ ), occupation ( $t=0.643$ ,  $p=0.544$ ), family type ( $t=0.913$ ,  $p=0.396$ ), medication adherence ( $t=0.345$ ,  $p=0.742$ ), sleeping hours ( $t=1.520$ ,  $p=0.179$ ), and mean difference in systolic blood pressure among hypertensive patients.

*f* There was a significant relationship between occupation,  $t=2.936$  ( $P=0.026$ ), and family type,  $t=2.679$  ( $P=0.037$ ), and mean difference in diastolic blood pressure among hypertension patients. *f* There was no significant relationship between age,  $t=1.062$  ( $P=0.329$ ), gender,  $t=1.237$  ( $P=0.262$ ), nature of work,  $t= 1.207$  ( $P=0.273$ ), duration of illness,  $t=0.663$  ( $P=0.532$ ), regularity of taking medications,  $t=1.133$  ( $P=0.301$ ), sleeping hours,  $t=0.426$  ( $P=0.685$ ), exercise,  $t=1.163$  ( $P=0.147$ ), and mean difference in dias

## CONCLUSION

In addition to pharmacological treatment, nurses can teach hypertensive patients the importance of include garlic in their diet to lower blood pressure. Additionally, the nature of the work demand, the duration of illness, and exercise are linked to a decrease in systolic blood pressure. Clients must be encouraged to relax while performing the appropriate activities.

## Bibliography

1. Banerjee .S.K.,and Maulik 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.

