



Efficacy of Garlic Therapy for Hypertensive Patients : A Research Study

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Introduction

People often struggle with a health issue that is referred to as "hypertension," which is short for high blood pressure. There are around 14 million people who could have high blood pressure but are unaware of it since they haven't been diagnosed with the condition. Recent research conducted in India has indicated that hypertension affects 13% of people living in rural areas, while it affects 25% of those living in urban areas. There are around 68 million people in India who are thought to suffer from hypertension. In India, medical professionals discovered that the percentage of people with hypertension in urban areas ranged from 28–39%, which was a significant increase from the rate in rural areas, which ranged from 5%–9%. In India, hypertension is the primary cause of death without obvious symptoms and affects around 22 percent of the adult population. The majority of them eventually develop what's known as primary, also called "essential," hypertension. Alterations to one's diet continue to be an essential component in both the successful treatment of hypertensive patients and the prevention of the adverse effects of hypertension. Alterations to one's diet and an overall healthier lifestyle may help bring blood pressure under control. It is a beneficial step to take for controlling hypertension all over the world. Because nurses are in the best position to identify and evaluate individuals' specific medical requirements, nursing is an important component of the healthcare system. In addition to this, they provide aftercare therapies to patients in order to assist them in maintaining a healthy blood pressure. In order for nurses to be able to provide preventive health care, it is necessary for them to aid in determining and changing individuals' exposure to risk factors for hypertension. This may take place in a number of contexts.

Methodology

Research on hypertension and its treatment; research on garlic and its health advantages; studies on the impact of garlic on hypertension—these are just a few of the titles that were included in the literature review that was carried out for the purpose of the present inquiry. During the course of our inquiry, we made use of a conceptual framework that was founded on the CIPP model. The researcher was able to better understand the effects of garlic on blood pressure both before and after therapy thanks to the model. An analytical research technique was used for the investigation. This study used a quasi-experimental technique and, more particularly, a repeated measures time series design in order to evaluate the effect that garlic had on blood pressure in hypertensive individuals. For the purpose of data collection, a systematic interview and observation schedule was developed and used. All things considered, it was a dependable and useful piece of equipment. Patients with hypertension who fulfilled the inclusion and exclusion criteria for the research were included in the pilot trial, which was conducted at a few hospitals located in the city of Lucknow. It was determined that the research could be carried out successfully. Beginning in the month of October 2021, the main research was carried out in the outpatient departments of a number of different hospitals. All of the hypertension patients who were recruited for the study fulfilled the selection criteria, and there were a total of 100 of them. Twenty of them were assigned to the experimental group, while the other twenty were assigned to the control group. Before collecting each participant's data, the researchers made sure they had all the appropriate permissions, as well as the participant's informed and written consent, after first stating the objectives of the study. It was a given that the talk would be kept between the two of them. Blood pressure readings were taken both before and after the garlic therapy was administered to the experimental group. Because the members of the control group received no therapy, their blood pressure was measured both before and after the clinical trial. Between the pre-tests and the post-tests, there was a forty-day gap in the outpatient departments of a number of different hospitals. All of the hypertension patients who were recruited for the study fulfilled the selection criteria, and there were a total of 100 of them. Twenty of them were assigned to the experimental group, while the other twenty were assigned to the control group. Before collecting each participant's data, the researchers made sure they had all the appropriate permissions, as well as the participant's informed and written consent, after first stating the objectives of the study. It was a given that the talk would be kept between the two of them. Blood pressure readings were taken both before and after the garlic therapy was administered to the experimental group. Because the members of the control group received no therapy, their blood pressure was measured both before and after the clinical trial. Between the pre-tests and the post-tests, there was a forty-day gap. On the information that was gathered, inferential and descriptive analyses were carried out using SPSS 22.

Findings

The majority of hypertensive patients in the control group fell into the age range of 51 to 65 years old (44%), were female (60%), had a high school education (31%), were married (66%), were unemployed (63%), reported that their work was physically and psychologically demanding (45%), belonged to a nuclear family (33%), were non-vegetarian (77%), took medications very regularly (87%), and either had less than eight hours of sleep. Patients with hypertension who belonged to the control group made up 43 percent of the total; 66% of the population was female, whereas 44% was male. 56% of them had finished high school, 67% of them were married, and 67% of them were jobless. 42% of respondents had been sick within the past two years; 66% of patients took their medication as prescribed; 66% of patients slept for less than six hours per night; 95% of respondents ate meat; 94% of respondents did not eat meat; 33% of respondents reported that their jobs were mentally and physically demanding; 33% of respondents belonged to nuclear families; 42% of respondents had been sick within the past two years; 66% of patients took their medication as prescribed; and 95% of respondents ate meat. In order to determine whether or not garlic lowers the blood pressure of hypertensive patients, this research will compare blood pressure measurements recorded before and after therapy with garlic supplementation. • Individuals with hypertension who were part of the experimental group and were given garlic saw a significant reduction in their mean systolic blood pressure ($t = 5.84$, $P = 0.001$) after receiving the garlic. Individuals suffering from hypertension in the experimental group who were given garlic therapy had a significant reduction in their diastolic blood pressure ($t = 5.84$, $P = 0.001$) as a consequence of the treatment. In order to make a comparison between the average readings of blood pressure taken by the experimental group and the control group of hypertensive patients, The mean difference in systolic blood pressure between the experimental group and the control group was significantly greater ($t = 1.52$), as was the mean difference in diastolic blood pressure ($t = 1.52$) among patients diagnosed with hypertension.

experiment with a population sample of people who have hypertension in order to determine whether or not the average blood pressure difference is related to a select group of important characteristics. Patients with hypertension showed a substantial variation in their mean systolic blood pressure based on factors like gender, employment, length of illness, and amount of physical activity. The average difference in systolic blood pressure among hypertension patients was not connected to factors such as age, occupation, the make-up of the patient's family, the patient's adherence to their medicine, or the amount of time spent sleeping. Differences in diastolic blood pressure among hypertensive persons were strongly connected to the individuals' professions and the composition of their families. *f* Patients with hypertension did not differ substantially in their diastolic blood pressure according to age, gender, employment status, illness duration, medication compliance, sleep duration, or amount of physical activity compared to one another.

Conclusion

Patients who are hypertensive should be educated by nurses, in addition to receiving pharmacological treatment, about the advantages of having garlic in their meals as a way to decrease their blood pressure. There are a number of variables that might cause a decrease in systolic blood pressure. These factors include the duration of an illness, the intensity and frequency of exercise, and the demands of the work itself. The client has to be encouraged to relax while still being inspired to exercise at the same time.

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.