

A Study to assess the efficacy of Cinnamon therapy on hypertension among Hypertensive patients at Lucknow City.

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Introduction

Adults often suffer from hypertension, also known as high blood pressure. It is believed that over 10 million individuals have high blood pressure yet are unaware of it. According to Indian study, around 25% of individuals in cities and 10% in rural regions have hypertension. Hypertension is predicted to affect 66 million people in India. According to a study done by the Association of Physicians of India, the country's metropolitan regions had a much higher prevalence of hypertension (27-37% vs. 2-8% in rural areas) (Agarwal-2001). Hypertension affects around 20% of the adult population in India, making it the country's most silent killer. Almost 90% of these patients are classified as main or essential hypertension. The effect of cinnamon on blood pressure is a disputed topic since, in addition to studies that indicate cinnamon to be beneficial in lowering blood pressure, there are reports that demonstrate cinnamon to be ineffective in this context. Based on data from three randomised clinical trials, Akilen et al. reported in 2013 that administration of cinnamon (at doses ranging from 0.5 to 2.4 g/day for 12 weeks) causes to substantial decreases in SBP and DBP in persons with prediabetes and type 2 diabetes. Nurses offer a significant percentage of health care and are responsible for identifying and analysing patients' health needs. They also provide follow-up treatments to help clients maintain excellent hypertension management. Before providing preventive health care, it is vital to analyse people's lifestyles and identify risk factors for hypertension. Nurses may assist in identifying and modifying risk factors for hypertension in a variety of settings.

Methodology

The examination of literature on relevant research aided the investigator in developing the technique, conceptual framework, and instrument. For the current research, a literature review was conducted and provided under the

categories of studies related to hypertension and management, studies related to Cinnamon Therapy and health, and studies linked to the impact of Cinnamon Therapy 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 Cinnamon Therapy administration. The study's research methodology was evaluative in character. The current study used a quasi experimental approach, namely a repeated measurements time series design, to assess the impact of Cinnamon Therapy on blood pressure in hypertensive individuals. A systematic interview / observation schedule was created and utilised to gather data. The gadget was dependable and practical. The pilot research was carried out at selected hospitals in Lucknow, among and hypertensive patients who met sample selection criteria. The feasibility of the investigation was determined.

The main study was conducted in the OPD of selected Hospitals in from month of April 2019. 40 hypertensive patients (20 in experimental group and 20 in control group) were selected using quota sampling method among those who fulfilled the sample selection criteria. Prior permission from the authorities was sought and obtained, individual informed and consent was taken from the study samples after explaining the purpose of the study. Confidentiality was assured. Blood pressure was assessed before and after the Cinnamon Therapy administration in experimental group. Pre and post test blood pressure was measured without any intervention in control group. The gap between pre and post test was 21 days. The gathered data were analyzed using SPSS (Version 21) package by using inferential and descriptive statistics.

Findings

The majority of hypertension patients in the experimental group were 51-65 years old (43%), female (72%), had a high school education (22%), were married (78%), and were jobless (64%). reported that their work was both physically and psychologically demanding (36%), that they belonged to a nuclear family (95%), that they had non-vegetarian dietary habits (88%), that they had been sick for more than five years (60%), that they took medications very regularly (81%), and that they had both less than 8 hours (32%) and 8 hours of sleep (56%). There

were no midday naps and no exercise (81%). The majority of hypertension patients in the control group were over 65 years old (44%), females (52%) and men (48%) were evenly distributed, had a high school education (49%), were married (82%), and were jobless (51%). reported that their work was both physically and psychologically demanding (31%), that they belonged to a nuclear family (92%), that they ate non-vegetarian food (91%), that they had been sick for less than two years (49%), that they took medications very regularly (55%), that they slept for less than eight hours (48%), that they did not take afternoon naps (58%), and that they did not exercise (67%). To compare blood pressure levels in hypertensive individuals in the experimental group before and after Cinnamon Therapy administration. • In the experimental group, there was a substantial drop in mean systolic blood pressure following Cinnamon Therapy administration ($t = 8.22$ $P = 0.001$). • In the experimental group, there was a substantial drop in mean diastolic blood pressure after Cinnamon Therapy delivery $t = 8.22$ ($P = 0.001$). To compare the mean difference in blood pressure between experimental and control groups of hypertensive individuals. • The mean difference in systolic blood pressure between the experimental and control groups was substantially greater in the experimental group ($t = 3.44$, $P = 0.005$). • The mean difference in diastolic blood pressure between the experimental and control groups was substantially greater in the experimental group ($t = 3.22$, $P = 0.007$).

To investigate the relationship between mean difference in blood pressure and selected covariates in hypertensive patients in the experimental group. ☐ There was a significant relationship between sex, $\chi^2=12.21$; type of employment, $\chi^2=18.22$; length of illness, $\chi^2=15.89$; and mean difference in systolic blood pressure among hypertensive patients.

There was no significant relationship between age, $\chi^2=2.3$; employment, $\chi^2=3.4$; family type, $\chi^2=21$; medication adherence, $\chi^2=0.345$ ($p=0.742$); sleeping hours, $\chi^2=1.520$, and mean difference in systolic blood pressure among hypertensive patients.

☐ There was a significant relationship between work ($\chi^2=12.936$), family type ($\chi^2=12.66$), and mean difference in diastolic blood pressure among hypertension patients. There was no significant relationship between age, $\chi^2=0.39$; gender, $t \chi^2=1.15$ type of job, $\chi^2=1.01$ length of illness, $\chi^2=0.622$;

regularity of taking medicines, $x_2=1.04$, sleeping hours, $x_2=0.403$, exercise, $x_2=1.12$ and mean difference in diastolic blood pressure in hypertensive patients.

CONCLUSION

In addition to pharmaceutical therapy, nurses may educate hypertensive patients the benefits of integrating Cinnamon Therapy in their diet for blood pressure lowering. Additionally, the kind of job demands, the length of sickness, and exercise are linked to a decrease in systolic blood pressure. Clients must be encouraged to relax while doing the appropriate activities..

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