



“EFFECTIVENESS OF YOGA THERAPY ON CONTROL OF HYPERTENSION AMONG HYPERTENSIVE CLIENT AT SELECTED PHC IN PUDUCHERRY”.

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ABSTRACT

Background: Hypertension is the most common cardiovascular disease affecting more than one billion people worldwide. It is a repeatedly elevated blood pressure exceeding 140 over 90 mmHg- a systolic pressure above 140 with a diastolic pressure above 90. In India, hypertension is the leading risk and estimated to be attributable for nearly 10 per cent of all deaths. Adult hypertension prevalence has risen dramatically over the past three decades from 5 percent to between 20-40 percent in urban areas and 12-17 percent in rural areas. **Aim:** To evaluate the effectiveness of yoga therapy on control of hypertension among hypertensive client. **Material and Methods:** Quantitative research approach, Quasi-Experimental research design (Pretest and posttest with control group) was adopted for the study. Simple Random sampling technique was used for data collection and sample size was 60 (30 experimental & 30 Control group). The researcher used demographic variables and also using sphygmomanometer to evaluate the blood pressure. Data was analyzed by descriptive and inferential statistics by SPSS- 20. **Results:** The result of the study showed that the post test mean value of SBP in the experimental and control group was 139.07 ± 9.67 and 146.93 ± 18.92 respectively with the unpaired 't' value 2.026 shows statistically significant. The post test level of DBP in the experimental and control group was 85.10 ± 3.34 and 88.18 ± 4.88 respectively with

statistically unpaired value 2.848 was found to be statistically significant. So, this clearly shows that implementation of yoga therapy was effective in reduction of blood pressure level among hypertensive clients in experimental group.

Key words – Effectiveness, Yoga therapy, Hypertension & Hypertensive client.

INTRODUCTION

“A good exercise for the heart is to bend down and help another up.”

Now a days, various non communicable disease affecting the people such as, anemia, hypertension, diabetes mellitus, cardio-vascular disease, chronic respiratory problems, cancer, visual impairment, accidents, Cerebro-vascular disease and renal problems. Most common vulnerable group is adolescent women, children and elderly people. A higher percentage of men than women have high blood pressure until age 45. From ages 45 -54 and 55-64, the percentage of men and women is similar; after that a much higher percentage of women than men have high blood pressure. About 69% of people who have heart attack, 77% who have a stroke, and 74% who have congestive heart failure have blood pressure higher than 140/90 mmHg. **(American Heart Association, 2014)**

Hypertension is the most common cardiovascular disease affecting more than one billion people worldwide. It is a repeatedly elevated blood pressure exceeding 140 over 90 mmHg- a systolic pressure above 140 with a diastolic pressure above 90. **(Joyce, 2009)**

In India, hypertension is the leading risk and estimated to be attributable for nearly 10 per cent of all deaths. Adult hypertension prevalence has risen dramatically over the past three decades from 5 percent to between 20-40 percent in urban areas and 12-17 percent in rural areas. The number of hypertensive individuals is anticipated to nearly double from 118 million in 2000 to 213 million by 2025. It is estimated that 16 per cent of ischemic heart disease, 24 percent of acute myocardial infarctions and 29 percent of strokes are attributable to hypertension underlining the huge impact effective hypertension prevention and control can have on reducing the rising burden of cardiovascular disease. **(Indian Journal of Medical Research, 2013).**

The prevention and management of hypertension is major public health challenges. In recent decade, different classes of antihypertensive agents were developed and tested in a variety of settings and among different patients. Complementary and alternative medicine is becoming increasingly popular and numerous interventions are regularly recommended for lowering elevated blood pressure. **(Basavaraddi, 2010).**

Yoga, as a complementary therapeutic regimen, has been shown to be useful to individuals with a wide range of health conditions, including cardio-vascular diseases (CVDs) and diabetes. Yoga represents a body of practices with an ancient history originally derived from India, and is gaining increasing popularity in many countries around the world, consisting of various postures, breathing and meditation techniques. (Vaze, 2010).

Now a day, Yoga used alone or combined with conventional therapy has been widely used as an alternative and effective method for the treatment of essential hypertension all over the world. There is a need to provide a better recognition of yoga by the health care community as a compliment to conventional medical care. (E. Gonzalez, 2013).

Yoga therapy as an effective complementary treatment in the management of high blood pressure (BP). Yoga presents an effective method of treating hypertension that is nonpharmacologic and therefore there are no adverse effects and there are other valuable health benefits.

Madanmohan (2012) conducted study on immediate effect of sukha pranayama on heart rate and blood pressure of patients with hypertension. The result of the study revealed that Sukha pranayama produced a significant reduction in HR from 79.5 ± 3.09 to 78 ± 3.24 beats/min and significant reduction in systolic pressure from 132.5 ± 5.45 to 123 ± 3.83 mmHg, all these changes being statistically significant.

STATEMENT OF THE PROBLEM

A study to evaluate the effectiveness of yoga therapy on control of hypertension among hypertensive client at selected PHC in Puducherry.

OBJECTIVES

1. To assess the pre-test levels of blood pressure among experimental and control group.
2. To evaluate the post test levels of blood pressure among experimental and control group.
3. To compare level of blood pressure between experimental and control group.
4. To associate the effectiveness of yoga therapy with their demographic variables.

HYPOTHESES

P value was tested at the level of significance 0.05

H₁- There is a significant difference between pre and post test levels of blood pressure among hypertensive clients in experimental and control group.

H₂- There is a significant association between the effectiveness of yoga therapy and selected demographic variables.

ASSUMPTIONS

1. Yoga therapy will reduce blood pressure.
2. Age 40-60 years may increase risk for hypertension.

MATERIAL AND METHODS

Quantitative research approach, Quasi-Experimental research design (Pretest and posttest with control group) was adopted for the study. Simple Random sampling technique was used for data collection and sample size was 60 (30 experimental & 30 Control group). The researcher used demographic variables and also using sphygmomanometer to evaluate the blood pressure. Pre-test was done to assess the level of blood pressure for both the groups. Experimental group received yoga therapy for 20 days for each samples and control group did not receive. After 20 days the posttest level of blood pressure was evaluated for both study and control group. Data was analyzed by descriptive and inferential statistics by SPSS- 20. The conceptual framework used for this study was based on Health promotion Model. The content validity of the tool was obtained from the experts in nursing field. The reliability of the tool was established by karl pearson's formula which (0.8) was found reliable. Feasibility of the study was confirmed by pilot study. The data was organised, analysed and interpreted in terms of the study objectives. The data was summarized and tabulated by using descriptive statistics (Mean, Frequency, Percentage & Standard Deviation) and inferential Statistics (t-test, Chi-square).

RESEARCH VARIABLES

Independent Variable: Yoga therapy

Dependent Variable: Hypertensive client

Demographic Variable:

- Age in years
- Religion

- Educational status
- Family income
- Type of family
- Food habits
- BMI

RESULTS

With regard to age indicates that 13 (43.33%) subject in 56-60 years of age belongs to experimental group. 13 (43.33%) subject in 46-50 years of age belongs to control group.

Religion indicates that 86.67% subject in experimental & control groups belong to Hindu religion.

Educational status indicates that 73.33% subject is belong to illiterate/Primary school in experimental group. 86.67% subject are belong to /Primary school in experimental group.

The comparison of pre and post test level of blood pressure in experimental group shows that, the pre-test mean value of SBP was 142.55 ± 9.76 and the post test mean value of SBP was 139.07 ± 9.67 . The pre test mean value of DBP was 88.14 ± 3.41 and the post test mean value of DBP was 85.10 ± 3.34 . The calculated paired 't' value of $t = 25.623$ for SBP and $t = 33.153$ for DBP was found to be statistically significant. This clearly shows that the implementation of yoga therapy had significant reduction in their post test level of blood pressure among clients with hypertension in experimental group.

The demographic variable religion had shown statistically association with the posttest level of diastolic blood pressure at $p < 0.001$ level in experimental group.

CONCLUSION:

The study concludes that selected yoga therapy was effective in reducing blood pressure among the hypertensive clients. All the subjects in the experimental group had reduced blood pressure further days. This is also a convenient measure. So this selected yoga therapy can be practice as an alternative and complementary therapy by nurses in their day to day caring the hypertensive clients in PHC setting.

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