

# Effectiveness of Yoga on Blood Pressure Among Patients with Hypertension

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**Abstract:** This paper presents an overview on effectiveness of yoga on blood pressure among patients with hypertension.

**Keywords:** Yoga, Blood pressure, Hypertension.

## 1. Introduction

Hypertension is very common indeed and hence a major public health issue. The estimated number of adults living with high blood pressure globally was 972 million. This is expected to increase to .56 billion by 2025. (Duluth, 2003). Hypertension was common in both developed (333 million) and developed (639 million) countries. In Europe hypertension occurs in about 30-45% of People. (Soreson, 2010).

Hypertension is a worldwide epidemic. The prevalence of hypertension in the United States is increasing and reached 34% in 2006 and African American adults have among the highest rates of hypertension in the world at 44%. Hypertension is more prevalent in men (though menopause tends to decrease this difference) and in those of low socioeconomic status. (Ferrouni, 2007). One in every 10 Indian suffers from high blood pressure. Antihypertensive drugs have side effects and are expensive. Noncompliance to medication is very common among hypertensive patients due to various reasons. Antihypertensive drugs alone cannot control blood pressure. Physiological relaxation is very important for maintaining blood pressure. (Indian express bureau, 2004) Savasana therapy relaxes the body and facilitates normal blood circulation without obstruction and it is one of the important technique to control blood pressure. Based on the review of literature, prevalence and incidence of hypertension is existing in various regions and the investigator practice in the field of community; felt that savasana may be beneficial to the patients with hypertension. It is a simple procedure to carry out in day to day life and potentially risk free procedure, so the investigator had selected this study and proved by evidence based approach

## 2. Methodology

The conceptual frame work of this study was based on Daniel. L. Stuffle beams context, input, process and product evaluation mode and it provided a complete frame work for achieving the central purpose of the study. The research methodology adopted for the study was quasi experimental pretest and posttest control group design. The Study was

conducted in selected areas of Lucknow. The Sample size for the study was 60, 30 persons were in experimental group another 30 persons were in control group. The samples were selected based on the inclusive criteria by using purposive sampling technique. The collected data was analyzed and interpreted based on the objectives using descriptive and inferential statistics.

## 3. Findings

On analysis of frequency and percentage of demographic variables, majority of the patients 12 (40%) were between the age group of 41-50 years and 51-60 years among hypertensive patients in experimental group, whereas in the control group 14 (46.67%) of subjects were between the age group of 51-60 years. With regard to sex, majority of patients 20 (66.67%) were females in the experimental group, whereas in the control group 17 (56.67%) of patients were female. With respect to education majority of the patients 15 (50%) had no formal education in the experimental group, whereas in the control group 17 (56.67%) of subjects had no formal education. With regard to occupation majority of patients 22 (73.33%) were belongs to coolie in the experimental group, whereas in the control group 22 (73.33%) of subjects were belongs to coolie. With regard to monthly income, majority of the patients 20 (66.66%) of them were belongs to <3000, in the experimental group, whereas in the control group 15 (50%) of subjects were belongs to <3000. Regarding the family history of hypertension, majority of patients 23 (76.67%) did not have family history of hypertension, in the experimental group and 24 (80%) in the control group did not have family history of hypertension. Regarding the bad habits majority of patients, 22 (73.33%) of them were do not have any bad habits in the experimental group. whereas in the control group, majority of patients 16 (53.33%) of them were do not have bad habits. With regard to dietary habits majority of patients 25 (83.33%) were belongs to non-vegetarian in the experimental group, whereas in the control group majority of patients, 29 (96.67%) were belongs to non-vegetarian. On analysis the pretest level of blood pressure among experimental group, majority of patients 25 (83.33%) had prehypertension and in the control group majority of patients 27 (90%) had prehypertension. On analysis the posttest level of blood pressure among experimental group, majority of patients 25 (83.33%) had normal level of blood

pressure and in the control group majority of patients 25 (83.33%) had prehypertension. On analysis of posttest level of blood pressure among experimental group, majority of patients 25 (83.33%) had normal level of blood pressure and in the control group majority of patients 25 (83.33%) had prehypertension. On analysis of mean score of blood pressure among experimental group was 0.16 and in control group was 1.16. Standard deviation after intervention among experimental group was 0.36 and in control group was 0.39 and calculated 't' value was 15.625. It shows reduction of blood pressure in experimental group. analysis revealed there was no significant association between the posttest level of blood pressure and demographic variables such as age, sex, education, occupation, monthly income, family history of hypertension, bad habits and dietary habits. In experimental and control group, the calculated chi square value showed that there was no association between demographic variables and blood pressure respectively at  $p < 0.05$  level.

#### 4. Conclusion

This study was assessed the effectiveness of savasana on reduction of blood pressure among patients with hypertension. The study findings revealed that there was a significant association on the level of blood pressure after administration of savasana in the experimental group. On the basis of the study, the researcher concluded that administration of savasana has a significant effect on blood pressure. Savasana is an effective, easy to apply and potentially risk free intervention.

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