

Effects of Yogic Exercises on Hypertension among Working Ladies in School Education Department

^aSabzar Ahmad, ^bJeetender Kumar Thakur

^aResearch Scholar R. T.M .University Nagpur, MS, India

^bOfficating Principal Weinganga College Of Physical Education Sakoli, India

Abstract

The study in hand was an attempt to investigate the effect of yogic exercises on hypertension patients working in school education department. For this purpose 30 working ladies from different schools of school education department of kulgam district of (J &K) were selected randomly as subjects for the study. The age of the subjects ranged between 25 to 40 years. The data on hypertension was measured in mmHg by using Sphygmomanometer to find out the effect of yogic exercises on hypertension among working ladies “t” test was used as a statistical tool. The level of significance was set at 0.05. The results revealed that yogic exercises have a significant effect on hypertension.

KEYWORDS: - yogic exercises, Hypertension and working Ladies

Introduction: - Blood pressure is a measure of the force or pressure exerted by the blood on the arteries. The highest pressure (systolic blood pressure) reflects the pressure in the arteries during systole of the heart when myocardial contraction forces a large volume of blood in to the arteries. Following systole the arteries recoil and the pressure drops during diastole, or the filling phase of the heart. Diastolic blood pressure is the lowest pressure in the artery during the cardiac cycle. The difference between the systolic and diastolic blood pressure is known as pulse pressure. The pulse pressure creates a pulse wave that can be palpated at various sites in the body to determine pulse rate and to estimate blood pressure.

Current estimates suggest that over 76 million US adults suffer from hypertension and that blood pressure is well controlled in less than 50% of these individuals. Uncontrolled hypertension is thought to be responsible for 62% of cerebrovascular disease and 49% of ischemic heart disease and is estimated to cost the United States \$93.5 billion in health care services, medications, and missed days of work in 2010. The cost of drugs, drug interactions, and non adherence with the drug regimen all contribute to current high rates of uncontrolled hypertension. Alternative, less expensive methods to reduce blood pressure that have lower risk of drug interactions and which may convey the benefits of long-term adherence are much needed.

Yoga is one such alternative healthcare practice thought to improve blood pressure control. There is no single definition of the practice of yoga, that is universally accepted although it is generally described as an ancient tradition (originating 5,000 to 8,000 years ago) that incorporates postures, breath control, and meditation, as well as specific ethical practices. The number of yoga practitioners continues to rise, with current estimates indicating at least 15.8 million people in the United States (6.9% of Americans) practice yoga. Most relevant to the issue of blood pressure control is that yoga is increasingly being suggested by American health care providers as a means of enhancing health.

Methodology:-

Subjects: - 30 working ladies from different schools of school education department of kulgam district of (J &K) were selected randomly as subjects for the study. The age of the subjects ranged between 25 to 40 years.

Tools:- The data on hypertension was measured in mmHg by using Sphygmomanometer.

Procedure: - on the selected subjects a pre-test with respect to measure the hypertension was conducted at very first stage of the study then as for the experimental treatment was concern the 12 weeks yoga training programme was administered as per schedule (6 days per week for 45 minutes per day) and then post test was conducted to measure hypertension with the help of reliable of tools of measurement to find out the effect of yogic exercise on hypertension.

Statistical technique: - the t test was used to determine the effect of yogic exercises on hypertension. Further the level of significance was set at 0.05.

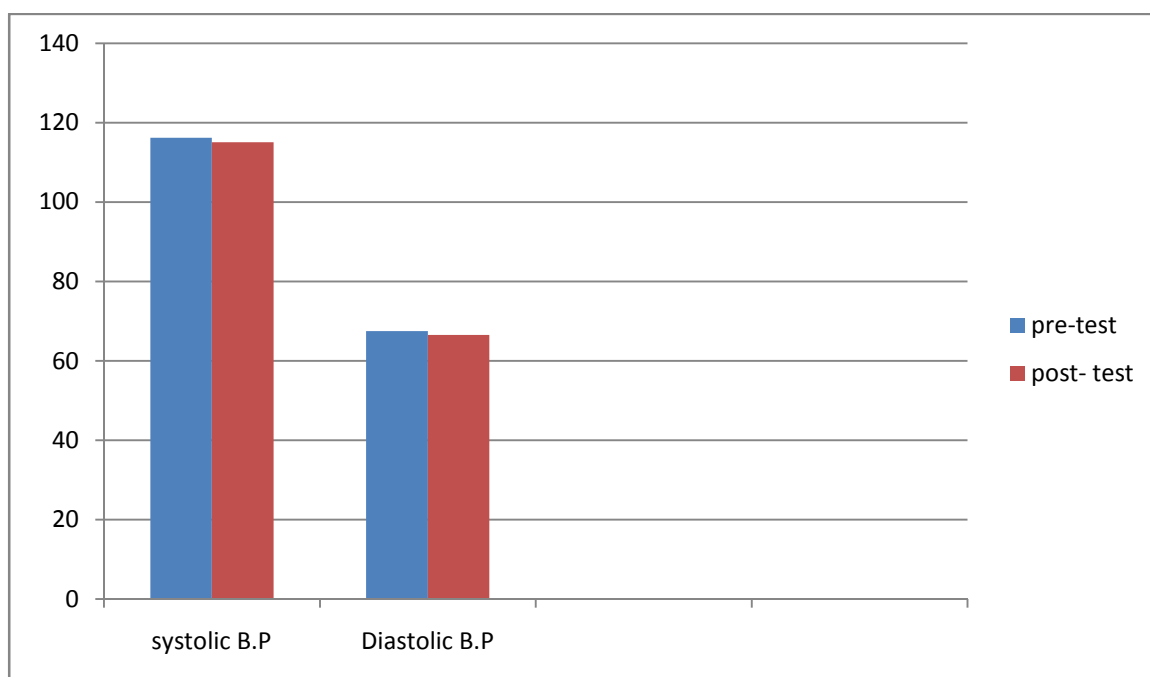
Results

t ratio of the means of hypertension among working ladies.

Variable	Group	N	Mean	S.D	df	“t”
Systolic pressure	Pre-test	30	116.17	4.11	29	3.17*
	Post- test	30	115.07	3.21	29	
Diastolic pressure	Pre- test	30	67.54	2.73	29	4.64*
	Post -test	30	66.50	2.17	29	

*significant at 0.05, $t_{.05}(29) = 2.04$

From the above results it is evident that the calculated t value is greater than the tabulated value of 2.04. Hence it is considered that there was significance difference found between the pre test scores of hypertension among the working ladies. The scores are also illustrated in the figure.



Discussion:- yoga aims at perfection of the body and mind; it is natural to ask whether the progress towards perfection is reflected in objective reproducible changes in physiological variables. In general, yogic practices have been proposed to reduce blood pressure (Bhargava et al., 1988). A significant decline in systolic blood pressure in the present study is in accordance with the findings of Bhargava et al. (1988) Diastolic blood pressure mainly varies with the degree of peripheral resistance (Guyton, 1996) and heart rate. The significant change in diastolic blood pressure observed in the present study suggests that Yogic exercises might have any immediate effect on peripheral vascular resistance and to reduce heart rate (. Results of this study also supported by (Joshi et al., 1992, Lohan and Rajesh (2002, Mohan (2003), M.Saroja (2010) and Sushil Lega (2010)

Conclusion

Significant difference was observed on the variable blood pressure as a result of yogic exercise treatment.

References

1. Bhargava R, Gogate MG and Mascarenhas JF (1988) Autonomic responses to breath holding and its variations following pranayama. *Indian J. Physiol. Pharmacol.* 32, 257-264.
2. Guyton AC (1996) *Textbook of Medical Physiology*. 9th edition. W.B. Saunders, Philadelphia.pp:161-169.
3. Hadi N (2007) Effects of hatha yoga on well-being in healthy adults in Shiraz, Islamic Republic of Iran. *East Mediterr. Health J.* 13, 829-837.
4. Harinath K, Malhotra AS, Pal K, Prasad R, Kumar R, Kain TC, Rail L and Sawhney RC (2004) Effects of hatha yoga and omkar meditation on cardio respiratory performance, psychological profile, and melatonin secretion. *J. Altern. Complement. Med.* 10, 261-268.
5. Joshi et al. (1992) Yogic asanas and pranayama to reduce the physiological parameters. *Indian J. Physiol Pharmacol.* 35, 286-289.