COMPARATIVE EFFECTS OF YOGIC PRACTICES AND PHYSIO THERAPY EXCERCISES ON SYSTOLIC BLOOD PRESSURE AMONG LOW BACK PAIN FOR MIDDLE AGE MEN

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Abstract

It is common knowledge that India is the world's second-largest country in terms of population, after only China. However, in comparison to China and other affluent nations, the health of the vast majority of the population is far from good. However, India has achieved significant progress in improving the health of its population during the previous five decades by expanding health facilities and manpower in primary, secondary, and tertiary care in the government, voluntary, and commercial sectors. The goal of this study was to compare the impact of voga practises and physiotherapy exercises on Systolic blood pressure in middle-aged males with low back pain. Due to the affects of comparative effects of yogic practises and physiotherapy exercises, it was expected that there would be substantial variations in Systolic blood pressure among middle-aged males with low back pain. The study's goal was to find 45 middle-aged males in Chennai who had low back pain and were between the ages of 30 and 40. For 6 weeks, the Experimental groups I, II, and III were exposed to the effects of yogic practises and physiotherapy exercises for an hour in the morning. The control group did not get any special training but continued to engage in normal activities. For each of the four groups, a pre- and post-test was conducted before and after the training. The data obtained from the three groups before and after the training period was statistically evaluated using Analysis of Covariance (ANCOVA) to assess the significant difference, which was tested at the 0.05 level of significance.

Keywords: yogic practices and physiotherapy exercises, Systolic blood pressure.

INTRODUCTION

Meditation and pranayama (breathing exercises) are two yogic practices that are especially useful for those with high blood pressure. For a long time, it has been known that regular exercise and healthy eating habits can assist to decrease blood pressure. Yoga treatment may be useful to those who are hypertensive or prehypertensive. Yoga has a substantial effect on hypertensive individuals. According to Park and Hans' review, yoga therapy and meditation are effective in lowering systolic and diastolic blood pressures.

In compared to meditation, yoga therapy has been shown to be more helpful. This study took into account all of the underlying factors for cardiovascular disease, not only high blood pressure. There was no evaluation that focused entirely on prehypertension. As a result, the goal of this review is to provide evidence on yoga's standalone effect on the prehypertensive group.

This study will also include a meta-analysis for blood pressure, both systolic and diastolic, to guarantee high-quality data. Yoga is a great illustration of the mind-body connection as R. VENUGOPAL 6084

therapy and a means to promote and maintain wellbeing.

As a result, the goal of this research is to highlight yoga's possible involvement in the physiotherapeutic process as whole. Theoretically, cross-fertilization of their mutual assumptions would result in a variety of advantages for the patient mind-body interaction and overall health. As a result, this would indicate that yoga might be conceptually integrated with the physiotherapeutic process.

METHODOLOGY

A total of 60 low back pain for middle-aged males from Chennai, aged 30 to 40 years, were chosen for the study. They were randomly assigned to one of four groups: EG- I (YP), EG-II (physiotherapy), EG-III (yogic practices plus physiotherapy), and CG.

Data was obtained from all three EG and the CG after six weeks of comparing the effects of YP and physiotherapy exercises. The apparatus that is used to test the Systolic blood pressure level using conventional equipment. The significance of the differences between the groups was determined using analysis of covariance (ANCOVA). The significance threshold was set at 0.05 percent.

Table I COMPUTATION OF ANALYSIS OF COVARIANCE OF SYSTOLIC BLOOD PRESSURE

(Total Scores in mm/hg)

Yogic	physio	Combined	Control	Source of Variance	Sum of Squares	Df	Mean Squares	Obtained F
				between	15.52	3.00	5.17	
148.40	147.13	147.73	147.20	within	3368.67	56.00	60.15	0.09
				between	1397.92	3.00	465.97	
139.13	138.93	133.07	146.67	within	2336.93	56.00	41.73	11.17*
				between	1453.26	3.00	484.42	
138.76	139.16	133.01	146.86	within	1586.84	55.00	28.85	16.79*
0.27	8 20	14.67	0.52					
	148.40	148.40 147.13 139.13 138.93 138.76 139.16	148.40 147.13 147.73 139.13 138.93 133.07 138.76 139.16 133.01	148.40 147.13 147.73 147.20 139.13 138.93 133.07 146.67 138.76 139.16 133.01 146.86	Yogic physio Combined Control Variance 148.40 147.13 147.73 147.20 within 139.13 138.93 133.07 146.67 within 138.76 139.16 133.01 146.86 within	Yogic physio Combined Control Variance Squares 148.40 147.13 147.73 147.20 within 3368.67 139.13 138.93 133.07 146.67 within 2336.93 138.76 139.16 133.01 146.86 within 1586.84	Yogic physio Combined Control Variance Squares 148.40 147.13 147.73 147.20 between 15.52 3.00 139.13 138.93 133.07 146.67 within 2336.93 56.00 138.76 139.16 133.01 146.86 within 1586.84 55.00	Yogic physio Combined Control Variance Squares Squares 148.40 147.13 147.73 147.20 within 3368.67 56.00 60.15 between 1397.92 3.00 465.97 139.13 138.93 133.07 146.67 within 2336.93 56.00 41.73 between 1453.26 3.00 484.42 138.76 139.16 133.01 146.86 within 1586.84 55.00 28.85

Table value at 0.05 level of confidence for 3 and 56 (df) is 2.77, 3 and 55(df) is 2.77.

Table II Scheffe's Confidence Interval Test Scores on Systolic blood pressure

(Scores in mm/hg)

	Mean	Required			
Control Group	GROUP I	GROUP II	GROUP III	Difference	.CI
146.86	138.76			8.10*	5.00
146.86		139.16		7.70*	5.66

^{*} Significant at 0.05 level.

146.86			133.01	13.85*	
	138.76	139.16		0.40	
	138.76		133.01	5.75*	
		139.16	133.01	6.15*	

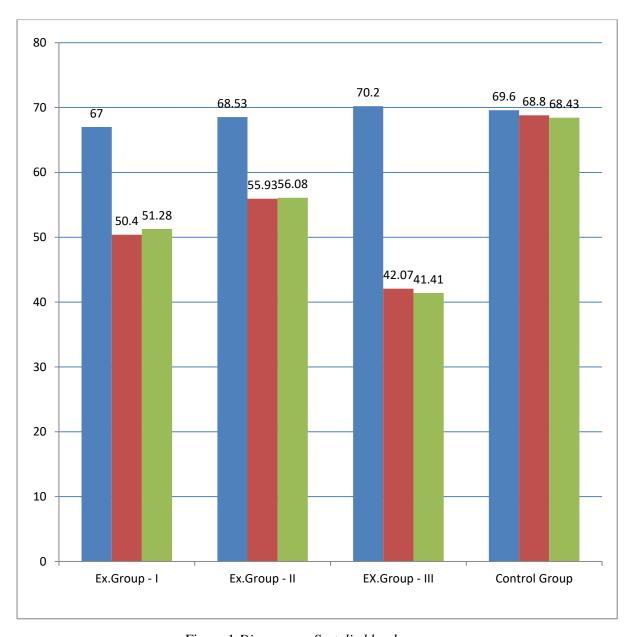


Figure 1 Diagram on Systolic blood pressure

(Scores in mm/hg)

CONCLUSION

When compared to the control group, the experimental groups had a substantial improvement (decrease) in systolic blood pressure. The combined group (Yogic practices

plus physiotherapy) showed a little improvement (decrease) compared to the Yogic practices and physiotherapy groups.

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Reference

[1] Carolyn kisner and Lynn Allen Colby (1996). "Therapeutic Exercise Foundation and Techniques". Delhi; Jaypee Brothers Medical Publishers. P.84-89

- [2] Chandrasekar.K (2003)."Yoga for Health" Delhi; Khel SathiyaKendra, PP.1-5
- [3] Dhiren Gala, D.R. Gala and Sanjay Gala (2005). "Back Ache Prevention and Cure". Mumbai; Navneet Publication (India) Limited. P: 8, 25, 53.
- [4] Goel.R.N. (1997). "Goel's Physiotherapy", Delhi; JAYPEE Brothers Medical Publishers. P.546-558
- [5] Goel.R.N. (1997). "Goel's Physiotherapy", Delhi; JAYPEE BROTHERS Medical Publishers, PP.36-49.
- [6] Iyengar P.K.S. (2004). "Light on yoga" Haper Collins Publishers, India. P-488.
- [7] John Ebnezar (2003). "Text book of Orthopedics", Delhi; JAYPEE BROTHERS Publications. P. 251
- [8] John Ebnezar (2003). "Text book of Orthopedics", Delhi; JAYPEE BROTHERS Publications, P.324.
- [9] M.Dena Gardinar (2005). "The principles of Exercise Therapy", Deihi; CBS Publishers & distributers.P-29
- [10] Nagarathna.R.H.R.Nagendra (2006). "Yoga for back pain". Bangalore; Swami Vivekananda yoga prakashana. P.1-10, 40-60.
- [11] Phulgenda Sinha (2007). "Yoga Meaning, Values and Practice", Mumbai; JaicoPublishing House. P.1- 3
- [12] Phulgenda Sinha, (2007). "Yoga Meaning, Values and Practice", Mumbai; Jaico Publishing House, PP.1-3.
- [13] Prakash Tiwari.O.M. (2005). "Asana-Why and How", Pune; Kaivalyadhama, SMYM Samiti, P.32, 66