

Effect of Individual Asanas on Blood Pressure Post Aged Adults

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Abstract

Eighty four Blood Pressure subjects between the age group of 40-59 years were studied to see the effect of 120 days of Yoga asanas. The experiment was conducted on the veteran males with one type of disorders i.e. hypertension. The subjects of the hypertensive patients were divided into three groups (viz. yoga, self learning, and control). This research included 28 subjects of yoga group, 28 subjects of self learning group and 28 subjects of control group. In this research subjects who suffering from blood pressure for last 1 to 5 years are selected. The yoga and self learning groups was realized six days a week, over a period of 4 month, and duration of each individual exercise was 60 minutes in evening time and was given training by the Yoga expert. The basic descriptive statistic parameters were calculated for all the result, and the difference between pre, mid and post measuring was determined by ANOVA (Analysis of Covariance) and Scheffe's post hoc test. The study of individual Asanas was undertaken to understand the effect of changing postures on the blood pressure. The result revealed that yoga (i.e. asanas) training continued to bring down the systolic and diastolic blood pressure to a normal range among the hypertensive.

Keywords: Blood pressure, Asanas.

Introduction

During exercise the strain on muscles increases, the requirement for blood and oxygen increases but in Yogasana the requirement goes down as there are no strains and every muscles is relaxed, the requirement for blood and oxygen goes down. This also reduces the strain on mind; the mind also becomes stable and focused. Also because of twists and stretched postures, the functioning of endocrine glands, digestive organs, heart and organs improves. To achieve this even simple Yogasanas are helpful, one can easily practice these yogasanas and get the best for himself.

However, the asanas are to be performed without strain, undue stretching in some asanas may do more harm than benefit. Old reports have indicated that some asanas are harmful for heart disease and hypertensive and should be performed

with caution. This study of individual Asanas was undertaken to understand the effect of changing postures on the blood pressure.

Methodology

Eighty four subjects age 40-59 years randomly selected from Karvenager, Pune (India). The subjects were divided randomly in three equal groups. (viz. yoga, self learning, and control). This research included 28 subjects of yoga group, 28 subjects of self learning group and 28 subjects of control group. In this research subjects who suffering from blood pressure for last 1 to 5 years are selected. The yoga and self learning groups followed the program of instruction for the period of six times a week, over a period of 4 month, and duration of each individual exercise was 60 minutes in evening time and was given training by the Yoga expert. The data was collected before, after 2 months and after 4 months of experimental period. The yoga asanas regime included the Suryanamaskar, Yogmudra, Matyasana, Siddhasana, Padmasana, Pashimottansana, Sarvangasana, Vajrasana, Pawanmuktasana, Dhanurasana, Bhujangasana, Supta-Vajrasana, Mayurasana, Shirshasana, Shavasana. Every one received personalized attention and supervision of a yoga expert during yoga sessions.

Results

Thus, the information, obtained from the measures of central tendency and dispersion, as presented in Tables 1, revealed that all the training interventions i.e., 'Yoga' and 'Self Learning' may have the treatment effect in controlling the Blood pressure among the patients with hypertension.

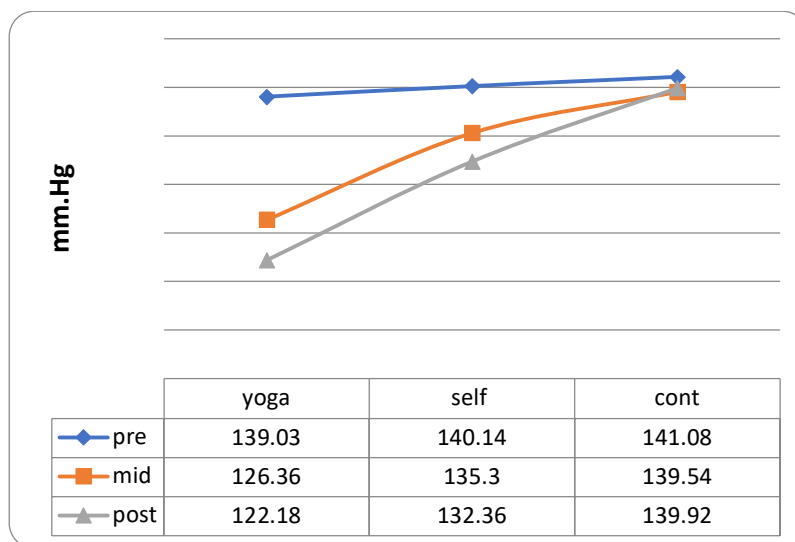


Fig.1: Yoga for reduction of systolic blood pressure among hypertensive

The **overall result revealed that** all the training interventions **could** record reduction in **systolic blood pressure** during mid test. However, during post test the trend of improvement in **systolic blood pressure** was evident especially among the subjects of **yoga** group only, whereas **the self learning** and **controlled subjects** did not show any change in systolic blood pressure. Finally, on post-test, the result revealed that yoga (i.e., asanas) training continued to bring down the **systolic blood pressure** to a normal range among the hypertensive.

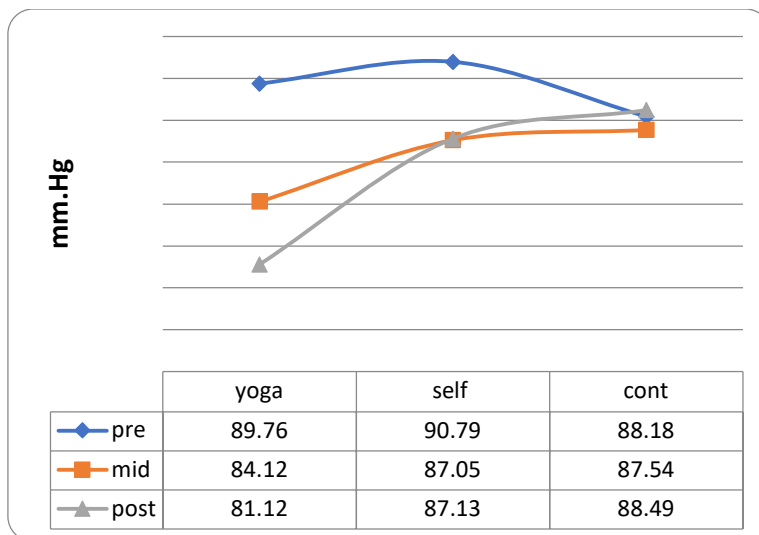


Fig. 2: Yoga for controlling diastolic blood pressure among hypertensive

The **overall result revealed that** all the training interventions **could** record significant reduction in **diastolic blood pressure** during mid test. However, during post test the trend of reduction in **diastolic blood pressure** was evident especially among the subjects of **yoga** group only, whereas **the self learning** and **controlled subjects** did not show any change in systolic blood pressure. Finally, on post-test the result revealed that yoga training (i.e., asanas) helped to bring down the **diastolic blood pressure** to a normal range among the hypertensive. (Fig. 2)

Discussion of Result

Health and natural remedies among people by yoga has been proven an effective method for improving health in addition to prevention and management of disorders. Yoga is reported to reduce stress and anxiety, improves autonomic functions by triggering neuro hormonal mechanisms by the suppression of sympathetic activity.

The results of this study revealed that yoga practices introduced to the subjects with hypertension could significantly reduce the systolic and diastolic blood pressure to the normal level. The results are in line with the previous findings (McCaffrey et al., 2005; Bijlani et al., 2005; Latha et al., 1991; Vijayalakshmi et al., 2004; Damodaran et al., 2002; Murugesan et al., 2000; Selvamurthy et al., 1998). Other studies have also observed that Yoga lowers systolic pressure (Selvamurthy et al., 1998; Patel and North, 1975; Sunder et al., 1984; Okonta, 2012;). In the case of stress related hypertension, Yoga might modify the states of anxiety (Patel, 1975), thus reducing hypertension. The present study dealt with the impact of the asanas training and the result revealed that such intervention was helpful to reduce blood pressure to the normal level.

Conclusion

The 'self-learning intervention' could reduce blood pressure during mid-test (i.e., after 2 months of experiment), whereas no change in blood pressure is evident during post-test (i.e., after 4th month of experiment). However, the schedule of 'asanas' for 4 months (i.e., 1st 2 months and 2nd 2 months of experiment) brings significant trends of reductions in blood pressure in hypertensive. Thus, yoga training (i.e., asanas) was found better than 'self-learning' and 'control' groups respectively in controlling blood pressure among hypertensive.

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