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Effect of yoga practices on hypertension among working women

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Abstract

The purpose of this study was to find out effect of yoga practices on hypertension among working women. To achieve the purpose of the study twenty hypertension women were selected. The hypertension is identified by physician. The selected subjects were treated for experimental group. The total subjects were measured by physiological variables as used in the present study of systolic and diastolic values. The subjects of the single group design were administered. Yoga practices given for six weeks after completion of training period, the subjects of experimental group were tested as such in the pre test. It was called post test. The collected data were analyzed by using dependent 't' test. In all cases 0.05 level was fixed. The results of the study showed that there was significant improvement on systolic and diastolic blood pressure due to six weeks of yoga training.

Keywords: Yoga training, systolic and diastolic blood pressure

Introduction

Every living animal on the planet has blood pressure, there is no exception to this rule. The blood flows through the body with certain pressure, but if the pressure is higher than the normal range then it is a disease, which is called High Blood Pressure or sometimes the blood pressure drops below the normal range, then it is called Low Blood Pressure Angela Pirisi H. (2007) [1]. The reason for the High BP cannot be found on physical plane but can be traced to mental activities. High mental strain results in high BP. Modern medical science treats the BP but not the underlying reason that is mental strain. When one takes medicine to control BP, the BP comes to normal for sometime but when the effect of the medicines is over, the BP again rises. So the best remedy is to remove all underlying reasons for mental stress and strain. Also these are dependent on mental activities. If mental strain increases the breathing rate is affected. In Pranayama the breathing is controlled and the rate is reduced, which reduces the strain on heart and also the heart rate. Asanas, Pranayama, Meditation also affects carotid sinus, which help reduce BP. Pranayama controls the pranic flow and reduces the need of oxygen, so also the production of carbon dioxide. So the respiratory rates reduce and definitely help achieve the mental peace, Agte W. (2001) [2].

Methodology

To achieve the purpose of the study twenty women were selected. The hypertension identified by physician. The selected subjects treated for experimental group. The total subjects were measured a physiological variables as used in the present study of systolic and diastolic values. The subjects of the single group design were administered Yoga practices for six weeks after completion of training period, the subjects of experimental group were tested as such in the pre test. It was called post test. The collected data were analyzed by using dependent 't' test. In all cases 0.05 level was fixed. The results of the study showed that there was significant improvement on systolic and diastolic blood pressure due to six weeks of yoga training.

Training Schedule

Starting Prayer-5 Minutes
Warm up

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Asanas-15 Minutes

Sasangasana, Pachimodasana, Vakarasana, Tri Konasana, Dhanurasana, Badhakonasana, Bjangasana, Salabasana, Tadasana, Shavasana

Pranayama- 20minutes

AnulomaVioma-10 Minutes

Ratio (Inhalation: Exhalation)

1st Week- 1:1, 2nd Week- 1:2, 3rd Week-1:3:2:2, 4th Week- 1:4:2:2, 5th Week-1:4:2:2, 6th Week-1:4:2:2

Relaxation-10 Minutes

Meditation

Transcendental Meditation-15 Minutes

Closing Prayer-5 Minutes

Total Minutes-60 minutes

Results on systolic blood pressure

The descriptive statistics and ‘t’ test results comparing the final effect of yoga practices on systolic blood pressure was presented in Table I.

Table I: Showing descriptive statistics and obtained ‘t’ value on systolic blood pressure due to yoga treatment

TEST	MEAN	SD	MD	SD&DM	"t" Value
PRE TEST	152.6	3.16	7.8	1.21	6.44
POST TEST	144.8	4.4			

Required table value at 0.05 level 2.04* Significant at 0.05 level

In result the Table-I showed on systolic blood pressure pre test mean was 152.6 and post test was 144.8 with the mean difference 7.8. the mean difference was subjected to statistical treatment using ‘t’ test and the obtained ‘t’ value of 6.44 was greater than the required table value 2.04 at significant at 0.05 level and it was proved that yoga treatment significantly reduce the systolic blood pressure.

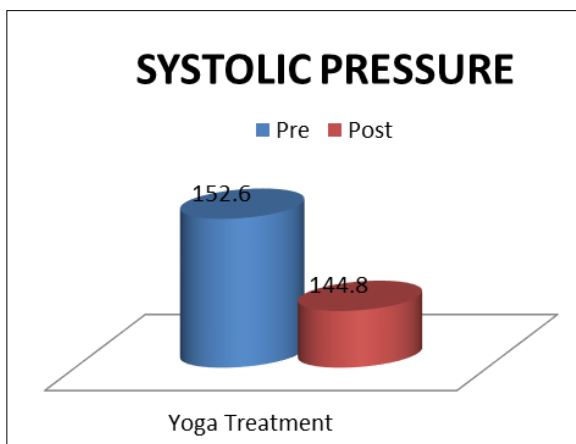


Fig 1: Pre and post test mean of systolic pressure

Results on diastolic blood pressure

The descriptive statistics and ‘t’ test results comparing the final effect of yoga treatment on diastolic blood pressure was presented in Table II.

Table II: Showing descriptive statistics and obtained ‘t’ value on diastolic blood pressure due to yoga treatment

TEST	MEAN	SD	DM	SD&DM	"t" Value
PRE TEST	94.7	2.81	3.5	0.989	3.57
POST TEST	91.2	3.42			

Required table value at 0.05 level 2.04, * Significant at 0.05 level

In result the Table-II showed on diastolic blood pressure pre test mean was 94.7 and post test was 91.2 with the mean difference 3.5. the mean difference was subjected to statistical treatment using ‘t’ test and the obtained ‘t’ value of 3.47 was greater than the required table value 2.04 at significant at 0.05 level and it was proved that yoga treatment significantly reduce the diastolic blood pressure.

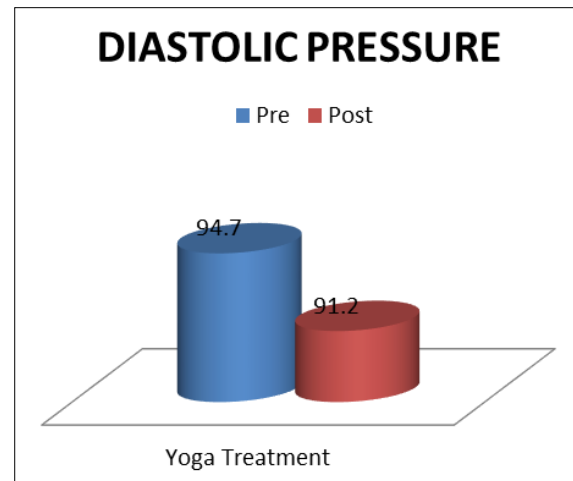


Fig 2: Pre and post test mean of diastolic pressure

Conclusion

Women have a lot of challenges in her life. As they are facing the challenges, they are bound to be stressed out. And one effect of stress is rise in blood pressure. So yoga practice as a means to reduce stress thereby reducing the blood pressure is the main objective of the study. It was found that the yogic practice as significantly reduced the blood pressure. There could be other possible variables operating in the individual that would have reduced blood pressure.

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