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## Impact of yogic practices on stress and anxiety among middle aged hypertensive men

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### Abstract

This study is to find out the impact of yogic practices on stress and anxiety among middle aged hypertensive men. To achieve the purpose of the study, Only 30 middle aged hypertensive men were selected from different Yoga centers in Karur district, Tamil Nadu, and their age ranged between 35 and 50 years. The selected thirty subjects were randomly divided into two equal groups of fifteen subjects each, out of which group – I (n = 15) underwent yogic practices and group – II (n = 15) remained as control. The training period for the present study was six days per week for twelve weeks. Prior to and after the training period the subjects were tested for stress and anxiety. Stress was assessed by using the questionnaire, Giardino and Everly Stress scale and anxiety was assessed by using Taylor's Manifest Anxiety Scale. The statistical tool were used for the present study is Analysis of covariance (ANCOVA). The results of the study showed significant decrease on stress and anxiety after twelve weeks of yogic practices. Significant difference occurred between yogic practices group and control group after twelve weeks of yogic practices programme.

**Keywords:** yogic practices, hypertension, stress and anxiety

### Introduction

Hypertension is the force of blood in your arteries. The right pressure varies from person to person and needs to be regulated. Only then will your system function smoothly. The American Heart Association considers 120/80 as the standard blood pressure limit. Pre-hypertension is when your parameter is between 120/80 mmHg and 140/90 mmHg. Anything above 140/90 mmHg is hypertension and is dangerous. (Roger *et al.*, 2012) [6].

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. Of the many benefits ascribed to yoga practice, blood pressure control is among the most studied. While several reviews regarding the potential benefits of yoga for reducing blood pressure and other cardiovascular disease risk factors have been published, most have stated that the quality of the studies are generally poor. Additionally, few reviews have specifically focused on blood pressure control, and meta-analyses are lacking. Thus, the degree to which yoga may decrease blood pressure as well as the potential modifying effects of type of yoga intervention and type of comparison group remain unclear. To address these gaps, meta-analysis of controlled studies (randomized and nonrandomized) examining the effects of yoga practice on systolic and diastolic blood pressure in individuals with prehypertension or hypertension presented. (Gillespie *et al.*, 2011) [3].

### Statement of the problem

The purpose of present study was to find out the impact of yogic practices on stress and anxiety among middle aged hypertensive men.

**Methodology**

To achieve the purpose of the study, Only 30 middle aged hypertensive men were selected from different Yoga centers in Karur district, Tamil Nadu, and their age ranged between 35 and 50 years. The selected thirty subjects were randomly divided into two equal groups of fifteen subjects each, out of which group – I (n = 15) underwent yogic practices and group – II (n = 15) remained as control. The training period for the present study was six days per week for twelve weeks. Prior to and after the training period the subjects were tested for stress and anxiety. Stress was assessed by using the

questionnaire, Giardino and Everly Stress scale and anxiety was assessed by using Taylor’s Manifest Anxiety Scale. The statistical tool were used for the present study is Analysis of covariance (ANCOVA).

**Analysis of data**

The data collected prior to and after the experimental periods on stress and anxiety on yogic practices group and control group were analyzed and presented in table–1 and 2 respectively.

**Table 1:** Analysis of covariance of yogic practices group and control group on stress

Variable Name	Group Name	Yogic Practices Group	Control Group	F ratio
Stress	Pre-test Mean ± S.D	23.47 ± 1.25	23.33 ± 2.23	0.024
	Post-test Mean ± S.D.	20.53 ± 1.13	24.07 ± 2.31	14.88*
	Adj.Post-test Mean	20.453	24.107	99.67*

Significant at 0.05 level of significance.

(The table value required for significance at 0.05 level of significance with df 1 and 28 and 1 and 27 were 4.196 and

4.210 respectively).

**Table 2:** Analysis of covariance of yogic practices group and control group on anxiety

Variable Name	Group Name	Yogic Practices Group	Control Group	F ratio
Anxiety	Pre-test Mean ± S.D	17.00 ± 1.13	16.80 ± 1.08	1.76
	Post-test Mean ± S.D.	14.80 ± 1.32	17.07 ± 1.28	13.38*
	Adj.Post-test Mean	14.917	17.36	54.10*

Significant at 0.05 level of significance.

(The table value required for significance at 0.05 level of significance with df 1 and 28 and 1 and 27 were 4.196 and 4.210 respectively).

**Results**

From the Table-1 and 2 it is clear that yogic practices decreases stress and anxiety when compared with control group.

- The result of the study showed high decrease in stress after yogic practices. Cong *et al.*, (2011) <sup>[2]</sup> cited that the a survey which depended on eight randomized control preliminaries and clinical controlled preliminaries demonstrated a beneficial outcome of yoga in lessening stress levels on stress symptoms. Shohani *et al.*, (2018) <sup>[8]</sup> has discovered critical decrease on stress after the yogic practice. Sharma *et al* (2013) <sup>[7]</sup> has found that significant decrease on stress after the slow and fast pranayama practices.
- Anxiety decreased after the yogic practices when compared with the control group. Rocha *et al.*, (2012) <sup>[5]</sup> established that there was critical decrease in anxiety after the yogic practices. Ahmadi *et al.*, (2013) found that there was critical decline in anxiety after the aerobic and yoga training. Kwok *et al.*, (2017) <sup>[4]</sup> has recommended from his research work that there was a high improvement in anxiety after the yoga versus stretching and resistance training exercises.

**Conclusions**

From the analysis of the data, the following conclusions were drawn.

- There was a significant difference between yogic practices group and control group on stress due to yogic practices on middle aged hypertensive men.
- There was a significant difference between yogic practices group and control group on anxiety due to yogic practices on middle aged hypertensive men.

**References**

1. Ahmadi A, Arastoo AA, Nikbakht M, Zahednejad S & Rajabpour M. Comparison of the effect of 8 weeks aerobic and yoga training on ambulatory function, fatigue

and mood status in MS patients. Iranian Red Crescent Medical Journal. 2013;15(6):449-454.

2. Cong CS, M Tsunaka, HW Tsang, EP Chan and WM Cheung. “Effects of Yoga on Stress Management in Healthy Adults: A Systematic Review”, *Altern Ther Health Med*, 17:1, January – February, 2011, 32-38.

3. Gillespie C, Kuklina EV, Briss PA, Blair NA, Hong Y. Vital signs: prevalence, treatment, and control of hypertension, United States, 1999–2002 and 2005–2008. *Morbidity and Mortality Weekly Report*. 2011;60(4):103-108.

4. Kwok JJYY, Kwan JCY, Auyeung M, Mok VCT & Chan HYL. The effects of yoga versus stretching and resistance training exercises on psychological distress for people with mild-to-moderate Parkinson’s disease: Study prxotocol for a randomized controlled trial. 2017;18:1-13.

5. Rocha KK AM Ribeiro, KC Rocha, MB Sousa, FS Albuquerque, S Ribeiro and RH Silva. “Improvement in Physiological and Psychological Parameters after 6 Months of Yoga Practice”, *Conscious Cogn*. 2012;21(2):843-850.

6. Roger VL, Go AS, Lloyd-Jones DM, *et al.* On behalf of the American Heart Association statistics committee and stroke statistics subcommittee. Heart disease and stroke statistics-2012 update: a report from the American Heart Association. *Circulation*. 2012;125(1):188-197.

7. Sharma V, Trakroo M, Subramaniam V, Sahai A, Bhavanani A & Rajajeyakumar M. Effect of fast and slow pranayama on perceived stress and cardiovascular parameters in young health-care students. *International Journal of Yoga*. 2013;6:104-110.

8. Shohani M, Badfar G, Nasirkandy MP, Kaikhavani S, Rahmati S, Modmeli Y. The effect of yoga on stress, anxiety, and depression in women. *International Journal of Preventive Medicine*. 2018;9:21.