

EFFECT OF YOGA NIDRA PRACTICE ON RESPIRATORY RATE OF FEMALE HIGH BLOOD PRESSURE PATIENTS

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ABSTRACT

The present study aims at finding out the Effect of Yoga Nidra Practice on Respiratory Rate of Female High Blood Pressure Patients. A total of sixty female subjects with marginal high blood pressure of Allahabad, Uttar Pradesh were selected for the purpose of the study. Thirty subjects acted as experimental group who participated in scholars Yoga Nidra programme. Other thirty subjects acted as control group who continued with other usual program but was not a part of scholars Yoga Nidra programme. The result shows a significant change as Yoga Nidra positively improving Respiratory Rate.

INTRODUCTION

In modern world mind related diseases like hypertension, stress, etc. are quite common. Tension is the central theme of all mind related diseases. This tension is due to the strain of life that an individual carries. It is well established that the brain with its known centers for sensory intellectual and emotional tensions play the main role in maintaining by liberating required amount of hormones. Any disorder of this homeostatic by any factor would ultimately lead to the development of tension related therapies have been unable to answer the question of prevention and cure of hypertension.

Yoga Nidra is an ancient Tantric method which can open new capacities of mind. Stress, frustrations, insomnia, and psychosomatic diseases which have become a part of modern man's life, are being caused by our unstable mind. It is a state of mind in-between wakefulness and dream. At that moment intellectual mind is operating but when one relax, the sub-conscious and unconscious levels of mind opens up. If one practice Yoga Nidra, then the nature of his/her mind can be changed, diseases can be cured and his/her creative genius can be restored.

Yoga Nidra is a practice which brings the deeper layers of the psyche into conscious experience. This brings deeper relaxation on all levels; physical, psychological and mental. This induces direct affect on glandular functions which means a better health and higher levels of energy. Today in this fast growing world the competencies for the survival have gone up and one have to face a lots of competitions. One might be very rich in materialistic sense but keeping a healthy state of mind is very difficult due to the large number of problems of daily life.

In an experiment, Gharote (1971) explains that Yoga can easily control the functions of parasympathetic nervous system within two months of regular practices and thereby, improves autonomic balance; this study of Gharote (1971) signifies that Yoga controls the parasympathetic system which in turn helps for improving inward awareness, introspection, tranquility, a spirit of development and inner satisfaction. This naturally contributes to control autonomic response pattern and therefore reduces anxiety.

The scholar, being lover of Yogic exercises and has experienced the great benefits of Yoga. The visible effect of Yoga Nidra is well known and hence the researcher became inclined to venture in to the study to test the Effect of Yoga Nidra Practice on respiratory rate of Female High Blood Pressure Patients.

METHODOLOGY

The purpose of this study was to determine the Effect of Yoga Nidra Practice on Respiratory Rate of Female High Blood Pressure Patients. A total of sixty female subjects with marginal high blood pressure and Respiratory Rate of Allahabad, Uttar Pradesh were selected for the purpose of the study. Thirty subjects acted as experimental group who participated in scholars Yoga Nidra programme. Other thirty subjects acted as control group who continued with other usual program but was not a part of scholars Yoga Nidra programme.

The scholar administered Yoga Nidra in her residence. Blood pressure (Systolic and diastolic)and respiratory rate were taken at the above mentioned address. All necessary instructions were given to the subject before the administration of each test. The subjects were tested only during morning session. Confidentiality of response was guaranteed.

Table 1

Mean and Standard Deviation of Respiratory rate of High blood pressure female patient

Variables	Tests	Groups	Mean	Std. Deviation ¹
Respiratory Rate (No. of breath in one min.)	Pre Test	Experimental	24.1667	1.44039
		Control	23.5333	1.43198
		Total	23.8500	1.45934
	Post Test	Experimental	19.7667	1.65432
		Control	20.9333	2.44855
		Total	20.3500	2.15363

Table – 1 reveals the mean and standard deviation of **Respiratory Rate (No. of breath in one min.)** Pre Test Experimental (24.1667± 1.44039), Control (23.5333± 1.43198), **Total** (23.8500± 1.45934), Post Test Experimental (19.7667± 1.65432), Control (20.9333± 2.44855), **Total** (20.3500± 2.15363) To observe the difference among experimental and

control group the analysis of variance and co-variance was adopted and data pertaining to these have been presented in Table –2

Table 2

Analysis of Co-Variance of the Means Of One Experimental Groups And The Control Group in relation to respiratory rate in female high blood pressure patient

	Groups		Sum of Squares	df	Means sum of squares	F-ratio	
	Experimental	Control					
Pre-test Means	24.1667	23.5333	A	6.017	1	6.017	2.917
			W	119.633	58	2.063	
Post-test Means	19.7667	20.9333	A	20.417	1	20.417	4.676*
			W	253.233	58	4.366	
Adjusted post test means	19.509	21.191	A	40.377	1	40.377	13.211*
			W	174.206	57	3.056	

* Significant at 0.05 level of significance

N = 60

A = Among Means variance

W = With in Group variance

F = Ratio needed for significance at 0.05

level of significance = $df(1,58) = 3.94$, $df(1,57) = 3.94$

The analysis of co-variance for **respiratory rate** was insignificant in case of pre-test means from which it is clear that the pre-test mean does not differ significantly and that the random assignment of subjects to the two experimental groups was quite successful. The post-test means of all the two groups yielded a F-ratio of 4.676 which was significant at 0.05 level of confidence. The difference between the adjusted post means was found significant as the obtained F-ratio was 13.211. The F-ratio needed for significance at 0.05 level of confidence was 3.94 at $df(1,57)$.

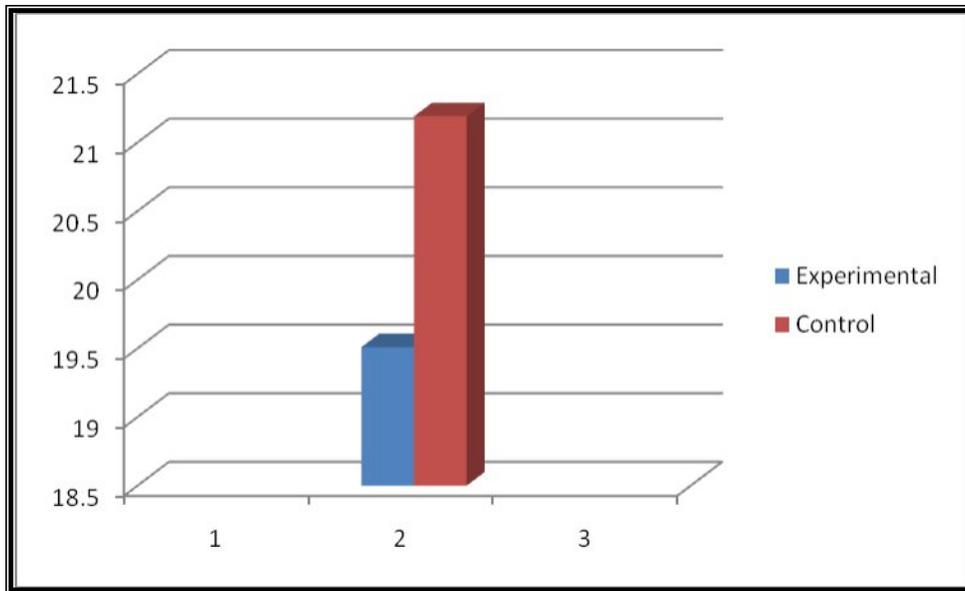


Fig. 1 Graphical representation Mean comparison of Experimental and Control Group in relation to Respiratory Rate

DISCUSSION OF FINDINGS

Khodaskar result showed that the training based on some Yogic exercises had more positive effects compared to non-Yogic exercises on the selected physiological variables. The analysis of data reveals that significant effect was found in case of blood pressure, Heart Rate, respiratory rate and hemoglobin. As revealed by Sivasankaran S, and et.al Yoga and meditation appear to improve endothelial function in subjects with coronary artery disease CAD. Similarly Patel C, North WR. Revealed that six weeks Yoga meditation training can improve high blood pressure. Madanmohan and et.al. Yoga training for a short period of six weeks can produce significant improvements in respiratory muscle strength and endurance. Cooper MI. results suggest that relaxation therapy may contribute to the management of individuals with mild hypertension and/or mild hypercholesterolemia.

Solberg EE and et.al. Suggest that advanced meditators have higher melatonin levels than non-meditators. Melatonin decreases during long meditation, a finding the study does not explain. Serotonin declines after both one-hour meditation and rest, indicating that serotonin may be a marker of general rest and not meditation-specific relaxation. Delmonte MM. The meditators, however, tended to become more relaxed over meditation trials, whereas the non meditators showed the opposite trend. Carrington P, and et.al. The safe and inexpensive semi-automated meditation training has considerable value for stress-management programs in organizational settings. Thus the study is supported by the present findings.

CONCLUSION

Within the limitation of the following study Yoga nidra can be prescribed for improving respiratory rate. Yoganidra training produces significant improvement in respiratory rate.

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