



TO STUDY THE EFFECT OF YOGA NIDRA ON ANXIETY AND STRESS IN MEDICAL STUDENTS.

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ABSTRACT

Introduction- Yoga nidra means 'psychic sleep' i.e. sleep with full awareness. Main principle is deep relaxation of mind. It relieves tensions, increased stress resistance and prevents development of psychosomatic diseases. Anxiety is unpleasant emotional state characterized by subjective feelings of tension, apprehension, worry and by activation of autonomic nervous system. Stress overloads mental and physical resources and interferes with effective use of skills. **Material and method-** Study was conducted in Physiology department; Pt. B.D. Sharma PGIMS, Rohtak which included 30 healthy medical students in age group of 18-20 years who served as their own controls. Students practiced yoga nidra at fixed time for 45 minutes daily for 3 months. General health questionnaire-12 scores were taken before and after practice. **Observations-** Mean basal score for all subjects was 9.8 before starting practice. It got reduced after 3 months of yoga nidra. **Discussion-** Decrease in scores indicated reduction in stress and anxiety levels of study group. Yoga nidra is an effective tool in balancing sympathetic and parasympathetic outflow of autonomic nervous system. This is very powerful and effective technique to handle anxiety and stress better. **Conclusion-** Our study was on medical students and we feel that along with changes in medical curriculum and teaching modalities it would be beneficial to introduce students to techniques like yoga nidra which could help them to improve their academic performance and live a healthy life style.

KEYWORDS: *Yoga nidra, General health questionnaire-12, Anxiety, Stress.*

INTRODUCTION

Yoga is a form of physical activity consisting of various postures (asanas), breathing (pranayama) and meditation techniques. A lesser known branch of yoga is Yoga Nidra. Yoga meaning union or one pointed awareness and Nidra meaning sleep.^[1] Yoga nidra means 'psychic sleep' i.e. sleep with full awareness. The main principle is deep relaxation of mind. It has wide spread application as a preventive measure, to be practiced by healthy, active people as a means of relieving accumulated tensions, increasing stress resistance and overall efficiency, and preventing the development of psychosomatic diseases.^[2] A person with relaxed mind shows predominance of alpha waves while a person with tensed mind shows more beta waves activity in electroencephalogram.^[3] By reducing deep seated conflicts and tensions, yoga nidra promotes a general feeling of wellbeing, which helps to curb excessive consumption of coffee, cigarettes and alcohol as well as aiding in management of drug abuse and addiction.^[4] It has its widespread application as a preventive measure, to be practiced by healthy, active people as a means of relieving accumulated tensions, increased stress resistance and overall efficacy and preventing the development of psychosomatic diseases. Anxiety is an

unpleasant emotional state or condition characterized by subjective feelings of tension, apprehension and worry and also by activation of the autonomic nervous system. Anxiety conditions if not treated properly, can cause disorders such as, generalized anxiety disorders, panic disorders, obsessive compulsive disorders, social phobias and also headaches, irritable bowel syndrome, eating disorder, allergies, insomnia, backaches, frequent cold and fatigue, diseases such as hypertension, asthma, diabetes, heart ailments and even cancer.^[5] Stress can be understood as a state of mental or emotional strain. Negative stress mainly leads to discomfort, anxiety, irritation and emotional instability in the beginning and with time may progress to frank psychosis and psychosomatic disorders.^[6] Stress overloads our mental and physical resources and interferes with the effective use of our skills. It also exhibited a negative correlation with cognition, thus negatively impacting academic performance.^[7] Therefore, students would benefit from the identification of techniques that reduce stress and thereby potentially enhance cognitive performance.^[2] The autonomic symptoms of high anxiety such as headache, giddiness, chest pain, palpitations, sweating and abdominal pain respond well to yoga nidra induced relaxation.^[8]

The present study is planned to study the effects of yoga nidra practice on anxiety and stress in medical students.

MATERIAL AND METHOD

The present study was conducted in the department of Physiology; Pt. B.D. Sharma PGIMS, Rohtak. The study included 30 healthy, volunteer medical students in the age group of 18-20 years. The group of 30 students comprising of 16 males and 14 females served as their own controls. An audio CD from a trained instructor was used to initiate the students into yoga nidra and it was practiced at a fixed time on empty stomach for 45 minutes daily for 3 months.

Type of study: Prospective cohort study.

Inclusion Criteria

The students residing in hostel were included in the study so that they had similar daily activities and common stressors.

No history of any major illness.

No previous exposure to yoga practice.

Willingness and motivation to participate in the study.

Exclusion Criteria

No history of any medical disorder which could affect cognitive functions.

No history of any drug intake or alcohol.

Instructions to the participants

All subjects were explained the study in detail to allay any fear or apprehension.

They were asked to sign a consent form.

They were instructed to practice yoga nidra at a fixed time, in comfortable clothing and on empty stomach daily.

General Health Questionnaire-12 (GHQ-12) was given to students. The scale comprised of 12 questions and each item was rated on a four-point scale (less than usual, no more than usual, rather more than usual, or much more than usual). Highest score of GHQ-12 is 36 based on Likert scoring styles (0,1,2,3 from left to right).^[9] The results were recorded before and after yoga nidra practice.

OBSERVATIONS

The present study was conducted in Department of Physiology Pt. B.D. Sharma University of Health Sciences, Rohtak. The study was carried out on 30 medical students in the age group of 18-20 years. Out of 30 subjects 16 (53%) were male students and 14 (47%) were female students (table I). The GHQ-12 scores were taken before and after yoga nidra practice. In males, the mean basal score was 8.81. The mean score after 3 months of yoga nidra practice got reduced to 5.68. In females the basal score was higher compared to males. The mean basal score was 10.92 before the relaxation session. Following yoga nidra practice the scores

reduced to 7.28. The mean score for all subjects was 9.8 before starting the practice. It got reduced to 6.43 after 3 months of yoga nidra session (figure 1, table II).

Table I- Number of male and female participants in the study.

Gender	Number	Percentage (%)
Males	16	53
Females	14	47
Total	30	100

Table II- General Health Questionnaire-12 (GHQ-12) score before and after Yoga Nidra practice (maximum score-36).

Gender	Before Yoga Nidra	After Yoga Nidra	Maximum score
Males	8.81	5.68	36
Females	10.92	7.28	36
Total	9.8	6.43	36

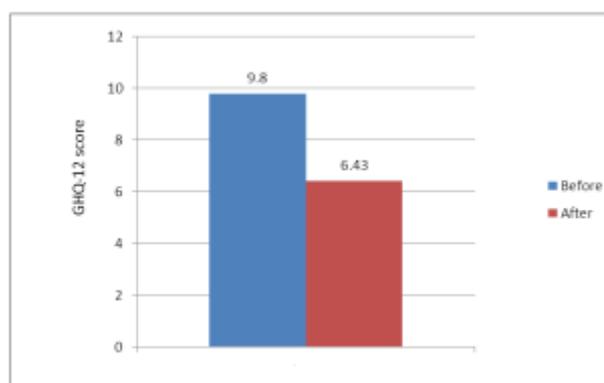


Figure 1- Effect of yoga nidra on GHQ-12 scores in all subjects.

DISCUSSION

The present study used the general health questionnaire-12 (GHQ-12) to score and assess the effect of yoga nidra on the state of stress and anxiety being experienced by the subjects. The score range was from 0 to 36 with score of 15 or more indicating distress, while scores more than 20 would suggest severe psychological problems.^[9] The pre yoga nidra scores for male and female subjects were 8.81 and 10.92, respectively. This indicated that the subjects included in our study may have been experiencing some anxiety, but were not suffering from any overt distress. The females had a higher score compared to males. This may be due to the gender differences in emotional expressiveness and social acceptability to its display instilled since early childhood.^[10] Following post yoga nidra practice session GHQ-12 test scores decreased for both males and females (5.68 and 7.28, respectively) and for all the subjects as a whole from 9.8 to 6.43. A decrease in the scores indicates a reduction in the stress and anxiety levels of our study group.

A Japanese study reported that GHQ-12 was a reliable and homogenous scale for psychological distress and

social dysfunction.^[11] Studies reported that GHQ-12 was an useful test for adolescents suspected to be having threat to psychological health.^[12] Indian clinical psychologist Sachin Kumar Dwivedi has worked extensively in the field of yoga nidra and his research indicated that it effectively decreases the levels of anxiety.^[13] Kumar Kamakhya found after a six months study on the higher class students that practice of yoga nidra reduced not only stress and anxiety, but also improved the General Well Being.^[14] A study by Evans et al found that performance on an arithmetic test was negatively correlated with the amount of stress students experienced.^[7] Felston and Wilcox showed that higher levels of stress reduced grade point average among 146 college men and led to increased psychological and somatic symptomology.^[15] It has been proven by many studies that yoga nidra is an effective tool in balancing the sympathetic and parasympathetic outflow of the autonomic nervous system.

CONCLUSION

From this study we can conclude that yoga nidra is a very powerful and effective technique to handle anxiety and stress better. Our study was on medical students and we feel that along with changes in medical curriculum and teaching modalities it would be beneficial to introduce students to techniques like yoga nidra which could help them to improve their academic performance and live a healthy life style.

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