Physiology Section

The Effect of Yoga Therapy on Selected Psychological Variables Among Male Patients with Insomnia

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ABSTRACT

Background: An estimated 30-50% of the general population is affected by insomnia and 10% have chronic insomnia. Yoga therapy is beneficial in such disorders and it has fewer side effects.

Aim: The aim of this study was to find out the effect of yoga therapy on selected psychological variables among men with insomnia.

Methods: Forty males with insomnia were divided randomly into 2 groups (the experimental and the control groups). The

experimental group received eight weeks of yoga therapy, while the control group did not receive any therapy. The pre and post treatment stress and the self confidence scores were taken.

Results: There was a significant improvement in the stress scores and the self confidence scores in the experimental group. There were neither any side effects nor any drop outs.

Conclusion: We conclude that yoga is an effective treatment option for the patients with insomnia. There are no major side effects.

Key Words: Insomnia, Yoga, Males

INTRODUCTION

Sleep is an essential phenomenon which restores our energy. By definition, insomnia is "a difficulty in initiating or maintaining sleep, or both" or the perception of a poor quality sleep. An estimated 30-50% of the general population is affected by insomnia, and 10% have chronic insomnia. As per the current statistics, the prevalence of insomnia may range from 28-40% in many countries, with differing disease prevalences in various age groups.

This statistics is a huge burden, especially among the age groups who have a maximal earning capacity. It can cause irritability, tiredness, mental fatigue and a few other undesirable side effects. Sometimes, even the most advanced medication fails because the individual's body constitution rejects the modern cures [1]. Yoga is not a religion, but a way of living, with health and peace of mind as its aims. With specialized movements called asanas and breathing exercises, yoga can accomplish a cure in certain illnesses like insomnia [2,3].

Hence, in this study, we attempted to find out the effect of yoga therapy on selected psychological variables among men with insomnia. We hypothesize that there will be a significant improvement in the psychological variables after the yoga therapy.

PURPOSE OF THE STUDY

The purpose of this study was to find out the effect of yoga therapy on selected psychological variables among men with insomnia.

METHODS

The sample for the present study consisted of 40 men who were between 30-40 years, who had insomnia, who were from a hospital near Chennai city. The sample size was selected to have an alpha power of 80% taking into account the earlier studies. The subjects were selected by using a random sampling method, by using a sealed envelope technique. The selection of subjects was

according to the definition of insomnia. By definition, insomnia is "a difficulty in initiating or maintaining sleep, or both" or the perception of a poor quality sleep. Insomnia may therefore be due to an inadequate quality or quantity of sleep.

Insomnia is not defined by the specific number of hours of sleep that one gets, since individuals vary widely in their sleep needs and practices. The patients who were on any sedative drugs or those who had other co morbid illnesses were excluded from the study. The age group of 30-40 years was selected in view of adulthood and the fact that there would be less chances of accompanying co morbid illnesses among them.

They were divided into 2 equal groups, namely the experimental group (Gr I) and the control group (Gr II) by using a sealed envelope technique. The experimental group was given yoga therapy for a period of 8 weeks in the morning. The training programme was administered for ninety minutes per session. The training schedule has been given in detail in [Table/Fig-1].

The control group did not engage in any special activities. As this was a training session, it was difficult to blind the patients. The observer who recorded the scores was blinded to the nature of the group to which the patients belonged to. The pre test and post test scores were taken before and after the experimental training programme. The collected data were fed into a computer, descriptive analyses were made and all the comparative evaluations with the mean and SD were made by using the unpaired Student's "t" test. Any special events and problems were noted.

Stress was measured by a score which was described by Dr. Latha Satish and the self confidence was evaluated by a measure which was proposed by Rekha Agnihotri [4]. The reliability of such scores has already been established by various studies which had been done earlier. The description of each yogic practice [5] is beyond the scope of this article.

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RESULTS

All the men went through the procedure without any discontinuity. The mean scores for stress and self confidence were similar between the groups, prior to the initiation of the therapy. This established that the selected patients among the groups were similar. There were no special untoward events during the study. The stress scores were found to be significantly decreased after the course of the yoga therapy. There were no mentionable side effects in the experimental group [Table/Fig-2]. There was a significant improvement in the self confidence scores in the experimental group. [Table/Fig-3].

S.NO	Name Of Practices	Repetition	Duration (90) Minutes
1	Prayer	1	5 min
2	Loosening Exercises (Sithilikarana Vyayama)	1	10 min
4	Jalaneti	2	5 min
5	Tadasasana	2	3 min
6	Vrikshasana	2	3 min
7	Ardha Padmasana	2	3 min
8	Padmasana	2	3 min
9	Vajrasana	2	3 min
10	Padahasthasana	2	3 min
11	Ardhakatichakrasana	2	3 min
12	Ardhachakrasana	2	3 min
13	Ardhakatichakrasana	2	3 min
14	Shalabasana	2	3 min
15	Vakrasana	2	3 min
16	Matsyasana	2	3 min
17	Anuloma Viloma	2	3 min
18	Nadishodana	2	3 min
19	Brahmari	2	3 min
20	Chakra Meditation	1	10
21	Makarasana	1	10 min
22	AUM Kar	1	5 min

[Table/Fig-1]: Showing methodology of training yogic schedule.

Group	Test	N	Mean	SD	MD	t
	Pre	20	41.2	5.80018		
Control (Gr II)	Post	20	41.3	5.72253	0.10	0.261
	Pre	20	40.25	6.21437		
Experimental (GrI)	post	20	*32.8	6.16100	7.45	*8.603

[Table/Fig-2]: Mean, Standard Deviation And Mean Difference of the Groups and the 't' test of the Control Group and the Experimental Group for Stress

p< 0.05*

Group	Test	N	Mean	SD	MD	t
	Pre	20	22.12	1.08	22.19	1.0
Control	Post	20	22.21	1.07		
	Pre	20	21.76	1.11		
Experimental	post	20	30.28	0.89	30.64	*46.0

[Table/Fig-3]: Mean, Standart Deviation and Mean Difference of the Groups and the 't' test of the Control Group and the Experimental Group for Selfconfidence

*20.0 >q

DISCUSSION

The increasing incidence of insomnia is becoming a major health burden. A lot of drugs have been used, but with significant side effects and a decrease in the quality of life. In this context, the practice of yoga assumes importance. Yoga therapy has beneficial effects on the nervous system, and the brain. Certain yoga asanas increase the blood supply to the sleep centre in the brain and so that they normalize the sleep cycle.

Yoga will induce sleep sooner and improve the quality of the sleep. Yoga therapy will provide a more restful sleep because of its relaxing aspect and the subsequent relieving of stress, tension and fatigue. The practice of breathing allows the uptake of more oxygen in the body, thus providing clarity of the mind. The physiological parameters like the heart rate, blood pressure and the oral temperature and the psychological parameters like the personality, learning, the arithmetic and the psychomotor ability and the mental well being were found to be improved with 6-10 months of yogic practice [6,7,8].

There was a significant improvement in both the self confidence scores and the stress scores in the patients who received the yoga therapy in our study. We did not study the physiological parameters. Khalsa SB, in his study on insomnia and yoga therapy, has established the yoga therapy to be very effective in 20 patients with insomnia [9]. Even though the sample size in our study was small, it established the efficacy of yoga in the treatment of insomnia. Catherine Woodyard [10] proved that yoga was beneficial in improving sleep disturbances. No major side effects had been mentioned in any of the earlier studies. Our findings correlated with those of the earlier studies.

There were no drop outs or any untoward side effects. Taibi DM and Vitiello MV showed that in women, yoga improved the sleep pattern (among only fourteen patients). Our study was done on 40 male patients. Even though lot of research has been done on the efficacy of yoga therapy in insomnia, the studies on men are sparse. In such a context, our study assumes importance.

CONCLUSION

There was a significant betterment of the stress scores and the self confidence scores after eight weeks of yoga therapy in men with insomnia. There were no notable side effects. We conclude that yoga is an effective treatment option in patients with insomnia. The results need to be confirmed with studies which involve larger sample sizes.

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