

Effective Yoga Asanas For Reducing Anxiety Symptoms After COVID-19

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Abstract:

The purpose of the study was to find the effect of specific yoga asanas on the anxiety levels of individuals who have recovered from COVID-19. A total of 25 recovered COVID-19 patients, both male and female, aged 18 years and older, experiencing mild to severe anxiety were selected as subjects based on inclusion and exclusion criteria. The Hamilton Anxiety Rating Scale (HAM-A) was administered to evaluate the anxiety levels of the individuals. A statistical technique of descriptive and paired sample t test was employed and tested at a 0.05 level of confidence. The finding showed a statistically significant difference in the before and after intervention program on anxiety levels.

Keywords: *Yoga, Anxiety and Hamilton Anxiety Rating Scale (HAM-A)*

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I. Introduction

The word “yoga” is derived from the Sanskrit root yuj which means ‘to join’ or “to yoke;” the related meaning is “to focus attention on” “to use. The practice of asanas (postures) and pranayama (breathing exercises) helps achieve this integration, bringing serenity to the body, relaxing facial muscles, and releasing tension from the organs of perception such as the eyes, ears, nose, tongue, and skin (Iyengar, 2001). One of the most significant benefits of yoga is its ability to balance physical and mental states. It enhances muscular strength and flexibility, improves respiratory and cardiovascular function, supports recovery from addiction, and reduces stress, anxiety, depression, and chronic pain. Moreover, yoga helps improve sleep patterns, thereby enhancing overall well-being and quality of life (Woodyard, 2011).

Yoga practices, such as coordinated breathing (pranayama), movement (asana), and meditation (dhyana), have been shown to improve health and reduce stress. Stress is defined as the disruption of a person’s biological, psychological, and social dimensions due to environmental problems or perceived threats, and it can be effectively managed through these yoga practices (Trivedi & Gupta, 2010). Research has consistently supported these benefits; a systematic review and meta-analysis demonstrated that yoga interventions lead to substantial reductions in anxiety across various clinical and non-clinical populations (Cramer et al., 2018). Yoga not only alleviates anxiety symptoms but also has a broadly positive effect on psychological well-being (Zoogman et al., 2019).

Anxiety disorders, among the most common mental health issues, are characterized by excessive worry and fear that can interfere with daily functioning (American Psychological Association, 2013). They are highly prevalent and impose a significant burden on both individuals and healthcare systems, often leading to high levels of distress and disability, diminished quality of life, and increased healthcare utilization (Whiteford et al., 2013). The chronic nature of these disorders frequently results in the development of comorbid conditions, such as depression and substance abuse, which further complicate treatment and recovery (Hofmann et al., 2012). Effectively managing anxiety disorders typically requires a multifaceted approach, including psychotherapy, pharmacotherapy, and lifestyle interventions such as stress management techniques, which collectively contribute to improved outcomes and enhanced well-being (Cuijpers et al., 2016).

The COVID-19 pandemic has further intensified the global burden of anxiety disorders. Many individuals are experiencing heightened levels of stress and anxiety due to uncertainty, isolation, and economic impacts associated with the pandemic (Xiong et al., 2020). The psychological impact of COVID-19 is profound, disrupting daily life and contributing to increased anxiety, depression, and other mental health disorders worldwide (Rajkumar, 2020). Studies have shown that the fear of infection, coupled with the effects of quarantine

and isolation, can lead to significant mental health issues, including anxiety and post-traumatic stress symptoms (Brooks et al., 2020). Moreover, individuals who have recovered from COVID-19 are reporting increased levels of anxiety, driven by concerns about potential long-term health effects and reinfection (Huang et al., 2021; Mazza et al., 2020).

II. Objective

To evaluate the effect of specific yoga asanas on the anxiety levels of individuals who have recovered from COVID-19, as measured by the Hamilton Anxiety Rating Scale (HAM-A).

III. Methods And Materials

The Hamilton Anxiety Rating Scale (HAM-A) is a widely recognized clinician-administered tool used to assess the severity of anxiety symptoms in individuals. Developed by Max Hamilton in 1959, the HAM-A consists of 14 items that evaluate both psychic and somatic symptoms associated with anxiety. Each item is rated on a scale from 0 to 4, where 0 signifies "not present" and 4 indicates "very severe." (Hamilton, 1959).

For the study, 25 recovered COVID-19 patients (both male and female) aged 18 years and older, experiencing mild to severe anxiety as assessed by the Hamilton Anxiety Rating Scale (HAM-A), were selected from Thoubal district, Manipur, India. Subjects were chosen based on specific inclusion and exclusion criteria.

Inclusion Criteria:

- i. Documented recovery from COVID-19, confirmed by a negative PCR test.
- ii. Willingness to participate in a yoga intervention program for up to 8 weeks.
- iii. Participants experienced mild to moderate anxiety symptoms, as indicated by a Hamilton Anxiety Rating Scale (HAM-A) score between 14-24.

Exclusion Criteria:

- i. Individuals with a history of severe anxiety disorders or other psychiatric conditions
- ii. Participants currently undergoing treatment for anxiety or using anti-anxiety medications.
- iii. Pregnant women or individuals with severe comorbidities.
- iv. Those with physical limitations prevent them from performing yoga asanas.

Each item is scored on a scale of 0 (not present) to 4 (severe), with a total score range of 0-56, where < 17 indicates mild severity, 18-24 mild to moderate severity and 25-30 moderate to severe.

Participants in the study were engaged in a structured yoga program specifically designed to reduce anxiety levels. The yoga intervention included a carefully selected series of asanas (yoga poses) and pranayama (breathing techniques) that have been shown to have calming and anxiety-reducing effects. Five yoga professionals were consulted to validate this yoga program.

The yoga asanas practiced by the participants included:

- i. Shavasana (Corpse Pose)
- ii. Balasana (Child's Pose)
- iii. Vrikshasana (Tree Pose)
- iv. Sukhasana (Easy Pose)
- v. Anulom Vilom (Alternate Nostril Breathing)

The yoga sessions were designed to last for 75 minutes and were conducted five times per week over eight weeks. Participants performed the asanas and breathing exercises correctly and safely, gradually increasing their comfort and proficiency with the practices.

The statistical analysis of descriptive and paired sample t test was used to find out the characteristics of data and significant differences at a 0.05 level of confidence.

IV. Results

The descriptive analysis of the before and after intervention program of anxiety levels is presented in Table 1.

Table 1
Before and After Intervention Program Means of Anxiety Level

Variables	N	Mean	SD	SE
Before Intervention	25	20.240	3.179	.636
After Intervention	25	8.920	2.660	.532

Table 1 reveals that the mean (M) and standard deviation (SD) before intervention and after intervention of the group were 20.24±3.179 and 8.92±2.66, respectively. In addition, the standard error (SE) of before and after intervention was also found as 0.636 and 0.532, respectively.

The graphical representation of the before and after intervention program means comparison of anxiety levels are shown in Figure 1.

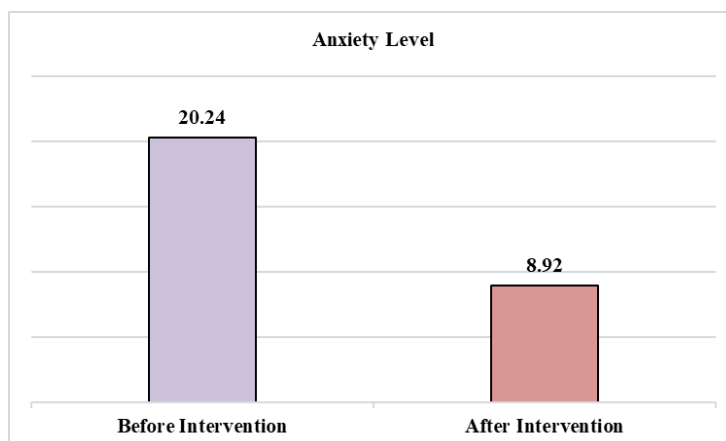


Fig. 1. Means Comparison of Anxiety Before and After Intervention Program.

The paired t test analysis of the before and intervention program for the anxiety level of the group is presented in Table 2.

Table 2

Analysis of Anxiety for the Group

Variable	MD	SD	SEM	95% Confidence Interval of the Difference		t	df	Sig.
				Lower	Upper			
Before Intervention-After Intervention	11.320	3.705	.741	9.791	12.849	15.277*	24	.000

*Significant at 0.05 level of confidence, $t_{0.05}(24) = 2.064$

Table 2 reveals that there was a statistically significant difference in the group's before-and-after intervention program, as the obtained value of $t=15.277$ is greater than the critical value of $t=2.064$.

V. Discussion

The objective of the study was to find the effect of specific yoga asanas on the anxiety levels of individuals who have recovered from COVID-19. The paired sample t test analysis was applied and revealed that there was a statistically significant difference in the before and after intervention program. This might be due to the nature of the exercises, individuals' interests and the strict implementation of asanas during the stipulated intervention period. A similar study by Sharma et al. (2022) suggests that yoga intervention can be an effective complementary practice for reducing stress, anxiety, and depression levels in COVID-19 patients. Berger and Owen (1988) examined the effects of swimming, fencing, body conditioning, and yoga sessions and discovered that only the yoga treatment group experienced a significant short-term reduction in state anxiety. A study by Ray (2001) reported that yoga was effective in reducing anxiety, but only among male students. In another study, Jerrin et al. (2021) conducted a pilot study on the effects of Yoga and Naturopathy interventions on anxiety and depression in COVID-19 patients, demonstrating a significant reduction in anxiety and depression levels among the participants.

VI. Conclusion

The eight (8) weeks yoga intervention program has shown a significant effect on the anxiety levels of the individuals who have recovered from COVID-19. More yoga asanas might be recommended to reduce the anxiety levels of the individuals. Given the positive outcomes observed, incorporating a broader range of yoga asanas and integrating them into regular rehabilitation protocols could further enhance mental well-being and recovery in post-COVID-19 patients. Future research could explore the long-term benefits of yoga interventions and identify the most effective asanas for specific anxiety symptoms, thereby providing a more tailored approach to anxiety management.

Conflict of interest: None.

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