

# Interventional Study to Find Out Effect of Yoga on Anxiety and Stress among MBBS Students

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## Abstract

Background: MBBS students are always under stress. Extremes of stress results in stress induced disorders and deteriorating performance. The present interventional study is conducted in III/I MBBS students to determine benefits of yoga on anxiety stress. Such study among MBBS students of Terna Medical College was never done before. Objectives: 1. To find out number of students suffering from Anxiety 2. To find out number of students suffering from Stress 3. To find out effect of Yoga on Anxiety Stress. Methodology: Questionnaire DASS21 for anxiety, stress in form of a Pre-test was administered to the students. Out of 102,96 students responded. It was considered as a pre-test. Accordingly, students were divided into anxious and non-anxious groups.

**Index terms**— pranayam, , medical students.

## 1 I. Introduction

MBBS students are always under stress. A student under optimal stress does bring out his or her best, however extremes of stress can result in stress induced disorders and deteriorating performance. [1] Can yoga be of benefit in stress induced effects in medical students? The present interventional study is conducted in III/I MBBS students to determine the benefits of yogic practices on anxiety & stress levels during their day to day life.

Such study of Yoga as an interventional measure to decrease stress and anxiety among III rd year MBBS students of Terna Medical College was never [2] was used to collect the information on, Anxiety, stress experienced by students of III/I batch. Identification data was collected separately.

? Scientific Research Society Approval & Ethics Committee Approval was taken. ? A pretested validated questionnaire DASS by Lovibond, S.H. & Lovibond P.F [2] containing the questions on anxiety, stress in form of a Pre-test was administered to the batch of III rd year MBBS students. There were 102 students in the III/I MBBS batch. There were 7 questions each on depression, anxiety & stress. Total 21 questions hence DASS 21 is the name of the scale. Questions on anxiety & stress were analysed. ? As per the scoring on the scale, students were divided into anxious and non-anxious groups. ? To the anxious group, intervention with 4 types of Pranayam namely, Bhastrika, Kapalabhati, Anulom-Vilom and Bhramari was given by trained teacher. [3] 6 avaratans of each were conducted in each session. It took around 30 minutes to conduct a session. 3 such sessions per week were conducted and continued for 8 weeks. Students were asked to practice them regularly at home.

? Post-test was applied on the same group at the end of the session. ? Results of Pre-test & post-test were compared.

## 2 III. Results

### 3 Graph 3.1 : Students with Anxiety & Stress

Graph 3.1 shows that 71.1% students chosen from pre-test had mild anxiety, 26.3% students had moderate anxiety & 2.6% students had severe anxiety. Also 73.7% students had mild stress, 26.3% students had moderate stress

& none of them had severe level of stress. show none of the student was suffering from any form of anxiety after yogic intervention. Atezaz et al [7] also found positive effect of pranayam on anxiety among medical students. 6. 73.7% (28) students were suffering from mild level of stress and 26.3% (10) students had moderate level of stress. None of the student had severe form of stress during pre -test. During post-test, all the students found to be within normal range of stress showing the role of daily practice of Yoga in decreasing the stress among students. Jadhav et al [4] , Sharma et al 5 & Li et al 6 also found decrease of stress among medical students after yogic interventions in their respective studies. Malathi et al [1] found the positive effects of Yoga in relieving the stress among medical students. Arvind et al [9] also found significant difference after yogic practices in his study group of 1 st year medical students. Chandla et al [10] & Pal et al [11] also found similar positive effects of Yoga in relieving stress among the participants.

## 4 V. Conclusion

III/I MBBS students were under stress & anxiety. Yoga in form of Pranayama or breathing exercises decreased stress & anxiety among them. It is advised to continue to practice the yoga regularly in future.

## 5 VI. Recommendations

? To implement it on all the batches of MBBS ? To make it a regular activity for all the batches every year.

VII. Limitations Table 3.1 shows that out of 96 students of 3 rd year MBBS, 39.58% (38) came to be positive for anxiety and stress as per DASS21. It was considered as a pretest. It proved that Yoga played a significant role in decreasing anxiety. It is also statistically significant.

Jadhav et al [4] , Vivek Sharma et al [5] also found subjective wellbeing & decrease of stress among medical students after yogic interventions. Li et al [ 6] also found similar result in his review on stress & yoga. S.Y.Atezaz et al [7] also found that for anxiety disorders, exercise and yoga have shown positive effects.

However Bhupendra Singh et al [8] did not find significant reduction in anxiety level of his study group of high school students.



Figure 1:

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<sup>2</sup>Interventional Study to Find Out Effect of Yoga on Anxiety and Stress among MBBS Students

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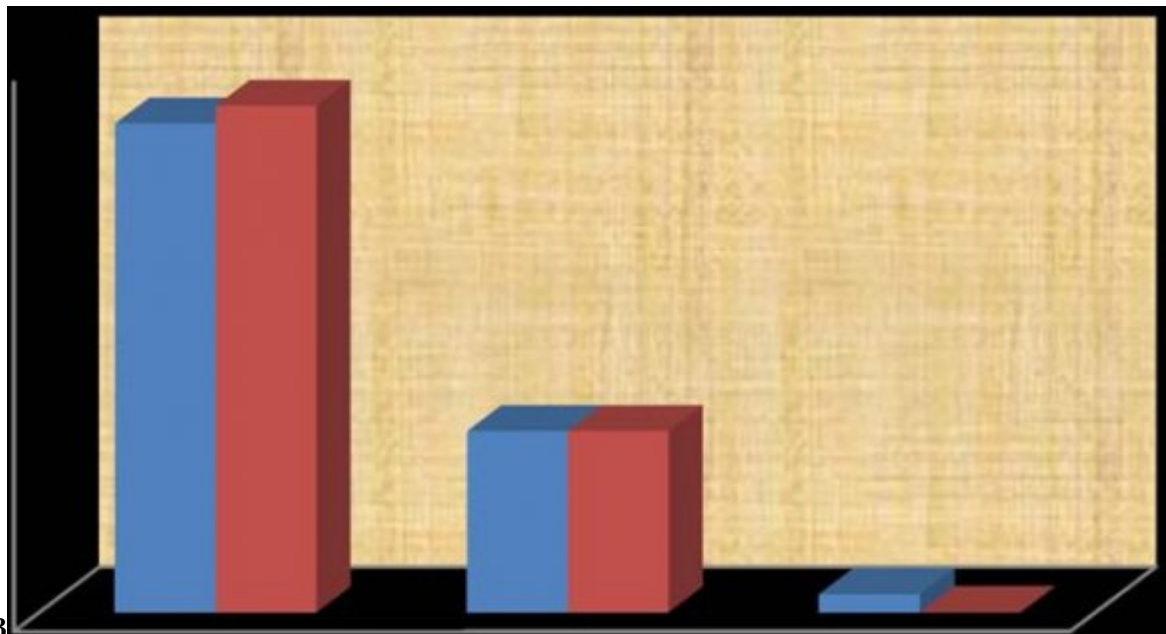


Figure 2: Graph 3 . 3 :

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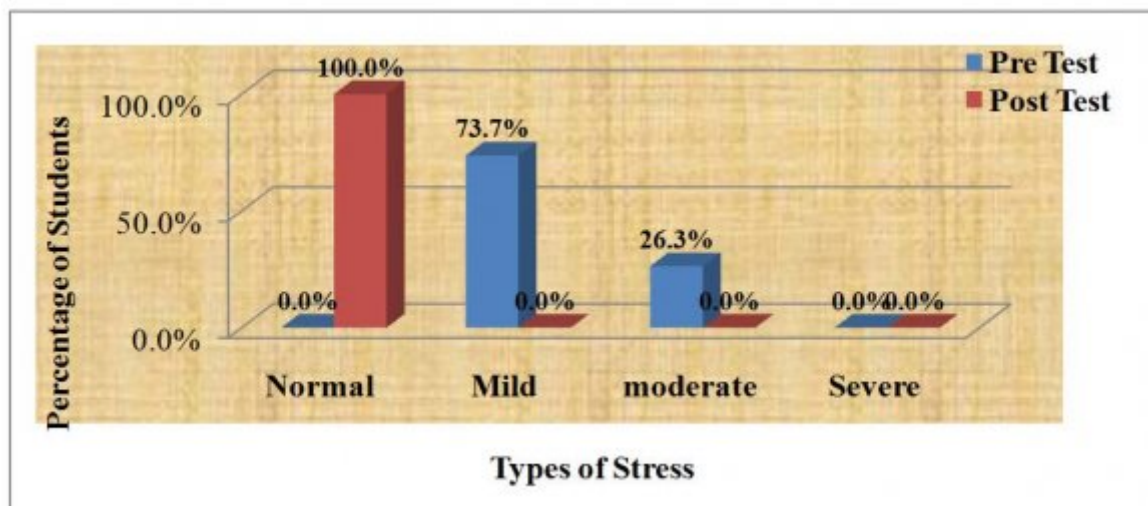


Figure 3: Graph 3. 4

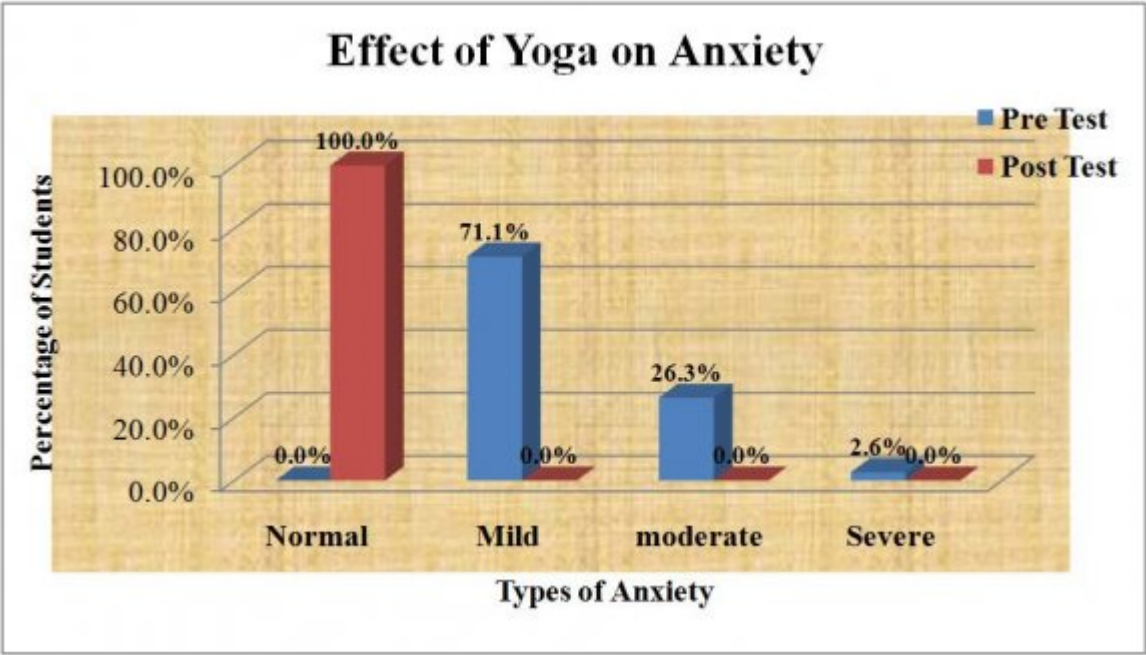


Figure 4:

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| Types of Anxiety | Pre-Test |      | Post-Test |     |
|------------------|----------|------|-----------|-----|
|                  | No.      | %    | No.       | %   |
| Normal           | 00       | 0.0  | 38        | 100 |
| Mild             | 27       | 71.1 | 00        | 00  |
| Moderate         | 10       | 26.3 | 00        | 00  |
| Severe           | 01       | 2.6  | 00        | 00  |
| Toal             | 38       | 100  | 38        | 100 |

Z = -5.383, P = 0.000 highly significant at 1% level as per Wilcoxon Signed Rank Test

Figure 5: Table 3 . 2 :

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Windows Excel 2010 and SPSS version 21 is used for statistical analysis. It proved that Yoga played a significant role in decreasing anxiety. The results are statistically significant.

Figure 6: Table 3 .

[Note: AnxietyStressVolume XVI Issue II Version I]

Figure 7: of Students Types of Anxiety & Stress

Figure 8: Table 3 .

| Types of Stress | No.   | Pre %<br>Test | No.   | Post %<br>Test | Year 2016                     |
|-----------------|-------|---------------|-------|----------------|-------------------------------|
| Normal Mild     | 00 28 | 00.00         | 38 00 | 100 00         | 11                            |
| moderate Severe | 10 00 | 26.30         | 00 00 | 00 00          | Volume XVI Issue II Version I |
| Total           | 38    | 00.00         | 38    | 100            |                               |
|                 |       | 100.00        |       |                |                               |

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[Note: © 2016 Global Journals Inc. (US)]

Figure 9: Table 3 . 5 :



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