

Yoga- Simple Remedy To Reduce Stress Among Medical Students- A Cross-Sectional Study

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ABSTRACT:

Context: Medical students lack time to take care of their health and relaxation. Yoga Practising needs just a mat and minimum 15 minutes. This study would help them explore benefits of Yoga.

Objective: To determine the effect of yoga in reducing stress among medical students.

Materials and Methods: Cross-sectional study was conducted in a group of 100 students for a period of 6 weeks. Hatha yoga was taught. The stress was assessed by perceived stress scale.

Result: Comparison of Perceived **Stress Score** of study participants, taken before starting and after completion of the yoga session showed significant reduction ($p < 0.001$) consistent with our hypothesis that there is reduction in stress of the students after practise of yoga.

Conclusion: The study showed significant reduction in stress levels after a structured yoga intervention among medical students.

KEYWORDS: Yoga, Stress, Medical students, Stress relief, Life style.

INTRODUCTION:

Stimuli called stressors can elicit the body's "flight or fight" response^[1], healthy mild to moderate stress is a natural response, but chronic or insidious stress can be harmful.

Chronic stress leads to psychiatry illness like depression, suicide and anxiety^[2]. Eva et al. (2015) reported 54% Stress among medical students^[3], due to strenuous course load and hectic schedule^[4]. Management of stress is possible by ancient system of yogic practices like Surya Namaskar, Pranayama and Meditation^[5]. Yoga is gaining prominence in improving mental health and in the treatment of a number of psychiatric and psychosomatic disorders^[1].

AIM & OBJECTIVE:

To assess the efficacy of yoga as a health promotion lifestyle method to reduce stress among medical students.

MATERIALS AND METHODS:

Study design and sampling description:

Cross sectional study done in Sree Balaji Medical College and hospital from 1st week of March 2021 to last week of April 2021. 100 Students pursuing Under-graduation and Post-graduation at Sree Balaji Medical College and Hospital Chromepet, Chennai were taught yoga by a certified Hatha yoga instructor for six weeks.

Students satisfying inclusion criteria and have given informed consent were included in the study. The socio demographic details of the students and the stress level of students were assessed through the questionnaire given to them. We used Simple random sampling as sampling technique.

Following six weeks of yoga practice, stress level will be assessed for students by the same questionnaire. The data was entered in the Microsoft-Excel software 2013 and analysed statistically by using paired t-test.

Due to the onset of COVID-19 pandemic, sessions were conducted online.

Inclusion Criteria:

Undergraduate and Postgraduate students of SBMCH who are willing to participate in the study and over the age of 18.

Exclusion Criteria:

Undergraduate and Postgraduate students of SBMCH with history of spinal problems, recent joint injuries were excluded.

Feedback from students was used as mechanism to assure quality of study. Study period was for 6 weeks.

Procedure:

As designed by the Hatha yoga instructor, different asana were demonstrated and students were made to observe and follow the steps accordingly. A questionnaire to assess stress levels was circulated to students before and after completing the 6 weeks of yoga sessions in order to register the effects. Yoga session was conducted on alternate days for each group from morning 7a.m-8.a.m live online through google meet.

The session started with brief introduction to yoga and its practice. The students first observed and then started to do the asanas simultaneously along with the instructor. After attending each session all the students practiced these asanas for a duration of 1hr per day. We had a total of 12 sessions, 2sessions a week. We had full attendance during these sessions.

A WhatsApp group was constituted to motivate and to follow up the practice of yoga asanas taught to the students. The group is still active with motivating messages and students reporting their daily practice of yoga.

Instrument: Perceived Stress Scale

- a. ► Scores ranging from 0-13 would be considered low stress.
- b. ► Scores ranging from 14-26 would be considered moderate stress.
- c. ► Scores ranging from 27-40 would be considered high perceived stress.

OBSERVATION AND RESULT:

100 students volunteered to participate in the study. The Mean Age+ Standard deviation of study participants was 20.77+2.24 with a range of 18-24 age.

The overall mean Perceived Stress Score of the study participants calculated before starting the yoga session is 26.39. But after completion of 6 weeks of yoga practice, the overall mean Perceived Stress Score of students reduced to 21.04

There is significant reduction in perceived stress score after 6 weeks of practicing yoga.

We found difference in overall mean of Perceived Stress Score with p-value of (<0.001), consistent with our hypothesis that there is reduction in stress of the students after practicing yoga.

DISCUSSION:

Yoga makes the body active, energetic, and reduces the risk factors of non-communicable disease. It is the most economical and easy method of charging the tired and exhausted cells. Even in conditions of bad weather and lockdown imposed due to pandemic all that is required is the will to do and a yoga mat. Yoga practice include “asana” physical postures, and “Pranayama” breathing techniques ^[6]. Practice of Pranayama daily will develop a habit of slow and deep breathing unconsciously throughout the day ^[7]. Surya Namaskar, Asanas, Pranayama and Meditation significantly increases the basal level of growth hormone and dehydroepiandrosterone sulfate in the blood, thus contributing to healthy ageing ^[8]. Yoga could be done anywhere so it could help students combat this lack of time. The practice of Yoga is easy, safe, low cost acceptable ^[9]. “Practise what you preach” we must first promote the health of our students who are going to be future doctors ^[10]. It would be welcome to have Yoga in the curriculum of medicine. By the time the study was over Yoga is already a part of medical curriculum. Further studies using physiological and biochemical parameters are needed for the mechanism to be deciphered.

CONCLUSION:

From the study it was evident that yoga helped to relieve stress among medical students. Yoga proves to be a simple economic and accessible way to stay healthy both physically, mentally and emotionally. Yoga is also a part of Curriculum of M.B.B.S students.

ETHICS APPROVAL AND CONSENT TO PARTICIPATE

Our study is approved by Institutional Human and Ethical Committee of Sree Balaji Medical College and Hospital, Chennai. (Reference no: 002/SBMC/IHEC/2020/1321).

DATA AVAILABILITY:

All the data are available with us.

CONFLICT OF INTEREST:

There is no conflict of interest regarding publication of this study.

FUNDING STATEMENT:

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AUTHORS CONTRIBUTIONS:

All the authors had equally participated in the final preparation of the current manuscript. The authors equally formulated the theoretical and conceptual frameworks, designed the methodological procedure, performed the data collection process, analysed and processed the data, interpreted the data and drawn the conclusions, and finalised the research manuscript.

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