

Compulsory Yoga Protocol for MBBS Students- Students' Perspective

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ABSTRACT

Background: The National Medical Commission (NMC) introduced a compulsory Yoga module in the foundation course of MBBS students as part of Competency-Based Medical Education (CBME). Yoga is well known for its mental and physical benefits, including stress reduction and improved focus. This study aimed to explore students' perspectives on the compulsory Yoga protocol.

Methods: A cross-sectional study was conducted among 417 MBBS students (batches 2018–2022) from two medical colleges in Madhya Pradesh and Maharashtra. Data were collected using a pre-tested, semi-structured questionnaire and analyzed using SPSS v.24.

Results: Most participants were from First MBBS and aged 21–25 years. Academic stress (70%), time mismanagement (33%), and internet distractions (14%) were cited as major hurdles. A majority (95%) agreed on the necessity of Yoga in the MBBS curriculum, citing benefits like improved mental health, relaxation, and stress relief. About 70% did not associate Yogasanas with religion, and 84% expressed willingness to continue Yoga. Most reported satisfaction with Yoga arrangements, especially the involvement of certified trainers. Around 93% felt more energetic and focused post-session and 83% reported regular involvement in physical activities like walking and running.

Conclusion: The compulsory Yoga protocol was well-received by MBBS students and found effective in alleviating stress and enhancing focus. Regular integration of Yoga in medical education could promote long-term wellness and improve the quality of life for medical students.

Key-words: Feedback, MBBS student, Yoga, National Medical Commission (NMC), New Competency based Medical Education

INTRODUCTION

The New Competency-Based Medical Education (CBME) curriculum for undergraduate medical education has been implemented by the National Medical Commission (NMC) starting from the academic session 2021–22.

As part of this reform, Yoga training has been introduced during the one-month foundation course conducted in the first month of MBBS professional studies. Under this protocol, Yoga sessions are held for a maximum of one hour per day over 10 days and are mandatory in all medical colleges across the country. To maintain symmetry in the Yoga training programme at all medical colleges in India, Morarji Desai National Institute of Yoga under the Ministry of AYUSH has developed a common Yoga protocol ^[1].

Extracurricular activities like sports and arts are given equal importance and encouraged in the schools of many foreign countries, and the candidate cannot pass

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by reading books alone. But in India, till now marks alone are the criteria to pass and extracurricular activities have no importance. A 10-day Yoga course may be considered as an act of extracurricular activity. Yoga has several benefits including physical and mental well-being ^[2,3]; this appears a laudable decision in the interest of the health and well-being of medical students in the early stages of their career, which demands responsible patient service with balance and poise. Hopefully, that should become an integral component of their lifestyle. It would be better if teachers (who missed Yoga in earlier years) also join and participate for complete involvement. Yoga is a possible solution to 'burnout'—a rising phenomenon amongst medicos ^[4–6].

Yoga is a mind-body practice that has been shown to have numerous health benefits, including reducing stress, improving mental health, and lowering the risk of chronic diseases such as hypertension, diabetes, and heart disease ^[7–9]. As such, it can be a valuable tool for medical students to incorporate into their lifestyle and promote overall wellness. Yoga is now a global movement in 180+ countries over the world and its land of origin—India—should nowhere lag. While some may consider it a religion-based practice, others might have adopted it from school days and made it a part of their lifestyle.

In recent years, there has been an increasing recognition of the importance of integrating complementary and alternative medicine (CAM) into mainstream medical practice. Yoga, as a CAM practice, could potentially play a role in this integration ^[10,11]. Through this study, the investigators intend to find out the opinion of medical students regarding the NMC Yoga protocol.

MATERIALS AND METHODS

Study Design and Setting- This was a descriptive, cross-sectional study conducted among MBBS students of two government medical colleges—one in Madhya Pradesh and the other in Maharashtra. Data collection was carried out in April 2024.

Study Population- The study included MBBS students from the 2018 to 2022 admission batches, who had undergone the compulsory NMC Yoga module during their foundation course. Participation in the survey was voluntary.

Sample Size and Sampling Technique- A total of 417 students responded to the online questionnaire. A convenient sampling technique was used, where the questionnaire link was circulated via WhatsApp and email groups of medical students.

Data Collection Tool- A pre-tested, semi-structured, self-administered questionnaire was used as the study tool. It included items related to demographic details, Yoga practice, satisfaction levels, perceived benefits, and opinions about the NMC Yoga protocol. The questionnaire was validated by subject experts for clarity and relevance.

Statistical Analysis- The collected data were compiled in Microsoft Excel and analyzed using IBM SPSS version 24.0. Descriptive statistics such as frequencies and percentages were used to summarize the findings.

Ethical Considerations- Ethical clearance was obtained from the Institutional Ethics Committee of both participating colleges. Written informed consent was included at the beginning of the Google Form to ensure voluntary and informed participation. The confidentiality and anonymity of the participants were strictly maintained.

RESULTS

Demographic Profile- A total of 417 students from two medical colleges (private and government) in Madhya Pradesh and Maharashtra participated. Most were from First MBBS (288, 69%), aged 21–25 years (222, 53%), and male (224, 54%). The majority were from Madhya Pradesh (315, 76%) and Maharashtra (81, 19%). Urban origin was reported by 214 (51%) students, rural by 117 (28%), semi-urban by 74 (18%), and tribal by 12 (3%).

Feedback on Personal Questions- Academic stress was the most common issue (294, 70%), followed by learning-related stress (32, 8%), interpersonal/social stressors, language problems, and group activity challenges. For extracurricular needs, 89 (21%) wanted personality development, 77 (18%) time management, and 71 (17%) personal counseling. Main hindrances to performance included time mismanagement (137, 33%), lack of guidance (83, 20%), internet distraction (59, 14%), and academic stress (42, 10%). About 117 (28%) reported no hindrance. Regarding NMC suggestions, 217

(52%) gave none; others suggested better infrastructure, extracurricular inclusion, Yoga continuation, and time management training.

Input-Related Feedback- Most students (395, 95%) supported Yoga in the MBBS curriculum for physical and mental well-being (394, 94%). About 243 (58%) knew of the NMC YouTube Yoga link. A majority (331, 79%) believed Yoga sessions included relaxation, meditation, and practical training. 290 (70%) did not consider Yoga religious, and 244 (58%) felt no changes were needed in the current protocol.

Process-Related Feedback- Separate, safe Yoga space was reported by 286 (69%), cleanliness by 245 (59%), and sufficient capacity by 303 (73%). Only 163 (39%) received mattresses. Sessions were conducted mostly by authorized Yoga specialists (301, 72%). Session durations were 60 min (231, 55%), 120 min (69, 16%), and 90 min (56, 13%). About 335 (80%) noted teacher participation. Post-session, 383 (92%) supported future continuation.

While 213 (51%) wished to continue Yoga, others cited lack of time or personal disinterest.

Output-related feedback- 396(95%) participants found Yoga sessions helpful. 81(19%) found them relaxing, 65(16%) mentioned it as a stress buster, 37(9%) believed that these sessions improved concentration and focus, others reported it has energized, provided freshness, felt fitter, and improved productivity. When the participants were asked whether they felt energetic/ more attentive/ focused for the rest of the day for academic purposes 386(93%) participants gave a positive response.

Impact-Related Feedback- 348 (84%) intended to continue Yoga, and 229 (55%) were actively practicing. Among 113 (27%) pre-existing Yoga practitioners, Suryanamaskar (45%), meditation (29%), and pranayama (20%) were common. Physical activities included walking (260, 75%), running (117, 34%), sports (100, 29%), gym (68, 20%), and others. Meditation practice was reported by 97 (23%), though most could not name the method.

Table 1: Showing response of MBBS students on input-process-output-impact related questions on compulsory Yoga sessions by NMC

Questions asked to MBBS Students	Most common Response	Positive Responses Students (%)
Main problem in a MBBS student's life	Academic related stress	294(70%)
Major hindrance in achieving full potential	Time mis- management	137(33%)
Most demanded extra- academic activity	Time management & personality development classes	166(39%)
Necessity of introducing Yoga in MBBS curriculum	Yes	395(95%)
Yoga is a tool	For better physical/ mental health	394(94%)
Yoga is not religion specific	Yes	290(70%)
Fair arrangement for Yoga sessions by the institute	Yes	286(69%)
Yoga protocol should continue in future	Yes	383(92%)
Yoga sessions were found useful	Yes	396(95%)
Effect of Yoga sessions	Relaxing & Stress buster	146(35%)
Yoga increased focus and energized for rest of the day	yes	386((93%)
Students willing to continue Yoga practice	yes	348(84%)
Students involved in any daily physical activity	yes	345(83%)
Most common physical activity routine among students	walking	260(75%)

DISCUSSION

The study documents that there are many hurdles in the personal and professional life of a medical undergraduate academic-related stress, Teaching and learning-related stressors, intrapersonal and interpersonal-related stressors, Social-related stressors, language problems, etc. Major hindrances per the students in achieving their full potential performance were time mismanagement, lack of guidance, mobile phones and internet, inability to concentrate, academic stress, frequent examinations, low self-confidence, lack of motivation, etc. A previously done study also highlights similar findings.^[12] Challenges such as time management and academic adjustment were common among medical students as per the previous study.^[13] The study also encompasses the view of the students regarding the most important extra-academic facility needed by them. Most students felt the need for personality development classes, time management, and personal counselling along with yoga meditation and psychiatric assistance.

Maximum students thought that yoga should be introduced in the MBBS curriculum. The reason is that yoga helps to improve mental health, improves concentration, and helps deal with anxiety and stress. More than half of the students included in the study already knew about the yoga protocol. A similar study done by Shinde *et al.*^[14] also indicates that medical students had good knowledge, attitudes, and practice about yoga. They believed that some part of theoretical and practical knowledge regarding yoga practice to be inculcated in the curriculum of medical students. This will help them guide patients with chronic diseases like hypertension, diabetes mellitus etc to non-pharmacological measures like yoga. Like a similar previous study¹⁵ majority of the students believed yoga asanas are not religion-specific and also did not recommend any change in the current yoga protocol.

The majority of the students reported that adequate space was provided for the sessions and a guest yoga specialist was present to assist the students. The time given per session was mostly 1 hour or 2 hours. The medical teachers also participated with the students in the sessions. More than half of the students believed that yoga classes should continue in the future. Others were of the view that lack of time would not allow them to continue it. Most of the participants found the yoga

sessions to be helpful, relaxing and stress buster. Almost all participants felt more energetic and focused for the remaining day.

Many studies emphasize the role of yoga in stress reduction. As per a study published in the Indian Journal of Physiology and Pharmacology, yoga is not only helpful in decreasing the basal anxiety level in medical students but it also attenuates the increase in anxiety in students who may be experiencing life stressors such as examinations and academic pressure.^[3] Simard and Henry conducted a pilot study on fourteen first-year medical students which concluded that students reported improvement in overall health, perceived stress and depressive symptoms following yoga intervention.^[5] In addition to stress reduction, the physical benefits of yoga included a decrease in musculoskeletal pain including low back pain, headache, neck pain and wrist discomfort.^[3-7,16,17] Prasad *et al* conducted a study on medical students showing that participants showed a statistically significant improvement in relaxation, calmness, stamina and exhaustion. This can be beneficial for students who may be sitting for long periods in class and at home. Yoga can also improve concentration and focus which can be helpful for students who need to stay alert and focused during lectures and exams.^[18]

Most of the students said that they would continue yoga after the completion of the session. Some were already yoga practitioners and meditation practitioners among them. Most of the students reported being involved in physical activities like walking, running, gym training, dancing, and swimming. This study has a few limitations such as it is done for a short period with a limited number of respondents, A Similar study with respondents from all over the country and their comparison at the international level can fetch more profound results.

CONCLUSIONS

The innovative and thoughtful step taken by NMC of introducing yoga in the initial classes of MBBS seems to be highly effective and fruitful in the future. As it provides an instant calming effect it is fondly acceptable by the students too. The period allotted and the structure allowed may be modified over time but Yoga classes seem to be an important and effective tool to reduce stress and improve both the physical and mental health of the medicos in India.

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