



ORIGINAL ARTICLE

Mindfulness practices among the medical faculty of a private medical college.

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ABSTRACT... Objective: To explore mindfulness practice in clinical and basic science faculty in a private medical college. **Study Design:** Comparative Cross-sectional study. **Setting:** Abwa Medical College Faisalabad. **Period:** 15th December 2022 to 15th January 2023. **Material & Methods:** Faculty members of MBBS from basic medical sciences and clinical sciences of Abwa Medical College Faisalabad were enrolled in the study after taking informed consent. A total of 37 participants were enrolled in the study using a purposive sampling technique. Sixteen participants belonged to the basic medical science faculty, and 21 from the clinical science faculty. A pilot study was conducted to validate the questionnaire, and after validation, data was collected and analyzed in SPSS version 21. Categorical data were represented in frequency and percentage, and P-value was calculated by comparing the responses of both groups using an independent t-test. **Results:** A total of 37 participants were enrolled in the study. The mean age calculated was 39 years. Out of 16 participants in basic medical sciences, 44% were male, and 56 were female. However, of the clinical science faculty, 71% were male, and 29% were female. Participants taking breakfast in the early morning had a statistically significant p-value of 0.036 (Basic sciences faculty Mean \pm S.D = 3.13 \pm 1.15, Clinical Science Faculty Mean \pm S.D = 3.95 \pm 1.07). Participants having a sense of community also recorded a P value of 0.0005. on the other hand, people driving to home were more prone to anxiety and stress with a P-value = 0.044. **Conclusion:** There have been varied practices of mindfulness among medical faculty of basic & clinical sciences to cope stress. More studies are warranted to assess the frequency & practices of mindfulness among basic & clinical faculty, so as to have positive impact on personal, institutional & professional benefits.

Key words: Basic Sciences, Clinical Sciences, Mindfulness, Medical Faculty.

INTRODUCTION

Physical and emotional reactions that occur when the job demands are incompatible with the worker's capabilities and resources are explained as workplace or emotional stress.¹ Workplace or occupational stress results in long-lasting conditions caused by situations in the workplace that negatively impact the employee's financial, physical, and cognitive well-being.²

Educators of either discipline may experience workplace stress because of an apparent mismatch between their training and responsibilities. For instance, despite the obligation of all doctors to teach and educate their juniors and students, there is an immense scarcity of faculty training programs and formal teaching qualifications.³ With

an increasing load of patients and administrative workload, research is not uncommon for a doctor to face several competing demands. With such responsibilities, there is insufficient time for preparation and teaching. The ultimate sequelae results in dissatisfaction with the job reduced organizational and academic performance and compromised creativity and productivity.⁴ The amalgam of all the above roots for decreased and impaired health care delivery by the affected health care professionals.

Several studies have been published on how medical students cope with stress.⁵ On the other hand, a minimal amount of literature evidence is present on a medical educator's stress-coping mechanisms. A medical teacher is a practitioner,

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teacher, researcher, and trainer. Stress in medical educators leads to compromised delivery of all the services mentioned above, which further contributes to striking a balance between education and health care delivery.⁶ According to a study, Organizational stress can result in physiological and psychological dysfunction, adversely affecting the organization's effectiveness, functioning, and morale. In addition, to decreased productivity, turnover, and job satisfaction, work stressors have also been examined in terms of their emotional impact on medical educators.⁷

Furthermore, "burnout" results after a long-term involvement and ineffective coping with chronic stress. As per literature, alarming statements have been issued in the education literature about the growing prevalence of teacher stress and burnout and the adverse effect this has on the learning environment and the achievement of educational goals.⁸ Another study reports a significantly higher level of stress and depression among medical faculty members of doctors and dentists. All this yields poor relationships with colleagues, unrealistic demands, and expectations from the administrative bodies.

Many studies and mechanisms have been proposed to cope with organizational stress. However, the mechanism's effectiveness depends upon the teacher's physical health and emotional well-being.⁹ A study reports fewer burnout cases among those healthcare professionals who have to assess the coping mechanism. Stoeber and Rennert classified the coping mechanisms into two: active and avoidant. Active coping methods are widely accepted, including exercise, meditation, and healthy spare time. Research shows that developing a nexus between healthcare professionals can bear fruitful results of mind-bearing and emotional support. Mentoring and collaboration among new special educators are associated with an increased commitment to the profession. In addition to being able to problem-solve and access social-emotional support, teachers with effective coping strategies are more likely to experience greater job satisfaction.¹⁰ One successful and efficacious

method of dealing with occupational stress is mindfulness.

Holzel et al.¹¹ developed a theoretical model of mindfulness mechanism comprising four essential components. All these four components are interlinked to provide a better coping mechanism against occupational stress consequences. This model significantly recons the strength of self-regulation, attention regulation, body regulation, and perspective change regarding one's self. The benefits of mindfulness meditation for doctors, nurses, and other healthcare workers include reduced stress, depression, burnout, well-being, and empathy. The method, however, has several limitations, including a small number of participants, a high dropout rate in the intervention group, and above all, ceasing to practice mindfulness after the course ends. Healthcare professionals can implement mindfulness to improve their well-being and quality of care, thus improving their well-being and quality of care. The practice of mindfulness among the health professionals of middle to low-resource countries such as Pakistan can prove efficient in providing quality health care. A study by Magtibay et al. reported significantly reduced stress and burnout among healthcare professionals enrolled in the blended programs after the Stress management and resiliency training program.¹²

This study assesses and compares mindfulness practice in basic and clinical science faculty.

MATERIAL & METHODS

A cross-sectional comparative study was designed at Abwa Medical College Faisalabad from June 15 December 2022 to 15 January 2023. A total of 37 participants were enrolled in the study, 21 of which belonged to basic medical sciences and 16 to clinical sciences, using a purposive sampling technique. All the participants enrolled in the study were of the faculty or a teacher of the subject for MBBS. The inclusion criteria comprised all faculty members teaching basic medical sciences and clinical sciences to MBBS students. Faculty members of other disciplines and unwillingness to participate were excluded from the study. The questionnaire

was prevalidated by conducting a pilot study and circulated among the faculty members. The data collected was then analyzed in SPSS 21. Categorical data such as age, gender and work experience were represented in frequency and percentages. Mean and standard deviation was calculated for the responses in both groups, and an independent t-test was applied to calculate the P value.

The study has been approved by the ethical committee of Abwa medical college, khurrianwala, Faisalabad. (Rer.No. ICE/DME-679-22, Dated 15-11-2-22)

RESULTS

The study comprised a total of 37 participants from a private medical college comprising both the basic sciences and the clinical sciences. 16 participants out of 37 belonged to basic medical science faculty, and 21 were from the clinical science faculty. The mean age calculated in was 39 years of age. Table-I depicts the distribution of age and gender in groups along with the working experience.

Questions	Basic Sciences Faculty (n=16)	Clinical Sciences Faculty (n=21)	
	Frequency (%)	Frequency	Percentage
Age (years)			
<25	4 (25%)	4	19%
25- 34	3 (19%)	3	14%
35- 44	6 (38%)	5	24%
45- 54	2 (12%)	6	29%
>55	1 (6%)	3	14%
Gender			
Male	7 (44%)	15	71%
Female	9 (56%)	6	29%
Work Experience (years)			
1-3	8 (50%)	1	5%
4-6	2 (13%)	2	10%
7-9	1 (6%)	7	33%
10-12	2 (13%)	8	38%
>12	3 (18%)	3	14%

Table-I. Demographic details of the participants

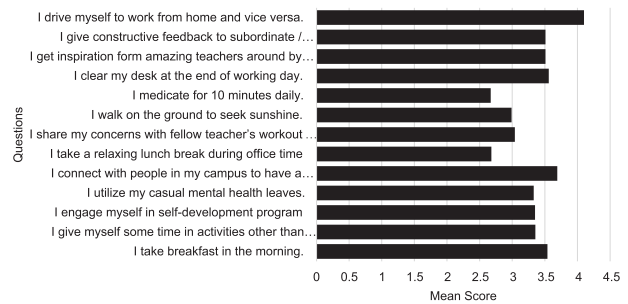


Figure-1. Graphical representation of mindfulness practices score.

Figure-1 depicts the graphical representation of the mindfulness practice score by each participant from both groups. It has been estimated that the people driving themselves home have a high mean score of 4.44 and P- value = 0.044. People taking breakfast at home have a significant P value = 0.036. While people connecting the campus to have a sense of community have also a P-value = 0.0005. P value <0.05 is considered statistically significant and P- value <0.005 is considered highly significant. (Table-II)

Out of 13 variables influencing mindfulness practice in clinical and basic science faculty, participant habitual of taking breakfast in the early morning have a statistically significant p-value of 0.036 (Basic sciences faculty Mean ± S.D = 3.13 ± 1.15, Clinical Science Faculty Mean ± S.D = 3.95 ± 1.07). Participants connecting to have a sense of community in basic science faculty have a Mean ± SD of 3.00 ± 1.10 and Mean ± SD = 4.38 ± 1.08 recorded for clinical science faculty was statistically significant with a P-value = 0.0005. Participants who drive themselves to home from work and vice versa also have a statistically significant value of P-value = 0.044.

DISCUSSION

Mindfulness is now a widely and globally accepted therapeutic modality in healthcare. The study aims to assess and compare mindfulness practice among the clinical and basic medical science faculty. In our study, the participants who drive themselves from work to home and vice versa are more prone to develop depression and anxiety. The P-value = 0.044 was statistically significant.

Sr. No.	Questions	Basic Sciences Faculty (n=16)		Clinical Sciences Faculty (n=21)		P-Value
		Mean Score	Standard Deviation	Mean Score	Standard Deviation	
1	I take breakfast in the morning.	3.13	1.15	3.95	1.07	0.036*
2	I give myself some time in activities other than teaching	3.19	1.33	3.52	1.12	0.418
3	I engage myself in self-development program	3.19	1.05	3.52	0.98	0.332
4	I utilize my casual mental health leaves.	3.56	0.96	3.10	1.04	0.177
5	I connect with people in my campus to have a sense of community	3.00	1.10	4.38	1.08	0.0005*
6	I take a relaxing lunch break during office time	2.69	1.66	2.67	1.35	0.968
7	I share my concerns with fellow teacher's workout having any worry about rumors.	2.94	1.18	3.14	1.20	0.616
8	I walk on the ground to seek sunshine.	3.31	1.25	2.67	1.15	0.115
9	I medicate for 10 minutes daily.	2.44	1.15	2.90	1.14	0.2339
10	I clear my desk at the end of working day.	3.50	1.15	3.62	1.12	0.119
11	I get inspiration form amazing teachers around by talking to them	3.31	1.25	3.71	1.10	0.309
12	I give constructive feedback to subordinate / faculty/ students each day.	3.50	1.46	3.52	1.21	0.964
13	I drive myself to work from home and vice versa.	4.44	0.81	3.76	1.09	0.044*

Table-II. Comparison of mindfulness practices between basic sciences and clinical sciences faculty

A study quotes "Mindfulness is likely to have negative associations with anger and aggression because it promotes opposing appraisals."¹³

In our study, connectivity with colleagues to have a sense of community was also considered statistically significant with a P value = 0.0005. A literature review suggests that a healthy mindfulness practice has remarkable results on personal and interpersonal well-being. Recent studies have found that mindfulness positively impacts a wide range of measures of a person's health regarding anxiety, stress and lifestyle choices. According to recent studies, mindfulness has been effective in treating chronic pain. The mindfulness techniques aids in avoiding or reducing the "autopilot" effect that may eventually cause unwanted ruminations. Significantly reduces the stress, anxiety, and depression levels. On the other hand, mindfulness leads to better mood elevations, improves cognitive behaviour and thinking more effectively.¹⁴

A subject review by Jaffrey white¹⁵ started a

habit of breakfast in patients and revealed that developing a habit, especially taking breakfast early in the morning can help improve the increase in the Gray matter of brain regions that are linked to the learning, memory, emotional regulation and empathy behavior of the patients. This healthy practice among the faculty members revealed statistically significant results with a P-value = 0.036.

Mindfulness also positively affects interpersonal interactions by encouraging empathy, compassion, and attentiveness, evident in the increased patient-centeredness with which mindful doctors conduct their clinical practice. As a result, mindfulness training for healthcare professionals is encouraged to reduce stress and burnout at work and improve the quality of care. A study by Millaray Sanchez-Campos¹⁶ has revealed positive outcomes and measures of mindfulness practice in medical education. Implementation of mindfulness interventions among the medical facilities in both the basic sciences and clinical sciences can yield a positive impact in perceived

personal, institutional and professional benefits.

Moreover, A scoping review by Hani Malik¹⁷ suggests that mindfulness practice is integral to positive psychology and inherently linked to effective leadership. By providing a supportive environment for innovation, a mindful and compassionate physician leader will address current practice gaps, prioritize staff mental health, and address current practice gaps.

CONCLUSION

There have been varied practices of mindfulness among medical faculty of basic & clinical sciences to cope stress. More studies are warranted to assess the frequency & practices of mindfulness among basic & clinical faculty, so as to have positive impact on personal, institutional & professional benefits.





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AUTHORSHIP AND CONTRIBUTION DECLARATION

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2	Noor I Kiran Haris	Design, Revision of review of manuscript.	
3	M. Sohail Anjum Noor	Critical revision & review of manuscript.	
4	M. Usama Sohail	Critical revision & review of manuscript	
5	Hamza Rana	Revisin of review of manuscript.	