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Original Article

LIFESTYLE HABITS OF MEDICAL AND NON-MEDICAL TEACHERS: A COMPARATIVE CROSS-SECTIONAL STUDY

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Background: Teachers, both medical and non-medical, are important community professionals. Their lifestyle habits, such as diet, exercise, and stress management, are influenced by their profession. This study aimed to identify the similarities and differences in lifestyle habits between medical and non-medical teachers in two populous provinces of Pakistan. **Method:** This cross-sectional study was conducted in different cities of Punjab and Khyber-Pakhtunkhwa (KPK) province from April 2024 to January 2025. By convenient sampling, 208 medical and non-medical teachers completed an electronic questionnaire. Data was analysed using SPSS-22. The Independent *t*-test and Chi-square test were used to compare lifestyle habits between the groups. A $p<0.05$ was considered significant. **Results:** A Total of 208 medical and non-medical teachers with a mean age of 33.36±10.165 years, 131 (63.0%) males and 77 (37.0%) females participated in the study. Overall, 178 (85.6%) of the respondents had healthy lifestyle habits, with a mean value of **5**1.44±8.6301. A chi-square test across lifestyle domains, including exercise, diet, stress management, and demographic variables, resulted in an insignificant. Additionally, no significant difference was found between lifestyle domains and overall scores versus those of medical and non-medical teachers ($p>0.05$, respectively). **Conclusion:** The study confirmed that teachers, as a whole, exhibit healthy lifestyle habits, including exercise, stress management, and a balanced diet, irrespective of their profession across various academic institutions in Punjab and KPK. This suggests that occupational context and socioeconomic factors are more significant determinants of lifestyle than specialised health knowledge.

Keywords: Lifestyle Habits; Medical Teachers; Non-Medical Teachers; Comparison.

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INTRODUCTION

Health is a state of physical, mental, and social well-being in which disease and infirmity are absent.1,2 The term 'lifestyle' is a relatively familiar concept often used to describe people's lives. It is the full range of reflections of social values, attitudes, and activities.[3] Lifestyle includes behaviours such as food habits, sleeping, resting, physical activity, exercising, weight controlling, and immunisation against disease.[4] A healthy lifestyle (HLS) helps keep and improve peoples' health and well-being.

Every profession and occupation has its risks and hazards.[5] Medical teachers, in general, are more committed to their profession and experience late working hours and stress management, which negatively impact their health. On the other hand, non-medical teachers tend to be relatively more relaxed and live healthier lives.[6]

Studies on the lifestyle of non-medical teachers have been conducted. The results of Charkzai *et al*, showed that the lifestyle of 84% of teachers in Gorgan city was semi-desirable, and other studies indicate that the lifestyle status of teachers is not favourable.[7] However, in Asian countries, a comparative analysis of HLS habits, particularly diet, exercise, and stress management among medical and non-medical professionals, is rarely studied. Medical teachers, as healthcare providers, are more knowledgeable about healthy living and health hazards compared to non-medical teachers. Therefore, it is necessary to determine whether they apply their knowledge in practice.

This study aims to identify and compare the lifestyle behaviours, including eating habits, exercise practices, and stress management, or coping capabilities,

among medical and non-medical teachers in Punjab and KPK provinces of Pakistan.

MATERIALS AND METHODS

This cross-sectional study was conducted in various cities of Punjab and Khyber Pakhtunkhwa from April 2024 to January 2025. After obtaining ethical approval and using a convenience sampling technique, data were collected via an electronic (freely available on Google) form at various medical and non-medical undergraduate institutions. The e-form comprised six sections: a brief introduction including the objective and exclusion criteria, a consent and confidentiality statement, a socio-demographic profile, and questions related to three domains of HLS: exercise, stress management, and diet. The first two domains consisted of 7 questions each, with a 5-point Likert scale. The minimum score was 7, and the maximum was 35. A cut-off value of ≤21 was considered an HLS. The third domain consisted of six questions, each with five levels (ranging from 6 to 30). A cut-off value of ≤18 was considered a healthy diet habit. Each question had a cut-off value of 3, with responses 1-3 indicating a healthier lifestyle (strongly agree, agree, neutral) and 4–5 indicating a poorer lifestyle (disagree, strongly disagree). For the total score (20 questions, minimum 20 and maximum 100), a cut-off of 60 or less was considered HLS. However, the greater the score, the poorer the lifestyle was assumed.

The study included participants from undergraduate medical and non-medical teaching professions with at least 5 years of experience and a minimum age of 25. Designation was categorised according to the basic pay scale or its equivalent. All teachers of primary and secondary schools or diploma-awarding institutes, as well as those with any chronic disease(s), were excluded. In SPSS 22, the Shapiro-Wilk test was used to assess data normality. In addition to descriptive statistics and the chi-square test, the independent *t*-test was used to compare lifestyle domain scores across the two professions. When the *p*-value of the Levens test was >0.05, equal variance was assumed for each domain. $p<0.05$ was considered significant.

RESULTS

A total of 284 responses reached the e-form, among which 76 were excluded due to either non-consent or incomplete form completion. The remaining 208 respondents' data, with a mean age of 33.36±10.165 years, are included in the current study. Table-1.

Table-1: Demographic characteristics of participants

Attributes of participants		n (%)
Gender	**Male**	131 (63.0)
	Female	77 (37.0)
Profession	**Medical teachers**	89 (42.8)
	Non-medical teachers	119 (57.2)
	Single	98 (47.1)
Marital Status	**Married**	106 (51.0)
	Divorced	4(1.9)
Profession scale	**BPS-16 or below**	74 (35.6)
	BPS-17	65 (31.3)
	BPS-18	25 (12.0)
	BPS-19	18 (8.7)
	BPS-20 or above	26 (12.5)
Total		208(100.0)

Overall, 178 (85.6%) of the respondents had healthy lifestyle habits, with a mean value of **5**1.44±8.6301 (Table-2).

Table-2: Descriptive statistics of lifestyle domains and categorization of health vs poorer lifestyle

Domain	Standard cut-off value	Mean+SD	Min-Max	Healthier Lifestyle	Poorer Lifestyle
Exercise	≤21	18.86±4.0673	7–28	145(69.7)	63(30.3)
Stress management	≤21	18.13±4.0346	7–35	176(84.6)	32(15.4)
Diet	≤18	14.46±3.9168	6–27	174(83.7)	34(16.3)
Overall	≤60	51.44±8.6301	20–77	178(85.6)	30(14.4)

When the chi-square test was run across lifestyle and demographic variables, none of the results was significant. However, 114 (87%) males, 77 (86.5%) medical teachers, 92 (86.8%) married, and 63 (85.1%) with a BPS-16 or lower ranking had higher frequencies of healthier lifestyles compared to those with poorer lifestyles. This confirms that medical teachers are not significantly more or less likely to have a healthy lifestyle than non-medical teachers, Table-3.

Table-3 Comparison of participants' characteristics with lifestyle status, Chi-Square test (n=208)

Participants attributes	Lifestyle status		Total n (%)	*p*
	Healthy lifestyle Habits	Poor lifestyle Habits		
Gender				
Male	114 (87)	17 (13)	131 (100)	0.439
Female	64 (83.1)	13 (16.9)	77 (100)	
Profession				
Medical teachers	77 (86.5)	12 (13.5	89 (100)	0.739
Non-medical teachers	101 (84.9)	18 (15.1)	119 (100)	
Marital Status				
Single	82 (83.7)	16 (16.3)	98 (100)	0.580
Married	92 (86.8)	14 (13.2)	106 (100)	
Divorced	4 (100)	0 (0.0)	4 (100)	
Pay scale				
BPS-16 or below	63 (85.1)	11 (14.9)	74 (100)	0.865
BPS-17	55 (84.6)	10 (15.4)	65 (100)	
BPS-18	21 (84)	4 (16)	25 (100)	
BPS-19	17 (94.4)	1 (5.6)	18 (100)	
BPS-20 or above	22 (84.6)	4 (15.5)	26 (100)	
Total	178 (85.6)	30 (14.4)	208 (100)	

$p<0.05$=significant

When each question was checked for lifestyle categorisation with a cut-off value of <3, 14/20 question mean values were with a positive response (Table-4).

Table-4: Mean±deviation of each question, indicating a positive response with a cut-off value of <3

Questions	Mean	SD
Exercise is a part of my daily routine	2.35	1.006
I start an exercise program but then find myself unable to stick to that	2.21	0.948
I feel fresh after exercise	1.66	0.830
I feel exhausted after exercise	3.29	1.302
I cannot do exercise because of busy schedule	2.77	1.391
I cannot do exercise because of laziness	3.06	1.364
I visit doctor for regular check-up	3.50	1.270
I eat a balanced diet and healthy diet	2.25	1.005
I drink at least eight glasses of water in a day	2.41	1.334
I eat homemade food	1.91	0.966
Fruits and vegetables are included in my daily diet	1.94	0.981
I avoid soft drinks and junk food	2.61	1.318
I often order food from restaurant	3.33	1.297
I'm able to cope with stress in my life	2.34	1.114
I relax and enjoy leisure time	2.11	0.911
I feel stressed during work hours	3.06	1.336
I drink tea/ coffee to relieve stress	2.77	1.418
I smoke or take relaxants to relieve stress	3.71	1.217
I sleep 8 hours daily	2.10	1.040
I enjoy my work	2.04	1.028

An independent *t*-test was conducted to compare the mean score of lifestyle domains between medical and non-medical teachers. No significant difference was found between lifestyle domains, such as exercise, diet, stress management, and overall score, versus medical and non-medical teachers (p>0.05, respectively), as shown in Table-5. For all tests, degrees of freedom were assumed to be equal, as Levene's test was not significant for any variable (p>0.05).

Table-5: Comparison of lifestyle domains with professions by independent *t*-test (n-208)

Lifestyle Domain	Teaching status: Medical Teacher Mean±SD	Teaching status: Non-Medical Teacher Mean±SD	*t*	df	Cohen's d	*p*
Exercise	19.0000±4.13412	18.7395±4.03052	0.532	206	0.06	0.649
Diet	14.4719±4.07623	4.07623± 3.81055	0.048		0.01	0.962
stress management	17.5843±4.04185	18.5378±3.99744	-1.694		-0.24	0.092
Overall	51.0562±8.52451	51.7227±8.73326	-0.550		-0.08	0.583

p<0.05=significant

DISCUSSION

The current study aimed to identify and compare lifestyle habits, including dietary patterns, physical activity, and stress management, between medical and non-medical teachers. Contrary to the assertion that medical teachers would exhibit better health practices, the study revealed no significant differences in the lifestyle habits of medical and non-medical teachers.

Based on the overall score, this study identified a high percentage (85.5%) of healthy lifestyle habits in the whole cohort. This is quite high compared to other studies, which report moderate levels of health-promoting behaviours.[8] From a broader spectrum, Pakistan's national data suggested that most of the population lives with insufficient physical activity and consumes a low-healthy diet.[9] This discrepancy indicates that the teaching cohort of the population, irrespective of their field of speciality, is observing healthy lifestyle habits because of their structured working hours and greater job stability and satisfaction.

The primary question of the current study yielded unequivocal null results. The chi-square test revealed no significant association between professional category and lifestyle classification (X^2=0.112, p=0.739), with nearly identical proportions of medical (86.5%) and non-medical teachers (84.9%). Maintaining a healthy lifestyle. This finding was further substantiated by independent-samples t-tests, which showed no statistically significant differences in mean domain scores for exercise (t=0.532, p=0.649), diet (t=0.532, p=0.649), stress management (t=-1.694, p=0.092), or the overall lifestyle score (t=-0.550, p=0.962). These results align with recent work by F Alves R (2023), who found that health knowledge alone was a poor predictor of lifestyle habits among educated professionals and more closely support the hypothesis that occupational context overrides disciplinary background.[10,11]

The paradoxical finding that medical knowledge does not translate into personal health practices can be explained through the theoretical framework of the "know-do-gap", a well-documented phenomenon in health behaviour research by Pakenham-Walsh N.[12] This gap is particularly evident in high-stress professions where time constraints become a predominant barrier. The mean values of our questionnaire support this, revealing that the "busy schedule" (Q5, mean=2.77) was a commonly endorsed barrier to exercise across both groups. This suggests that the structural constraints of the teaching profession - including heavy workloads and time pressures - create a universal barrier that impedes the translation of knowledge into action regardless of disciplinary background.[13] Moreover, a uniform distribution of participants across Basic Pay Scale 16 to 20 shares a similar socioeconomic status, indicating a uniform access to resources, similar mindsets that lead them to adaptation of healthy lifestyle behaviours [14]

Despite valuable insights, this study bears certain limitations. Due to the study's cross-sectional design, causal relationships could not be established. A potential participant bias arises from the nature of self-reported measures, in which participants may over- or under-report their lifestyle habits. A limited cross-

analysis of sub-groups, such as divorced individuals, and a relatively small sample size of females, may affect its generalizability. Future studies should focus on minimising the limitations by employing a longitudinal study design or independent behavioural analysis through phenomenological approaches.

CONCLUSION

Overall, teachers exhibit commendably healthy lifestyle habits, with medical teachers engaging in no more healthy behaviours than their non-medical colleagues. This establishes that socioeconomic factors and occupational context are powerful determinants of lifestyle behaviours than specialised health knowledge. Institute-level wellness initiatives within educational premises are warranted to address pervasive constraints, such as work-related stress management and busy schedules, thereby supporting all educators and maintaining their health despite the demands of their profession.

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