



ORIGINAL ARTICLE

Factors affecting Quality of Life (QOL) in students during study in medical institution.

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Article Citation: Naiyar I, Masud R, Ashfaq A, Faheem A, Anjum AF, Hashmi SN. Factors affecting Quality of Life (QOL) in students during study in medical institution. Professional Med J 2023; 30(10):1355-1361. <https://doi.org/10.29309/TPMJ/2023.30.10.7632>

ABSTRACT... Objective: To determine factors affecting quality of life of the students of medical college and to assess the stress levels, sources of stress, and other determinants of their wellbeing. **Study Design:** Descriptive Cross-sectional study. **Setting:** CMH Kharian Medical College, Kharian Cantt. **Period:** April 2022 to September 2022. **Material & Methods:** 302 undergraduate MBBS students from 1st Year to final year were selected by nonprobability convenient sampling. Data was collected by self-structured questionnaire. **Results:** Most of the students enrolled are satisfied with college schedule but the tensions owing to college environment are reason for stress. The extracurricular activities do balance the stress at times. Financial dependence is major stress factor amongst students as well. Most of students are satisfied with facilities in lecture theaters, yet students feel fatigued and need more breaks during their college hours. Another reason for anxiety amongst medical scholars is lack of proper cafeteria and healthy refreshments at college premises. Many students complain of overeating and excessive caffeine intake to relieve stress. Despite various stressors, most are coping with stress. The main factor which is destroying their quality of life is lack of sleep. Loneliness and limited family socializing is enhancing depression in students. The students do find console in fact that they are pursuing medical profession and have no regrets to their decision of becoming a doctor. **Conclusion:** Our study concludes that medical studies effect quality of life of medical students in terms of less resting time, and limited socializing and other leisure activities. Stress and increased work load are supplementary reasons for disordered eating habits. Financial dependence is also a big factor in increasing stress level. Quality of life (QOL) can be improved by better institutional backing, supportive faculty, student centered curricula and engagement in extra-curricular activities. Quality improvement tools can enhance students' motivation, as most of the student despite stressful triggers, do not regret their decision of pursuing medical profession.

Key words: Life, Medical Students, Quality.

INTRODUCTION

Personality is defined as a combination of behaviors, cognitions, and emotional patterns that develop over time as a result of biological and environmental influences. Recent studies have found evidence that personality can change throughout a person's life. An important idea to consider is that differences in personality traits, amongst individuals, tend to stay consistent throughout fairly long periods of time. Research found personality traits, such as conscientiousness, achievement, calmness, social confidence, tolerance and responsibility did, in fact, lead to a better predictability for the potential success of medical students.¹

Behavioral change is the long-term modification of habits and behaviors, i.e., smoking, public interaction levels, eating habits, incorporating self-care activities in daily lifestyle and many more² These changes may be permanent or of limited duration and may be characterized by changes in perceiving things, thinking and interpretation along with actions. Several reasons can be held accountable for behavior changes in human being; stress, life changing moments, medications etc. However, it is not necessary that these changes are harmful, it may prove to be beneficial at times to live a healthy lifestyle.³

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Article received on: 18/05/2023
Accepted for publication: 27/07/2023

One of the most common behavioral change experienced by medical students in particular is mental health change, such as an increase in anxiety and stress levels. Previous researches have highlighted a number of factors specific to medical undergraduates that may increase stress levels in students compared to the general population.⁴ These may be contributed to more workload and academic pressures such as gaining excess knowledge, different learning styles⁵ and having amplified information to process and retain.⁶

Medical education is perceived as demanding and stressful. A number of cross-sectional studies have reported stress, anxiety, depression, and burnout⁷ as possible consequences of frequent testing, strict absence rules, and increasing responsibility for patients⁸ Results from previous cross-sectional surveys at different points in medical education and work-life indicate that these stressful phenomenon increase throughout the course of study⁹ Indeed, a number of longitudinal studies demonstrated that life satisfaction, healthy behavior, and experience patterns decreased and symptoms of anxiety, depression or burnout increased during the course of medical education¹⁰ Other studies have concluded that students had mixed feelings of satisfaction and personal development with stresses and fears.¹¹

Quality of life has been defined, by the World Health Organization ((WHO) in its multicenter studies) as, "the individual's perception of his position in life, within the context of culture and system of values wherein the individual lives and in relation to his objectives, expectations, standards and concerns"¹²

Due to various factors, medical students are prone to have behavioral changes which may lead to either them being focused and living a healthier lifestyle or it may lead towards devastating and depressing future. Highlighting the lifestyle changes may seem to be small but it holds a very major role in how these students will behave and live as doctors and health care physicians. Thus, it is important to consider these changes and

raise awareness. Along with this, by conducting this research, we can devise a better system of education and learning which has lower impact rates on students' lifestyle patterns.

Objective of the Study

The study's aim is to study lifestyle of the undergraduate students of medical college and to assess the stress levels, sources of stress, and associated determinants among medical students

MATERIAL & METHODS

The current study employed descriptive cross-sectional study design and was conducted at CMH Kharian medical college from April 2022 to September 2022 after taking approval from ethical committee of the institution.

By using sample size calculator 302 students of CMH Kharian Medical College from 1st year MBBS to final year MBBS were included by non-probability convenient sampling after taking their consent.

Self-structured questionnaire consisting of various variables, to assess quality of life was distributed among 500 students out of which 302 responded.

Data Analysis was done using SPSS (Statistical Package for the Social Sciences) version 22.0. Frequency tables of various factors were constructed using this software

RESULTS

Out of 302 students 141 were males and 161 females; with mean age of 21.68. 1st year (30.1%), 2nd year (21.5%), 3rd year (21.9%), 4th year (20.2%) and final year (6.3%), respectively.

Table-I shows 46.7% of respondents were Male and 53.3% of the respondents were Females, with a total of 302 respondents. Most of the respondents were between the ages of 21-22 (53.6%). Respondents included undergraduate medical students currently enrolled in CMH Kharian medical college in a 5-year MBBS program, belonging to 1st year (30.1%), 2nd year

(21.5%), 3rd year (21.9%), 4th year (20.2%) and final year (6.3%), respectively.

FIGURE 1.1: Gender

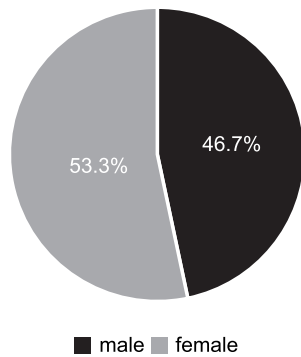


Figure-1. Gender

Figure 1.2: Age Group

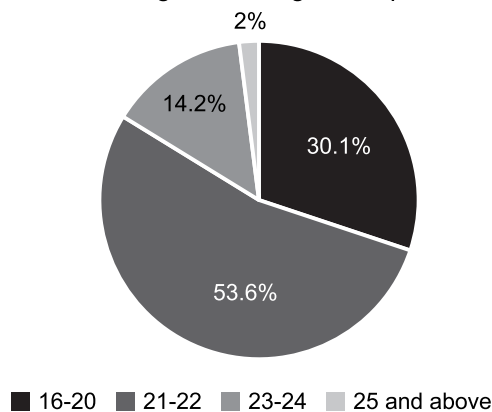


Figure-2. Age groups

Figure:1.3: Year of Study

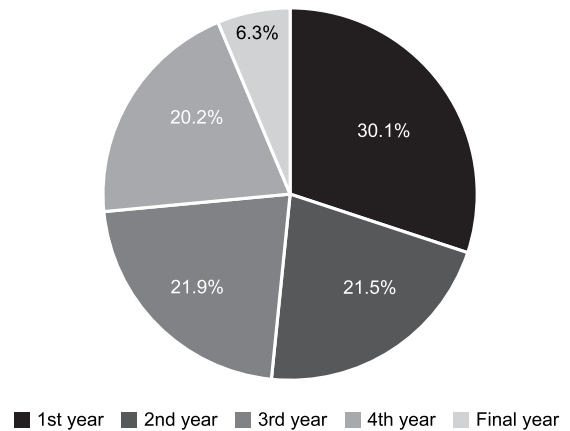


Figure-3. Year of study

From the frequency table, it is clear that mostly students enrolled in MBBS program are satisfied with college schedule (25.2%) but the tense college environment due to strict administrative rules make most of them stressed (29.8%). Regarding extracurricular activities like sports and trips to different places, balances the stress among most of the students (26.8%). Financial dependence is another important factor causing stress. (26.8%)

Regarding lecture halls and equipment required most of them agree that they have all the modern gadgets. (29.5%) Most of the students feel fatigued and need more breaks during their college hours. (30.8%).

S. No	Characteristics	N (Number)	Percentage %	Cumulative Percentage %
1	Gender	Male	46.7	46.7
		Female	53.3	100.0
2	Age (in years)	16 – 20	30.1	30.1
		21 – 22	53.6	83.8
		23 – 24	14.2	98.0
		25 and above	2.0	100.0
3	Year of Study	1 st year	30.1	30.1
		2 nd year	21.5	51.7
		3 rd year	21.9	73.5
		4 th year	20.2	93.7
		Final year	6.3	100.0

Table-I. Frequency analysis of demographic questions

Sr.	Questions	Disagree Strongly	Disagree a Little	Neither Agree nor Disagree	Agree a Little	Agree Strongly
1	Are you satisfied with your college schedule?	31 (10.3%)	63 (20.9%)	50 (16.6%)	81 (26.8%)	76 (25.2%)
2	Do you feel tense in college environment (administrative)?	61 (20.2%)	63 (20.9%)	44 (14.6%)	88 (29.13%)	90 (29.8%)
3	Does your institution offer entertainment activities (sports, extra-curricular activities) to balance stress of studies?	31 (10.3%)	63 (20.9%)	50 (16.6%)	76 (25.2%)	81 (26.8%)
4	Do you have comfortable environment during lectures (lecture halls, Air-conditioning, multimedia etc.)	33 (10.9%)	44 (14.6%)	37 (12.3%)	98 (32.5%)	90 (29.5%)
5	Do you have proper breaks between lectures?	93 (30.8%)	64 (21.2%)	39 (12.9%)	54 (17.9%)	52 (17.2%)
6	Is your cafeteria providing healthy refreshments?	122 (40.4%)	74 (24.5%)	40 (13.2%)	37 (12.3%)	29 (9.6%)
7	Have you developed any abnormal eating habits (Like overeating, excessive caffeine intake)	57 (18.9%)	67 (22.2%)	46 (15.2%)	76 (25.2%)	65 (18.5%)
8	Are your extra- curricular activities decreased (like Book Reading, Sports or other Hobbies)?	33 (10.9%)	44 (14.6%)	37 (12.3%)	98 (32.5%)	90 (29.5%)
9	Do you feel like a failure?	102 (33.8%)	76 (25.2%)	48 (15.9%)	51 (16.9%)	25 (8.3%)
10	Does your institution faculty and administration help you in case of failure?	35 (11.6%)	50 (16.6%)	48 (15.9%)	89 (29.5%)	80 (26.5%)
11	Does mentoring by your teachers helps you in relieving stress of studies?	46 (15.2%)	38 (12.6%)	52 (17.2%)	98 (32.5%)	68 (22.5%)
12	Do you get sudden feelings of Panic?	46 (15.2%)	50 (16.5%)	57 (18.9%)	97 (32.1%)	52 (17.2%)
13	Does counselling provided by institution helps in relieving stress?	86 (28.5%)	67 (22.2%)	60 (19.9%)	62 (20.5%)	26 (8.6%)
14	Do you have difficulty sleeping?	93 (30.8%)	64 (21.2%)	39 (12.9%)	54 (17.9%)	52 (17.2%)
15	Do you have any change in your religious beliefs (If any)?	136 (45.0%)	41 (13.6%)	66 (21.9%)	38 (12.6%)	21 (7.0%)
16	Does financial dependence on parents increase your stress level?	31 (10.3%)	63 (20.9%)	50 (16.6%)	76 (25.2%)	81 (26.8%)
17	Do you have enough sleep?	93 (30.8%)	64 (21.2%)	52 (17.2%)	54 (17.9%)	39 (12.9%)
18	Do you use sleeping pills for insomnia (unable to sleep)?	222 (73.5%)	35 (11.6%)	19 (6.3%)	19 (6.3%)	7 (2.3%)
19	Do you indulge in smoking?	215 (71.7%)	27 (8.9%)	31 (10.3%)	20 (6.6%)	7 (2.3%)
20	Does excessive studying hours disturbed your life style?	65 (21.5%)	82 (27.2%)	83 (27.5%)	59 (19.5%)	11 (3.6%)
21	Do you feel alone when you cannot participate in family gatherings?	41 (13.6%)	44 (14.6%)	49 (16.2%)	80 (26.5%)	88 (29.1%)
22	Do you regret your decision of getting admission in medical college?	93 (30.8%)	64 (21.2%)	39 (12.9%)	54 (17.9%)	52 (17.2%)

Table-II. Factors affecting quality of life of medical students during studies.

A big chunk of students enrolled in study (40.4%) are disturbed due to lack of proper cafeteria and healthy refreshments at college premises.

Due to hectic study hours and examination system most of the students think that they have developed overeating and excessive caffeine intake to relieve stress. (25.2%)

Despite of all pressures most of the students are coping with stress (33.8%). The main factor which is destroying their quality of life is lack of sleep (30.8%)

Lack of socializing with family have developed feeling of depression and loneliness (29.1%). Despite the students facing all of the fears, stresses and depression, the good thing is that they do not regret their decision of becoming a doctor (30.8%).

DISCUSSION

It is a fact that medical students' workload is considerably higher than students of any other field. This study sets out to understand in more depth the factors affecting the quality of life of medical students. The literature highlights a number of factors specific to studying medicine that may cause increased stress in students compared to the general population² which is comparable to our study. An alternative study supported this by highlighting the fact that medical students have unhealthy dietary habits such as: irregular meals, increased fast food intake and fried food consumption, and decreased consumption of fruits and vegetables which affects the socioeconomic and psychological aspects of their life.¹³ These aspects were mainly caused by changes in life pattern, stress, fast food intake, and smoking. In our and a previous study, an increase in abnormal eating habits was observed in smokers as compared to nonsmoker.¹³

It is documented that due to the stress and lack of time, medical students felt guilty that they were unable to focus on other domains in life such as leisure activities and healthy lifestyles.¹⁴ The medical students, in all years of instruction, felt more stressed, more responsible, and

less capable of managing their personal and financial lives¹¹, and our findings are in complete agreement with these results.

Research studies have documented that better curriculum and interactive teaching strategies proved beneficial to infuse medical students with more positive, varied and comprehensive coping tools during their education.¹⁵ In our study, participants reported a decrease in the feeling of being a failure yet also reported a diminished ability to enjoy the little things in life. This finding is in line with another published study that stated that medical students faced high rates of burnout, linked to their academic performance.¹⁶

Most of the students feel fatigued and need more breaks during their college hours. (30.8%). A big chunk of students enrolled in study (40.4%) are disturbed due lack of proper cafeteria and healthy refreshments at college premises. Due to hectic study hours and examination system most of the students think that they have developed overeating and excessive caffeine intake to relieve stress, (25.2%) however, these developments were divergent to study at a Malaysian university in which 48.5% of students never consumed caffeine containing drinks and beverages.¹⁷

Another finding in the above study was that most of the students had adequate sleep indicating a better QOL practiced by medical students¹⁷, which was yet again contrary to our study, where lack of sleep was prevalent and a major factor disturbing quality of life. The relentless nature of the examination system additionally leaves little time for hobbies or interests outside medicine, as pointed in previous studies¹⁸, and is a finding very similar to our study.

In line with our observations, a study has explained that medical students feel more accomplished due to medical motivation, local cultural and social adaptations and ability to process how to handle and accept failure at different points of life.¹⁹ Most of the students in our study (30.8%) do not regret their decision of becoming a doctor, a finding similar to previous study¹¹, in which students admitted that enhanced quality of life

is achieving their goals. Factors playing positive role in maintaining quality of life of medical students in our study are inclusive of comfortable teaching environment, modern equipment and good mentoring by teachers which is similar to study conducted by Patricia Tempiski et al.¹¹

CONCLUSION

Our study concludes that medical studies effect quality of life of medical students in terms of less resting time, and limited socializing and other leisure activities. Stress and increased work load are supplementary reasons for disordered eating habits. Financial dependence is also a big factor in increasing stress level. Quality of life (QOL) can be improved by better institutional backing, supportive faculty, student centered curricula and engagement in extra-curricular activities. Quality improvement tools can enhance students' motivation, as most of the student despite stressful triggers, do not regret their decision of pursuing medical profession.

RECOMMENDATIONS

- Devise a better system of learning methodology that aims towards every type of personality trait.
- Provide health education on healthy life style with good eating and sleeping habits
- Create an effective study schedule
- Bring variations in teaching and learning methods. Using Socratic communication instead of didactic during lectures.
- Encourage self-care routines and staying active in students
- Provide a healthy college environment that encourages being active, for example adequate playground facilities, access to equipment, walking paths etc.
- Involve students in decisions about the learning environment
- Provide a welcoming eating environment that encourages positive social interaction.
- Motivate them by by giving different rewards.

LIMITATIONS

- The response rate of eligible students was lower than its corresponding estimate.
- All of our students were from the same medical

college so we cannot project the same results for all medical students.

- Less Sample size (302 students) slightly reduced the power of study and increased the margin of error.
- Time factor was major hindrance. Due to limited period of time to complete this study, we were not able to collect data from a larger population, from various other medical colleges.
- Lack of funds to conduct proper research






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2	Rizwan Masud	Write up, Final drafting, Data analysis, Correspondence.	
3	Anum Ashfaq	Write up, Literature review, Data Collection, Data analysis.	
4	Ali Faheem	Write up, Drafting, Data analysis.	
5	Aiman Farogh Anjum	Final drafting and revision of article.	
6	Shoaib Naiyar Hashmi	General supervision and revision of article.	