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Medical Students' Absenteeism: Magnitude of the Problem and Associated Factors

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ABSTRACT

Frequent absence from the classes leads to inadequate student learning and poor performance in the exams. The problem of University students' absenteeism is increasing, and data about its magnitude and the associated factors at Faculty of Medicine at Tripoli University is lacking. Hence, the study conducted to determine the prevalence of and the main factors associated with medical students' absenteeism at Faculty of Medicine at University of Tripoli during the academic year 2018/2019.

A descriptive cross-sectional study conducted over a period of one month (January,2019). Undergraduate medical students of both sexes and from all year groups of study were included using stratified random sampling technique. Data was collected using a pre-structured, semi open-ended questionnaire. The questions were classified into 3 sections; student-related, college-related and lecturer-related factors for absenteeism. Data was analyzed using the SPSS Version 16. Likert scale has been used to measure the students' attitude. The total sample was 1,497 students, 490 males (32.7%) and 1,007 females (67.3%). The prevalence of absenteeism was 89%. Most students have missed ≥ 9 classes (55%). College-related factors showed the most significant association (high Likart scale rank, mean = 3.72, SD = 0.80). Student-related and lecturer-related factors were also significant but with a moderate rank (mean = 2.72, SD = 0.55 and mean = 3.35, SD=0.77, respectively). Absenteeism is highly prevalent among medical students at Tripoli University. College-related factors were the most significant factors associated with absenteeism.

Key words- *Absenteeism; Medical students; Absenteeism related factors,; Problem-based learning; Lectures.*

INTRODUCTION

Student absenteeism has been defined as "the frequent absence from classes without any good reason".[1] Frequent absence from the classes leads to inadequate student learning and poor performance in the exams[2,3], and also wastes time and reworks for lecturers.[4] The Professional courses as undergraduate medical education need high theoretical and clinical classes attendance[4,5], as those students will be future doctors and will deal with the health and disease of the public.[2,6,7] Therefore, if a medical student frequently misses the classes and this does not only mean a loss for him/her, but also the whole community[2], as without getting proper knowledge, clinical skills, and having a good clinical career that satisfies the patient's expectations will be very challenging.[2] Previously published studies have found that lack of motivation for learning, influence of friends, ill health, family problems[2,5], poor relationships with the lecturers, poor teaching methods[4,8], low conducive environment[2], commitment to job[4,8], and the availability of lectures online, on CDs or as audio recordings[4,9-12] were the most significant contributors to university student's absenteeism.[2]

Medical students are active contributors to their learning and they must take responsibility for achieving good educational standards through successful completion of each stage of their studies.[2] Consequently, medical universities set up several measures to ensure students' attendance to achieve their maximum proficiencies.[2] Dealing with medical student absenteeism and its contributing factors is not a new phenomenon[12], it has been the main concern for the researchers[2] and has been extensively studied.[12] However, there have been no previously published studies examined the phenomenon of absenteeism and their causes among students at the Faculty of Medicine at University of Tripoli. Thus, this study has been designed to determine the prevalence of undergraduate medical students' absentee-

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ism at Faculty of Medicine at University of Tripoli during the academic year 2018-2019, and to explore the main factors associated with this phenomenon. With an attempt to find out suggestions, ideas and solutions for absenteeism as reported by the medical students.

MATERIALS AND METHODS

After obtaining a formal permission from the Research and Consulting Department at Faculty of Medicine in University of Tripoli, a questionnaire based cross sectional study was conducted over a period of one month (January, 2019). This study included a total of 1,497 undergraduate medical students from all year groups, who attend Faculty of Medicine in University of Tripoli and who had given consent to participate. Students who had not given consent and were not willing to participate were excluded.

Data was collected from the participating students by using a pre-structured, pre-tested, pre-coded, semi open-ended self-administered questionnaire. The questionnaire included three sections with a total of 37 questions with 5 points likert scale; students-related factors (15 questions), college-related factors (12 questions), and lecturer-related factors (10 questions). To ensure confidentiality and honesty in responses, the questionnaire did not include students' names, study ID and other personal data. Participating students were selected using a stratified random sampling technique. The first stage of sampling involved getting access to student's information from the college's register for all year groups of study (1st year to 5th year). Then a list of students has been sorted out. On the second stage, 300 students have been randomly selected from each stream using a simple random sampling to pick a total sample of 1,497 students. Data was statistically analyzed and interpreted using SPSS V.16. Descriptive statistics including mean, SD and proportion were used to summarize the different variables (quantitative and qualitative). Likert Scale analysis was used to determine the level of significance of association of each question and the overall significance of each of the three sections with absenteeism. The level of significance of association was considered low if the mean score was between 1-2.33, moderate if the mean score was between 2.34-3.66 and high if the mean score was between 3.67-5.

RESULTS

Among the total 1,497 participating students, 490(33%) were males and 1,007(67%) were females, the most frequent age group was 20-22 years (39.7%). The majority of those students (88.1%) were residing in Tripoli. Most of the students (88%) joined the Faculty of Medicine with their own interest, with a smaller number of students joined in under their parent's pressure (12%). Very good and good GAP scores in the last semester were the most frequently reported by the students (37.4% and 32% respectively) (Table 1).

Table 1: Sociodemographic characteristics of participating students

Variable	(%) Frequency
Sex	
Male	(32.7%)490
Female	(67.3%)1,007
Age group	
year 20 >	(15.2%)227
22 - 20	(39.7%)594
25 23-	(36.4%)545
25 <	(8.8%)131
Year of study	
1st year	(16.5%)247
2nd year	(22.8%)341
3rd year	(17.8%)267
4th year	(18.2%)273
5th year	(24.6%)369
Residency	
Tripoli	(88.1%)1,319
Outside Tripoli	(11.9%)178
Joined the medical college as per choice	
Yes	(88.0%)1,317
No	(12.0%) 180
Self-reported GAP last semester	
Excellent	(20.1%) 292
Very good	(37.4%) 542
Good	(32.0%) 465
Average	(9.0%)130
Poor	(1.5%)22

Regarding the magnitude of absenteeism, the overall prevalence in this study was 89% with more than half of the participating students (55%) had missed more than 9 classes per semester (Figure 1).

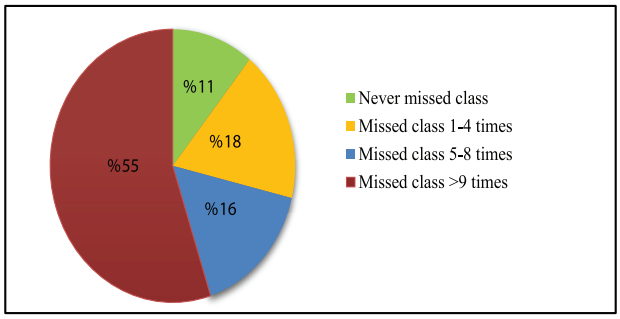

Figure 1: Prevalence of absenteeism among medical students at Faculty of Medicine

Student-related factors have shown an overall moderate significance association with absenteeism (mean score 2.72), with the majority of factors in this section have revealed a moderate significance. However, the factor of "there are those who do not attend the lectures and get high grades" showed a high significant association (mean score 3.95) (Table 2).

Table 2: Student-related factors to medical students' absenteeism

Reason (Students' related factors)	Frequency (%)	Mean (SD)	Rank
The transportation traffic prevents you from getting on time for lectures	1,467 (98.0%)	3.04 (1.32)	Moderate
Busy with conversations with friends and do not want to go alone for the lecture	1,460 (97.5 %)	2.48 (1.26)	Moderate
Busy in studying a particular subject and do not want to attend other lectures	1,438 (96.1%)	2.95 (1.22)	Moderate
Prefer attending private courses outside the university	1,424 (95.1%)	3.02 (1.42)	Moderate
Currently in work and cannot find time to attend lectures	1,432 (95.7 %)	2.36 (1.25)	Moderate
Prefer home study and listening to lecturer's recording audios	1,445 (96.5 %)	3.54 (1.24)	Moderate
Can pass without attending lectures	1,443 (96.4 %)	3.48 (1.23)	Moderate
My colleagues do not attend lectures, so I do the same	1,435 (95.9 %)	2.46 (1.25)	Moderate
Have social issues	1,445 (96.5 %)	2.11 (1.16)	Low
Cannot wakeup early, I always go to bed late	1,436 (95.9 %)	2.45 (1.29)	Moderate
Health problems prevent me from attending lectures	1,422 (95 %)	2.09 (1.13)	Low
Prefer to spend time with friends or (fiancé)	1,428 (95.4 %)	2.33 (1.30)	Low
The university is very far from residential place	1,385 (92.5 %)	2.69 (1.31)	Moderate
Not interested in studying medicine, I wish to transfer to another college	1,399 (93.5 %)	1.82 (1.18)	Low
There are those who do not attend the lectures and get high grades	1,429 (95.5 %)	3.95 (1.19)	High
Overall		**2.72 (0.55)**	**Moderate**

On the other hand, college-related factors have shown an overall high significance association with absenteeism (mean score 3.72). The top five contributing factors to the absenteeism in this section were poor college facilities (mean score 4.77); lack of modern teaching facilities in classrooms (mean score 4.74); poorly prepared classrooms (mean score 4.43); no enough rest between lectures (mean score 4.38) and all lectures are given in the same classroom (mean score 4.10). The other 7 factors in this section have shown a moderate significant association (Table 3).

Table 3: College-related factors to medical students' absenteeism

Reason (College's related factors)	Frequency (%)	Mean(SD)	Rank
Classrooms are not equipped with modern teaching aids	1,438 (96.1%)	4.74 (1.25)	High
Lack of chair and suitable space for each student inside the classrooms	1,429 (95.5%)	2.93 (1.40)	Moderate
The schedule of lectures is not appropriate (e.g., lectures start early and end late)	1,450 (96.9%)	3.37 (1.28)	Moderate
Poor Facilities in the college (e.g., lack of proper bathrooms)	1,439 (96.1%)	4.77 (1.27)	High
There are no places to rest and study at times between lectures	1,420 (94.9%)	3.14 (1.35)	Moderate
All the lectures are given in the same place, making me bored	1386 (92.6%)	4.10 (1.30)	High
The way to the university is not safe	1379 (92.1%)	3.01 (1.51)	Moderate
The College is unable to provide a strict security in the campus.	1396 (93.3%)	3.25 (1.35)	Moderate
Classrooms are not well prepared (no air conditioning, poor ventilation and lighting)	1428 (95.4%)	4.43 (1.34)	High
The college does not take any action regarding students absenteeism	1419 (94.8%)	3.21 (1.29)	Moderate

There is no enough time to rest between the lectures	1449 (96.8%)	4.38 (1.19)	High
Lack of motivation to regular attendance, absence of guidance from the departments and the teachers	1409 (94.1%)	3.36 (1.28)	Moderate
Overall		**3.72 (0.80)**	**High**

Whereas lecturer-related factors have also shown an overall moderate significance association with absenteeism (mean score 3.35). Five factors in this section revealed high significant association with absenteeism including, some lecturers do not use modern teaching techniques (mean score 3.98); theoretical lectures do not attract student's interest (mean score 3.93); some teachers do not explain the topics clearly and understandably (mean score 3.91); students entirely do not like the way of teaching and find it not interesting (mean score 3.88) and students feel dissatisfied with teacher's performance in a class (mean score 3.86) (Table 4).

Table 4: Lecturer-related factors to medical students' absenteeism

Reason (Teaching staff's related factors)	Frequency (%)	Mean(SD)	Rank
Feeling dissatisfied with teachers performance in class.	1,449 (96.8%)	3.86 (1.06)	High
Some teachers treat students poorly (e.g. ignore the student's question, never give students choices, never give a break,...etc.)	1,435 (95.9%)	3.35 (1.25)	Moderate
I entirely do not like the way of teaching and find it not interesting	1,452 (97.0%)	3.88 (1.10)	High
Some Teachers do not explain the topics clearly and understandably	1,438 (96.1 %)	3.91 (1.08)	High
Some Teachers do not use modern teaching techniques that improve student's understanding.	1,443 (96.4 %)	3.98 (1.07)	High
Some Teachers do not encourage active learning	1,422 (95.0 %)	3.51 (1.21)	Moderate
Theoretical lectures do not attract student's interest	1,420 (94.9%)	3.93 (1.11)	High
The lectures are very difficult, so I avoid attending to not feel overwhelmed by the lack of understanding	1,384 (92.5%)	2.93 (1.29)	Moderate
Lectures are very easy, attendance is waste of time because I can understand them on my own	1,381 (92.3%)	2.24 (1.17)	Low
Some Teachers do not motivate us for regular attendance, i.e. absence of guidance from departments and teachers	1,409 (94.1%)	3.36 (1.29)	Moderate
Overall		**3.35 (0.77)**	**Moderate**

DISCUSSION

Attendance is an essential aspect for the medical students' educational achievement and absenteeism can disrupt the process of learning and teaching.[2] The present study has shown that absenteeism is highly prevalent (89%) among undergraduate medical students at University of Tripoli, with 55% of participating students reported missed classes more than 9 times. College-related factors showed a high significant association with absenteeism. Particularly, the poor college facilities and poorly equipped classrooms and inadequate rest time between lectures. Although the student's and lecturer-related factors showed an overall moderate association with absenteeism but the majority of the factors included in these sections have shown a high and moderate significant association and should be considered as important contributors to improve medical students' attendance.

Most of the findings from the present studies in relation to student-related factors are consistent with the available evidence, particularly in that many students think that they can pass without attending lectures and they spend their time at work and other extracurricular activities instead of attending lectures.[2] Also many students reported being busy in studying a particular subject and other exams and do not want to attend other topics' lectures.[2, 13] Furthermore, the availability of lessons in other sources like CDs and audio records studies[2,14,15], and being in work[1,14] have been also found to be significant contributors similar to the present study. Although lack of interest in studying medical subject has revealed a low association with absenteeism in the present study (mean score = 1.18), however this factor showed significant association in other studies.[2,14] This inconsistency in findings was also observed regarding student's health problems and social issues which showed significant association [1, 2]contradictory to the present study's finding of low association.

The findings from literature were also consistent with the present study concerning some of the college's and lecturer-related factors; mostly poor college infrastructure[2,16], poorly ventilated overcrowded lecture halls, prolonged classes[2, 16], lack of clarity about the topic among lecturers while teaching[2], unfavorable teaching strategies[14,17,18], poor teaching skills of lecturers, dissatisfaction about lecturers' teaching methods[2, 17, 19]and lack of interest in theoretical lectures than the practical and clinical sessions.[1] Therefore, more training should be given to the lecturers in order to improve their teaching methods could help improve attendance.

Limitations

The main limitation of this study is that it was not feasible to study the impact of absenteeism on student's performance as the collected data from students was anonyms and did not include their study IDs.

Strengths

This was the first study that examined the magnitude of the problem of absenteeism and the main factors associated with this problem at Faculty of Medicine in University of Tripoli using a large sample of undergraduate medical students and considering a wide range of contributing factors.

Implications

This study recommends working on the main causes of absenteeism to improve the rate of attendance of medical students in all academic activities. Faculty environment should be improved with provision of proper facilities in class rooms for better learning. Teaching should be more practical and should be prepared in more interesting way. Training programs should be provided to the teaching staff to improve their teaching methodology and to change their orientation from the traditional lecture methods to interactive method. Further research is needed to determine the lecturers' and Faculty decision makers' perspectives toward the phenomenon of medical student's absenteeism.

CONCLUSION

Absenteeism is highly prevalent among undergraduate medical students at University of Tripoli. College-related factors were the most significant factors associated with absenteeism. Particularly, the poor facilities in the college and classrooms. However, there are some student's and lecturer-related should be considered to improve medical students' attendance rates.

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