

**Attitude of overseas Pakistani students towards modular examination.**Ali SM<sup>1</sup>, Fatima M<sup>2</sup>, Sharif S<sup>3</sup>, Ali L<sup>4</sup>, Imtiaz F<sup>5</sup>, Moiz A<sup>6</sup>**Abstract**

**Background:** Modularization an innovative initiative taken by educational institutes around the globe to increase the student's productivity and efficiency.

**Objective:** The objective of this study was to determine the knowledge and attitude regarding modularization in overseas Pakistani students.

**Methodology:** A cross sectional survey was conducted at the International Medical College of one of the public sector university during December 2012 till February 2014. A total of 425 undergraduate students were approached through non-probability convenience sampling technique and requested to fill a semi structured questionnaire after taking written consent.

**Result:** According to the outset of this paper a total of 425 students were questioned. Among the total 189 students were male (44.47%) and 236 were female (55.52%) out of which the majority belonged from North America/Canada (79.06%). A vast percentage (48.94) invested of about 2 hours of study daily. 63.06% of students believed modular examination to be a fair system and 32.94% of students thought it to be a failure to affect any educational standards. 36% of students blame stress/load for their poor result and 31.06% agrees with the lengthy syllabus being responsible for their down showing GPA's. 43.06% of students face hardships because of irregular attendance. The major complaint of students (39%) was their teaching style. 46.12% of students prefer to study from lecture notes. Thus, this study completely clears all the aspects of student's performance in modular system of examinations and its flow and shortcomings. It is important that more effort should be put into cater to student's stress, loads and make it an effective system to improve a student's capability and efficiency.

**Conclusion:** The findings of this study can guide us to revise and reshape the assessment system practiced at various medical colleges in Karachi.

**Introduction:**

Modular instruction is one of the latest innovations in the educational system<sup>1</sup>. This innovation in the modular approach contains a series of activities comprising of teaching instructions to the learners, explanation and practical exercises. A module is defined as a self-contained independent unit of a planned series of learning activities designed to help the student to achieve certain well defined goals<sup>2</sup>.

In the conventional system of medical education, the exams are held annually with least interdisciplinary interaction and are based on passive learning styles. As the teaching is not student centered, students are less motivated<sup>3</sup>. Modularization is based on the general principle of dividing the curriculum small discrete modules or units that are independent, non-sequential and typically short in duration. Assessments are an integral part of educational system, they are basic standard which determine the aptitude and abilities of students<sup>4</sup>. Students remain very concerned about their performance and CGPA's. Attitude of a student towards modular examination determines his focus, interest and stress level. This paper evaluates the attitude

of overseas Pakistani students of international medical college towards modular examination and their feedback regarding undergraduate medical syllabus. his study also assesses the statically difference between the grades of each module and various opinions of the students regarding their performance and result outcome. Student's feedback is an important tool to outline the major problems they are facing and to overcome those problems to maximize the result outcome. It also encourages the teachers to adopt effective teaching methods to develop a friendly teacher student environment. It reviews the research finding based on student's analysis, flexibility and mark criteria at medical colleges

**Objective:**

The purpose of this study is to evaluate the views of international medical students towards modular examination and to record their feedback.

**Methodology:**

A cross sectional survey was conducted at the International Medical College of one of the public sector university during December 2014 till February 2015. A total of 425 undergraduate students were approached through nonprobability convenience sampling technique and requested to

fill a semi structured questionnaire after taking written consent. Only the international students from 1<sup>st</sup> to final year were included in the study and all the local students were excluded. A self-administered close ended questionnaire was distributed among the study participants. It included questions relating their native land, study hours and GPA's. They were also questioned about the hardness and stress levels that they face during undergraduate studies.

The data were subjected to SPSS version 16.0 to analyze the data for calculation of frequency and percentages of each variable.

**Result:**

A total of 425 International Medical students were included which comprised of 189(44.7%) males and 236(55.52%) females. 336 students were from North America/ Canada. The nationality of the participants is depicted in (Table 01). In the survey 336(79.06%) students are completely satisfied with the Modular Spiral system of medical education while 85 (20%) students are not very clear in their perspective about the system.

*Study habits:* Most of the students (48.94%) spent about 2 hours in studying on daily basis. A small percentage of students (8%) study more than 8 hours per day. Table 2 showed the number of hours these students invest to study. A large

<b>Table1.</b>		
Characteristics	n	%
<b>Students are from</b>		
From North America / Canada	336	49.06
From Emirates / Middle East KSA	47	11.06
From Australia/ Singapore, Malaysia	43	11.12

<b>Table 2</b>		
Characteristics	n	%
<b>Study hours</b>		
2 hours	208	48.94
4 hours	98	23.06
6 hours	60	14.12
8 hours	68	16
Over 8 hours	17	4

percentage of the students (46.12%) rely only on lecture notes to study for exam and only few students (16%) refer to text books. (Figure 1)

**The GPA Scores:**

The GPA scores showed variation according to medical years. The mean GPA for first year is 2.35+0.08, with improvement shown in third year and CGPA climbing up to 3.06+0.09. The best CGPA's are seen in final year due to better understanding of modular system and learning methodologies. (Table3)

*Cause of Poor Results in Early Years:* While identifying the cause of poor result we came across few concrete reasons, 32% of the students believe that their results are poor due to stress as they are exposed to new environment away from their homes, 26.12 % of the students blames their study habits for their poor results. Beside that some other reasons are mentioned in (Fig: 2)

*Hardships faced by the students:* Around 20% of the international medical students face real hardship in achieving good results. According to the outset of this study 43.06% of the students face these hardships due to irregular attendance or lack of punctuality in lectures. Some other probable causes are showed in table 4.

<b>Table 3</b>	
Characteristics	GPA Mean ± SD
1 <sup>st</sup> Year	2.35±0.08
2 <sup>nd</sup> Year	2.59±0.07
3 <sup>rd</sup> Year	3.06±0.09
4 <sup>th</sup> Year	3.29±0.07
5 <sup>th</sup> Year	3.53±0.06

<b>Table 4</b>		
Characteristics	n	%
<b>Students facing hardship</b>		
Comfortable	336	79.06
Face hardship	85	20
<b>Students who face hardship because</b>		
Lack of proper guidance	51	12
Style of studying	77	18.12
Insufficient working hours	26	6.12
Irregular attendance	183	43.06

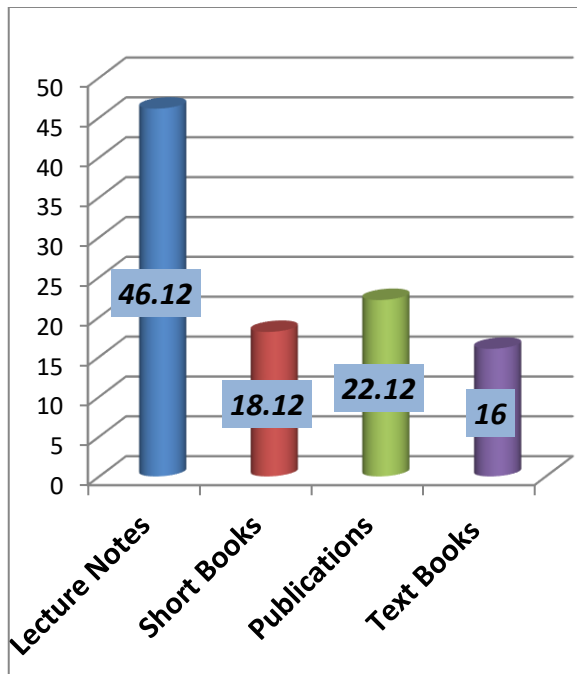


Figure 1: Study Material used by students

### Discussion:

Medical education is one of the most respectable and challenging education systems in the world. It requires a lot of hard work, passion, strong will and concept building. The practice of medicine has undergone great transformation throughout the world and similar reforms are needed in fundamental framework of medical education<sup>5,7</sup>. To meet the demand of current situation in the world, the teaching structure of medical education in Pakistan is also subjected to modifications and many institutions have adapted integrated system of education<sup>3</sup>. In this study it was seen that majority of the students are completely satisfied with the Modular Spiral system of medical education while few students are not very clear in their perspective about the system. Similar findings were seen in the studies conducted at one of the private sector medical university in Karachi<sup>6</sup>, and at an international medical college in Rawalpindi<sup>3</sup>. Majority of the students shared their views that the Modular system is easy to manage; there is less burden of studies at the end of the year with uniform distribution of the load of studies throughout the year. As the Modular system of education is student centered it keeps the students motivated and focused throughout the year. This study also

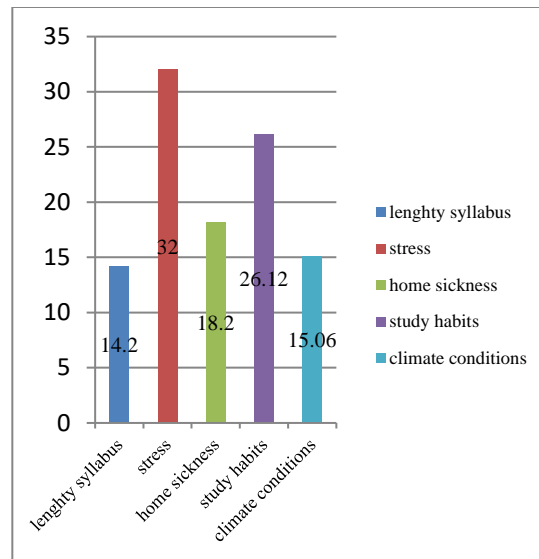


Figure 2: Probable causes of poor result

narrates that a large percentage of the students (46.12%) rely only on lecture notes to study for exam and only few students (16%) refer to text books. These findings are contrary to the findings seen in other studies where textbooks are considered as main instructional material for medical students<sup>8,9</sup>. For the proper implementation of any medical school curriculum textbooks become integral part of education system, and in developed countries textbooks are considered as the major source of the teaching learning process to be undertaken at medical schools. However, this could be seen as one of the reasons of poor results of students in this study. This study also concluded that the results of the students show improvement in clinical years than in preclinical years, as the students achieved better GPAs in third, fourth and final year. This improvement is seen due to better understanding of learning methodologies, familiarization of the environment and better attendance in clinical wards. This finding is concurrent with findings of another study conducted in an international medical university<sup>10</sup>. In this survey it is also established that majority of the students believe stress is the major reason for their poor performance in exams. It is a known fact that academic stress

produces anxiety and other stress related disorders and it untowardly effects the performance of students<sup>11</sup>. Other students believe that their study habits are the main reason for their poor results as most of them rely on lecture notes and short books for their exam preparations and their attendance in lectures is not up to the mark. Similar finding is seen in another study conducted in Manipal, India<sup>12</sup>. Home sickness is signified by some students as one of the cause of poor results, but there are studies which show opposite trends<sup>13</sup>. Around 20% of the International medical students face real hardships in achieving good results. According to the outset of this paper some probable known causes are lack of proper guidance, style of study and insufficient working hours, poor attendance and lack of punctuality. Similar findings are seen in another study conducted in a medical school in United Kingdom<sup>14</sup>.

The last part of the survey included the opinion of the students and the changes they like to bring in the administration to increase the productivity and efficacy of a student undergraduate program. The students showed some serious concern over the law and order situation of the city which adversely affects their academic calendar as exam dates keep fluctuating. Some students believe that living in dorms affect their exam performance in the long run and home sickness is another integral factor in down regulating student's performance. All the students unanimously agreed that attending lectures is beneficial for acquiring knowledge but attending exams is stressful.

### Conclusion:

The findings of this study can guide us to revise and reshape the assessment system practiced at various medical colleges in Karachi. This would achieve the goal of reducing stress and anxiety in medical students during exams and at the same time improving their exam performance.

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