

## EFFECT OF GENDER ON REGULARITY OF UNDERGRADUATE DENTAL STUDENTS FROM ALL FOUR YEARS OF BACHELOR OF DENTAL SURGERY, SMDC, LAHORE

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### Abstract

**Objectives:** This study aimed to find the effect of genders on the regularity of the undergraduate dental students from all four years of Sharif College of Dentistry, SMDC, Lahore.

**Materials & Methods:** A study was done on the undergraduate dental students from all four years of the bachelor of dental surgery enrolled in Sharif College of Dentistry, Lahore. Students from each year were included irrespective of their age and gender and those who had withdrawn from the program before the end of the session, those who could not attend college due to any personal problem for over a period of one month and those who had been upgraded from another dental college were not included in the study. In this cross-sectional study, the end of the year cumulative attendance in the form of percentages was obtained from the relevant departments, and specially designed questionnaires were distributed among the 195 undergraduate dental students. The questionnaire consisted of questions on various factors that motivate students to maintain regularity in college. The data were analyzed using SPSS version 23, and all nominal data was entered in frequencies and percentages whereas all numerical data was entered as mean with its respective standard deviation. Chi-square test was applied for determining the association of gender with different factors affecting the regularity of students from all years of study. P value, i.e., ( $p < 0.05$ ) was taken as significant.

**Results:** A study was done on 195 undergraduate dental students from all four years of Sharif College of Dentistry, SMDC, Lahore with a male to female ratio of 1:2.45, mean age of 21+S.D 1.398). Excellent attendance was more among the first year students (14%) followed by third-year students (5%), first year and second year (1%) only. Poor attendance was reported to be insignificant with only (1%) among the third year students only. It was seen that gender and attendance were also significantly related ( $p=0.03$ ) with excellent attendance seen higher among the females (31%) with (6%) only among the males. There was a significant correlation between all four motivating factors for regularity (acquisition of basic knowledge, preparation in accordance with exam pattern, being noticed by teachers/receiving good marks and acquisition of major knowledge) with different years of study ( $p=0.044$ ,  $p=0.039$ ,  $p=0.000$ ,  $p=0.001$  respectively)

**Conclusion:** First-year students predominantly maintained an excellent attendance all year round while a very low but equal percentage of second, third and final year students had poor attendance. Females had comparatively a greater attendance percentage than males. Acquisition of basic knowledge, preparation in accordance with exam pattern, being noticed by teachers, receiving good marks and acquisition of major knowledge were all recognized by students as motivating factors for their regularity.

**Key Words:** Undergraduate dental education, student regularity, cumulative attendance, Bachelor

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**Introduction**

Professional medical and dental education is a topic that has been under debate since a long time<sup>1-5</sup>. The system of undergraduate medical and dental education has improved drastically over the period of time. In order to keep up with the progress the education system is making globally, it is very important to develop new policies and improve the existing ones<sup>6-8</sup>.

Maintaining a good attendance is very essential for good academic performance of students of medical education. Both practices in the clinic and patient interaction as well as teaching in classrooms have an imperative role in training oral health care professionals. Lectures are a traditional mode of educating students. It gives teachers the opportunity to access a large number of students. This mode of teaching is very effective and also saves resources<sup>9</sup>.

Lectures serve as an important mode of learning for the students. It helps them enhance their subject knowledge<sup>10</sup>. As per literature the students who were irregular in lectures and had a low attendance achieved less in terms of academics<sup>11</sup>. Irregular attendance is highly undesirable for health care providers as they are directly involved in the process of deciding sensitive matters that govern the life of patients<sup>9</sup>. Bachelor of Dental Surgery (BDS) is an undergraduate program that comprises of four years. The first two years help the students to develop an orientation with the non clinical sciences while in the last two years, students are given extensive clinical training. The program ends with a one year House Job that involves students working in different clinical departments of dentistry<sup>12</sup>.

One of the major concerns of higher education is the increasing trend of poor attendance. This has a direct influence on the student's academic achievement and negatively influences the discipline of classroom, the teacher and other students<sup>13</sup>. There is a very little research that has taken place about the various factors that influence academic performance according to teachers and students<sup>14,15</sup>. A study was

conducted which revealed that students did not regard a high attendance as a factor that influence academic results<sup>16</sup>. Another study was conducted in final year medical students that revealed that the students who had failed in their Annual exam were the ones who had a poor attendance in that subject<sup>17</sup>.

According to one study the percentage of attendance also varies according to gender with the females being more regular than males throughout the year. It was also revealed that there was an increased trend of absenteeism in females immediately before the exams as compared to the males for the preparation of the exams<sup>11</sup>.

**Objectives:**

1. To find relationship between gender and different year of BDS with different grades of attendance.
2. to find out the association between different factors affecting the regularity of students with their attendance

**Materials and Methods**

A cross sectional descriptive study was conducted in the undergraduate dental students of Sharif Medical and Dental College, (SMDC), Lahore from all four years. Demographics like name, age, gender and year of study were collected. Questionnaire was validated by Cronbach alpha test having multiple quantitative and qualitative variables. It was distributed among the 195 undergraduate dental students after obtaining permission from Sharif Medical Research Center (SMRC). Informed consent of the students was also taken.

The cumulative attendance record of all years of Bachelor of Dental Surgery, (BDS), was obtained from the respective subject in charges. A criteria was developed with slight modification in an already established criteria utilized in another research where the students were divided into four groups based on their attendance (Good 75% and above, Fair 51%–74%, Poor 34%–50% and very poor 33% and below). (17) In our examination setup the criteria of 75% attendance is must for qualifying for appearance in annual examination therefore slight modification was done in grading of attendance as shown in Table 1:

Students from all four years of BDS irrespective

of age and gender were included. Students who had withdrawn from the program before the end of the session, students who could not attend college due to an illness for over a month and those who had been upgraded from another dental college were not included in the study. Students were also asked about the motivating factors affecting their regularity. The questions asked are shown in table 2.

The data was analyzed using SPSS version 23 and Chi square test was used for determining association between regularity of students with the year of BDS and gender and also to find out the association between different factors affecting the regularity of students from all four years of study to their attendance. P value ( $p < 0.05$ ) was taken as significant.

**Results**

Data was collected from 195 undergraduate dental students of SMDC with 28.7% males and 71.3% females. The mean age was calculated to be 21+1.398 years. The number of respondents from first, second, third and final year were 48, 47, 51 and 49 respectively.

In the current study the 36.4% students demonstrated excellent attendance, 48.7% students demonstrated a good attendance, 13.7% demonstrated an average attendance while only 1.5% had a poor attendance.

Majority of students from all the years of BDS had a good attendance percentage while very few or none had a poor attendance. It was seen that among students from all years of BDS, the greatest percentage with high attendance belonged to first year (14%) followed by final year (10%) and third year (5%). The groups with good attendance was third year (15%) followed by second year (13%), final Year (11%) and first year (10%).

The students falling in the category of poor attendance was only one percent for each second, third and final year with no student from first year as shown in chart 1.

Students were seen to be very regular with majority falling in excellent and good groups.

It was seen that gender and percentage of attendance were significantly related to each other ( $p = 0.003$ ).

This study demonstrated the female gender

predominantly fell in the group of good attendance (33%) with males (15%) only. The category of excellent attendance also mainly comprised of the females (31%) with the males being only (6%). Furthermore, it was seen that the group of average and poor attendance had an equal percentage of both the genders (7% and 1% respectively) as shown in graph 2.

The students from all four years of BDS were inquired regarding the various factors that influence them to attend college regularly.

It was seen that there was a significant correlation between all the four motivating factors with all four years of BDS ( $p = 0.044, p = 0.039, p = 0.000, p = 0.001$  respectively) as shown in table 3 below.

It was seen that first year students identified acquisition of major and basic knowledge and preparation in accordance with the exam pattern as the major reasons for them to attend lectures (22%, 22% and 21 % respectively). Second year students reported preparation according to the exam pattern followed by acquisition of basic knowledge as the two main reasons (21% and 18% respectively) followed by acquisition of major knowledge (15%) and identified being noticed by teachers as good students and receiving good marks in exams as the least motivating factor (11%).

It was observed that Third year students also identified preparation according to exam pattern as the biggest reason for attending college (22%) followed by being noticed by teachers as good students

**Table 1: Factors affecting the regularity of students in college**

Q No	Motivating factors for students	Response
1	Students who are regular are likely to be noticed by teachers and therefore receive better marks in assessments/ Viva	Yes/No/Not sure
2	You attend lectures regularly because it gives you a basic knowledge to build upon in your learning	Yes/No/Not sure
3	You attend lectures regularly because it gives you major knowledge to build upon in your learning	Yes/No/Not sure
4	Attending lectures all year round is important because it prepares you according to the pattern of the university examination.	Yes/No/Not sure

Fig: 1 Variation of attendance in different years of BDS. years of BDS

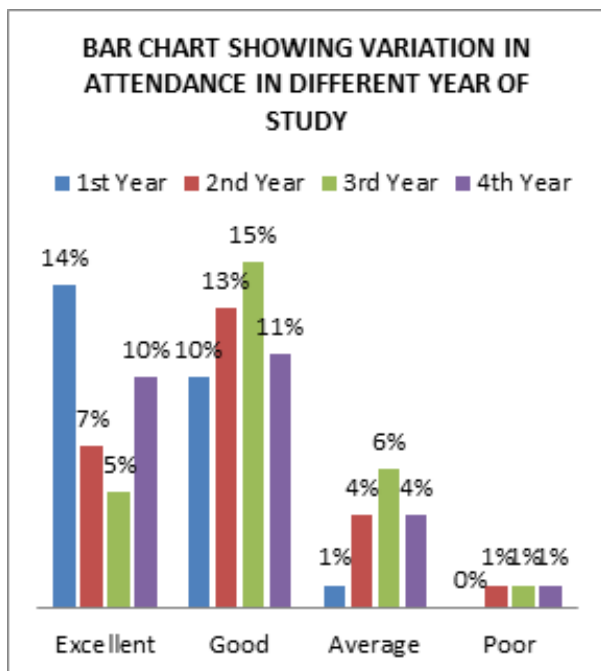
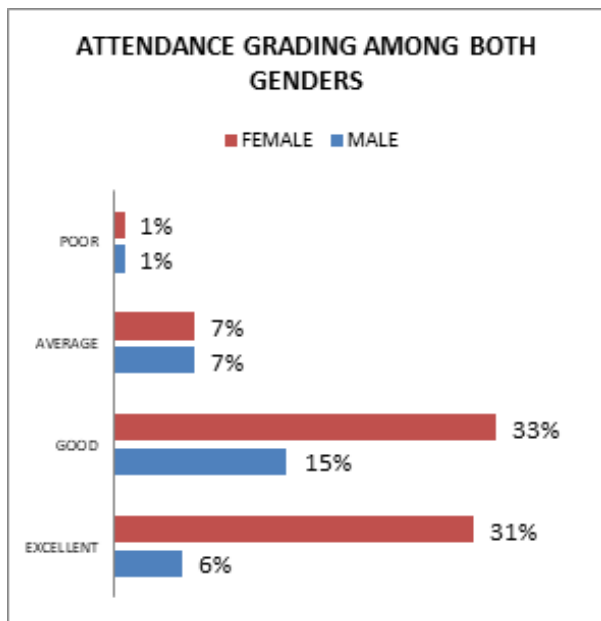


Fig: 2 A bar graph showing different grades of attendance among both genders



and receiving good marks and acquisition of basic knowledge (21% and 17% respectively). Final year students reported that they mainly attend college to acquire basic knowledge and to be recognized by teachers as good students and get good marks (18%) followed by acquisition of major knowledge and preparation according to exam pattern (17% and

Fig: 3 Column chart demonstrating a relation between various factors that impact regularity of students from different years of study

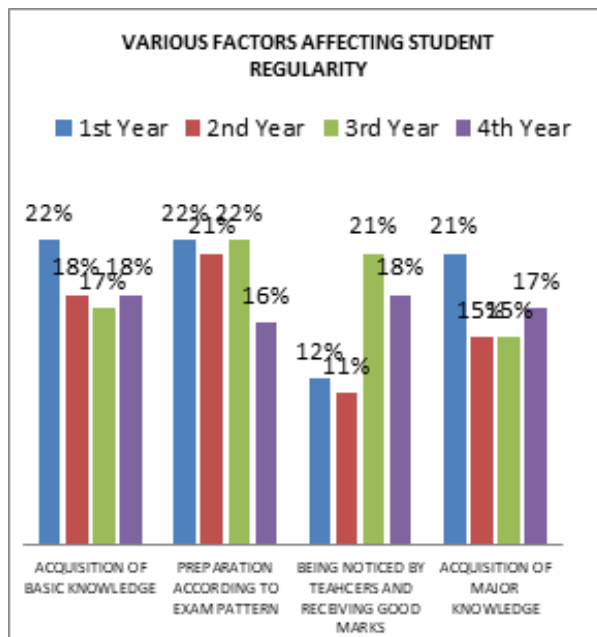


Table 3: Motivating factors association with students attendance

Association between various motivating factors for regularity to that of students attendance among all years.	Response
Acquisition of basic knowledge	0.044
Preparation in accordance with exam pattern	0.039
Being noticed by teachers and receiving good marks	0.000
Acquisition of major knowledge	0.001

16% respectively)

### Discussion

Maintenance of a good attendance record throughout the year is an indicator of the student's motivation and determination towards acquiring higher education. One of the major requirements for attaining medical education is being regular at college<sup>11</sup>. Unfortunately even though very strict rules and regulations are being implemented in this regard, the issue of absenteeism is increasing in the universities all over the world<sup>18-20</sup>.

There is not enough research that has been done on studying the various trends of attendance in students from different years of study in undergraduate

dental students. According to our study it was the majority of first year students that maintained an excellent attendance all year round (14%) while the majority of second, third and final year students had a good attendance (13%, 15% and 11% respectively). According to our study the 36.4% students demonstrated and excellent attendance, 48.7% students demonstrated a good attendance, 13.7% demonstrated an average attendance while only 1.5% had a poor attendance. The vigilance of the faculty and stern disciplinary regulations implemented by the administration of Sharif Medical and Dental College, Lahore has a large part to play in this.

It was reported in one study that both the genders exhibit different trends of attendance.

It was seen that male students had a low attendance throughout the year as compared to the females<sup>11</sup>. These results are very similar to our study where female students predominantly occupied the group of excellent and good attendance (31 and 33% respectively) while the percentage of male students in these categories was 6% and 15% respectively which is comparatively very low. It has been generally observed that females tend to bear a more serious attitude towards their attendance and academics.

There are various motivating factors that influence student regularity positively. Students are reported to be motivated to keep up a good attendance as they understand it helps obtain good marks (97%)<sup>19</sup> and 44%<sup>21</sup> while in our study 63% students reported getting noticed by teachers and receiving good marks was a driving factor for them. This implies that the teachers of Sharif College of Dentistry, (SMDC), Lahore, thoroughly keep a track of the student progress in terms of their attendance and academics and very efficiently identify good students through comprehensive analysis of their records. The students being well aware of this fact are motivated to attend college regularly.

Students reported acquiring subject knowledge because of their interest in the subject a reason for attending classes (82%)<sup>19</sup> which is very comparable to our study where students reported that they attend lectures as it equips them with basic (76%) and major (68%) subject knowledge. This finding in our study strengthens the notion that our teachers employ effective teaching methods that not only motivate students to attend lectures regularly

but also equip them with good subject knowledge.

Another very important motivating factor reported by the students was discussion in lectures which helps them understand difficult topics of basic and clinical sciences and requires teacher's help and guidance (73%)<sup>19</sup> Another reason for student regularity according to our study was that it prepares them according to the exam pattern (80%). This can be attributed to the extensive and comprehensive theory and practical assessments and tests that the students of Sharif College of Dentistry, SMDC, Lahore are made to go through which prepares them on the pattern of the final university examination.

### Conclusion

First year BDS class had the maximum number students with excellent attendance i.e., 15% followed by final year (10%) and third year (5%).

Excellent attendance is mainly among the female students (31%) with the males being only (6%)

Punctuality has been strongly correlated with all motivating factors like acquisition of basic knowledge 0.044, preparation in accordance to the exam pattern 0.039, being noticed by teachers and receiving good marks 0.000, acquiring major knowledge 0.001.

### Limitations

Multiple colleges from the same city could not be included within the study due to limited time and resources that could otherwise have resulted in much better outcome.

### Recommendations

Measures should be taken to help students retain the passion and enthusiasm with which they enter dental school throughout their years of undergraduate studies. Attempts are required to be taken by the teachers in enhancing student's attitude towards their attendance, academics and clinical training especially in male students by regular student counseling sessions.

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