

ORIGINAL ARTICLE

Patients' Satisfaction Regarding The Dental Treatment Provided by Educational Dental School in Majmaah University

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ABSTRACT

Introduction : Patient satisfaction with health care is considered to be one of the main objectives of quality care. The satisfaction of the patients has been investigated in different colleges of dentistry in many countries. Assessment of the patients' feedback could help in promoting best quality of treatment.

Aims & Objective. The objective of this study is to determine patients' satisfaction regarding the quality of treatment at dental clinics of the College of Dentistry at Majmaah University.

Material & Method: Self-administrated questionnaire was distributed to patients attending to dental clinics. It was composed of twenty-four closed questions measuring patient satisfaction regarding the dental care provided. This questionnaire had three main themes. First, was the reason why patients chose the dental school and the purpose of the visit. Second, was based on the ease of getting an appointment and staff behavior. Third was related to student/doctor communication and attitude.

Results: A total of 442 questionnaires were collected. Response rate was 88.4% as 442 out of 500 questionnaires were returned. The most of the patients were male (68.1%) whereas female were (31.9%). A total of 424 (95.9%) of the participants agreed that it was easy to get an appointment in the dental clinics and a total of 278 (62.9%) were very satisfied with the performance of the reception. Regarding to the treatment Majority of the participant were satisfied with the treatment provider, 295(66.7%) very satisfied.

Conclusions: The results of the study reported that dental clinics in the college of dentistry in Majmaah university has been successful in achieving participant's satisfaction regarding the services, staff, treatment and patient–dentist interaction.

Key words: Dental care, Education, patient satisfaction.

INTRODUCTION

Patient satisfaction with health care is considered to be one of the main objectives and prerequisites for quality care, ¹ and is an indicator used to determine the level of treatment given and the relationship seen between patient and the health care provider². The outcome of a satisfied patient therefore influences the quality of a hospital or clinic, and it is widely accepted that a successful dental practice cannot be established without ensuring patient satisfaction³⁻⁴. This will inevitably rely on dental care and services provided, on confidentiality, on the integrity of appointments and on the staff's behavior⁵. Therefore, observing patient satisfaction with the dental service offered is very critical in order to satisfy patient needs, increase patient compliance and ensure the success of the dental institutions⁶. In addition, patients' satisfaction shows the advantage and disadvantage of dental centers and thereby helps to enhance care efficiency and prospective plans⁷.

The ease of getting appointments was considered to be the most significant consideration for patient satisfaction⁸. Patients demonstrate better cooperation with certain dentists who are diligent and have time to meet the needs of the patients⁹. Decent quality, free or reduced treatment, and accessibility ease are the main reasons to seek treatment in dental schools¹⁰⁻¹¹. Dentists' concerned attitude and personality are correlated with a high level of

patient satisfaction, which lead patients to visit the same dentist regularly¹².

The educational institutes provides mutual advantages for both students and patients by offering training opportunity for students and addressing patient dental care needs and it is very important to ascertain patient satisfaction with the dental service provided in order to meet patient demands, improve patient compliance and ensure the performance of the dental institution¹³. This could allow students to meet their clinical requirements on time as happy patients cooperate more and attend their appointments. Although all dental clinics and hospitals work towards patient satisfaction and patients are the most important stakeholders in such setups, in educational setting student learning becomes one of the main priorities and hence patient satisfaction may be compromised at times.

The College of Dentistry in Zulfi is an integral college of Majmaah University, Saudi Arabia. It has provided the city with a wide range of free dental services. The clinical services provided by our school constitute about 60% of the total services of government dental clinics in Al Zulfi Governorate. Numerous studies to evaluate patient satisfaction have been conducted in many dental schools, however most of the studies done in the kingdom of Saudi Arabia are based in bigger cities like Riyadh, Jeddah, Madinah etc., where the patients have more options of

private and government clinics which offer dental services, and not in a smaller city like in our case where the school is a major dental service provider in the region.

Over the past few years, the number of patients visiting the dental college has been increasing steadily from around 1900 in 2015 to more than 9000 in 2019, moreover two years ago we have also opened the female wing of dental clinics. This increase in patient inflow and expansion of healthcare services could compromise on the quality of health care provided, hence this study was designed to measure patients' satisfaction regarding the dental treatment provided by the dental school in Zulfi at Majmaah University.

MATERIAL & METHOD

The ethical approval for this study was obtained by 2020. Patients who visited the dental school in Majmaah University for dental care between August 2019 and February 2020 were selected using convenience sampling. The inclusion criteria were male and female patients. Patients who were 18 years old and older. The exclusion criteria were children and pregnant women. Patients who had fulfilled the inclusion/exclusion criteria received a text message to voluntary participating in this study. It contained the explanation and the purpose of the study. The questionnaire for this study was previously used and

validated by (Balhaddad et al 2018). It was composed of twenty-four closed questions measuring patient satisfaction regarding the dental care provided in the school. This questionnaire had three main themes. First, was the reason why patients chose the dental school and the purpose of the visit. Second, was based on the ease of getting an appointment and staff behavior. Third was related to student/doctor communication and attitude. Each closed question was assessed with a five-point Likert scale. T-test was used to compare the mean of each question with sex. Anova-test was used to compare the mean of each question with age. Variables were considered statistically significant when p values <0.05.

RESULTS

A total of 442 questionnaires were collected from the electronic system used in the dental clinic of Majmaah university (EXACT system) by taking the phone numbers of the patients and send the questionnaires for them. The response rate was 88.4% as 442 out of 500 questionnaires were returned. Most of the patients were male 301 (68.1%) whereas female was 141 (31.9%)

The most age category was 18-25 years (51.4%) [Table 1]

Group	Sub-group	Total number (N)	Percentage (%)
Gender	Male	301	68.1
	Female	141	31.9
Age of the participants (Years)	18-25	227	51.4
	26-40	139	31.4
	41-55	56	12.7
	>55	20	4.5

[Table 1]: Descriptive characteristics of the study population

[Table 2] shows the distribution of patients response about their satisfaction with appointments, facilities, and treatment

Factors related to satisfaction	Mean± SD	Strongly disagree (%)	Disagree (%)	Neutral (%)	Agree (%)	Strongly agree (%)
Appointments						
It was easy to make my first appointment	4.49±0.78	9 (2)	9 (2)	0 (0)	164 (37.1)	260 (58.8)
Appointment secretary (coordinator) was polite and helpful	4.58±0.61	0 (0)	10 (2.3)	0 (0)	154 (34.8)	278 (62.9)
I received a reminder of each of my appointments	4.40±0.88	10 (2.3)	19 (4.3)	1 (0.2)	166 (37.6)	246 (55.7)
easy to schedule a convenient appointment	4.41±0.83	5 (1.1)	23 (5.2)	0 (0)	171 (38.7)	243 (55.0)
Appointment options suited my schedule	4.52±0.62	1 (0.2)	8 (1.8)	1 (0.2)	182 (41.2)	250 (56.6)
Overall satisfaction with appointments	4.48±0.59					
Facilities						
Office location and parking were convenient	2.93±1.488	95 (21.5)	137 (31.0)	0 (0)	126 (28.5)	84 (19.0)
The reception area was neat and clean	4.24±0.945	17 (3.8)	18 (4.1)	0 (0)	212 (48.0)	195 (44.1)
The temperature in the office was comfortable	4.23±0.949	16 (3.6)	21 (4.8)	0 (0)	212 (48.0)	193 (43.7)
Overall satisfaction with facilities	3.80±0.91					
Treatment						
The Dentist was professional and courteous	4.65±.544	2 (.5)	1 (.2)	0 (0)	144 (32.6)	295 (66.7)
There was a care in cleaning the clinic and infection control	4.51±.760	10 (2.3)	4 (.9)	0 (0)	165 (37.3)	263 (59.5)

proposed dental treatment was clearly explained	4.53±.735	8 (1.8)	5 (1.1)	1 (.2)	158 (35.7)	270 (61.1)
My questions had been answered	4.48±.811	10 (2.3)	10 (2.3)	0 (0)	158 (35.7)	264 (59.7)
The treatment time was completed efficiently and in a timely manner	4.45±.802	10 (2.3)	8 (1.8)	3 (.7)	171 (38.7)	250 (56.6)
The dental treatment was completed to my satisfaction	4.49±.757	9 (2.0)	5 (1.1)	2 (.5)	170 (38.5)	256 (57.9)
Quality is higher compared to other places	4.41±.834	10 (2.3)	13 (2.9)	1(.2)	180 (40.7)	238 (53.8)
I will advise those I know to come here	4.50±.760	9 (2.0)	6 (1.4)	0 (0)	169 (38.2)	258 (58.4)
Overall satisfaction with treatment	4.51±0.63					
Overall satisfaction	4.37±0.58					
[Table2] The distribution of patients response about their satisfaction with appointments, facilities, and treatment						

A total of 424 (95.9%) of the participants agreed that it was easy to get an appointment in the dental clinics, 18 (4%) disagreed. And the mean score was 4.49 (SD+0.78) A total of 278 (62.9%) were very satisfied with the performance of the reception, and reported highest mean score of 4.58 (SD+0.61) Regarding to facilities , about 52.5% (n=232) were unsatisfied with office location and parking and the mean score was 2.93 (SD+1.48) . Whilst they're very satisfied about the neatens of reception area so the mean score was 4.24 (SD+0.945) Regarding to the treatment, the concern shown by the dentist received the highest level of satisfaction with mean score 4.65. Majority of the participant were satisfied with the treatment provider, 295 (66.7%) very satisfied , 144 (32.6%) satisfied , and only 3 (0.7%) were unsatisfied . Overall, mostly the patients were satisfied with treatment (mean score = 4.51), then by appointments (mean =4.48) and finally the facilities (means score = 3.79)

[Table 3] Association of patient satisfaction with gender. The likert scale data is a non-parametric data and hence association between gender and satisfaction feedback was done using Mann Whitney U Test.

However, it's shows that female expressed better satisfaction with the facilities (P<0.000) and treatment (P=0.015) comparing with male. However, the overall patient satisfaction was also higher in females than males (P=0.021). there was no significant gender difference in satisfaction with appointments (P=0.166). However, there was no significant association between age group and satisfaction with appointments (P=0.598), facilities (P=0.229), treatment (P=0.147) and overall patient satisfaction (P=0.416)

Satisfaction	Gender	Mean	Standard deviation	Mean Rank	P- Value
Appointments	Male	4.4771	.55705	215.87	0.166
	Female	4.4879	.66305	233.51	
FACILITIES	Male	3.7229	.84765	206.70	0.000
	Female	3.9603	1.02893	253.10	
TREATMENT	Male	4.4721	.64230	211.69	.015
	Female	4.5915	.59384	242.44	
Overall patient satisfaction	Male	4.3402	.58448	211.96	.021
	Female	4.4390	.57256	241.87	

[Table 3] Association of patient satisfaction with gender

DISCUSSION

Various researchers at many institutes worldwide have investigated patient satisfaction with dental care. Patient satisfaction is not based only on the treatment quality, but on other factors such as facilities, staff behavior, and basic environmental needs¹⁴. This study has provided information about the patient's satisfaction with the dental care provided to them by the dental students at the college of dentistry, Almajmaah University, Zulfi, Saudi Arabia. The response rate was relatively high among patients who were contacted (500 patients) for the study and it was 88.4% (n=442). This is close to (Mahrous and Hifnawy study 2012), As the number of responses was 80%(10).and two other studies^{9,15} . On the other hand, it was higher than (Habib et al.2014) study whereas the response rate was 19.28%¹⁶.

In most of the reported studies, the ages of patients visiting for treatment in the dental training institutes were ranged between 30–40 years of age⁹. In this present study, more than half of the participant's age ranged between 18-25 years (51.4%) which was similar to Alshahrani and

Abdulrazak study whereas the highest proportion (40%) of the patient belonged to the age group of 18-25 years¹⁸. Also similar to Tashkandi, et al study (19). One of the reasons for this could be due to the fact that most of population falls within this age range¹⁷. Moreover, many university students from other college prefer to visit our clinic seeking dental treatment and the student's friends and relatives mostly fall in this age range. However, this is an area for improvement, which should be taken up by the public health department and the higher management of the college to conduct health camps and increase the awareness of the services provided in our college among the older population in the region.

The majority of responses was from male patients (68%) due to the fact that the flow of patients was more in male section and at that time there was only two female batches. This is same as reported by (Habib et al2014) study¹⁶, and is contrary of (Naguib, et al 2016) study whereas the female response was 55.7% ²⁰.

The satisfaction of patients has been investigated in several dental schools in different countries⁹. These studies found that the most reported purpose for seeking care in these clinics is attributed to assumptions of high quality service and concern for the patients' health(10). Other studies found that the most important reason for attending these clinics to be low cost of services^{9,21,22}. Even though our clinics do not charge for the services provided, this study showed that the primary reason for choosing the treatment in our clinics was high quality service and concern for health of patient and we should continue to meet these expectations of the patients.

Patients who had difficulty in obtaining appointments conveniently reported low degree of satisfaction²³. In the present study the patients reported a high level of satisfaction with the appointments. As results of their responses about the ease of making the first appointment, the satisfaction was about (95.6%). Also they were very satisfied with suitably of the appointment options with their schedule (97.8%). Moreover, majority of the patients agreed that they received a reminder of each appointment (93.7%). On the other hand appointments' time and long waiting time before getting an appointment was the main reasons for patient dissatisfaction at UQUDENT¹⁹. Moreover, the professional and polite coordinator who has an experience and skills to deal with the patients may have good effect on their satisfaction. The appointments are generally managed by the reception desk and team, and they are also the first persons whom the patient meets on entering the clinics ,they are an important part of the team and the high level of satisfaction reported in our study is very encouraging and the positive feedback should be passed on to the reception team .

Regarding to facilities, It has been found that good facilities, up-to-date equipment, and clean instruments contribute to patient satisfaction^{6,24}. In our study, 92.1% of the patients found waiting rooms clean and neat. This result is close to a study performed by (Al-Refeidi et al2012)., whereas 91% of the sample reported that the waiting room was clean(25), and so on in (Balhaddad et al 2018) whereas 87.4% of the patients found waiting rooms clean and neat(26). This level of satisfaction is much higher in comparison with (Naguib et al 2016) study. However, the office location and parking had the lowest level of satisfaction through all this study (47.5%) and needs to be addressed by looking into the specific problems and rectifying them. It is nearly the same with the Dental College of King Saud University and UQUDENT^{9,19}, but our institute and the city where we are based is much smaller compared to these institutes and hence the parking issues can be sorted out easily in our institute.

Having an effective communication skills could be a cornerstone for providing an efficient and successful treatment and for achieving patient satisfaction. Previous study have revealed that the dentist's attitude and concern for patient needs has been associated with a high level of satisfaction¹². The explanation of the procedures before the treatment, which is a very important Elements in the patient–dentist satisfaction domain represented with 96.8% of satisfaction among the studied sample, which is contrary to what was found by Othman and Abdel Razak (45.6%)²⁷.

And this may be due to the presence of this study in an educational environment, that places significant focus on educating students on the ideal way of communication and interaction with the patient. Rankin and Haris mentioned that patients don't like having a dentist who begins treatment without any explanation²⁸.

Unlike what was found by Othman and Abdel Razzak regarding the personality of the dentists who were cheerful, smiling, professional and friendly, our patients were more satisfied with a 99.3% level of satisfaction compared to 54.3%²⁷.

Dental clinics should aim to achieve the highest degree of satisfaction with the neatness and cleanliness of facilities, including equipment, instruments and materials, in order to ensure proper control of infections in clinics. Our investigation showed that 96.8% of the patients found equipment and materials clean. Similarly, Awliya identified 90% of patients satisfied with the cleanliness of equipment⁹.

Quality of treatment that provided to our patients consider as a major concern. As result of that, our patients reported a high level of satisfaction regarding to the quality of the treatment, and 94.5% of them agreed that the quality of treatment in the dental college of almajmaah university is higher than the other places. In contrast to (Mahrouss and Hifnawy study 2012) whereas the quality of treatment offered reported as the least satisfaction level (65%)¹⁰.

Limitation of this study was the smaller number of the female responses due the fact that the female clinic is newly operated. Moreover, five-point Likert scale can provide wide ranges of responses. Nevertheless, open-ended questions can help patients provide more details about their satisfaction. It is therefore Abstract

CONCLUSION

The results of the study reported that dental clinics in the college of dentistry in almajmaah university has been successful in achieving participant's satisfaction regarding the services, staff, treatment and patient–dentist interaction. Evaluation of patient satisfaction should be done continuously at regular intervals to keep the high percentage of satisfaction and for more improvement, and further qualitative studies need to be conducted determine the emotional, perceptive, and social factors of dental patient's satisfaction with dental care.

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