#### **ORIGINAL ARTICLE**

# Patient Satisfaction in Dental Teaching Hospitals of Lahore

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### **ABSTRACT**

Aim: To evaluate patient satisfaction feedback by assessing services provided by the dental teaching hospital regarding the quality of dental care, reference to interaction with doctor, services, facilities and treatment Methodology: Data of this analytical cros sectional study was collected using purposive convenient sampling technique. Data was collected from 180 patients (60 patients each from dental teaching hospital A, B and C). A pretested questionnaire of patient satisfaction was given to the patients to fill in after completed their treatment. The responses were on 3-point Likert scale ranging from 2 "Agree", 1 "Neutral" corresponding to 0 "Disagree". Percentages were calculated as descriptive analysis to explore the gender distribution of study sample along with the means score of age. Pearson Chi-square test was used to explore the difference of patients' satisfaction Results: The patients of Dental teaching hospital C were highly satisfied with their services in regards to Patient-

**Results:** The patients of Dental teaching hospital C were highly satisfied with their services in regards to Patient-Dentist Interaction (93.71%), administrative efficiency and clinic setup environment (75.55%) whereas Participant's satisfaction with technical competency was higher in Dental teaching hospital A (78.33%).

**Conclusion:** Majority of patients were found to be satisfied with the overall treatment received at all the three dental teaching hospitals of Lahore. Continuous assessment of patient satisfaction feedback is required in order to set a higher bar in services provided by dental teaching hospitals.

Keywords: Patients Feedback, Quality of Services, Dental Teaching Hospitals

## INTRODUCTION

A major concern for health care system around the world is a provision of high-quality care<sup>1</sup>. The assessment of the services provided by dental teaching hospitals to the patient plays an important role in comments and critique towards the overall performance of the health care education system<sup>2</sup>. Therefore, it has to be assessed by health care providers. Satisfaction of patient is a relative phenomenon that shifted the quality of life from service centered towards patient centered approach<sup>3</sup>. In dental field, patient satisfaction played an important role, specifically for finding weakness and strength in dental practice. Patient seek dental treatment in order to ease pain, improve aesthetics or full mouth rehabilitation. Their selection of dental hospitals or clinics depends on convenience, accessibility and affordability.

Dental teaching institutes provide dual advantage to students and patients by means of imparting training possibilities for students and fulfilling the treatment needs of the patients. Contemplating patient satisfaction with dental services provided is essential to meet patient needs, obtain better compliance of patient, and hold the recognition of such institution. The most pertinent factor for patient satisfaction is the ease of getting appointments. Measuring patient satisfaction indirectly indicates dentist satisfaction with their jobs. Good Patient-Dentist interaction could be achieved by explaining them about the condition in a simple and understandable terms, followed by procedure and treatment options, by providing instructions<sup>3,4</sup>. On the contrary, improper communication,

Received on 21-05-2020 Accepted on 17-10-2020 dissatisfaction and complaint made by patients may cause anxiety and stress, resulting in changing their Dental surgeon even if the outcome of treatment was acceptable<sup>1,4</sup>. Studies have shown that patients seek teaching hospitals for treatment of good quality, low cost services<sup>4,5</sup>.

This study aims to evaluate patient satisfaction with reference to interaction with doctor, facilities, quality of services and treatment provided at the dental teaching hospitals.

## **METHODOLOGY**

This was a cross-sectional study conducted at dental teaching hospitals of Lahore. Purposive convenient sampling technique used to gather data. Inclusion criteria involved patients who required multiple visits to complete their dental treatments and exclusion criteria involved patients with the single visit, refused to participate in the study, incompletely filled form. Informed consent was taken by the participant. A structured questionnaire was adopted from other similar studies<sup>1,14</sup> and modified accordingly. The questionnaire was divided into four sections, the first section comprising of questions related to demographics. The second section was related to administrative efficiency and clinical set up environment. The third section was about the patient- dentist interaction and communication while provision of treatment and the last section was about the prime facilities provided.

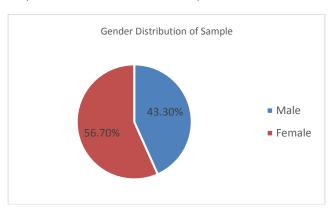
A sample of 180 participants was taken (60 participants each from dental teaching hospital A, B and C. The participants were asked to respond after the completion of their treatment according to the response format provided in the questionnaire. The responses were

on 3-point Likert scale ranging from 2 "Agree", 1 "Neutral" corresponding to 0 "Disagree". 200 questionnaires were distributed and response was received by 180 participants which were considered for analysis. Data was analyzed by SPSS version 20.0. Percentages were calculated as descriptive analysis to explore the gender distribution of study sample along with the mean score of age. Pearson Chi-square test was used to explore the difference of patients' satisfaction visiting 3 dental teaching hospitals in Lahore.

#### **RESULTS**

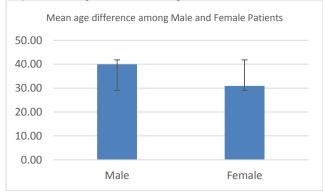
As demographic variables, gender and age were calculated. Males were 78 (43.30%) whereas females were 102(56.70%).

Graph 1: Gender distribution of sample



The mean score of age was 34.83±16.387. Among males, mean age was 39.94±19.240 whereas among females, mean age was 30.93±12.577 (Graph 2).

Graph 2: Mean age difference among Male and Female Patients



Patient satisfaction was measured according to 3-disciplines: Administrative efficiency and clinic set up (Table 1), Patient-Dentist interaction (Table 2), Technical competency (Table 3). The results of chi- square revealed that there was a significant difference with regards to patient satisfaction among patients from dental teaching hospital A, B and C. On asking about working hours' suitability of the hospital, 71.7% participants of dental teaching hospital A, 63.3% participants of dental teaching hospital B and 73.3% participants of dental teaching hospital C responded in positive which was nonsignificant

(X2=2.601, P=.627). Difference with respect to Completion of dental treatment, 73.3% participants of dental teaching hospital A and B responded where as 96.7% of dental teaching hospital C responded positive (x2 = 21.085, P<.001). 66.7% of hospital A, 60.0% of hospital B and 90.0% of hospital C responded positive to comfortable waiting area (x2=18.706, P=.001). 70.0% of participants of teaching hospital A, 83.3% of teaching hospital B, 96.7% of teaching hospital C responded to question related to insured Privacy of treatment (x2=20.320, P<.001). 50.0% participants of dental teaching hospital A, 50.0% of teaching hospital B and 83.3% of teaching hospital C responded positive with Short working time for appointment (x2=21.101, P<.001). 56.7% participants of teaching hospital A, 53.3% teaching hospital B, and 73.3% of teaching hospital C responded positive to Short waiting time for the treatment with (x2=14.027, P=.007).

53.3% of participants of teaching hospital A, 43.3% of teaching hospital B and 90.0% of teaching hospital C responded positive to question related Dental staff did not Talk with each other while providing treatment with (x2= 31.878, P<.001). 88.3% of teaching hospital A, 86.7% of teaching hospital B and 96.7% of teaching hospital C responded positive to concentration of dental staff on their work (x2=25.047, P <.000). 88.3% of teaching hospital A, 93.3% of teaching hospital B and 90.0% of teachinghospital C participants responded positive to friendly nature of dentist (x2=2.586, P=.629). 80.0% participants of dental teaching hospital A, C and 70.0% of teaching hospital B responded positive to cheerful Dentist's facial expression (x2= 7.122, P =.130). 80.0% participants of teaching hospital A, 90.0% of teaching hospital B and 100.0% of teaching hospital C responded positive to statement related to criticize or compared oral condition with others (x2=13.333, P=.010). 88.3% participants teaching hospital A, 93.3% of teaching hospital B and 96.7% participants of teaching hospital C responded positive to statement related to not asking personal question while during offering treatment (x2=7.028, P=.134). 65.0% participants of teaching hospital A, 50.0 % of teaching hospital B and 90.0% of teaching hospital C responded positive to statement related to not obliged to treat by a student (x2= 35.414, P<.000). 88.3% participants of teaching hospital A, 83.3% of teaching hospital B and 100.0% of teaching hospital C responded positive to statement of explaining procedure before the start of treatment (x2=10.284, P= .036). 83.3% of participants of teaching hospital A, B and 100.0% of teaching hospital C responded positive to question related to post-treatment instructions (x2=11.610, P=.020). 61.7% participants of teaching hospital A, 53.3% of teaching hospital B and 43.3% of teaching hospital C responded positive to offered treatment was not painful (x2=6.362, P=.174). 85.0% participants of teaching hospital A, 86.7% of teaching hospital B and 90.0% of teaching hospital C responded positive to question related to thorough dental examination (x2=4.223, P= .337). 88.3% participants of teaching hospital A, 83.3% of teaching hospital B and 96.7% of teaching hospital C responded positive to question related to satisfied with the treatment quality (x2=10.373, P=.035).

Table 1: Participant's satisfaction with administrative efficiency and clinic setup environment.

\Statements	Dental teaching hospital A			Dental teaching hospital B			Dental teaching hospital C		
	Agree %	Neutral %	Disagree %	Agree %	Neutral %	Disagree %	Agree %	Neutral %	Disagree %
Working hours of the hospital	71.7%	16.7%	11.7%	63.3%	26.7%	10.0%	73.3%	16.7%	10.0%
were suitable for me				Х	2=2.601, P=	.627			
Complete dental treatment	73.3%	20.0%	6.7%	73.3%	26.7%	0.0%	96.7%	3.3%	0.0%
was done	X2=21.085, P<.001								
Waiting area was	22.2%	5.6%	5.6%	20.0%	10.0%	3.3%	30.0%	2.2%	1.1%
comfortable	X2=18.70, P=.001								
Privacy of treatment was insured	70.0%	21.7%	8.3%	83.3%	16.7%	0.0%	96.7%	3.3%	0.0%
	X2=20.320, P<.001								
Short working time to have	50.0%	28.3%	21.7%	50.0%	20.0%	30.0%	83.3%	10.0%	6.7%
an appointment	X2=21.101, P<.001								
Short waiting time to get the treatment	56.7%	28.3%	15.0%	53.3%	20.0%	26.7%	73.3%	23.3%	3.3%
	X2=14.027, P=.007								

Table 2: Participant's Satisfaction on Patient- Dentist Interaction.

Statements	Dental teaching hospital A			Dental teaching hospital B			Dental teaching hospital C		
	Agree	Neutral	Disagree	Agree	Neutral	Disagree	Agree	Neutral	Disagree
Dental staff did not talk with	53.3%	16.7%	11.7%	63.3%	26.7%	10.0%	73.3%	16.7%	10.0%
each other while providing treatment	X2=31.878, P<.001								
Dental staff were	88.3%	20.0%	6.7%	73.3%	26.7%	0.0%	96.7%	3.3%	0.0%
concentrating on their work	X2=25.047, P<.001								
Dentist was friendly with me	88.3%	5.6%	5.6%	20.0%	10.0%	3.3%	30.0%	2.2%	1.1%
Dentist was mendly with me				X	2=2.586, P=	.629		Neutral 16.7%	
Dentist's facial expression	80.0%	21.7%	8.3%	83.3%	16.7%	0.0%	96.7%	3.3%	0.0%
were cheerful		•	•	X	2=7.122, P=	.130	•		•
Dentist did not criticize my oral condition or compared it with others	80.0%	28.3%	21.7%	50.0%	20.0%	30.0%	83.3%	10.0%	6.7%
	X2=13.333, P=.010								
Dentist did not ask personal	88.3%	28.3%	15.0%	53.3%	20.0%	26.7%	73.3%	23.3%	3.3%
question during offering care		•		Х	2=7.028, P=	.134		% 10.0% (% 23.3% (% 10.0% (% )	
I was not obliged toreceive dental care by a student	65.0%	25.0%	10.0%	50.0%	16.7%	33.3%	90.0%	10.0%	0.0%
	X2=35.414, P<.001								
Dentist's explained the procedure before the start of procedure	88.3%	6.7%	5.0%	83.3%	10.0%	6.7%	100%	0.0%	0.0%
	X2=10.284, P=.036								
Dentist gave me instructions	83.3%	11.7%	5.0%	83.3%	13.3%	3.3%	100%	0.0%	0.0%
after treatment			•	X2	2=11.650, P=	=.020		0.070	

Table 3: Participant's satisfaction with technical competency.

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Statements	Dental teaching hospital A			Dental teaching hospital B			Dental teaching hospital C		
	Agree	Neutral	Disagree	Agree	Neutral	Disagree	Agree	Neutral	Disagree
Treatment offered was	61.7%	23.3%	15.0%	53.3%	30.0%	16.7%	43.34%	26.7%	30.0%
not painful		X2=6.362, P=.174							
Through dental	85.0%	10.0%	5.0%	86.7%	13.3%	0.0%	90.0%	6.7%	3.3%
examination was done	xamination was done X2=4.223, P=.337								
Treatment quality was	88.3%	8.3%	3.3%	83.3%	16.7%	0.0%	96.7%	3.31%	0.0%
satisfactory	X2=10.373, P=.035								

## **DISCUSSIONS**

Quality of care is a major concern of health care providers all around the world. Several tools have been developed to measure quality of health care services however, the ideal means of quality of care remains ambiguous. Patient satisfaction has been investigated at several teaching institutes in different part of the world. It is not primarily based on the quality of treatment, but on other elements which includes behavior of staff, availability of facilities and comfortable environment. This study showed that majority of the patients were found to be satisfied with the quality of dental services. A response rate of dental teaching hospital C is 83.3% which is high than the responses of college A

and B 50.0% with Short waiting time for an appointment and is relatively higher comparative to other study conducted at college of dentistry, Iman Abdulrahman Bin Faisal University, Dammam, Saudi Arabia reported degree of satisfaction 51.9%4. Reasons for higher satisfaction such as multiple appointment treatments could be completed without any delay, effective skills and attitude of the dental students dealing with the patients in the college. Every patient wishes that a hospital environment could be comfortable with privacy maintained while providing treatment, and long waiting hours would be compensated by ease of waiting place. 22.2% respondents form dental teaching hospital A, 20% of teaching hospital B and 30.0%

of teaching hospital C agreed with comfortable waiting area,75.9% respondents were satisfied in the previous study conducted at college of dentistry, Taibah university, Saudi Arabia<sup>14</sup>. Our study showed 70% respondents of dental teaching hospital A, 83.3% of teaching hospital B and 96.7% of teaching hospital C satisfied with the insured privacy during treatment, comparatively similar to response rate 90.7%<sup>14</sup> of study conducted at Taibah University, Saudi Arabia. Kind, cheerful and friendly nature leaving a good thought in a patients mind during initial interaction. Our study shows 88.8% respondents of dental teaching hospital A, 93.3% respondents of teaching hospital B and 90.0% respondents of teaching hospital C more satisfied responses with the friendly nature of the dentist as compared to 54.3% response rate of Othman and Abdel Razzak study<sup>1</sup>. The main reason of patient dissatisfaction is the spending time in the waiting area. 56.7% respondents of dental teaching hospital A, 53.3% respondents of teaching hospital B and 73.3% of teaching hospital C responded to short waiting time to get treatment which is comparative less as compared to previously study with high response rate of 81.5%. Depending upon the compliance of patient with treatment sessions 96.7% participants of teaching hospital C and 73.3% participants of teaching hospital A and B satisfied with the complete dental treatment was given similar to 83.3% response rate from the previous study14. Patient not feel obliged with their care provider, if there is no proper interaction between them before and during the treatment.65.0% participants of dental teaching hospital A, 50.0 % of teaching hospital B and 90.0% of teaching hospital C responded positive to statement related to not obliged to treat by a student, significance difference found as compare to previous studies (24.1%)14 this was due to lack of surety given to the patient while providing treatment. 88.3% participants of teaching hospital A, 83.3% of teaching hospital B and 100.0% of teaching hospital C responded positive to statement of explaining procedure before the start of treatment more as compared to previous study (77.8%).14 This is due to taking written consent before starting the treatment. 83.3% of participants of teaching hospital A, B and 100.0% of teaching hospital C responded positive to question related to post-treatment instructions similar to previous study (85.2%). As a teaching institutes, students were supervised at each phases by their supervisors. 90.0% respondents of teaching hospital C, 53.3% respondents of teaching hospital A and 43.3% respondents of teaching hospital B responded positive to the statement that dentist did not talk with each other while providing treatment compared to 74% response rate of study conducted at Taibah University, Saudi Arabia<sup>14</sup>.

#### CONCLUSIONS

Almost most of the patients were satisfied with the performance of Dentists and other dental staff members. Patient response towards dental auxiliaries and administration was also satisfactory. In general, overall reviews of patients regarding the clinical efficiency of dental teaching hospital A was found to be satisfactory.

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**Recommendation:** In order to set a higher bar in dental services provided by dental teaching hospitals, it is required to assess patients' demands and satisfaction. Patient response towards the treatment being provided highlights the discrepancies and lacking in dental setup that can, in turn, be overcome by raising the clinical performance of the staff at Dental teaching hospitals.

## Conflict of Interest: No

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