

# Assessment of Patient Satisfaction towards Dental Care Services Provided at Private Dental Hospital: Cross Sectional Study

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## ABSTRACT

**Background:** The dental practice is a mixture of science and art that provides excellent dental and oro-facial care to their patients.

**Aim:** To assess the level of patient satisfaction and seek improvement in the quality of dental services provided at Private Hospital.

**Study Design:** Cross sectional study.

**Methodology:** A total number of 400 patients were enrolled who responded to the questionnaire. The ethical approval was obtained from hospital review ethical committee, after completing and submitting the research proposal. The questionnaires were filled by patients after being guided by dental assistants for accuracy and complete filling of data.

**Results:** Among 400 enrolled subjects, there were 53.7% females while males were 46.3%. Satisfaction score was higher in all domains except reception desk & waiting area. No significant difference was observed in satisfaction score of patient-doctor interaction, dental assistant patient interaction and overall health facility domain among different age groups. The satisfaction score of reception desk & waiting area domain was significantly lower in young patients (<30years). There was no significant difference in satisfaction score of all domains between both genders. Patient visited to Orthodontics department had lower score in dental assistant patient interaction domain as compared to patients visited operative department. Similarly, overall satisfaction score of the patients visited Orthodontics department was scored lower as compared to remaining departments.

**Conclusion:** It was concluded that there was significantly high satisfactory score from patients. Thus, were ready to re-visit the hospital. Young patients were less satisfied pertaining reception desk services and waiting area. Patients visited Orthodontics department were also less satisfied with the behavior of dental assistant.

**Keywords:** Dental Professionals, Satisfactory Score and Health Facilities.

## INTRODUCTION

The dental practice is a mixture of science and art that provides excellent dental and oro-facial care to their patients.<sup>1</sup> Recently, new pharmacological agents have opened new ways of providing better dental care. Its use has reduced dental caries, restoration of functions and to try to achieve a perfect smile as revealed by literature review<sup>1,2</sup>.

Patient satisfaction is a relative term that depends on various factors. This has replaced the idea of 'quantity of life' by a more patient centered concept of 'quality of life'. Patient satisfaction means his needs, expectations from the health system and experience of health care. This is a multi-dimensional approach that includes both medical and non-medical aspects<sup>3,4</sup>.

Various different theories like expectancy value theory and care quality theory show that satisfaction is a combination of experience, efforts and expectation of patient from health care providers. It includes doctors, dentists and para-medical staff.<sup>5</sup>

Previously, literature review has revealed many factors that can dominate patient satisfaction. Some provider-related parameters include physician's proficiency, his communication skills, behavior of hospital staff, basic facilities and infrastructure. Parameters like age of patients, disease stage, patients trust on doctor and care given by doctor sum up his satisfaction<sup>6-8</sup>.

Thus, dentistry is an ever-evolving field where satisfaction of consumer is a complex interplay between their personal interests and health facility<sup>9</sup>. While opting for dental treatment patients look for a number of diverse variables such as ease of access, physician, employees' characteristics and clinic's environment<sup>10</sup>. It has been analyzed in past that the quality of dental services has a positive impact on overall patient's satisfaction. Thus, it is important to see weaknesses in system to aid betterment of health facility through patient's eyes.

With the passage of time there is an increase in the number of healthcare services mostly in the private sector. Hence, the

patient has a diverse choice of choosing the healthcare facility which increases the competition among healthcare providers. The need of the hour is to improve quality and feasibility of healthcare services to improve patient's flow. This can be accomplished by possible exploration of factors affecting satisfaction of patient.

Pakistan is a developing country that lacks research culture. Unfortunately, many common health issues remained untouched in our society thus increasing their burden both economically and generally. In the light of above description, we planned current study in-order to highlight areas in private hospitals that require improvement so that health care providers gain maximum satisfactory score from patients. This will improve quality of life and satisfaction level of the patients.

The objective of the study was to assess the level of patient satisfaction and seek improvement in the quality of dental services provided at private Hospital.

## METHODOLOGY

After getting permission from Institutional Ethical Review Board, this Cross-sectional study targeted dental professionals who were working at Chaudhry Muhammad Akram Dental Hospital, Pakistan. A questionnaire was distributed among study participants who were randomly selected to avoid bias. The questionnaires were filled by patients after being guided by dental assistants for accuracy and complete filling of data. Written consent following approval by the Hospital's Ethical Committee was taken. A total number of 400 patients were enrolled who responded to the questionnaire. Data was analyzed by SPSS version 26. Demographic parameters were presented as frequencies and percentages. Data was stratified with respect to age, gender and departments to see modifier effect. Post stratification, one way ANOVA and independent t test were used for comparison of satisfaction score. A p-value  $\leq 0.05$  taken as significant.

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## RESULTS

In current project, females were 53.7% while males were 46.3%. Among enrolled patients, varying demographic parameters were summarized in table-1. Almost equal number of patients were married and unmarried.

Table-1: Demographic parameters of Subjects (n=400)

Variable	Categories	Frequency	%age
Gender	Male	185	46.3
	Female	215	53.7
Marital Status	Married	202	50.5
	Unmarried	198	49.5
Department	OMFS	50	12.5
	Operative	106	26.5
	Orthodontics	43	10.8
	Periodontology	170	42.5
	Prosthodontics	31	7.8

Among enrolled subjects, satisfaction score was higher in all domains except Reception Desk & Waiting Area. Score was demonstrated among domains as mean±SD in table-2. Maximum satisfaction score presented as mean±SD was in the domain (Patient-Doctor Interaction) with 98.4± 5.8 while lowest score was achieved by Reception Desk & Waiting Area (89.3±14.4).

Table-2: Satisfactory Score among Domains as mean ± SD

Domain	Mean ± SD
Patient-Doctor Interaction	98.4± 5.8
Dental Assistant Patient Interaction	96.3±9.6
Reception Desk & Waiting Area	89.3±14.4
Overall Health Facility	98.0±6.3
Overall Satisfaction Score	96.13±6.09

No significant difference was observed in satisfaction score of patient-doctor interaction, dental assistant patient interaction and overall health facility domain among different age groups. However, patient having age <30years had lower satisfaction score in reception desk & waiting area domain as compared to others age groups as shown in table-3. Patients were satisfied with domains like patient-doctor interaction, dental assistant patient interaction and overall Health Facilities provided at the hospital among all age groups as shown in Table-3.

Table-3: Satisfactory Score among Domains with respect to Age

Domain	Age groups	n	Mean ± SD	p-value
Patient-Doctor Interaction	<30 years	214	98.6±4.2	0.673
	30 - 50 years	138	98.0±8	
	>50 years	48	98.5±4.5	
Dental Assistant Patient Interaction	<30 years	214	95.7±9.9	0.215
	30 - 50 years	138	96.5±10.3	
	>50 years	48	98.3±4.3	
Reception Desk & Waiting Area	<30 years	214	86.9±15.8	0.001*
	30 - 50 years	138	91.4±12.9	
	>50 years	48	94.2±8.7	
Overall Health Facility	<30 years	214	98.1±5.1	0.769
	30 - 50 years	138	97.6±8.3	
	>50 years	48	98.1±4.1	
Overall Satisfaction Score	<30 years	214	95.7±5.1	0.152
	30 - 50 years	138	96.4±8.0	
	>50 years	48	97.5±3.3	

\*Statistically significant

No significant difference was observed in satisfaction score of all domains among between both genders as shown in table-4. Both genders were equally treated by doctors and were given standard treatment in all domains at hospital.

Table 4: Satisfactory Score among Domains with respect to Gender

Domain	Genders	n	Mean ± SD	p-value
Patient-Doctor Interaction	Male	185	98.1± 7.0	0.398
	Female	215	98.6±4.6	
Dental Assistant Patient Interaction	Male	185	95.8±10.8	0.317
	Female	215	96.7±8.4	
Reception Desk & Waiting Area	Male	185	90.2±14.3	0.278
	Female	215	88.6±14.5	
Overall Health Facility	Male	185	97.8±7.5	0.627
	Female	215	98.1±5.1	
Overall Satisfaction Score	Male	185	96.1±7.3	0.914
	Female	215	96.2±4.8	

Patient visited to Orthodontics department had lower score in dental assistant patient interaction domain as compared to patients visited operative department. Similarly, overall satisfaction score of the patients visited Orthodontics department had lower score as compared to remaining departments as shown in table-5.

Table-5: Satisfactory Score among Domains with respect to Departments

Domain	Department	Mean	SD	p-value
Patient-Doctor Interaction	OMFS	97.4	4.7	0.122
	Operative	99.5	2.1	
	Orthodontics	98.8	2.6	
	Periodontology	97.8	8.1	
	Prosthodontics	98.9	3.3	
Dental Assistant Patient Interaction	OMFS	95.8	7.3	0.014*
	Operative	98.1	6.8	
	Orthodontics	92.6	13.8	
	Periodontology	95.9	10.7	
	Prosthodontics	98.4	4.5	
Reception Desk & Waiting Area	OMFS	89.9	12.9	< 0.001*
	Operative	93.1	12.1	
	Orthodontics	79.4	15.1	
	Periodontology	89.0	15.4	
	Prosthodontics	91.2	11.5	
Overall Satisfaction Score	OMFS	95.9	3.6	0.029*
	Operative	97.5	4.0	
	Orthodontics	94.1	4.4	
	Periodontology	95.8	8.0	
	Prosthodontics	96.7	3.3	

\*Statistically significant

## DISCUSSION

Dental problems are common health issues faced by individuals of every age today. Patients have to seek dental schools and hospital services for major and minor oral and dental problems globally. Patient satisfaction with dental care given has an impact on the future use of dental services. Satisfaction can be characterized as the degree of an individual experience compared with his or her desires. Nature of treatment depends on facilities available. Awareness in regards to dental wellbeing has prompted to change in patients' state of mind towards nature of dental treatment.

Present study was an attempt to evaluate patient satisfactory levels with the various respect to various health facilities in a private hospital of Lahore. Patient satisfaction is a multi-dimensional issue mainly influenced by doctor related factors along-with patient's experience.<sup>11</sup> Our results showed that 93% patients were satisfied with the services provided to that at hospital thus in line with one previous study.<sup>12</sup> One previous study showed that 94% of the patients who visited the OPD were satisfied with their doctor. This positive response is taken as satisfaction that contributes to greater compliance with follow up visits. Paradoxically, one other study showed low satisfactory response (52%) towards their doctors and facilities given.<sup>12</sup>

In present study majority of the patients observed warming welcome (71%), thorough dental checkup (93.3%), dentists' positive attitude towards patients (95%), good infection control (93%) at hospital. Similar, parameters were assessed by few

researchers that showed 98% doctors were courteous, listened attentively to the patients (88%).<sup>13</sup> Other studies depicted that 88–92% of their patients believed that they were treated with respect and dignity.<sup>14,15</sup> Our results showed that private dental hospital was working in a best way to serve their patients. Doctors and para medical staff were competent and paid full attention to the well-being of their patients.

In present study, overall satisfaction score of patients showed significant p-value (0.02\*) in terms of different departments and their services provided at hospital (table-5). Majority of patients (93%) in present study were satisfied and were ready to re-visit. Similar to one study which reported that most of their patients (89%) were found satisfied and willing to re-visit the hospital<sup>16</sup>.

All patients who visited the hospital showed satisfaction with all domains especially patient-doctor interaction, Dental assistant-patient interaction and overall treatment given by health care providers. Our results showed that facilities given in private hospital were upto mark. Our results were in line with many other studies that showed excellent health care services at their hospitals<sup>17</sup>.

Our results showed that there is a need to improve in one area i.e., waiting area. Although they were welcomed warmly but the facilities and sitting arrangement at waiting area need improvement. This was paradoxical to other studies that showed excellent sitting arrangement<sup>18</sup>.

**Limitations:** As the time frame was limited and regretfully delayed in data collection. Other limitation was lack of financial resources.

## CONCLUSION

It was concluded that there was significantly high satisfactory score from patients. Thus were ready to re-visit the hospital. Thus, it was a very encouraging response that depicted high satisfactory response of the patients. It also indirectly portrays doctor as well as hospital performance. However, there is always a room for improvement in every field. More studies are thus required to evaluate hospital performance and their professional attitude.

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**Author's contribution: MA&AS:** Overall supervision, write up and literature review, : data collection, literature review, help in write up.

MRS&WL: Data analysis and write-up.

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