#### **ORIGINAL ARTICLE**

# Patient Satisfaction with the Provision of Dental Treatment

UBAIDULLAH¹, HUMA TAHIR², BURHAN SAMAD³, MUHAMMAD AFRASIAB KHAN⁴, MOIZ AHMED SHAIKH⁵, TAHIRA SADIQ6, IRFAN

<sup>1</sup>Assistant Professor, Community Medicine Department Swat Medical College

<sup>2</sup>Assistant Professor, Community Dentistry Department, Abottabad International Dental College

<sup>3</sup>Assistant Professor, Department of Community Medicine, Sialkot Medical college. <sup>4</sup>Centre of Forensic and Legal Medicine and Dentistry, University of Dundee, Dundee, Scotland <sup>5</sup>Independent researcher, Dow Dental College, DUHS, New labour colony, Mission road, Karachi.

<sup>6</sup>Department of Community Medicine Islamic International Medical College, Riphah International University

<sup>7</sup>Department of Life Sciences, School of Science, University of Management and Technology (UMT), Lahore, Pakistan

Corresponding authors: Huma Tahir, Email: Humatahir2020@gmail.com

#### **ABSTRACT**

Objectives: This study's goal is to learn how satisfied patients are with the dental department's services at a tertiary care hospital in Islamabad, Pakistan.

Study design: A cross-sectional study

Place and duration of study: The study was carried out in Islamic international dental hospital, Islamabad in six months

Materials and methods: In a dental hospital, a descriptive cross-sectional study was conducted. The sample size was 153, the confidence level was 95%, and the margin of error was 5%. Through the use of convenience sampling, data were gathered. To gauge patients' impressions of their satisfaction with the hospital's availability, accessibility, and convenience of services as well as staff behaviour, a survey was undertaken.

Results: The results gathered indicated that the patients were satisfied with the dentistry department's services. Participants expressed high levels of satisfaction with the hospital's cleanliness, doctor's demeanour, and appointment scheduling. It was noted that several aspects, such as waiting times, were their top priorities.

Conclusion: This survey demonstrates how satisfied patients are with the periodontology department at Islamic International Dental College & Hospital in terms of accessibility, availability, and convenience. A few procedures for shortening wait times and scheduling appointments still require improvement.

Keywords: patient satisfaction, dental hospital, services.

#### INTRODUCTION

Any institute's major goal is to give its clients outcomes that are satisfactory. There is a well-known idea regarding requirements. (Zalenski & Raspa, 2006), This hypothesis describes how a man's wants work. A man's desires are constantly subject to alter throughout time. A finished piece of art is no longer the motif. A man will have another need after he has satisfied his first one. Every service that is offered at a hospital is essential for every patient there. (Dutta, Calvani, Bernabei, Leeuwenburgh, & Marzetti, 2012), As is well known, technology is always evolving. The application of this cutting-edge technology is not only costly but also highly difficult. Because of this, the patient receiving the therapy will be completely satisfied. Healthcare professionals with expertise can ensure patient satisfaction. Patient satisfaction refers to the degree to which a patient is happy with the services offered by hospitals and the care they get there. (Beck, Daughtridge, & Sloane, 2002), The expertise of medical staff members, quality of care supplied, hospital conditions, and the cost of services should not be so high that patients cannot afford them in order to ensure patient satisfaction. It should be easy to communicate between patients and doctors.

The degree to which patients are satisfied with the treatments differs from other ideas, such as the quality of life or happiness. (Grol et al., 2000), The outcome of the care, its restrictions, and the procedure are only a few of the variables that might affect how well healthcare is provided. Patients' happiness is mostly based on how well their treatments worked and how they were administered. (Saba et al., 2006), Or, how efficient and reasonably priced the therapy is.

Islamabad's Islamic International Dental College & Hospital (IIDC & H) is a private medical facility whose main objective is to offer affordable, high-quality healthcare to residents of Islamabad and surrounding regions. (L. Williams, 2016)The goal of this institute is to improve the results for patients. The patient outcome has significantly improved as a result of all these treatments being offered. Ambulance service improvements are one instance of this. (ORGANIZATION, 2003) In order to improve the outpatient sector, other nations and countries are also focusing on various factors. (Mattke, Epstein, & Leatherman, 2006) The degree of patient satisfaction may be tracked with the use of various feedback surveys. (Vázquez, Torres, Otero, Blanco, & Clifford Attkisson, 2019) However, up until today, this has not been occurring in the neighborhood. (Mattke et al., 2006) This study's goal was to determine how satisfied patients were with the treatments they received.

#### **METHODOLOGY**

In the Dental Hospital, descriptive cross-sectional research was done. The calculated sample size was 153, and the margin of error was 5%. Data from patients with various demographic profiles was gathered via convenience sampling. Patients were asked to complete a questionnaire that was intended to gauge their degree of satisfaction with the hospitals' availability, accessibility, and services as well as the behavior of stall. Co-operative patients willing to participate in the study were included while those who did not consent to participate were excluded. Questionnaire was developed after through literature search and validated by the experts. After doing pilot on 20 respondents, study responses were collected from the patients. Level of satisfaction was measured on Likert scale. All Questions were phrased in Urdu language and were interviewed by researcher himself. The study was reviewed and approved by the Institutional Review Board (IRB) of the Human Subjects Committee (HSC) of Riphah International Islamabad no:IIDC/IRC/2020/008/001(Annexure1). Permission for data collection was obtained from the administration office of the hospital. Data was collected over one-month duration. Standard procedures of informed consent were used inclusive of anonymity and confidentiality. Questionnaires were completed on the spot by the researcher himself. Data was analyzed through SPSS and presented in the form of Frequency distributions and percentages.

## **RESULTS**

Data was collected on 153 respondents who replied to the questionnaire. Demographic profile is shown in the following table. Mostly respondents were males and between. 26-40 years of age. Almost half of participants were graduate and 15 % had no formal

education. 85.4 % were high school graduates and above.

Table 1: Demographic profile of respondents

Table 1: Demographic profile of respondents						
Gender(n=153)		Age in Years		Education(n=153)		
		(n=153)				
Male	82	11-25	43	No formal	20	
	(54%)		(28.1 %)	education	(14.5%)	
Female	71	26-40	58	Matric	26	
	(46%)		(37.9 %)		(18.8%),	
		41-55	34	Intermediat	21	
			(22.2%)	е	(15.2%)	
		56-70	14	Graduate	71	
			(9.1%)		(51.4%)	

According to survey, most of the participant were pleased by the appoint process by showing their satisfaction level in the table given below.

Table 2: level of patient satisfaction regarding Appointment process

- casio 2: lovo: or patient cationaction regarding rippointment processi					
Responses	Frequencies	Percentages			
Absolutely satisfied	16	10.6			
Yes satisfied	123	81.5			
Not satisfied	12	7.9			
Don't know	=	-			
Total	151	100%			

A very important parameter of patient satisfaction remains time spend during waiting area, after entering the hospital till Doctor's consultation. Although many were satisfied but most of the patients were not satisfied by the waiting time, as shown in the following bar chart.

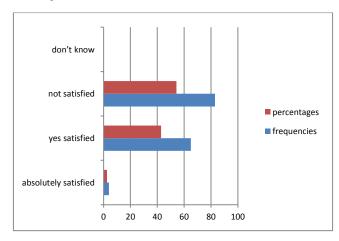


Figure 1: satisfaction of patients by Waiting time

Doctor's behavior in terms of attitude, allocated time, listening skills and trust gaining was satisfactory according to patient's perspectives, as presented in the following table:

Table 3: Responses of patients about overall Doctor Attitude

Responses	Absolutely	Yes	No	Don't
	satisfied (%)	satisfied	satisfaction	know
Time given by	17 (11.1%)	132	4 (2.6%)	-
doctor to patient		(86.3%)		
Doctor listen to	25 (16.3%)	124 (81%)	4 (2.6%)	-
your questions				
Happy with	30 (19.6%)	123	-	-
doctor attitude		(80.4%)		
Doctor able to	31 (20.3%)	117	3 (2%)	2
gain your trust	· ·	(76.5%)		(1.3%)

Guidelines and instructions given by the doctors at the end of consultation was satisfactory and absolutely satisfactory.

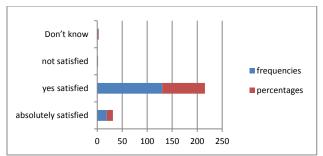


Figure 2: Responses of the patients about Instructions given by Doctor

Environmental cleanliness of dental department was satisfactory almost 95 %(satisfied and highly satisfied). Attitude of staff was also satisfactory around 97.7 %. On average 97 % patients were satisfied on the whole of dental care services, staff and cleanliness as shown in following table.

Table 4: Level of satisfaction about cleanliness of Dental Department, Staff Attitude and overall satisfaction.

Responses	Cleanliness of Dental Department	Staff Attitude	Patient's overall level of satisfaction
Absolutely Satisfied	22(14.4%)	23(17%)	19(12.41%)
Satisfied	123(80.4%)	127(79.7%)	129(84.31%)
Not Satisfied	7(4.6%)	1(0.7%))	4(2.61 %)
Don't Know	1(0.7 %)	2(1.6%)	1(0.67%)
Total	153(100%)	153(100%)	153(100%)

#### **DISCUSSION**

This study's primary goal was to ascertain how satisfied patients were with the care they received from the periodontology department of a tertiary care hospital. Hospital visitors were requested to complete a survey about the periodontology department's services.

This study has shown that the majority of patients attending the periodontology department were intelligent and educated (85.4%) and were high school graduates. It went against the belief that only those with lower levels of education seek dental care. A research found that 76% of college students who experience discomfort visit dentist clinics. (Dixit, Gurung, Gurung, & Joshi, 2010). While dental problems are inversely correlated with dental hygiene awareness (Gomes et al., 2015).

Any sector's structure improves the efficiency of the services provided. According to this survey, the majority of patients (94.7%) were extremely happy with the sanitation and amenities of the periodontology department. In addition to making patients satisfied, having a clean atmosphere is crucial for the hospital's reputation. (Whitehead, May, & Agahi, 2007). People were really delighted with the departments' structure, 5.3% of respondents to a poll of patients said they felt uncomfortable on a dental chair. According to a study, the patients' discontent was brought on by their fear of experiencing pain. (Armfield & Heaton, 2013). Due to the high standards for healthcare personnel' communication skills, promptness, and cleanliness in tertiary care hospitals, patient satisfaction may be lower. (McFarland, Shen, Parker, Meyerson, & Holcombe, 2017).

According to a poll, 60.7% of respondents were unsatisfied with how convenient the medications were at the hospital pharmacy. (Mattke et al., 2006). This low satisfaction rating might be related to the rise in demand for medications, which results in restricted supply and availability; as a result, patients are compelled to purchase their prescription medications from pharmacies outside of hospitals, which are regrettably more expensive. (Fenton, Jerant, Bertakis, & Franks, 2012). Almost 92 % patients were satisfied with the appointment procedures and timings. This is major contribution in overall patient satisfaction. This is also recommended by many studies that a definite

appointment schedule should be agreed and tracked by the dentists (Katre, 2014). On the other side around half of the patients were not satisfied about the waiting time required for consultation to start, same results are noticed in other researches too (Sur, Hayran, Yildirim, & Mumcu, 2004). In case of long stay in waiting room it should be comfortable and properly designed according to need of patients (Mahrous & Hifnawy, 2012)

The time given by the doctors to their patients about 97.4% was satisfied from their doctor's attitude(Newsome & Wright, 1999) while 2.6% were not satisfied and complaining of their conceited attitude(Wiggers, Donovan, Redman, & Sanson-Fisher, 1990; S. Williams, 1998). While whether doctors listen to the patient's questions, 97.1% showed their satisfaction and rest were distressed with their behavior. Regarding the questions that whether doctors gain patients satisfaction results shows that about 3.3% were not satisfied with this behavior of doctors. These highest ratings were noted to with regards to staffs temperament, approachability and politeness (Sun, Burnside, & Harris, 2010). According to research these quality indicators should be there to increase satisfaction level of patents (Griffith, Wilson, Langer, & Haist, 2003; McGilton, Robinson, Boscart, & Spanjevic, 2006). The effectiveness and calibre of medical care provided by the hospital's tertiary care periodontology department is anticipated to increase if and when these issues are resolved. This survey showed that 2% of patients were not satisfied with the instructions given by their doctors. But majority 98% showed that they were fully satisfied from their doctors. As realized by many researches that Attainment of Patient satisfaction is fundamental through improving quality of dental health services (Akbar & Pratiwi. 2016).

#### CONCLUSION

This study has demonstrated that patients are pleased with the services offered by the Department of Periodontology at Islamic International Dental College & Hospital in regards to availability, obtainability, and expediency. This study also revealed other areas where improvement may be made, such as the length of the consultation wait time. Reducing wait times for people who have scheduled appointments in advance is advised. In order to maintain the calibre of services, it is also advised that frequent surveys of patient opinions be conducted.

**Limitation of Study:** Study should involve data from multiple hospitals including Government and Private in order to have authentic and generalized results.

## **REFERENCES**

- Akbar, F. H., & Pratiwi, R. (2016). Patient satisfaction against the quality of dental health services at dental polyclinic of Tenriawaru general hospital in Bone regency. Journal of Dentomaxillofacial Science, 1(3), 352. https://doi.org/10.15562/jdmfs.v1i3.313
- Armfield, J. M., & Heaton, L. J. (2013). Management of fear and anxiety in the dental clinic: A review. Australian Dental Journal, 58(4), 390–407. https://doi.org/10.1111/adj.12118
- Beck, R. S., Daughtridge, R., & Sloane, P. D. (2002). Physician-patient communication in the primary care office: A systematic review. Journal of the American Board of Family Practice, 15(1), 25–38.
- Dixit, L. P., Gurung, C. K., Gurung, N., & Joshi, N. (2010). Reasons underlying the extraction of permanent teeth in patients attending Peoples Dental College and Hospital. Nepal Medical College Journal: NMCJ, 12(4), 203–206.
- Dutta, D., Calvani, R., Bernabei, R., Leeuwenburgh, C., & Marzetti, E. (2012). Contribution of impaired mitochondrial autophagy to cardiac aging. Mechanisms and therapeutic opportunities. Circulation Research, 110(8), 1125–1138. https://doi.org/10.1161/CIRCRESAHA.111.246108
- Fenton, J. J., Jerant, A. F., Bertakis, K. D., & Franks, P. (2012). The cost of satisfaction: A national study of patient satisfaction, health care utilization, expenditures, and mortality. Archives of Internal Medicine, 172(5), 405–411.

- https://doi.org/10.1001/archinternmed.2011.1662
- Gomes, A. P. M., Silva, E. G. da, Gonçalves, S. H. F., Huhtala, M. F. R. L., Martinho, F. C., Gonçalves, S. E. de P., & Torres, C. R. G. (2015). Relationship between patient's education level and knowledge on oral health preventive measures. International Dental & Medical Journal of Advanced Research VOLUME 2015, 1(1), 1–7. https://doi.org/10.15713/ins.idmjar.6
- 8. Griffith, C. H., Wilson, J. F., Langer, S., & Haist, S. A. (2003). House staff nonverbal communication skills and standardized patient satisfaction. Journal of General Internal Medicine, 18(3), 170–174. https://doi.org/10.1046/j.1525-1497.2003.10506.x
- Grol, R., Wensing, M., Mainz, J., Jung, H. P., Ferreira, P., Hearnshaw, H., ... Szecsenyi, J. (2000). Patients in Europe evaluate general practice care: An international comparison. British Journal of General Practice, 50(460), 882–887.
- Katre, A. N. (2014). Assessment of the correlation between appointment scheduling and patient satisfaction in a pediatric dental setup. International Journal of Dentistry, 2014. https://doi.org/10.1155/2014/453237
- Mahrous, M. S., & Hifnawy, T. (2012). Patient satisfaction from dental services provided by the College of Dentistry, Taibah University, Saudi Arabia. Journal of Taibah University Medical Sciences, 7(2), 104–109. https://doi.org/10.1016/j.jtumed.2012.12.002
- Mattke, S., Epstein, A. M., & Leatherman, S. (2006). The OECD Health Care Quality Indicators Project: History and background. International Journal for Quality in Health Care, 18(SUPPL. 1), 1–4. https://doi.org/10.1093/intqhc/mzl019
- McFarland, D. C., Shen, M. J., Parker, P., Meyerson, S., & Holcombe, R. F. (2017). Does Hospital Size Affect Patient Satisfaction? Quality Management in Health Care, 26(4), 205–209. https://doi.org/10.1097/QMH.000000000000149
- McGilton, K., Robinson, H. I., Boscart, V., & Spanjevic, L. (2006). Communication enhancement: Nurse and patient satisfaction outcomes in a complex continuing care facility. Journal of Advanced Nursing, 54(1), 35–44. https://doi.org/10.1111/j.1365-2648.2006.03787.x
- Newsome, P. R. H., & Wright, G. H. (1999). A review of patient satisfaction: 2. Dental patient satisfaction: an appraisal of recent literature. British Dental Journal, 186(4), 166–170. https://doi.org/10.1038/sj.bdj.4800053
- ORGANIZATION, D. of H. S. P. W. H. (2003). Quality and accreditation in health care. World Health.
- Saba, G. W., Wong, S. T., Schillinger, D., Fernandez, A., Somkin, C. P., Wilson, C. C., & Grumbach, K. (2006). Shared decision making and the experience of partnership in primary care. Annals of Family Medicine, 4(1), 54–62. https://doi.org/10.1370/afm.393
- Sun, N., Burnside, G., & Harris, R. (2010). Patient satisfaction with care by dental therapists. British Dental Journal, 208(5), 1–7. https://doi.org/10.1038/sj.bdj.2010.209
- Sur, H., Hayran, O., Yildirim, C., & Mumcu, G. (2004). Patient satisfaction in dental outpatient clinics in Turkey. Croatian Medical Journal, 45(5), 651–654.
- Vázquez, F. L., Torres, Á., Otero, P., Blanco, V., & Clifford Attkisson, C. (2019). Psychometric Properties of the Castilian Spanish Version of the Client Satisfaction Questionnaire (CSQ-8). Current Psychology, 38(3), 829–835. https://doi.org/10.1007/s12144-017-9659-8
- Whitehead, H., May, D., & Agahi, H. (2007). An exploratory study into the factors that influence patients' perceptions of cleanliness in an acute NHS trust hospital. Journal of Facilities Management, 5(4), 275–289. https://doi.org/10.1108/14725960710822268
- Wiggers, J. H., Donovan, K. O., Redman, S., & Sanson-Fisher, R. W. (1990). Cancer patient satisfaction with care. Cancer, 66(3), 610–616. https://doi.org/10.1002/1097-0142(19900801)66:3<610::AID-CNCR2820660335>3.0.CO;2-T
- Williams, L. (2016). Development of an Instrument to Measure Job Satisfaction among Dentists Author (s): Daniel A. Shugars, Ron D. Hays, M. Robin DiMatteo and Shan Cretin Published by: Lippincott Williams & Wilkins Stable URL: http://www.jstor.org/stable/3766101 Deve. 29(8), 728–744.
- Williams, S. (1998). Doctor-patient communication and patient satisfaction: a review. Family Practice, 15(5), 480–492. https://doi.org/10.1093/fampra/15.5.480
- Zalenski, R. J., & Raspa, R. (2006). Maslow's hierarchy of needs: A framework for achieving human potential in hospice. Journal of Palliative Medicine, 9(5), 1120–1127. https://doi.org/10.1089/jpm.2006.9.1120