



PATIENT MANAGEMENT IN A DENTAL UNIVERSITY CLINIC IN SOUTH INDIA – A COMPARATIVE STUDY

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ABSTRACT

Aim: To evaluate patient's perception towards patient management in a university dental clinic. **Objective:** To compare patient's perception involving treatment, management and environment in the clinic in a university dental clinic. **Background:** Receives a healthcare service and is in need of a health care provider due to his/her injury. Providing treatment is not just treating the medical problem but also environment, behaviour and satisfaction provided by the doctor to the patient during the course of the treatment. Patient satisfaction is often used as a parameter to measure performance while evaluating health care quality. **Reason:** The reason of this study to assess patient satisfaction is to try and better it any way possible.

KEYWORD: To evaluate patient's perception towards better it any way possible.

INTRODUCTION

In the current patient-orientated environment, patient surveys are widely used to assess needs and levels of satisfaction.^[1] Patients satisfaction is gaining attention as it appears be a critical factor in health outcomes.^[2] Patients who are satisfied with their care have greater trust in their health care provider making them more adherent to treatment which in turn brings about better treatment outcomes.^[2] From time to time, for a dental practice to succeed, it is important to assess the needs and levels of satisfaction of the patient.^[1] Previous studies^[3] have focused on evaluating technical competence of dentists, and neglected to investigate the bridge between the dentists' and patients' perception of 'ideal care'. John J (2011) concluded that "simply practicing dentistry with a high degree of technical expertise will not necessarily convince the patient that he/she has received high quality dental care".^[4]

Defining patient satisfaction as a construct is a complex task that involves numerous factors.^[5] Assessment of physician performance and overall quality of care is determined by both objective features (e.g., accessibility of services, technical expertise, and continuity of care) and more subjective features (eg, perception of pain, perception of how caring a provider is, and how effectively he or she communicates with a given patient).^{[6][7]} Furthermore, a direct relation was found between education level and patients' satisfaction, and low income group consistently produced low satisfaction scores.^{[8][9]} However, features such as neatness, comfort of seating, magazine selection, and background music of

the clinic facilities have been reported to influence patient perceptions.^[10]

Even though, research has shown that patient satisfaction is significantly decreased in large hospitals, teaching hospitals, hospitals with restrictive autonomy and privacy, and hospitals without efficient teamwork^[11], a significantly high level of satisfaction was found by the patients' responses that showed the trust and level of comfort toward the interns. After several questions put forward to the patients to evaluate the satisfaction towards treatment, doctor's behaviour, and clinical environment. Although no significant observation was made among all the variables, a high level of patients' satisfaction was found towards the interns.^[12] Although the quantity and, in many cases, the quality of research on the practitioner-patient interaction has improved over the last 10-15 years, many related topics remain largely unexplored {15}. In this study, we aim to evaluate the level of patient satisfaction while being treated by different operators in an undergraduate clinic.

STUDY POPULATION

30 patients treated by undergraduate dental students belonging to internship, 4th, 3rd years each, a total of 90 patients in a university dental clinic in south India.

MATERIALS AND METHODS

A group of thirty patients randomly selected, each treated by the interns, 4th and 3rd year dental students respectively under faculty supervision, are subjected to a comparative study. A self-formulated questionnaire was

distributed to the randomly selected patients. The questionnaire was used to assess the patient's treatment, behaviour, environment and satisfaction with the interns, 4th, 3rd year practitioners at the college in the university clinic. Various other questions such as the age, gender, education and income were also collected. The questionnaire was drafted in English and Tamil for the convenience of the local population.

A feedback form was also distributed to the patients treated by all the dental students in the clinic where they were asked to grade the overall experience on a scale of 1 to 10, one being the worst and ten the best. The data collected is entered and analysed using SPSS.

RESULTS

TABLE: 1 Participants' satisfaction on patient-dentist interaction.

	Agree		Strongly Agree		Disagree		Strongly disagree	
	N	%	N	%	N	%	N	%
Pain free treatment and relaxed physical state	36	40%	35	39%	19	21%	0	0
Universal protection procedures followed by the dentist	36	40%	49	54.4%	3	3.3%	2	2.2%
Waiting time	41	45.6%	31	34.4%	18	20%	0	0
Proper explanation of the treatment plan	41	45.6%	39	43.3%	6	6.7%	4	4.4%
Proper time allocation for the treatment	53	58.9%	29	32.2%	6	6.7%	2	2.2%
Time management by the dentist according to the patient	36	40%	29	32.2%	23	25.6%	2	2.2%
Reasonable and complete treatment plan	51	56.7%	32	35.6%	7	7.8%	0	0
Patient compatible appointment timings	49	54.4%	30	33.3%	10	11.1%	1	1.1%
Satisfaction with the treatment of the chief complaint	55	61.1%	27	30%	5	5.6%	3	3.3%
Rescheduling with the same dentist	49	54.4%	30	33.3%	6	6.7	5	5.6%

On average, 61.1% of the patients agreed that they were satisfied with the manner in which their chief complaint was dealt with.

Most of the patients seem to be satisfied, except that about 64.5% of the patients had to wait for a longer period of time for their respective treatments.

Table 2: The physical characteristics of the study subject (patient) are as follows.

	N	MEAN $\pm$ STD.DEVIATION
AGE	90	36.56 $\pm$ 14.809

In this study, the average age of respondents is 36.56 $\pm$ 14.809

From this pie chart we are able to easily see that "Agree" takes up most of the chart and therefore, most of the patients were of the opinion that the dentist were understanding and compatible with the work schedule of the patients. By referencing the box above the pie chart we can also determine exact percentages and frequencies which say that 54.4% patients agree and 1.1% say that the students are not compatible with their work schedule.

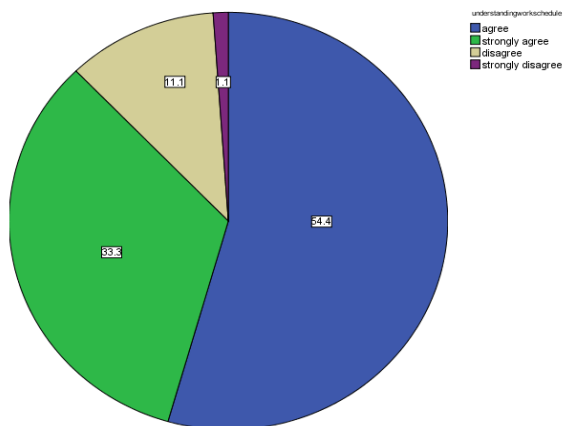


Figure 2: Appointment timing compatibility with work schedule of patient.

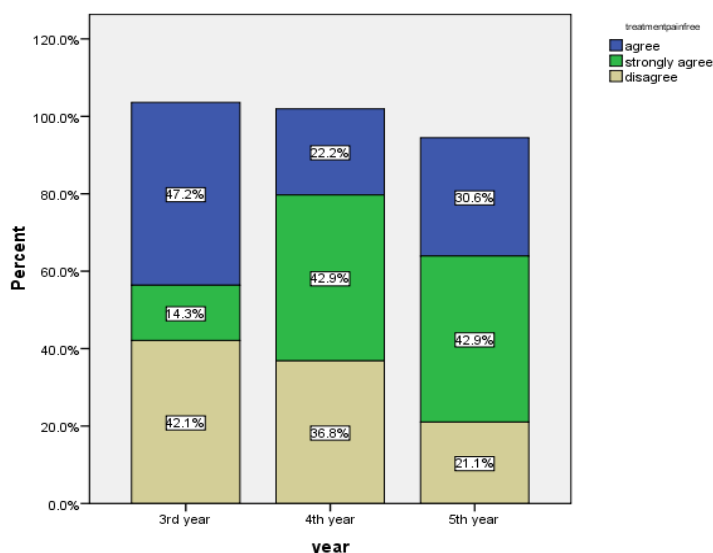


Figure 3: Pain Free Treatment Versus Different Year Of Undergraduate Students.

The above bar graph represents pain free treatment against the different 3rd and 4th year and intern students. It is prominent from the diagram that the patients 42.9% treated by 3rd, 4th year and intern students strongly agree that the treatment was pain free and relaxing. About 47.2% of the patients from 3rd year undergraduate clinic agreed that the treatment is pain free.

Kruskal-Wallis Test

Kruskal-Wallis test is used for comparing two or more independent samples of equal or different sample sizes.

Hypothesis

H₀: There is no significant difference between satisfactory score and different year of students.

H₁: There is significant difference between satisfactory score and different year of students.

Ranks			
	Years	N	Mean Rank
Satisfactory_ scores	three-year	30	32.88
	four-year	30	55.58
	five-year	30	48.03
	Total	90	

The mean Rank of the patient perception score for each year of students can be used to compare the different year of students.

Test Statistics ^{a,b}	
	Scores
Chi-Square	11.822
df	2
Asymp. Sig.	.003
a. Kruskal Wallis Test	
b. Grouping Variable: years	

A Kruskal-Wallis H test showed that there is a statistically significant difference in patient perception

score between the different year of students, $\chi^2 (2) = 11.822$, $p=0.003$, with mean rank patient perception score of 32.88 for 3rd year, 55.58 for 4th year and 48.03 for 5th year.

DISCUSSION

Being service providers, dental professionals should satisfy their dental patients.^[13] Teaching dental hospitals, originally envisioned as similar to private practice, evolved instead as teaching hospitals. In the former, graduate and licensed dentists perform the treatment while undergraduate dental students are assigned treatment within their capabilities. In the latter, dental students provide the treatment under faculty supervision. It is generally recognized that the care provided by the teaching hospitals is inefficient.^[14] However, in the last quarter of the twentieth century, teaching dental hospitals began to pay much more attention to how treatment is rendered. The comprehensive care movement and quality assurance systems are leading towards more efficient patient-centered care. Case studies at the University of Maryland, Columbia University, and University of Louisville describe activities to make their clinic programs more efficient and patient-friendly.^[14]

The relationship of the similarity of practitioner and patient preferences to treatment adherence has not been carefully investigated, either in a medical or dental setting.^[15] From the study results it is clearly seen that 54.5% of the dentists were compatible with the patients work schedule. About 32.2% strongly agreed and 40% agreed that the dental students also tried to complete as much of the treatment possible in one sitting, more than 55% of the patient agree that the treatment plan was reasonable and feasible for the preferences for a dental appointment which assessed the impact of the ability of the practitioner to be compatible and their adherence to the recommended treatment regimen, indicated that it is a very significant predictor of patient satisfaction. It also

showed an improvement in oral hygiene behaviour, and actual improvement in objective dental health. This lets us deduce that patient satisfaction is in turn an independent predictor of reported positive behavioural change and improvement in dental health.^[16,17]

In comparison with all three years of study, about an average of 46% of the patients agree that the treatment rendered was pain free. Also according to the feedback form distributed by the college patients were more satisfied with the fifth years (mean =9.35) than with the fourth years and third years (means =8.63 and 8.20, respectively). In a similar study, results indicate that the vast majority of the patients surveyed are satisfied with the facility, services and treatment received. Comments that addressed areas of concern included the length of time to get an appointment and the length of time the appointment took, and it was recommended that the process of treatment be expedited.^[18]

An average of 42.5% of the patients belonging to all the three years of study have agreed to reschedule with the same dentist. A study (Bamise CT, 2008) done indicates that most frequently reported reason for wanting to be a patient at the dental school was low cost (67%) followed by up-to-date care (19%), at least 80% responded positively. 99% indicated they would recommend the dental school to others seeking dental care.^[19]

CONCLUSION

It is concluded that patient satisfaction provides a dependent measure of service quality and also serves as a predictor of health-related behaviour. Also, despite the significant variations among the cultural and ethnic structures of different societies, personal interactions with the dentist have priority in establishing a satisfying dental service.^[13]

The findings in this study showed that there is a statistically significant difference in patient satisfaction score between the different year of students ($p=0.003$). The mean rank of the score being 32.88 for 3rd year, 55.58 for 4th year and 48.03 for interns was calculated. A surprising but enlightening conclusion can be drawn where the 4th year students provide better satisfaction to the patients in spite of having less experience and practise as compared to the interns. It is known that there is always room for improvement and therefore the dental health care providers along with the dental school must strive to provide the best to its patients, as patients come first.

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