# Correlation Assessment of Patient Satisfaction to Appointment Scheduling in a Pediatric Dental Setup

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#### Abstract

**Background:** Time management is planning activities and operations across the schedule to ensure an efficiency and effectiveness. A successful dental practice is dependent on good clinical skills and execution as well as a good administration. Time management while handling pediatric patients requires patience and skills, and essentially plays a key role in the successful execution of scheduled activities.

**Objectives:** The aim of the study is to understand the parameters related to appointment scheduling that improve patient satisfaction and assess the co-relation between them.

**Materials and Method:** A sample size of 50 patients was taken for the study. A questionnaire was prepared which consisted of 6 sets of questions with a rating scale of 1-5. The data was analyzed to assess the patient satisfaction with respect to appointment scheduling.

**Results:** Based on the survey conducted, the existing appointment scheduling was favorable for significant range of patients, apart from a few exceptions.

**Conclusion:** An efficient scheduling of dental practice can help the Pediatric dentist and ensures dental office team to be time efficient, systematic at work with heightened productivity.

Keywords: Pediatric dentist; Appointment scheduling; Patient satisfaction; Dental setup; Time management

## Introduction

"Knowledge is of no value unless you put it into practice"

Anton Chekhov

Paediatric dentists unquestionably have the responsibility to educate and advocate for a childhood free of pain and dental disease for all children regardless of nationality, ethnicity or socioeconomic background. The practice of modern paediatric dentistry requires delivery of quality care in combination with adherence to excellent business and management principles. Today's paediatric dental practitioner should be clinically astute and knowledgeable about consumer needs and demands, government regulations, third party participation, and so forth, aspects which may not have been taught in a dental school.[1]

Practice management can be defined as "the organization, administration, and direction of a professional practice in a style that facilitates quality client care, efficient use of time and personnel, reduced stress to staff and financial portability."The

dental practitioner thus should maintain a balance between patient care and business requirements while keeping moral, ethical, legal, and professional responsibilities in proper perspective [2, 3].

Paediatric dentistry is a unique specialty of dentistry as the patient, in the said case a child patient, cannot come alone to the dental clinic for his/her treatment but has to be brought by the parents who seek dental care for their child. Hence, the schedule of appointments and related processes will have to be discussed with the parents. [4]

To guide the parents into choosing the best suited appointment, the receptionist should be prepared with the relevant information to justify the time of scheduling [5]. Morning appointments are preferable in young patients as they are fresh and active. The length of the appointment should be as short as possible (not greater than 30 minutes). The children should not be made to wait too long in the waiting room as they tend to get restless with passing time. Long waits for appointments decrease patient satisfaction [6]. A definite schedule, preferably

designed in advance for individual patients, based on the magnitude of the dental problem and its subsequent management should be presented to the parents on the first or second appointment. More importantly, the prescribed schedule should be followed to the best of the professional abilities of the paediatric dentist. [7]

Appointment scheduling systems lie at the intersection of efficiency and timely access to health services. Timely access is important for realizing the desired medical outcomes. It is also an important determinant for patient satisfaction [8]. The goal of a well-designed appointment system is to deliver timely and convenient access to health services for all patients. Appointment systems also ensure smooth work flow, reduce crowding in waiting rooms and at the same time allow health systems to honour patient and provider preferences while meeting the demand in a timely manner. All these factors go a long way in promoting patient satisfaction and at the same time ensure improvement in the quality of dental care given to the child [9].

# **Materials and Methods**

The present survey was conducted at the department of Paediatric and preventive dentistry, Rama Dental College, Hospital and Research centre, Kanpur, Uttar Pradesh with random selection of subjects. A sample size of 50 children, age ranging from 8 to12years and their parents were included in the study. Only those patients and their parents were included who had reached or were in the process of reaching the completion of their prescribed treatment. These patients were treated and appointed by Post graduate students. Necessary permissions were obtained from the institution and consent of the participants was taken prior to the start of the study.

A survey with 5 sets of questions (Table-1) was conducted and patient satisfaction assessment was done by recording their response in Likert rating scale of 1-5. The parents of the selected patients were interviewed and the meaning of the questions along with the criteria of the rating was explained to them. They were instructed to fill out the questionnaire in isolation, ensuring the absence of any operator or another parent to check any biases in rating. The parent's identity was kept confidential by instructing them not to write their names or putting their signatures on the form. The parents were encouraged to give their valuable comments/suggestions for improving the services provided by the department. The filled data was collected by the researcher; tabulated and evaluated statistically.

### Results

The response by the parents was awe-inspiring and of all the 50 parents selected, each and every one eagerly took part in the survey. A response regarding appointed scheduling was noted, data was gathered and following results were obtained: -

- 1. Table 1- Questionnaire
- 2. Table 2- 5 Point Rating (Likert Rating)
- 3. Table 3- % distribution of patient satisfaction related to the parameters of the questionnaire

Table 1- Appointment Scheduling Questionnaire Rating Scale

- (1) Not at all happy
- (2) Not happy
- (3) Neutral
- (4) Happy
- (5) Very Happy

Questions	1	2	3	4	5
Rate your experience in getting					
the appointment					
Rate your satisfaction with the					
number of appointments for					
the prescribed treatment					
Rate your satisfaction with the					
duration of each appointment					
Was the appointment schedule					
given to you Followed while					
doing the treatment?					
Rate your experience related to					
the average waiting time?					

Any suggestions/comments: -



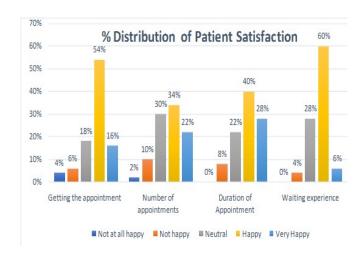
Table 2-5 Point rating (Likert Rating)

		int rating (i		
Q1.	Q2.	Q3.	Q4.	Q5.
1	3	2	4	2
2	4	3	5	2
5	5	4	5	3
5	4	5	5	5
5	4	5	5	4
3	3	3	3	4
4	4	4	3	3
4	5	4	4	4
4	4	5	4	4
3	4	4	4	4
3	3	3	5	4
4	3	4	4	4
4	5	5	4	4
4	4	4	4	4
4	3	3	5	3
3	4	5	4	3
3	4	5	4	3
2	4	4	4	3
3	5	4	5	3
4	4	3	4	4
2	4	3	3	4
4	2	4	4	3
4	3	3	4	3
5	4	2		4
4	4	3	5 3	4
4	3	4	3	4
1	3	4	3	3
5	3	4	4	4
4	2	4	2	4
4	2	4	2	4
4				
	3	3	4	4
4	3	2	3	5
4	3	4	3	4
4	3	3	4	4
4	3	3	4	4
4	4	3	4	4
3	2	5	2	4
4	2	5	4	4
5	4	4	3	4
4	4	4	3	5
3	2	1	5	4
5	3	2	3	3
4	4	2	5	3
4	4	5	5	4
4	4	5	5	4
3	4	3	2	4
5	4	5	5	3
4	4	3	4	3
4	4	3	5	4
3.66	3.40	3.58	3.82	3.62
3.00	5.40	5.58	5.82	3.02

The mean rating for (Q.1) was 3.66, which indicates that the parents were neutral (neither satisfied nor dissatisfied), with the average/majority inclination more towards being satisfied in getting the appointment for the treatment. For (Q. 2) that was related to the number of appointments for the procedure, the average rating was 3.40 which indicated that majority of the patients were inclined towards a neutral rating. For (Q. 3) that was related to the duration of each appointment, the rating of 3.58 indicated that majority of the patients decided being neutral. For (Q. 4) that was related to the adherence to scheduled appointment, the rating was 3.82 that indicated that most patients were satisfied with this parameter. For (Q. 5) that was related to waiting experience, a rating of 3.62 was indicative of neutral to happy feeling of the patients towards this parameter.

Table 3: % Distribution of patient satisfaction related to the parameters of the questionnaire

	Not at all happy	Not happy	Neutral	Нарру	Very happy
Getting the appointment	4%	6%	18%	54%	16%
Number of appointments	0%	12%	30%	48%	8%
Duration of appointment	2%	10%	30%	34%	22%
Appointment schedule	0%	8%	22%	40%	28%
Waiting experience	0%	4%	28%	60%	6%



#### Discussion

The scheduling of appointments is of utmost importance in a paediatric dental setup. This is mandatory to deliver quality health care in an effective and efficient manner to the child patients [1]. In addition, the scheduling of an appointment and how well the schedule is followed for a child patient is directly correlated to the behaviour management plan parallel with chronological age and, thus, should be considered while devising and presenting the treatment plan [9]. Across the globe, various systems have been devised and studied to improve the appointment scheduling systems so as to render quality treatment to patients. Most of these systems have been studied in reference to the various branches of medicine, but there is a paucity of literature related to paediatric dentistry. Most of these systems have concluded that though appointment scheduling does help to improve the quality of health care delivery, not all the systems may be patient friendly and variable, in terms of patient satisfaction with these systems [8, 10, 11, and 12].

In the study conducted, it was found that majority of the patients were satisfied with the current appointment system that was being followed in the Department of Paediatric Dentistry, Rama Dental college and Hospital. However, there was a group of the parents who were dissatisfied with the current appointment system, especially related to the process of procuring the appointment and the duration of each appointment. This dissatisfaction could possibly be related not being able to get appointments of their choice, which is not possible every time in a paediatric dental setup owing especially to the fact that the timings of the dental hospital entail the child to take a leave from school. The dissatisfaction could also be linked to operator variation, especially related to duration of the appointments, as each operator may not possess the same competency or efficiency as another operator in terms of various factors including time management. Also, in a typical paediatric dental setup, the appointment cannot be extended beyond a particular duration (ideally not more than 30 minutes) which could be disliked by certain patients, considering the fact that they may have travelled a considerable distance to reach the hospital.

A group of patients were neutral, which indicated that if the department can refine the appointment scheduling systems it will definitely improve the rating of the overall experience and could elevate the patients falling under the neutral category to the satisfied category. The parameters which differentiated satisfied patient group to neutral

group were number of appointments, appointment schedule implementation and waiting experience.

In the study conducted, an assessment of the answers given by the parents under the subheading of "Any other comments/suggestions" showed that majority of the parents stressed on the number of appointments and the average waiting time.

#### Conclusion

Practicing paediatric dentistry is a culmination of art, science and business. Having good skills of time management is as essential as having good clinical skills. Maintaining the standards of appointment scheduling system can be done by periodic reevaluation.

This study had a beneficial impact of establishing a communication bridge that helped understand the concerns of the parents towards the appointment scheduling system followed in the department. This reciprocal relationship builds trust between the Paediatric dentist and the parents.

However, to satisfy the patients in relation to all aspects of health care delivery system is the real challenge. Further studies on appointment scheduling using different parameters like age, gender, occupation of parents, and so on and so forth and their correlation with parent satisfaction needs to be conducted.

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