

# Between the Cup and the Lip: Missed Dental Appointments

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## ABSTRACT

**Introduction:** Missed appointments are an issue which have been very commonly noticed but overlooked in Indian dental society. Almost every dentist, general or specialized, private or public, has faced this problem in routine practice but very less research has been conducted on this issue in Asian countries.

**Aim:** The aim of this study was to determine the frequency and distribution of missed dental appointments among children and the reasons behind the non-attendance in department of paediatric and preventive dentistry.

**Materials and Methods:** Patients under 15 years of age who reported during the period March through August 2014 were included in this study. Attendance data and demographical data for patients was obtained from patient records and the hospital database. The type of treatment patients were to receive was gathered from the appointment diaries of staff, postgraduate students and undergraduates. A structured questionnaire

regarding the most frequent reasons given by patients for not attending the scheduled appointment was also prepared. The data were analysed using descriptive analysis.

**Results:** Of the total 2294 patients 886 patients failed to come on their scheduled appointment. Percentage of patients who missed their appointments was 38.6%. A 38.2% of them required primary teeth pulp therapy. No significant differences was found between genders regarding the prevalence of missed dental appointments. Only 40% dentist witnessed that the most common reason for their patients to miss dental appointment was "no leave from school". Illness was the second frequent excuse heard by dentists (5/20= 25%) from their patients and attendants.

**Conclusion:** Missed dental appointment was found to be a common issue in paediatric age group. Counseling and motivation is required to be done at first dental visit to reduce the chances of missed appointment.

**Keywords:** Children, Missed appointment, No leave from school, Pulp therapy

## INTRODUCTION

Dental caries is the most important oral health and financial burden. An extensive National Health Survey was conducted in 2004 throughout the entire country of India to report the percent prevalence of dental caries for the various age groups. The reported percent prevalence was 51.9% in five-year-old children and 53.8% in 12-year-old children [1]. Gupta et al., reported a prevalence of 37.66% of dental caries in urban and rural children in Jaipur (Rajasthan) [2]. To control the occurrence of oral diseases in children, integration is required between the dental practitioner, patient and the parent. Missed appointments are an issue which has been very commonly noticed but overlooked in Indian dental society. Almost every dentist, general or specialized, private or public, has faced this problem in routine practice but very less research has been conducted on this issue in Asian countries. It has been reported that frequency of failed appointments can be as high as 43.8% [3-6].

The impacts of missed dental appointments are not that simple as they seem to be. Patient is not only denying dental care to himself but also the opportunities are foregone to provide care to other patients. Failed attendance may also have economic impact on practitioners or organization when scheduled hours go unattended and unpaid while the staff is being paid which results in reduced tangible productivity. In a university setting, the academic requirements, clinical experiences and operating hours of dental students are affected resulting in graduating them without adequate clinical training to meet the dental demands of society [7].

The issue of missed dental appointments can be attributed to a variety of reasons. Lack of time, forgetfulness, transport difficulties, illness, pre occupation in school are the most frequent excuses

given by the parents [8,9]. Dental anxiety in children has been associated with missed appointments by some authors [10].

Firstly it is necessary to find out the prevalence and distribution of this behaviour, then we will be able to explore possible characteristics of individuals with high frequency of missed dental appointments.

## AIM

The ultimate aim of this study was to determine the frequency and distribution of missed dental appointments among children and the reasons behind the non-attendance in department of paediatric and preventive dentistry.

## MATERIALS AND METHODS

A retrospective study was conducted in OPD of Department of Paediatric and Preventive Dentistry in RUHS College of Dental Sciences, the only government run dental institution in Rajasthan. This study included 4982 patients less than 15 years of age who reported during the period March through August 2014. Attendance data and demographic data for patients was obtained from patient records and the hospital database. The type of treatment patients were to receive was gathered from the appointment diaries of staff, postgraduate students and undergraduates. The data utilized in this analysis are routinely collected and therefore ethics approval was not required. All the information gathered was then reviewed to obtain the following information;

1. Total number of paediatric patients registered in OPD,
2. Total number of appointments issued,
3. Total number of missed paediatric dentistry appointments,
4. Percentage of missed appointments {(no. of missed appointments/no. of scheduled appointments) X 100},

5. Distribution of missed appointments according to the treatment plan and gender.

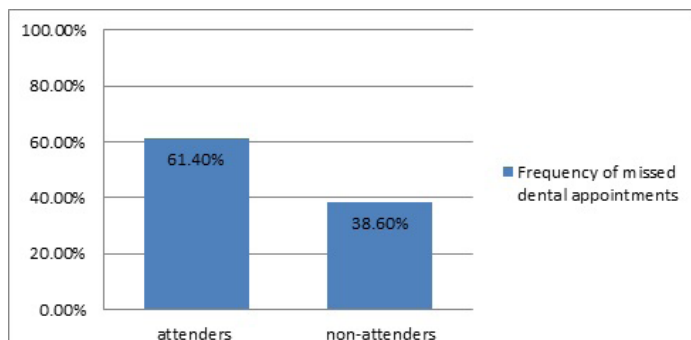
A structured questionnaire regarding the most frequent reasons given by patients for not attending the scheduled appointment was also prepared. The questionnaires were then circulated to all staff and students in the department and asked to tick the most frequent excuse given to them by patients and their parents. Upon completion, the questionnaires were collected and the data was analysed.

All the data collected was then transferred to the computer for analysis using IBM SPSS Statistics 21 32 bit for Windows. Descriptive statistics including percentage and frequency of factors for broken appointments were assessed.

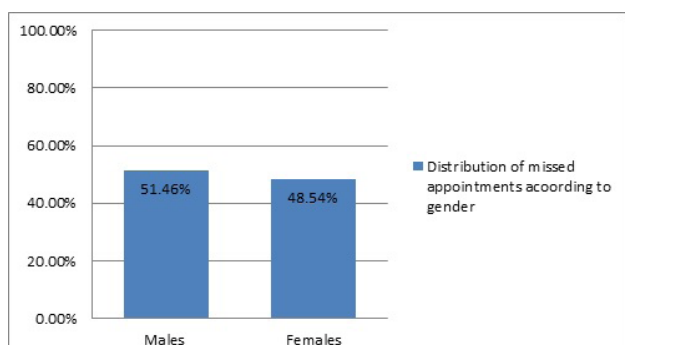
**RESULTS**

From the data collected, it was deduced that out of total 4982 outpatients, 2294 appointments were given. Out of them, 1408 patients succeeded to make their appointment while 886 patients failed to attend [Table/Fig-1]. Out of total missed appointments (886), 456 patients were males and 430 were females [Table/Fig-2]. Among patients missing their appointments, 38.2% children were those who were issued dental appointment for primary pulp therapy [Table/Fig-3].

Total of 60 completed questionnaires were obtained from the staff members and students of Pedodontia Department of Dental Colleges in Jaipur. A 35% dentist witnessed that the most common reason for their patients to miss dental appointment was "no leave from school" [Table/Fig-4]. Illness was the second frequent excuse heard by dentists (14/60= 23.3%) from their patients and attendants.



[Table/Fig-1]: Frequency of missed dental appointments.



[Table/Fig-2]: Distribution of missed appointments according to gender.

Pulp therapy		Space maintainer	Extraction	Crowns	Restorations	Others
Primary	Permanent					
338	172	110	106	74	40	46

[Table/Fig-3]: Distribution of missed appointments according to the treatment plan.

**DISCUSSION**

Most studies have found that patients of 45 years and over and paediatric patients were most likely to miss their scheduled

BCC subtype	
a) Illness	14
b) Lack of transportation	1
c) Lack of time	7
d) Financial constraints	3
e) No leave from school	21
f) Parents don't understand the treatment	0
g) Anxiety regarding dental treatment	2
h) Not interested in their dental condition	1
i) Forgot about the appointment	3
j) Exams or unit test	8

[Table/Fig-4]: Study Questionnaire (Reason for no-show).

appointments [9]. The present study have shown a high prevalence of missed dental appointments about 38.6% (886/2294) among paediatric dental outpatients. This is in accordance with Skaret E et al., who reported 47% of the study group (12-18 year old) had missed one or more dental appointments [5]. Helen D Rodd et al., also found a high rate off missed appointments (22.4%) among cleft palate children in paediatric dental clinic [11]. It can be estimated that total standstill for the dental team was 443 hours which represent more than 50 days of dental treatment if each of these appointments represent half an hour. Hallberg et al., have also pointed out that missed dental appointments represent a part of the dental care that is extremely cost inefficient. The estimated time on a yearly basis is equal to a full-time working dentist (average sized clinic) [12].

In this study, gender did not play a very significant role in determining whether or not patients missed their dental appointments. Although in some studies, it was observed that males had higher frequency of missed dental appointments than females [5]. Conversely George et al., concluded that males are more prompt in attending recall appointments as compared to females [8].

Among patients missing their appointments, 38.2% children were those who were issued dental appointment for primary pulp therapy. It can be attributed to the length of the procedure and multiple appointments needed for pulp therapy. It has also been observed earlier that the longer time taken during dental treatment and multiple treatment visits are possible factors [13]. Bhagat D et al., have shown that parents lack knowledge regarding the importance of primary teeth and identification of the carious lesion [13].

This finding indicates that when routines for recalling children are devised, more comprehensive reminder systems would be appropriate for children anticipating pulp therapy. Reminding patients, by telephone, post (mail) or voice messages reduce broken appointments and personnel time wasted [14]. Recently electronic media have shown immense advancement and can be used as an aid in leaving reminder texts or pictures. Reminder systems require resources, but directing these towards children with dental problems who are more likely to miss appointments would increase their cost-benefit ratios. Thomas et al., stated that missed appointments have considerable economic impact for service providers and may seriously compromise the patient's own health and treatment [15].

No leave from school, illness, exams or unit test, busy parents, transportation difficulties and urgent work for parents are the most frequent excuses given by patients and their parents. Potential barriers explaining the reasons regarding parental failure for bringing their children to the dental clinic had been identified by some authors. These barriers can be lack of knowledge of parents regarding the importance of oral health, treatment cost, treatment time, missing school, daily work load, fear from dental treatment and multiple visits [13].

George et al., found that lack of time was the most common reason for non-attendance [8]. Missed appointments may result in increased provider frustration, decreased levels of provider empathy and lower quality, patient-provider communication.

## LIMITATION

The present study included limited number of patients over a short period of time. Timing of study (March-April) typically falls in examination period of schools. Children are busy studying and are likely to miss more appointments during this period. The database is of a hospital where working is in one session (morning) only so children have to miss school, and parents have to miss office. A large number of children come from economically backward background where parents are working in unorganized sector. A day of no work may mean no pay.

A similar study over a longer duration involving larger sample size may reflect patient compliance better. By doing so, various other reasons of not attending the dental appointments by paediatric patients may emerge.

## CONCLUSION

Missed dental appointment was found to be a common issue in paediatric age group. The key in dealing with the issue of missed dental appointment lies in altering patient and parent's psychology during the first appointment. Counseling and motivation is required to be done at first dental visit to reduce the chances of missed appointment.

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