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Research Article

**EVALUATION OF FACTORS INVOLVED IN MISSED DENTAL
APPOINTMENTS BY ADULTS IN PAKISTAN: A CROSS-
SECTIONAL STUDY**¹Dr. Kinza Qureshi , ²Dr. Ammad Ashfaq , ³Dr. Asfa Anwar, ⁴Dr. Hafiza Syeda Mahnoor
Gillani¹722384-03-D²742934-03-D³715425-03-D**Abstract:**

Objective: This research sought to quantify the frequency of missed dental visits at PIMS in Islamabad and evaluate the contributing variables.

Methods: Data was gathered utilizing questionnaires from 50 dentists and 155 patients who were chosen at random. The frequency of this problem and its underlying causes were revealed via analysis of the data from these surveys. The information gathered from two private clinics' appointments and financial records was then compared to that from patients' and dentists' surveys.

Results: The average number of missed dental visits is 22.5%. Patients said that anxiety about discomfort and unexpected circumstances were the two most frequent excuses for skipping dental visits. The most important variables were the patient's age, income, education, if they were in discomfort and their psychological state. The findings indicated that missed dental visits cost a dental facility significantly each day.

Conclusions: The proportion of missed dental visits was determined to be unacceptable due to its detrimental effects on all parties concerned. The initial visit is when patients' psychology may be changed and missed dental appointment rules should be put in place after that.

Keywords: missed appointment, missed appointment, dental appointment

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INTRODUCTION:

Although this problem has been acknowledged for some time, there hasn't been much study done on it. It is characterized as a patient's or practitioner's failure to show up at the scheduled time and location without notifying the scheduler at least 24 hours in advance. Due to unexpected circumstances, there are occasions when a patient really must cancel or miss a dental visit. In general, people are considerate of the dentist's time and show up on time for appointments. There are those patients, however, who constantly manage to come up with a reason to cancel or skip their dentist appointment.

The majority of the study on this topic was done in Europe and USA. [1,2,3] In Africa, Asia, and the Middle East, where dental appointment cancellations are more frequent, very few studies have examined the problem. Missing a dentist or medical appointment might have more serious repercussions than you would think. There is always a decrease in the effectiveness of the organization in issues, but there are additional considerations when it comes to appointments for medical and dental care. [4,5] Patients who fail to show up for their dentist appointments deprive themselves of necessary if not urgent, dental treatment. [6] In addition, by skipping the appointment, the patient is depriving others of the opportunity to get dental treatment. Additionally significantly impacted by this problem are dental practices, hospitals, their personnel, and their suppliers. When this issue is connected to an academic environment where dental students are required to schedule appointments with patients as part of their clinical training, it has even more detrimental impacts. [7-12] As a consequence, dental students may only partly fulfill their educational medical prerequisites and may not graduate as dentists with enough clinical experience to address society's dental needs. [13,14] Patients who need and deserve high-quality dental treatment are not getting it. Dentists are moreover expected to deliver a degree of care for which they are not sufficiently qualified. Many things may be done to address this problem, but before any remedies are offered, rigorous study and investigation are needed to fully comprehend the problem. [15,16,17]

The final objective of this study is to provide precise instructions and remedies to lessen missed dental consultations. These answers can only be offered once this problem has been examined in its entirety and analysis has been done on evidence that has been objectively gathered from all parties involved.

METHODS:

Study Design: PIMS Islamabad hosted this study from January to April of 2023. Data has to be acquired from everyone concerned to correctly analyze the problem of missing dentist visits and draw reliable findings. Patients and dentists are the two major parties in a dental visit. Data from both sides had to be gathered for analysis. Questionnaires were chosen as the best tool for gathering data.

When compared to, say, an interview, a questionnaire had the benefit of offering a substantial quantity of data with far less uncertainty. Because questionnaires were completed anonymously, they also resolved the problem of the researcher influencing the subject's replies. One questionnaire was designed for dentists, while the other was for patients. After testing these surveys on volunteers, adjustments were made in response to feedback. It was agreed that to reach results that could be applied to the whole community, the data of 50 dentists and 155 patients as a sample would be needed.

The ratio of patients to dentists was substantially larger since it was thought that people were more likely to skip dental appointments than dentists. In contrast to a patient, a dentist is far more likely to appear for a scheduled appointment. The sampling strategy used was simple random sampling. Before they were gathered, every questionnaire was reviewed for completeness. This wasn't the only technique employed to gather data. To understand how common, the problem of missing dental visits is on a concrete and realistic basis, data were also gathered from two private clinics.

To remove any bias, the data was gathered in secret from the dentists working at the chosen clinics in Islamabad. The administration of these dental clinics granted permission to gather data as long as the clinics' information would be kept private. The information gathered was based on daily appointment volume, daily missed appointment volume and daily revenue loss from missed appointments. It was crucial to determine the percentage of daily missed dental appointments compared to daily totals as well as the financial impact on dental practices. This element of data collecting provided insight into the financial issue that missed dentist visits caused.

RESULTS:

According to patient replies to surveys, 33.3% of dental visits and 17.1% of dental appointments, respectively, were missed, according to the data gathered from those questionnaires. Clinics that were surveyed found that 17.4% of scheduled appointments

were missed on average. A minimum of one out of every five dentist visits is therefore missed.

Table 1: Patient-Related Factors in Questionnaire Design

PATIENT FACTORS
Sex
Gender
Education Level
Income Level
Past Experience with a dentist
Dental emergency experience
Pain Element
Keeping away from the dentist
Trust in the judgment of the dentist
Past Missed Dental Appointments
Patient Feedback on Dental Missed Appointment Guidelines

Table 2: Dentist-Related Factors in Questionnaire Design

	DENTIST FACTORS
Experience	Specialist/ Practitioner
Work Place	Private/Public
	Guidelines about the Dental Missed Appointment
	Procedure to be Undertaken

Patients and dentists have identified many causes or contributing factors for missing dental visits. Patients said that they would cancel dental visits due to fear 35.5% of the time and having an emergency 29.7% of the time.

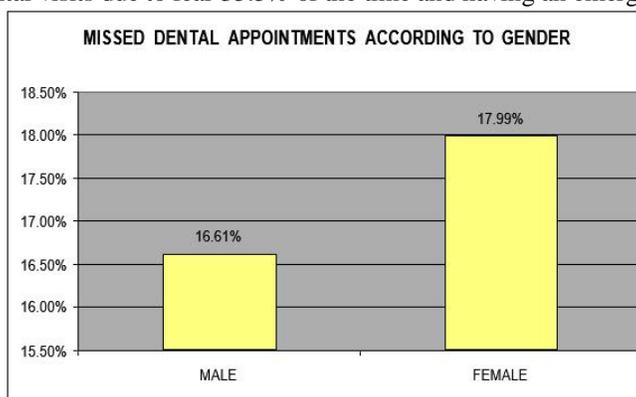


Figure 1: Missed dental appointments by gender

Dentists said that 27% of the people they treated did not perceive the value in receiving dental care, while 49% of them said that their clients would skip appointments due to emergencies. Just seven percent of dentists reported that their clients would cancel dental visits due to dental anxiety.

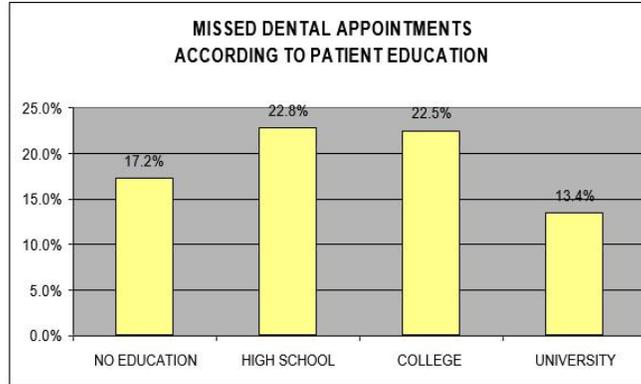


Figure 2: Missed dental appointments concerning education level

Patient education, income, and age were the three most important variables in determining whether or not patients will skip their dental visits. Missed dental visits drastically reduced as patient education, income, and age levels rose. In a poll, 44.5% of respondents said they believed it was reasonable to be paid for missing dental appointments. 11.8% of the patients skipped their dentist appointments.

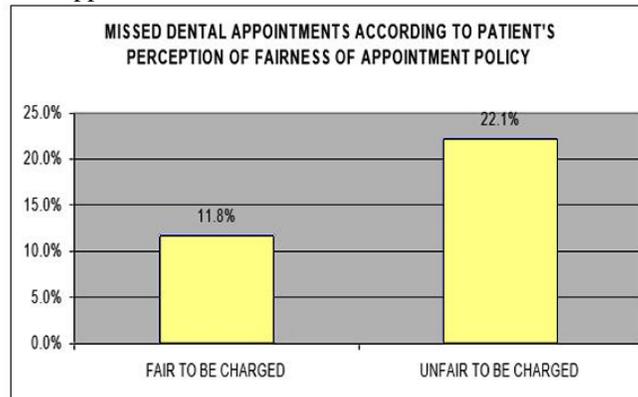


Figure 3: Missed Dental Appointments Based on Patients' Opinions of Appointments Policy's Reliability

Missing dental appointment rates were 22.1% among patients who said it wasn't fair to penalize them for missing appointments. The availability of a missed dental appointment policy, such as penalizing customers for missing their dental visits, was the most frequent dentist factor influencing whether or not patients will miss their dental appointments.

Dental offices that did not charge patients for missed appointments had a missed appointment rate of 35%, while those that did charge had a rate of 29.5%. A little over 50% of patients think a doctor's visit is more significant than a dentist's appointment. Due to their belief that receiving treatment would not be beneficial, forty percent of individuals have skipped at a minimum of one dental appointment, and twelve percent of patients have done so without making other arrangements.

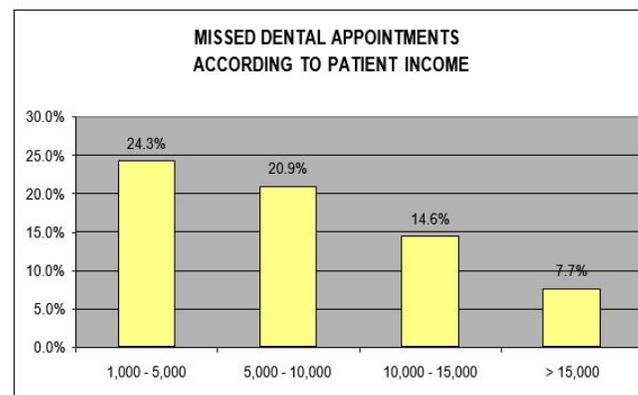


Figure 4: Missed dental appointments based on level of income

A little over 14.8% of patients have experienced financial difficulties with their dental care, and 16.1% of patients have had their dental care previously denied by a dentist because they have a history of missing appointments. Approximately forty percent of individuals stated that when they are in pain, they tend to skip their dentist visits less. The majority of dentists—more than 93%—said that when patients are in pain, they are less likely to miss their appointments. According to 63% of dentists, those who reside closer to their dentist's office prefer to keep their dental visits more often.

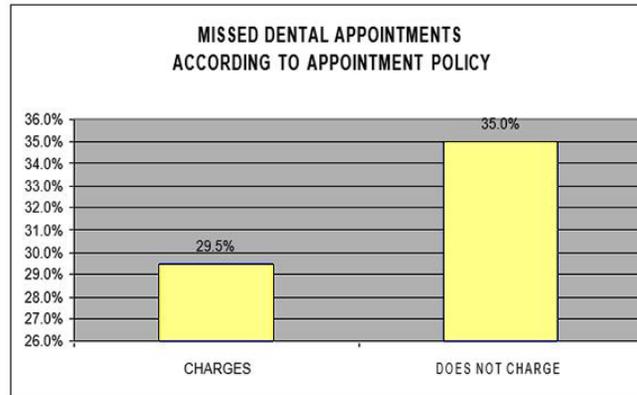


Figure 5: Missed dental appointments based on appointment policy

DISCUSSIONS:

Dentists estimate that more patients skip dental visits than do patients, however, clinics that were polled estimated that the incidence was 17.4%, which is more in line with what patients reported.

Dentists may have overstated the problem, which is why there are discrepancies between their comments and those of their patients. A rate of 22.5% for generally missed dentist appointments is obtained by averaging the three numbers.

In Pakistan, one out of every 5 or five dental visits is thus skipped.

Dentists' and patients' comments are widely divergent, although it may be accepted that the justifications given for skipping dental visits are frequent. The most frequent excuses for skipping dentist visits, according to both parties, are pain phobia, having a dire situation, and not seeing any sense in getting treatment. [18,19,20]

These explanations make it obvious what must be the focus of any effort to address this problem. When deciding if any patients skipped their dental visits, gender did not have a big impact. When it comes to missing dental visits, male patients reported missing 16.6% of them, compared to female patients who were nearly 18% absent.

Female patients may experience more dental anxiety than male patients, which might explain why they skip dental appointments more often. Notably, patients

cited an aversion to pain as the main cause of avoidance of the dentist and missed dental visits. The percentage of missed dental appointments did, however, significantly correlate with patient age. The frequency of missed dental visits considerably reduced as patient age rose. Patients older than 60 years missed 11% of their dental visits, compared to 18.5% of patients between the ages of 18 and 25. This association may be explained by the more responsible and conscientious nature of older patients, who are less prone to cancel appointments.

Additionally, owing to changes in oral health brought on by aging, older people may need additional dental care. Last but not least, elderly patients might be more aware of and concerned with their dental condition than younger patients, and as a result, are less likely to cancel their dental visits.

Regarding the likelihood that patients would cancel their dental visits, the patient's income also had a very important effect. The frequency of missed dental visits considerably reduced as patient income rose. This is understandable given that people with greater incomes are more prepared and eager to spend money on dental care.

Notably, 7% of dentists and 11.6% of patients stated that people skip dental appointments and avoid going to the dentist to avoid paying for care. Patients' level of education affects whether or not they will show up for their dental visits. High school students skipped the most dental visits (22.8%), while university graduates missed the fewest (13.4%). It is not unexpected that

university graduates have the lowest percentage of missed dental visits since they are more used to deadlines and appointments. Patient's psychological makeup was determined to have the most influence on whether they would show up for their dental visits.

The patient's perception of the fairness of the rules regarding missed dental appointments was one of the most significant parts of patient psychology. To put it another way, how did consumers feel about paying for a missed dental visit and how did this impact skipped dental appointments? About 45% of patients thought it was reasonable to charge them for a missed appointment. When compared to individuals who did not believe it was fair, these patients had a much reduced missed dental appointment rate of 11.8%. The percentage of missed dental appointments was 22.1% among patients who believed it was unfair to be paid for one. This constitutes one of the research's most important conclusions, and it is on the result basis that suggestions for how to approach the problem may be offered.

The percentage of missed dental appointments is significantly influenced by how patients perceive their dentist. The percentage of missed dental visits was 16.2% among patients who believed their dentist and thought their appointments were set aside for their welfare rather than for financial gain. Conversely, patients who lacked confidence in their dentist and thought that their visits were just arranged to benefit the practice's bottom line experienced a greater missed dental appointment rate of 20%.

The findings revealed that experts skipped dental appointments somewhat more often than non-specialists. At first, this was unexpected, but rational thinking helped to understand this association. The likelihood that a patient made an appointment with a specialist for elective dental care is higher. Patients who have made appointments with general practitioners, however, are more likely to have done so to get pain-relieving emergency dental care.

It should be noted that a sizable number of patients have said they are less inclined to cancel an appointment if they are in pain. This justification might help to explain why experts skip more dental appointments than non-specialists do. The diverse industries in which dentists worked had an impact on the frequency of missed dental visits. The business sector, followed by colleges, and finally the public sector, had the greatest percentage of missed dental visits.

When compared to universities and the public sector, whose appointment standards are less lenient, the

private sector exhibits an elevated number of missed dental visits. It is uncommon for a dentist at a private clinic or a dental student to refuse treatment to an individual due to having missed their dental visits. Since there are more patients in the public sector and thus are easier to replace, this is more probable to happen there.

Similar to how private sector dentists regard their patients more because of the money they can make from them, dental students respect their patients more because of the academic clinical requirements. This is not to say that dentists who work in the public sector do not love their patients, but they are less likely to terminate a patient's employment agreement as a result of missing dental visits. The public sector had the fewest missed dental visits as a result.

In figuring out missed dental appointment rates, the dentist's office's policy on missing appointments is also crucial. The most typical kind of missed dentist appointment policy involves charging individuals who forget to show up for their visits. Missed dental appointment rates were 29.5% among dentists who charged consumers for cancellations. While those who did not impose a fee on patients had a 35% of missed dental appointments. When attempting to fix this problem, this is also one of the most important study results, and it requires a great lot of consideration.

CONCLUSIONS:

Dental appointment cancellations have consequences that cannot be disregarded. Even if the problem may be tough to resolve entirely, it is feasible to reduce the frequency of missed appointments. Patients who are younger, less educated, and have lower incomes are more likely to skip their appointments. Dentists should emphasize to patients that skipping visits is inappropriate and irresponsible on their first visit to affect psychological change. Additionally, individuals need to be persuaded that dental care is vital and need not be uncomfortable. Additionally, a patient must have faith in their dentist and there must be a fair and lawful missed appointment policy in place. These suggestions may help us significantly lower Pakistan's rates of missed dental visits.

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