

The Most Common Presenting Complaints of Patients Attending Dental OPD

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Author's Contribution	ABSTRACT
^{1,3} <i>Substantial contributions to the conception or design of the work; or the acquisition, ^{2,6}Active participation in active methodology, ^{4,5}analysis, or interpretation of data for the work, Drafting the work or revising it critically for important intellectual content</i>	Objective: To determine the proportion of common presenting complaints among patients presenting at dental OPD and to evaluate the commonest dental issues in our population.
<i>Funding Source: None</i>	Methodology: A cross-section observational study was carried out at dental OPD of Bibi Assefa Dental College Larkana, from May 2022 to October 2022. Patients aged 18 years old or above, those who were presented at dental OPD of either gender, were included. The questionnaire was used to collect the data and divided into two parts, demographic details and chief complaints. Clinical examination was conducted to confirm the presented complaints including dental pain, dental caries, periodontal diseases, tooth sensitivity, tooth loss, oral ulcers and others. Data was entered and analyzed by SPSS version 25.
<i>Conflict of Interest: None</i>	Results: Overall mean age of 99 patients was 38.34 years. Most frequent presenting complaints of the 99 patients revealed that pain 63.6%, 37.4% dental caries, gingivitis and gum problems 33.3%. Post-filling complaints were 24.2%, while 21.2% expressed concerns about aesthetic issues and 31.3% had sensitivity, while 36.4% of patients had other complaints. Furthermore, the analysis of presenting complaints by gender in 99 patients revealed no significant gender differences in most complaints. $p>0.05$.
<i>Received: May 18, 2024</i>	Conclusion: Study revealed common dental issues such as pain, dental caries, gingivitis, sensitivity, and aesthetic concerns. The results suggest that dental problems, including caries, gum issues, and post-filling complications, are prevalent across both genders, highlighting the need for comprehensive oral care and preventive strategies.
<i>Accepted: Nov 09, 2024</i>	
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Cite this article as: Javed S, Memon N, Dahri WM, Bashir U, Hassan SS, Mughal N. The Most common presenting complaints of patients attending dental OPD. Ann Pak Inst Med Sci. 2024; 20(4):732-736-. doi: 10.48036/apims.v20i4.1242

Introduction

Oral health is a critical component of overall health in the field of medicine. The dental care not only aims to treat the oral disease but also increase the quality of life in terms of functional and aesthetic aspects of mouth. Understanding and addressing the complaints of the patients who visit to the dental outpatient departments is one of the crucial measures in delivering dental care.

Oral healthcare is becoming increasingly complex, with diagnosis and treatment planning largely dependent on the chief complaint presented by the patient.¹ The success of clinical, research, and administrative objectives in dental practice hinges on having a clear and easily identifiable chief complaint as a foundation for decision-making.^{1,2} Oral diseases are now a major public health problem worldwide. According to evidence from the global burden of oral health conditions, the number of people with untreated oral health issues has grown from

2.5 billion in 1990 to 3.5 billion in 2015.³ This phenomenon highlights how pervasive oral health conditions are and how significant a challenge this represents for policymakers to resolve in a comprehensive manner.^{3,4}

Globally, 60–90% of school-aged children and nearly all adults experience dental cavities, which frequently result in pain and discomfort.⁵ Other oral diseases, including dental caries, periodontal diseases, tooth loss, and oral cancer, have become a significant public health concern in the Member countries of South-East Asia.⁵ Tooth decay or dental caries is one of the most prevalent diseases to affect humans, and continues to be the most common presenting complaint in the dental OPD.^{6,7}

Caries dental, which are caused by the deterioration of the enamel of the teeth by the activity of bacteria, is widespread in all age groups. If not treated, it can cause pain, sensitivity and infection. On the other hand in a recent study reported that the most frequent chief complaint was deposits/stains, followed by gums bleeding, loose teeth, pain and the swelling of gums, while least common complaint were ulcer and replacement of tooth.⁸ In the Nigerian recent study most common complaints presented dental OPD were pain, infection and the swelling, which need urgent attentions.⁹

The chief complaints of patients play a crucial role in history-taking and treatment planning. They serve multiple purposes, such as monitoring the utilization of oral health services and evaluating the effectiveness of oral health awareness programs. In dental care, as in other healthcare services, patient satisfaction serves as a valuable tool for identifying the strengths and weaknesses of dental services. This feedback helps improve treatment quality and informs future planning efforts. Neglecting oral health often results in severe overall health issues, intense pain, difficulties with eating, and excessive visits to the emergency room.¹⁰ There is a discrepancy in the findings regarding the chief complaints of patients presenting at dental OPDs across studies globally. This difference may be due to various factors. A few previous national studies have also reported some controversial findings regarding the most common complaints,^{11,12} while no recent evidence has been found to address these discrepancies, creating a research gap.

Therefore, this study aims to evaluate the most frequent oral health-related complaints presented at dental OPDs and explore the latest knowledge that could help in

planning better treatment strategies, improving patient care, and informing public health initiatives.

Methodology

A cross-section observational study was carried out at dental OPD of Bibi Assefa Dental College Larkana during a period of 4 months from May 2022 to October 2022. Patients aged 18 years old or above, those who were presented at dental OPD of either gender, were included. All patients presenting with dental emergencies, those requiring immediate surgical interventions, or those diagnosed with oral carcinoma were excluded.

Additionally, patients who did not agree to participate in the study were also excluded. All patients were given detailed information about the study objectives, and role of the subject in the study, prior to their participation. Verbal informed consent was obtained from all participants, ensuring that involvement in the study was entirely voluntary and that participants were free to withdraw at any stage without detriment to their continuing care. For the data implementation used a structured questionnaire filled out by trained dental professionals. The questionnaire was divided into two parts, previous demographic details and chief complaints reported by the patients. Clinical examination was conducted to confirm the presented complaints including dental pain, dental caries, periodontal diseases, tooth sensitivity, tooth loss, oral ulcers and others. The data analysis workup was carried out by SPSS version 25.

Categorical data was presented in number and percentage, while numerical variables presented in mean and SD like age of the patients. Statistical chi-square test was applied and p-value ≤ 0.05 was taken as significant.

Results

The mean age of the entire 99 patients was 38.34 years, with standard deviation of 6.13 years. There was majority of males (60.6%), while 39.4% were females. Socioeconomic status was nearly evenly distributed between middle-income (44.4%) and poor (45.5%) categories, with a smaller proportion being rich (10.1%). Regarding residential status, most patients resided in rural areas (63.6%), followed by urban (26.3%) and sub-urban (10.1%) regions. Table I

Most frequent presenting complaints of the 99 patients revealed that pain in 63.6% cases, 37.4% had dental caries, gingivitis and gum problems were in 33.3% of patients. Post-filling complaints were reported by 24.2%,

while 21.2% expressed concerns about aesthetic issues, deposits, stains, and food lodgment affected 27.3% of patients, and 31.3% experienced sensitivity. Additionally, 36.4% of patients reported other complaints. Table II

Table I: Demographic variable analysis of the patients. (n=99)

Variables	N	%
Gender	Male	60
	Female	39
	Total	99
Socio economic status	Middle income	44
	Poor	45
	Rich	10
	Total	99
Residential status	Rural	63
	Urban	26
	Sub-urban	10
	Total	99
Mean age (mean \pmSD)	38.34\pm6.13 years	

Table II: Presenting complaints of the patients. (n=99)

Presenting complaints	N	%
Pain	Yes	63
	No	36
Gingivitis and gums problems	Yes	33
	No	66
Dental caries	Yes	37
	No	62
Post filling complaints	Yes	24
	No	75
Aesthetic problems in upper and lower anterior teeth	Yes	21
	No	78
Deposits/stains and food lodgments	Yes	27
	No	72
Sensitivity	Yes	31
	No	68
Others	Yes	36
	No	63

Table III Presenting complaints according to genders. (n=99)

Presenting complaints	Gender		p-value
	Male	Female	
Pain in upper and lower posterior teeth	42	21	0.103
	42.4%	21.2%	63.6%
Dental caries	20	16	0.437
	20.2%	16.2%	36.4%
Gingivitis and other gums problems	19	14	0.663
	19.2%	14.1%	33.3%
Post filling complaints	16	8	0.485
	16.2%	8.1%	24.2%
Aesthetic problems	11	10	0.385
	11.1%	10.1%	21.2%
Sensitivity	19	12	0.925
	19.2%	12.1%	31.3%
Deposits/stains and food lodgments	19	8	0.223
	19.2%	8.1%	27.3%
Others	24	12	0.351
	24.2%	12.1%	36.4%

Furthermore, the analysis of presenting complaints by gender in 99 patients revealed no significant gender differences in most complaints. While pain was more common in males, the difference was not statistically significant. Similarly, dental caries, gingivitis, post-filling complaints, aesthetic concerns, sensitivity, and deposits/stains were reported by both genders without significant variation. Table III

Discussion

The presenting complaints of patients are key indicators of health behavior, which ultimately influence oral health outcomes. The present study conducted to estimate the common presenting complaints among patients visiting the dental OPD and to evaluate the most prevalent dental issues in our population. The study involved 99 cases, with an overall mean age of 38.34 years and a male predominance of 60.6%. In comparison, Consistently et al¹³ reported a larger sample size of 1,500 patients, with a gender distribution of 50.1% males and 49.9% females. On the other hand, Jasim ZM et al¹⁴ observed that females visited the dental clinic more frequently than males, with 79 (64.28%) females and 44 (35.7%) males, and an average age of 31.7 years. Additionally, Omorodion GI et al¹⁵ reported different findings, noting that out of 857 cases, 477 (55.7%) were females and 380 (44.3%) were males. The relevant variables for their study were extracted from hospital records. This discussion highlights the variations in gender distribution and age across different studies, suggesting that patterns in dental clinic visits may vary depending on the demographic composition, variation in study sample sizes and geographic location of the patient population.

In this study the most frequent presenting complaints of the 99 patients revealed that pain in 63.6% cases, 37.4% had dental caries, gingivitis and gum problems were in 33.3% of patients. Post-filling complaints were reported by 24.2%, while 21.2% expressed concerns about aesthetic issues, deposits, stains, and food lodgment affected 27.3% of patients, and 31.3% experienced sensitivity. Additionally, 36.4% of patients reported other complaints. In aligns to this study Omorodion GI et al¹⁵ reported that the toothache and apical periodontitis were the most prevalent chief complaints (61.6%) and diagnoses (31.2%) among the patients. In addition to toothache, other common chief complaints included broken or cracked teeth and shaking teeth. Notably, 31.2% of the patients who presented with a toothache were diagnosed with apical periodontitis, highlighting the

strong association between the symptom of toothache and this particular condition.¹⁵ In another Nigerian recent study by *Ikimi NU* et al⁹ reported most common complaints presented dental OPD were pain, infection and the swelling, which need urgent attentions.⁹ On the other hand *Jasim ZM* et al¹⁴ also reported that the primary finding was that dental pain was the leading reason for seeking dental treatment (43.9%), followed by aesthetic treatment (30.8%), conservative treatments (21.9%), and prosthetics (3.2%), in that order. In aligns to this study *Tumbi* et al¹⁶ found dental caries to be the most common dental problem in patients visiting a tertiary care medical college hospital in Arunachal Pradesh. A wide range of dental problems were reported in their study, with dental caries being the most prevalent among patients receiving outpatient care. Furthermore in the study by *Soni* et al¹⁷ which involved 420 patients, the most frequent chief complaint was deposits/stains (32.38%), followed by bleeding gums (10.71%), loose teeth (10.24%), pain (10%), and gum swelling (7.86%). Other complaints included oral ulcers and the need for tooth replacement.

Moreover *Pitamber* et al¹⁸ found dental caries to be the most common presenting complaint in their study, with 54.54% of patients presenting with this complaint, followed by gingivitis at 37.62%. Furthermore, this analysis of presenting complaints in 99 patients showed no significant gender differences in most issues. While pain was more common in males, the difference was not statistically significant. Complaints such as dental caries, gingivitis, post-filling issues, aesthetic concerns, sensitivity, and deposits/stains were reported by both genders without significant variation. In the comparison of this study *Lollen Tet* a¹⁷ reported that the most common dental issues included caries and its complications, root stumps/retained teeth, dental calculus, stains, and trauma-related problems.

Trauma-related cases were predominantly seen in males, while conditions such as dental caries, root stumps, caries complications, and dental calculus/stains were more frequently observed in females. The variations in common presenting complaints at dental OPDs among different studies may be due to various factors including geographical location, demographic characteristics, difference in the study sample size and other factors, like as incidence of dental caries may be greater in some areas due to dietary or oral hygiene differences, while other areas may have a greater incidence of trauma due in part to lifestyle or occupation. This study contains several

limitatiostn include a relatively small sample size, a single-center design, and dependence on self-reported data, all of factors may limit the findings' potential for generalization and reliability. To reduce common dental disorders, future research needs to use larger, more diverse samples, undertake multi-center studies, take a longitudinal approach, and focus on preventative care and good oral hygiene awareness.

Conclusion

Presenting complaints of patients attending dental OPD observed the common dental issues like pain, dental caries, gingivitis, sensitivity, and aesthetic concerns. Results suggest that the dental concerns, such as caries, gum problems, and post-filling issues, are widespread across both genders, emphasizing the need for comprehensive oral care and preventive strategies. However further large scale studies could explore other factors influencing these complaints, like lifestyle and oral hygiene habits, to adapt more effective treatments for diverse patient populations.

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