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### Key Words

Dental outpatient department, oral health issues, chief complaints, pain, oral health issues

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**Received:** 25<sup>th</sup> August 2024

**Accepted:** 15<sup>th</sup> September 2024

**Published:** 10<sup>th</sup> October 2024

**Citation:** Dr. Dilshad Quraishi and Dr. Anjali Rathore, 2024. Spectrum of Presenting Complaints Among Patients Visiting the Dental Outpatient Department (OPD) of a Tertiary Care Hospital-A Retrospective Analysis. Res. J. Med. Sci., 18: 688-691, doi: 10.36478/makrjms.2024.10.688.691

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## Spectrum of Presenting Complaints Among Patients Visiting the Dental Outpatient Department (OPD) of a Tertiary Care Hospital-A Retrospective Analysis

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### Abstract

Oral health is closely linked to overall health and quality of life. Oral diseases are a significant global public health concern. The initial presenting symptoms are essential for assessing oral conditions, also assist dentist in diagnosis and treatment planning. To address this need we conducted, a six-month retrospective study at the dental outpatient department (OPD) of the Raipur Institute of Medical Sciences (RIMS), a tertiary care hospital located in a remote village of Raipur, Chhattisgarh, India from February 2024 to July 2024. This study aimed to determine the spectrum of presenting complaints, with a focus on identifying the most prevalent dental complaint at presentation. A total of 3,268 patients of all ages who visited the dental OPD were included in this study. The case files of all patients were retrieved from the medical records department and all patient records were thoroughly reviewed. Data collection sheets were used to gather data, which included patient's general demographic details, chief complaints at presentation and clinical examination findings. Data were collected, compiled and collectively analyzed using SPSS version 25. The results indicated that among the various complaints, the most common was pain, observed in 2,141 patients (65.51%), with a predominance among males (60.57%).

## INTRODUCTION

Oral health is an integral part of general health and wellbeing. According to a Global Burden of Disease study, oral conditions remain a substantial health challenge, affecting approximately 3.5 billion people worldwide<sup>[1]</sup>. This figure aligns closely with the WHO 2022 statement that oral diseases affect 45% or 3.5 billion people globally. Although largely preventable, oral diseases impose a substantial global health burden. As oral diseases continue to have a growing global and regional impact, it is essential to prioritize dental care for patients. The chief complaints presented by patients serve as a source of information to the dentist, which he uses to make early diagnosis and timely management<sup>[2]</sup>. Therefore, this study aimed to examine the range of chief complaints of patients visiting the dental outpatient department of a tertiary care hospital.

## MATERIAL AND METHOD

A six-month retrospective study was conducted at the dental outpatient department (OPD) of the Raipur Institute of Medical Sciences (RIMS), a tertiary care hospital situated in a remote village of Raipur, Chhattisgarh, from February 2024 to July 2024. This study aimed to determine the spectrum of presenting complaints among patients visiting the dental outpatient department (OPD) with a focus on identifying the most prevalent dental complaint at presentation. A total of 3,268 patients of all ages who visited the dental OPD were included in the study. The case files of all patients were retrieved from the medical record department and all patient records were thoroughly reviewed. Data collection sheets were used to gather data, which included patient's general demographic details, chief complaints at presentation, and clinical examination findings. The data were collected, compiled and collectively analyzed using SPSS version 25.

## RESULTS AND DISCUSSIONS

**Age Distribution of Patients:** Of the 3,286 cases analyzed, the demographic age of 21-30 years constituted the largest proportion of patients, accounting for 37.24%. Subsequently, the 31-40 years age group represented 29.16%, while the 41-50 years age group comprised 17.81%. Individuals aged over 50 years constitute a smaller segment, with a combined total of 8.01% for those aged 51-60 and over 60 and those under 10 years of age, are notably few, representing only 0.83%. The mean patient age was calculated to be 33.68 years.

**Sex Distribution of Patients:** Of the 3,286 cases analyzed, 1,745 were male, accounting for 53.39% and 1,523 were female, accounting for 46.61%. The findings of the present study suggest a slight predominance of males.

Table 1: Age Distribution of Patients

Sr Number	Age group (Years)	No. of patients (n)	Percentage (%)
1	< 10	27	0.83
2	11years to 20	227	6.95
3	21-30	1217	37.24
4	31-40	953	29.16
5	41-50	582	17.81
6	51-60	208	6.36
7	>60	54	1.65
Total		3268	100.00

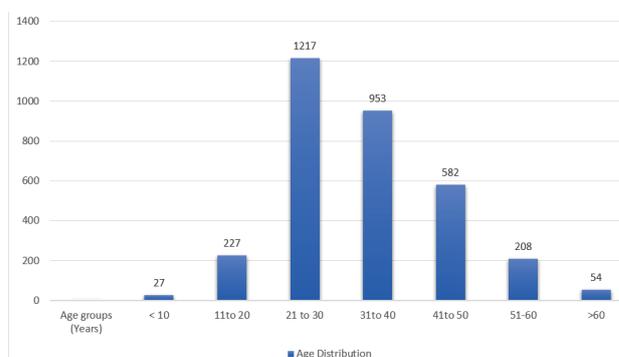


Chart 1: Age Distribution

Table 2: Sex Distribution of Patients

Sex Distribution	No of Patients (n)	Percentage (%)
Male	1745	53.39
Female	1523	46.61
Total	3268	100

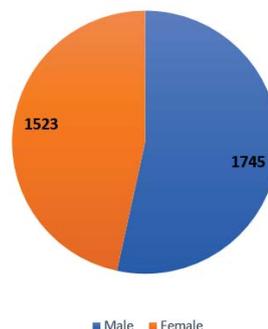


Chart 2: Sex Distribution

**Presenting Complaint of Patients:** Among 3,268 patients, based on their primary chief complaint, pain emerged as the most frequently reported complaint, affecting 2,141 patients, constituting 65.51% of all cases. Tooth mobility was the second most prevalent issue, affecting 218 patients (6.67%), followed closely by teeth discoloration and deposits in 192 patients (5.88%), indicating concerns about periodontal health and oral hygiene. Other common issues were gum problems (4.41%), teeth replacement (4.04%) and trauma (3.49%). Less frequently reported complaints were teeth arrangement problems (2.88%), oral ulcers (2.66%), tooth decay (2.20%), teeth sensitivity (1.07%) and least common complaint was food lodgement (0.37%). These data highlight that pain is the predominant cause of dental visits. In a cohort of 2,141 individuals experiencing pain, 1,297 (60.57%) were male and 844 (39.43%) were female. An in-depth review of the clinical examination records identified

dental caries as the primary source of pain among these patients. This was followed by periodontitis, abscess, tooth impaction, muscle spasms and temporomandibular joint (TMJ) disorders.

Table 3. Presenting Complaint of Patients

Presenting complaint	No of patients (n)	Percentage (%)
Pain	2141	65.51
Tooth Mobility issue	218	6.67
Teeth discoloration & deposits	192	5.88
Gum problems	144	4.41
Teeth replacement	132	4.04
Trauma	114	3.49
Teeth arrangement issue	94	2.88
Oral ulcer	87	2.66
Tooth decay	72	2.20
Teeth sensitivity	35	1.07
Food lodgement	12	0.37
others	27	0.83
Total	3268	100.00

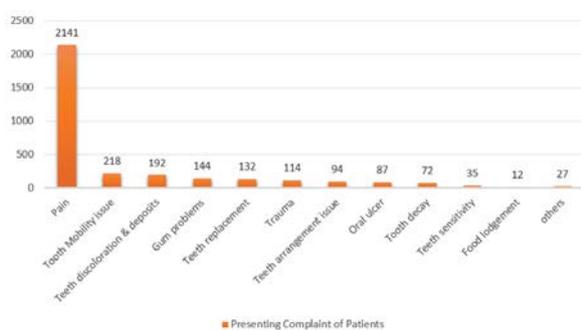


Chart 3: Presenting Complaint of Patients

A variety of dental complaints are reported by patients attending the OPD of a dental department at a tertiary care hospital. These chief complaints are crucial for evaluating dental conditions, aiding the dentists in diagnosis, treatment planning and offering preventive dental care advice. This retrospective study aimed to identify the common chief complaints of patients visiting the dental outpatient department (OPD) of a tertiary care hospital. The study included 3,286 patients who attended the OPD over a six-month time frame. Patient case files were obtained from the medical records department and each record was meticulously reviewed. To position our findings within a broader research framework, we performed a comparative analysis with analogous studies. The current study included 3,268 cases, with the majority of patients falling within the 21-30 years age group, comprising 1,217 patients (37.24%). This was followed by the 31-40 years age group, which included 953 patients (29.16%). The mean age was determined to be 33.68 years. The study indicated a slight male predominance, with 1,745 cases (53.39%), while 1,523 (46.61%) were female. These findings align with the study conducted by Sana Javed *et al.* at Bibi Assefa Dental College Larkana, which reported a mean age of 38.34 years and a male predominance of 60.6%<sup>[3]</sup>. Similar observations were made by Siddiqui *et al.* in Multan, where the study included 1,500 patients, with 50.1% male and 49.9% female patients<sup>[4]</sup>. The most

common chief complaint in the current study was pain, which was observed in 2,141 patients (65.51%), with a male predominance (60.57%). This finding indicates that the majority of individuals sought dental treatment primarily to alleviate pain, highlighting the significant burden of acute dental conditions. This result aligns with the study conducted by Nathan Ukuoghene Ikimi *et al.* in Nigeria, which revealed pain as the most common presenting complaint in 43.3% of the 267 patients<sup>[2]</sup>. Similarly, the study conducted by Sana Javed *et al.* at Bibi Assefa Dental College, Larkana, among 99 patients, reported pain in 63.6% of cases (4). Similar results were recorded by Ali WM *et al.*, who reported pain in 47.02% of patients<sup>[5]</sup>. In the present study, dental caries was identified as the most common primary cause of pain, followed by periodontitis, abscess, tooth impaction, muscle spasm, and temporomandibular joint (TMJ) pain. These findings align with the research conducted by M. A. Masiga *et al.* at Nairobi Dental Hospital<sup>[6]</sup> and Warnakulasuriya *et al.* in Sri Lanka<sup>[7]</sup>, both of which reported dental caries as the most prevalent cause of dental pain among patients.

## CONCLUSION

A retrospective study spanning six months was conducted at the dental outpatient department (OPD) of the Raipur Institute of Medical Sciences (RIMS), a tertiary care hospital, to determine the spectrum of presenting chief complaints among patients attending the dental OPD. The findings indicate that among the diverse complaints, the most common was pain, with a predominance among males. These findings highlight the importance of early intervention and preventive dental care. Emphasis should be placed on routine dental screening and patient education to reduce the incidence of advanced oral diseases and to decrease the demand for emergency treatment in dental OPDs.

**Limitations:** Tertiary care hospitals cater to diverse patient populations. However, the short duration and limited sample size of this study may affect its interpretation, potentially hindering a comprehensive understanding of the pattern of chief complaints in the region. Consequently, further large-scale studies are necessary to support resource allocation and develop improved treatment strategies.

## ACKNOWLEDGEMENT

**Funding:** None

**Conflict of Interest:** None.

**Data Availability:** Collected data available at the Department of Dentistry, Raipur Institute of Medical Sciences (RIMS), Raipur, Chhattisgarh India.

**REFERENCES**

1. Bernabe E., W. Marcenes, C.R. Hernandez, J. Bailey, L.G. Abreu and V. Alipour, *et al.*, 2020. Global, Regional, and National Levels and Trends in Burden of Oral Conditions from 1990 to 2017: A Systematic Analysis for the Global Burden of Disease 2017 Study. *J. Den. Res.* SAGE Public. Inc., 99: 362-373.
2. Ikimi N.U., 2022. Chief Complaint in A Dental and Maxillofacial Surgery Department in Abuja Nigeria. *Online J. Dent. and Oral Health*, Vol. 5. 10.33552/ojdoh.2022.05.000613.
3. Sana J., M. Naveed, M.D. Waheed, B. Uzma, S.H. Syeda and M. Noorulane., 2024. The Most Common Presenting Complaints of Patients Attending Dental OPD. *Annals of PIMS-Shaheed Zulfiqar Ali Bhutto Medical University [Internet].*, Vol. 20: 10.48036/apims.v20i4.1242.
4. Siddiqui M.I., M.I. Javed, A. Idrees, R. Shahid, S. Hussain and A. Khalid *et al.*, 2000. The Most Common Presenting Complaints of the Patients Attending Department of Operative Dentistry, Nishtar Institute of Dentistry, Multan. 0 Vol. 9.
5. Ali D.W.M., 2009. Chief complaint, treatment need and factors Affect Late Attendance to Dental Clinic in a Sample Collected from Iraqi Patients. *Mustansiria Dent. J.*, Vol. 20: 10.32828/mdj.v6i1.427.
6. Masiga M., 2005. Presenting chief complaints and clinical characteristics among patients attending the Department of Paediatric Dentistry Clinic at the University of Nariobi Dental Hospital. *East Afr. Med. J.*, Vol. 82: 10.4314/eamj.v82i12.9372.
7. Warnakulasuriya S., 1985. Demand for dental care in Sri Lanka. *Community Dent. Oral Epidemiol.*, Vol. 13: 10.1111/j.1600-0528.1985.tb01678.x.