# **Original Article**



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# The most Common Presenting Complaints of patients Attending Conservative Dental Clinic at College of Dentistry / University of Basrah at 2020-2021

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#### Abstract

Aim: To explore the common chief complaints of patients seeking treatment in conservative dental clinic at College of Dentistry \University of Basrah. Methods: Researcher obtained 123 complete records about the subject under the study, the most common chief complaints of the patients attending conservative dentistry clinic at college of dentistry university of Basrah at 2020-2021 prior to their examination for further dental treatment. Result: The main findings was that the dental pain was the most common reason for seeking dental treatment (43.9%), followed by esthetic treatment (30.8%), conservative (21.9%) and prosthetics (3.2%) respectively. Conclusion: The result of the study revealed that the most common reason for demanding dental treatment was "pain".

#### Keywords:

Chief complaint, pain, esthetic, conservative dentistry.

## Introduction

atients' chief complaint is considered as important detector of health status that would essentially affect the oral health. A chief complaint can be described as a personal announcement presented by a patient which would explain the most serious or important signs or symptoms of the condition that made him to look a health professional, this information is in general reported in the own words of the patient<sup>[1]</sup>. Chief complaint is considered for health provider and patient as an information source that would affect the management of the condition, chief complaints severity indicates the necessity of the individual to look for health care <sup>[2]</sup>. To obtain successful dental treatment a detailed history must be taken to reach to the correct diagnosis of the problem, so a proper line of treatment can be proposed. The steps of treatment required to solve the

This is an open-access journal, and articles are distributed under the terms of the Creative Commons Attribution-Non-Commercial-Share Alike 4.0 License, which allows others to remix, tweak, and build upon the work non-commercially, as long as appropriate credit is given and the new creations are licensed under the identical terms. approach to what is needed. Treatment plan should be extremely precise for each patient <sup>[3, 4]</sup>. A person seeking for a restorative treatment may afford a different reason, from these reasons we can mention the followings: 1. Prevention: some individuals may seek for dental treatment as the notice the presence of the problem (dental caries) before other symptoms begin to prevent worsening of the condition<sup>[5]</sup>. Prosthetics: Patients seeking for a prosthodontic treatment to convert an unattractive, defective dentition to a pleasant, healthy occlusion with improvement in the function and esthetic of teeth. To attain that desire, attention to treatment planning and mouth preparation must be done with great accuracy to treat teeth with dental decay prior to prosthetic treatment to restore missing or damaged teeth [6] Esthetics: Studies revealed that achievement of good dental esthetics is one of the most important reasons making the individual seeking for

problem of the patient should be planned

carefully and should imply a comprehensive

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dental treatment, as the patients feel uncomfortable with presence of discoloration in the tooth due to caries and fear about progression of this esthetic problem so they are looking for a solution to this problem before progression <sup>[7, 8]</sup>. For example, treatment of maxillary incisors becomes an important issue as their esthetic and functional value is absolute <sup>[9]</sup>.

4. Orthodontic: The orthodontist's primary goal is to solve the dental problem and achieve an ideal facial esthetics. However, prior to orthodontic treatment, it is advisable to achieve restorative treatment to carious teeth to maintain teeth in healthy condition and prevent progression of caries during the period of orthodontic treatment.

Orthodontic treatment could enhance accumulation of dental plaque, as the patients may not be able to clean his teeth in a correct way, and this could lead to enamel demineralization resulting in tooth decay <sup>[10]</sup>.

5. Pain: The nature of pain is known to be subjective <sup>[11]</sup>. The source of tooth pain may be dental decay, a cracked, trauma, damaged restoration, poor oral care and other caused can contribute to toothache. Some patients ignore the dental health and will not seek for restorative treatment until there is pain in teeth <sup>[12]</sup>.

Epidemiological studies are useful to provide a data that is used to evaluate the awareness of the individual about health problems, and to evaluate the severity and the extent of diseases within community, from which need estimates can be created, which will inform us how much care is needed when we treat active disease of the population <sup>[13]</sup>. This study was done to investigate the patients most common chief complaint making them seeking dental treatment at conservative dental clinique in the College of Dentistry at Basra University in southern Iraq.

### **Patients and Method**

The researcher obtained 123 complete records about the subject under the study.

This study was performed over a period of 3 months extended from December 2020 to March 2021. Almost every patient visited the conservative clinic in the college of dentistry at Basra university were incorporated in this study. The protocol of the dental clinics, upon arrival, the most common presenting complaints of the patients is recorded before taking full history and examination.

The standard probe and dental mirrors were used for performing clinical examination under artificial light. All information took from the patient was recorded in data extraction forms, including chief complaints and demographic variables (sex and age). If there were multiple complaints, the most important one was written down. Complete privacy was afforded to every patient. After completing history taking, clinical examination was performed by dentist. Data collected were analyzed using SPSS version 24. Level of significance was set at P=0.05.

#### Results

These data of 123 files of patients attending Conservative Dental Clinic at College of Dentistry \University of Basrah seeking for dental treatment during the period of 2020 till 2021, these records showed that female were more frequent visiting dental clinic than male (79 (64.28%) female and 44 (35.7%) male) with average age of the patients were 31.7 years as in Table 1.

The most common age group to visit the clinic was those aged 20 to 29 years old (37 patients), followed by those aged 10 to 19 years old (29 patients), 30 to 39 years old (22 patients), 50 to 59 years old (14 patients), and those aged >60 years old (nine patients) (5 patients).

| Table 1: Demographic characteristics of the patients. | Table | 1: D | emographic | characteristics | of the | patients. |
|---|-------|------|------------|-----------------|--------|-----------|
|---|-------|------|------------|-----------------|--------|-----------|

| Variables |        | No. | (%)    |
|-----------|--------|-----|--------|
| Age       | 10-19  | 29  | 23.577 |
|           | 20-29  | 37  | 30.081 |
|           | 30-39  | 22  | 17.886 |
|           | 40-49  | 16  | 13.009 |
|           | 50-59  | 14  | 11.382 |
|           | ≥ 60   | 5   | 4.065  |
| Gender    | Male   | 44  | 35.713 |
|           | Female | 79  | 64.287 |
| Total     |        | 123 | (100%) |

The frequency of chief complaints in all patients is illustrated in figure (1) which shows that most patients reported pain (43.902%), while the other complaints related to esthetics, conservatives, and prosthodontics had lower percentages with 30.894%, 21.951%, and 3.25% respectively.

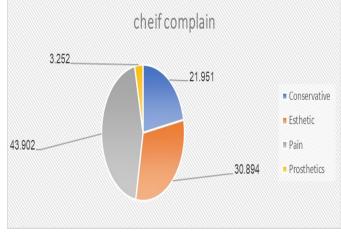


Figure 1: Frequencies & percentage of chief complaints in all patients.

The frequencies and percentage of chief complaints in each age group is given in (Table 2). In reference to the age, the pain is most frequent in patient within age 20-29 years which represent (64.865%) followed by age 60 years and above (60%), 10-19 years (44.828%), 30-39 years (31.819%), 40-49 years (25%) and 50-59 (21.428%).

Esthetic was the second common presenting symptom. It was most frequent in age 50-59 years by (50%) followed by age 10-19 years about (41.379 %), 30-39 years (27.272%), 40-49 years (25 %), 20-29 years (24.865%) and 60 years and above is (zero). Then conservative is most frequent in age 30-39 years by (40.909%) followed by age

40-49years (37.5 %), 50-59 years (28.572%), 60 years and above (20%), 10-19 years (13.793 %) and 20-29 years (8.108 %). The least one is prosthetics, most frequent in age 60 and above by (20 %) followed by age 40-49years is (12.5 %), 20-29 years is (2.702 %) and (zero %) for age (10-19) (30-39) (50-59) years.

Table 2: Frequencies of chief complaint according to age groups

| Chief Complain | 19-10 % | 29-20 % | 39-30 % | 49-40 % | <b>59-50</b> % | ≥60%   |
|----------------|---------|---------|---------|---------|----------------|--------|
| Pain           | 60      | 21.428  | 25      | 31.819  | 64.865         | 44.828 |
| Esthetic       | 41.379  | 0       | 50      | 25      | 27.272         | 24.325 |
| Conservative   | 13.793  | 20      | 28.572  | 37.5    | 40.909         | 8.108  |
| Prosthetic     | 0       | 20      | 0       | 12.5    | 0              | 2.702  |

Table (3) shows that the frequency of chief complaints varied by gender. The most common complaint in both groups was pain, however, pain reported more frequent in female than male, esthetic complaints is second most frequent complain followed by conservative complaints.

Similarly, the frequency of esthetic complaints in male patients was higher than in female patients, but it's not statistically significant ( $P \ge 0.05$ ). In general, female reported more prosthodontic-related complaints than male, but the difference wasn't significant (P = 0.06).

Table 3: Frequencies of chief complaint according to sex groups

| Chief complains |     | M      |     | F      | P Value |
|-----------------|-----|--------|-----|--------|---------|
|                 | No. | %      | No. | %      | ≥0.05   |
| Pain            | 18  | 40.909 | 36  | 45.569 | ≥0.05   |
| Esthetic        | 14  | 31.819 | 24  | 30.379 | ≥0.05   |
| conservative    | 11  | 25     | 16  | 20.254 | ≥0.05   |
| Prosthetics     | 1   | 2.272  | 3   | 3.798  | ≥0.05   |
| Total           | 44  | 100    | 79  | 100    |         |

### Discussion

Chief complaint of the patient is considered an essential component for the delivery of appropriate oral health care. This study was performed to assess the most patients attending common chief complaints in Conservative Dental Clinic at University of Basrah/College of Dentistry from the period of December 2020 to March 2021, the study was approved by University of Basrah/College of Dentistry<sup>[14, 15]</sup>. It was observed that pain was the most common reason for seeking dental treatment (43.9%), followed by esthetic (30.8 %), conservative (21.9%) and prosthetic (3.2 %).

From this finding we can notice that patients attend dental clinics for curative treatment <sup>[16]</sup>, not preventive treatment as the patients visit dental clinics when there is pain and they seek for solution to this problem <sup>[17, 18]</sup>. The results of this study was consistent with the results of a study performed at the college of dentistry in University of Umm Al-Qura in Makkah, Saudi Arabia <sup>[19]</sup>, and another study performed in college of dentistry University of Mosul, Iraq, in both studies the most common chief complaint was dental pain (35.4%) and (34.73%) <sup>[20, 21]</sup>.

However, study carried out in Sri Lanka recorded lower prevalence of dental pain being 23% <sup>[22, 23]</sup>. The predominant age group of patients attending the conservative dental clinique was 20–29 years old. In the age group of 10-19 years, there is relatively high demand for esthetic, in adolescent age group facial esthetics is considered an essential social norm, one of the most important factor to achieve this attractiveness is the dental appearance <sup>[24, 25]</sup>. In the age group of 20-29 years, there is more demand for restorative care because of pain, dental pain is a primary precipitator of dental treatment in this age group. In the age group of 30-39 and 40-49 years, there is relatively more demand for restorative treatment for conservative reason. In the age group of 50-59 years, patients have presented themselves relatively earlier for esthetic and conservative treatment of carious tooth before the acute symptoms such as pain developed. Like the patients seeking dental treatment at the University of Mosul<sup>[26, 27]</sup>. Pain was the highest chief complaints in age group  $\geq$  60, in this age teeth can show the patient's lifestyle and can excellently display long duration of trauma from incorrect tooth brushing <sup>[28]</sup>, eating habits and using of chemical and acidic materials, all that can cause increase in dental caries and therefore increase pain with increasing age <sup>[29, 30]</sup>. It was observed that the attendance of female patients was more than male patients and that is agreed with another researches performed [31, 32]. The incidence of esthetic and conservative complaints was higher in male than in female patients, however this difference was not statistically significant<sup>[33]</sup>. Females reported more pain and prosthodontic-related symptoms than males, but the difference was not significant. This gender differences covering a wide array of important factors, including hormonal influences, biological factors, stress and environmental factors. This explains strong clue reveals that female report more fear and are more expected to get anxiety disorders than male, this could affect the number of females seek for dental treatment for esthetic or conservative reasons. Seeking professional dental care at late stages in female could be due to many psychosocial influences such as lack of access, dental anxiety, perceptions of need and financial costs.

#### Conclusion

The most common reason for seeking dental treatment in conservative dental clinic at college of dentistry university of Basrah was dental pain followed by esthetic then conservative, and show that the female more than male seeking the dental treatment.

Results of this study demonstrate that many people seek dental treatment only when acute disturbing symptoms such as pain is apparent, therefore population need to increase awareness about importance of preventive dental measures and routine dental checkup to prevent health problems from progression and worsening.

### **References:**

- 1. M. S. Greenberg, M. Glick, and J. A. Ship, *Burket's oral medicine: diagnosis and treatment*. Bc Decker Hamilton, 2003.
- S.-M. Bae, W.-G. Chung, J.-H. Jang, S.-J. Mun, B.-M. Shin, and S.-J. Shin, "Competencies for entry into the profession of dental hygiene," *Journal of Dental Hygiene Science*, vol. 17, no. 3, pp. 193-201, 2017.
- D. Henderson, W. L. McCracken, G. P. McGivney, and D. J. Castleberry, *McCracken's removable partial prosthodontics*. CV Mosby Company, 1985.
- 4. J. D. Bader, D. A. Shugars, and A. J. Bonito, "A systematic review of the performance of methods for identifying carious lesions," *Journal of public health dentistry*, vol. 62, no. 4, pp. 201-213, 2002.
- G. Gilbert, U. Foerster, T. Dolan, R. Duncan, and M. Ringelberg, "Twenty–four month coronal caries incidence: The role of dental care and race," *Caries Research*, vol. 34, no. 5, pp. 367-379, 2000.
- A. Ahmed, "Oral Health, Diseases, Examination, Diagnosis, Treatment Plan & Mouth Preparation," *Adv Dent & Oral Health*, vol. 3, no. 5, pp. 555-602, 2016, doi: 10.19080/ADOH.2016.02.555602.
- J. Jenny, "A social perspective on need and demand for orthodontic treatment," *International dental journal*, vol. 25, no. 4, pp. 248-256, 1975.
- T. Tervonen, "Condition of prosthetic constructions and subjective needs for replacing missing teeth in a Finnish adult population," *Journal of oral rehabilitation*, vol. 15, no. 5, pp. 505-513, 1988.
- 9. G. R. Samorodnitzky-Naveh, S. B. Geiger, and L. Levin, "Patients' satisfaction with dental esthetics," *The Journal of the American Dental Association*, vol. 138, no. 6, pp. 805-808, 2007.
- 10. E. H. Angle, "Treatment of malocclusion of the teeth and fractures of the maxillae," *Angle's system*, pp. 21-24, 1907.
- T. Koyama, J. G. McHaffie, P. J. Laurienti, and R. C. Coghill, "The subjective experience of pain: where expectations become reality," *Proceedings of the National Academy of Sciences*, vol. 102, no. 36, pp. 12950-12955, 2005.
- 12. M. Moayedi and K. D. Davis, "Theories of pain: from specificity to gate control," *Journal of neurophysiology*, 2013.
- 13. B. A. White, "Factors influencing demand for dental services: population, demographics, disease, insurance," *J Dent Educ*, vol. 76, no. 8, pp. 996-1007, 2012.
- G. Gastélum-Cuadras, "PHYSICAL CAPACITY HERITABILITY FROM PARENTS TO CHILDREN: COMPUTERISED DERMATOGLYPHICS," Revista Internacional de Medicina y

Ciencias de la Actividad Física y del Deporte, vol. 22, no. 85, 2022.

- 15. X. Xie and L. Lei, "A particle swarm algorithm-based landscape planting path planning method in the agriculture sector," *Journal of Commercial Biotechnology*, vol. 27, no. 5, pp. 31-37, 2022.
- A. Muñoz-Villena, R. De la Vega Marcos, G. Cremades, and J. González-Hernández, "SPANISH ADAPTATION OF THE CTAI-2D. TOOL FOR ASSESSING THE TRAIT ANXIETY IN ATHLETES," *Revista Internacional de Medicina y Ciencias de la Actividad Física y del Deporte*, vol. 22, no. 85, 2022.
- 17. O. G. Omitola and A. O. Arigbede, "Prevalence and pattern of pain presentation among patients attending a tertiary dental center in a southern region of Nigeria," *Journal of dental research, dental clinics, dental prospects,* vol. 4, no. 2, p. 42, 2010.
- C. Lewis, H. Lynch, and B. Johnston, "Dental complaints in emergency departments: a national perspective," *Annals of emergency medicine*, vol. 42, no. 1, pp. 93-99, 2003.
- 19. C. L. S. Meira *et al.,* "Sialolithiasis of the submandibular gland associated with stafne bone defect: case report," *Jornal Brasileiro de Patologia e Medicina Laboratorial,* vol. 58, p. e4292022, 2022.
- K. Al-Johani, H. Lamfon, H. Abed, and M. Beyari, "Common chief complaints of dental patients at Umm AL-Qura University, Makkah city, Saudi Arabia," *Oral Health Dent Manag*, vol. 16, no. 3, pp. 1-4, 2017.
- 21. B. A. Abdullah and A. A. Al-Tuhafi, "Chief complaints of patients attending college of Dentistry at Mosul University," *Al-Rafidain Dental Journal*, vol. 7, no. 2, pp. 201-205, 2007.
- L. Ekanayake, C. Weerasekare, and N. Ekanayake, "Needs and demands for dental care in patients attending the University Dental Hospital in Sri Lanka," *International Dental Journal*, vol. 51, no. 2, pp. 67-72, 2001.
- K. A. Guevara-Noriega, A. Martinez-Toiran, B. Alvarez-Concejo, and J. L. Pomar, "Historical overview of vascular allografts transplantation," *Vasc Endovascul Rev*, vol. 2, pp. 19-22, 2019.
- L. Fernandes, E. T. d. Reis Neto, M. A. P. Pereira, M. C. d. C. Baretta, and A. Andriolo, "Piomiosite Tuberculosa: Relato de Caso," *Jornal Brasileiro de Patologia e Medicina Laboratorial*, vol. 58, 2022.
- Y. Zheng, "The application of task-driven model in adult computer technology teaching in healthcare sector," *Journal of Commercial Biotechnology*, vol. 27, no. 5, pp. 50-66, 2022, doi: https://doi.org/10.5912/jcb1095.
- A. Espinoza-Salinas, E. Zafra-Santos, C. Sabattini-Herrera, J. Sanchez-Molina, M. Bobadilla-Olivares, and G. Arenas-Sánchez, "OXYGEN UPTAKE KINETICS IN FEDERATED ATHLETES," *Revista Internacional de Medicina y Ciencias de la Actividad Física y del Deporte*, vol. 20, no. 80, 2020.
- G. Mukthayakka, A. Sajjan, and R. Kashid, "Comparative analysis of diagnostic methods used for assessing incidence of malaria in two regions from South India," *Journal of Natural Science, Biology and Medicine*, vol. 12, no. 1, pp. 12-16, 2021.
- H. R. Esmaeili, S. M. Al Jufaili, G. Sayyadzadeh, and S. Echreshavi, "An updated checklist of blenniiform fishes (Teleostei: Blenniiformes) in the North-Western Indian Ocean: Taxonomy, diversity, and conservation status," *Fishtaxa-Journal of Fish Taxonomy*, no. 24, 2022.
- M. BILECENOĞLU and M. B. Yokeş, "New additions to the fish fauna of Sea of Marmara: Dentex maroccanus Valenciennes, 1830 (Sparidae) and Gobius couchi Miller & El-Tawil, 1974 (Gobiidae)," *FishTaxa*, vol. 24, pp. 42-48, 2022.
- Y. Ji, Y. Shi, J. Zhou, X. Li, R. Qin, and Q. Zhu, "Analysis on the change of college students' life pattern and its impact during the COVID-19 outbreak in China," *American Journal of Health Behavior*, vol. 46, no. 3, pp. 218-230, 2022.

- 31. F. G. Agostini, C. M. Flaitz, and M. J. Hicks, "Dental emergencies in a university-based pediatric dentistry postgraduate outpatient clinic: a retrospective study," *ASDC journal of dentistry for children*, vol. 68, no. 5-6, pp. 316-21, 300, 2001.
- 32. P. Gürdal, H. Çankaya, E. Önem, S. Dinçer, and T. Yílmaz, "Factors of patient satisfaction/dissatisfaction in a dental faculty

outpatient clinic in Turkey," *Community dentistry and oral epidemiology*, vol. 28, no. 6, pp. 461-469, 2000.

 H. A. Prentice *et al.*, "Patient demographic and surgical characteristics in anterior cruciate ligament reconstruction: a description of registries from six countries," *British Journal of Sports Medicine*, vol. 52, no. 11, pp. 716-722, 2018.