



Research Article

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Chief Complaint in A Dental and Maxillofacial Surgery Department in Abuja Nigeria

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Abstract

Chief complaints in the dental clinic are a series of complaints that a patient presents with in order of severity that needs urgent attention. The knowledge of chief complaints enables the clinician to focus appropriately on the area of dental challenge to treat his patient's immediate complaint and plan preventive management. This is a retrospective study of cases that presented at the Dental and Maxillofacial Surgery department of State House Clinic from 2014 to 2021. Various Chief complaints that patients presented with in the clinic were prepared and used to review case files of patients. Statistical Package for social science (SPSS) version 21 was used to analyse the data collected; the relationship between chief complaints and age-group by sex of patients was examined. Toothaches was the most common chief complaints reported at 43.3% and this was more in females at 50.9%. Among the female sex, those within the age of 21-30 years reported more toothaches, while among the male sex those within 31-40 years of age reported more toothaches complaints and this was statistically significant.

The limitation of this study was that the sample size was small, and the study was conducted in one dental clinic only in Abuja. Thus, this might not be a complete reflection of pattern of chief complaints in Abuja, the Federal Capital Territory of Nigeria. Health planners, policy makers including non-governmental agencies should be interested in further studies since the result could be used in planning for dental needs of the populace.

Keywords: Chief complaints; Toothaches; State house clinic

Introduction

A chief complaint in dentistry could be defined as a subjective report provided by a patient in his own word that describes the most significant reason or serious symptoms of abnormality that caused him to seek an oral health care [1] and it serves as a source of information to the dentist which he uses to elicit signs in making a set of provisional diagnosis [2]. This is usually recorded in order of the most pressing dental challenges requiring urgent attention in the patient's exact own words to know his awareness of the dental

health challenges [1, 2]. Hence, recording accurately and identifying the patient's chief complaints (CC) by asking appropriate question that would elicit a detailed history from the patient is considered as the foundation for developing a consistent treatment plan [3]. The severity of the chief complaint (CC) in dentistry reflects the urgency of the patient to seek dental care however, a patient's CC is not designated to create a standard of care [4, 5] but rather it is the beginning or guide to taking an accurate dental history and is

usually a short statement describing the symptom or problems that requires dental attention [1].

Studies carried out in Pakistan reported toothache as the CC of patients seeking dental treatment [2], and this is like the report of 31.5% patients, attending the University of Nairobi Dental hospital whose chief complain was pain, while 25.4% had orthodontic related challenges as their CC and finally, 19.7% gave dental tooth decay as their chief complaint [6]. A study in Pelotas, Brazil indicated that the CC of most patients visiting the dental hospital was dental pain originating from dental caries and these ones eventually underwent endodontic treatment [7]. Furthermore, it has been reported that in India, toothache was the chief complaint among dental patients, while oral hygiene and mal-occlusion were the next most common CC [8]. In addition, Akaji, et al. reported on 1663 patients with an average age of 33.218 years, attending the Dental Clinic of the University of Nigeria that almost half of the patients, 49.2% to be precise, recorded tooth dental pain as CC, 7.6% had swelling as CC and 5.7% were at the clinic for dental check-up [9].

In dental practice, it is important to give utmost attention to the problem that brought the patient to the dental clinic and treat appropriately so that the patient leaves the clinic satisfied and the time spent in the dental clinic is thus reduced [4]. The knowledge of the most common chief complain would enable the dentist to focus his attention on that speciality that manages that complaints and plan for more dental materials to handle such cases when patients with them turn up. Moreover, dental public health campaigns would be geared towards enlightening the populace on preventive measures that could be done to reduce incidence of the chief complaints, while making them to appreciate the importance of visiting the dental clinic for dental check-ups early so that serious dental challenges are detected on time and treated to prevent them from developing into more serious challenges in the future [10].

However, literature on CC of patients visiting the dental clinic in Nigeria seems to be scanty from our search and there was none

to the best of our knowledge on study carried out in the northern region of Nigeria. Thus, this study aims to provide an update on the chief complaint of patients residing in Abuja, the Northcentral region of Nigeria so that adequate training and emphasis would be focused on the area of oral health needs of patients in this region and preventive strategies can be developed and implemented to reduce the man-hour spent in dental clinics by patients.

Methodology

This is a five-year retrospective study of chief complaints (CC) of patients attending the Dental and Maxillofacial Surgery Department of State House Clinic, Abuja. The State House Clinic was initially restricted to the President, the Vice-President, and their families, including a few senior government officials especial since it was not created to generate funds. However, with the creation of the National Health Insurance Scheme (NHIS) in June 2005 [11], the clinic was opened to employees of the State House and those patients who choose the clinic as their NHIS accredited Hospital. The NHIS has resulted in an increase in number of patients accessing the State House Clinic and this is similar to the effect of NHIS reported in Lagos state [12]. Ethical clearance for this study was obtained from the Federal Capital Health research ethics committee, Abuja.

Information such as age, sex, marital status excluding their names was collected from the case files of the patients in the Medical Records Unit of the clinic. A table of various CC was prepared with CC commonly heard from patients such as "My tooth is paining me", "I want to remove my tooth", "I want to wash my teeth", "I want to do dental check-up", "I do not like the arrangement of my child's teeth" and two trained investigators were required to tick on the table, the most appropriate CC found in the case file.

Chi-square test was conducted to find if there were any relationship between CC and age-group by gender of patients. Statistical Package for social science (SPSS) used is version 21.

Results

Table 1: Sex Distribution of Respondents and Chief Complaint.

Sex	Frequency	Percentage
Male	131	49.1
Female [‡]	136	50.9
Total	267	100
Mean	1.51	
Std. Deviation	0.501	

[‡] in the period under review, toothache complain was higher in females than in males, however this was not statistically significant.

Table 2: Chief Complaints of Respondents.

Complaints	Frequency	Percentage
Toothache	267	43.3 [¶]

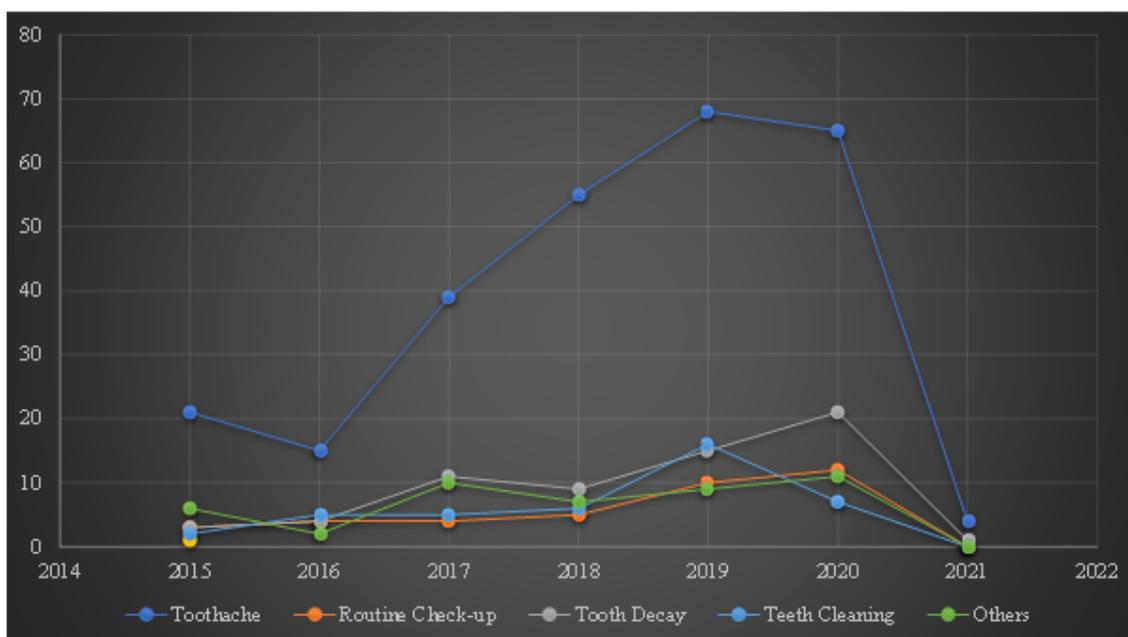
Routine Check-up	38	6.2
Tooth Decay	64	10.4
Facial Swelling	21	3.4
Broken Teeth	27	4.4
Teeth Discolouration	22	3.6
Teeth Cleaning	41	6.6
Teeth Replacement	10	1.6
Teeth Sensitivity	20	3.2
Oral Ulcer	9	1.5
Gum Bleeding	15	2.4
Intra Oral Swelling	9	1.5
Teeth Arrangement	11	1.8
Bad Breath	8	1.3
Gum Enlargement	5	0.8
Tooth Impaction	4	0.6
TMJ Pain	6	1
Others	40	6.5
Total	617	100

¶ Toothache is the most common complaints by patients.

§ More females than males under the age-group of 21-30 complained of toothaches.

B Toothache complain was highest among males of 31-40 age-groups and this correlation is statistically significant at the 0.01 level (1-tailed).

Figure 1: Time Series of Five Chief Complaint from 2015 – 2021



Source: Author's Computation 2021

Figure 1: Toothache was the most common chief complain for each year from 2019 to the early part of 2021. Patients were often not coming for routine check-up as shown.

Table 3: Age Group by Sex Distribution of Toothache.

Variable	Male (n=131)	Female (n=136)	Total	p-value
Age Group (Years)				
<10	18(13.74)	13(9.56)	31(11.61)	<0.01
11-20	15(11.45)	21(15.44)	36(13.48)	
21-30 [§]	18(13.74)	34(25.00)	52(19.48)	
31-40 [§]	37(28.24)	27(19.85)	64(23.97)	
41-50	25(19.08)	21(15.44)	46(17.23)	
51-60	13(9.92)	14(10.29)	27(10.11)	
≥61	5(3.82)	6(4.41)	11(4.12)	
Mean ± SD	18.72 ± 10.08	19.43 ± 9.36	38.14 ± 17.51	
Chief Complaint		-267	100%	.655 α
Male		131	49.06%	
Female		136	50.94%	

Discussion

This is a retrospective study of the chief complaints of patients who attended the dental and oral maxillofacial surgery department of the State House Clinic Abuja, over a period of 5 years, for the management of oral health challenges. The sample size of this study is a limitation that may affect its interpretation and it may not be a general reflection of chief complaints pattern in Abuja, Federal Capital Territory (FCT), Nigeria. Moreover, the study was done at a clinic that does not have a good mix of the general population of the federal capital territory, Abuja. Access to the State House Clinic (SHC) is limited to a certain category of government employees and those who chose SHC as their Health Provider in the National Health Insurance Scheme (NHIS) [11, 13]. In addition, SHC was originally created to operate as a clinic but became a Medical Centre as the facility was expanded during President Obasanjo period as the President of Nigeria (1999-2007). However, due to insufficient funding plus the fact that the medical centre was not originally established to generate funds, it was changed back from a Medical Centre to a Clinic. With these change, new restrictions were introduced which affected the number of patients that could access healthcare at the clinic as this number dropped drastically [14]. A reduced attendance in SHC by extension, also affected dental and maxillofacial surgery department, hence the low number of cases that were recruited for this study. Therefore, it is the authors believe that a better reflection of chief complaints in Abuja would be provided by a result from a retrospective study of Government Dental Centres where patients from diverse educational and social background have unrestricted access.

Nevertheless, in SHC the percentage of females that reported with toothache as Chief Complaints (CC) was 50.9%, and this was higher than males who recorded 49.1%. This result agreed with a similar study conducted in Benin city Edo state, and some parts of the world where a higher female percentage with toothache as

CC were reported [15-17]. While this study did not investigate the reason for the higher female percentages, possible reason could be that the females were more concern about the state of their teeth than the males which led to a higher percentage of females attending the dental clinic more than their male counterparts. Maheswaran et al study in Malaysia agrees with that assertion because he concluded that females' attendance pattern to the dental clinic was more preventive oriented than that of males [8]. Additionally, it is also possible that the females were not employed and were more at home which gave them more flexible time schedule to attend dental care facilities more than the males.

In our study, the total number of patients, male and female that presented with toothaches as chief complaints was 43.3% of the 267 patients whose dental records were reviewed. This result is in consonance with the study conducted by Ali in Iraqi among 407 patients, in which 47.02% were at the dental clinic for toothaches [18]. Additionally, Warnakulasuriya in Sri Lanka reported that dental caries was the chief complaints among the patients that were investigated [19]. This may not be surprising because toothaches resulting from dental caries has been described as "the most prevalent chronic diseases of people worldwide" [20].

In our study, toothache complain was highest among males of 31-40 age-groups and this correlation is statistically significant. Agreeing with this report is an Australia study that reported prevalence of toothaches being common among young people below the age group of 45-61 [21] and a Brazilian report of a prevalence of 34.8% which was among middle aged adults of 35-44 years old [22]. This age group is the economically active age group, therefore if this number keep increasing and more males keep spending time at the dental clinic, then the negative outcome would be a lower number of males reporting for work at their place of employment and this would have a ripple effect on the country's economy with much funds being lost [22].

Conclusion

This study has investigated the chief complaints of patients attending the Dental and Maxillofacial Surgery Department of State House Clinic. The result indicates that toothache is the highest on the list of patients' complaints. It was also observed in the study that young adults in their prime both in males and females had more toothaches. This population represents the active workforce of any Country. Adequate planning on preventive dentistry should be the focus so the man-hour spent in the dental clinic would be reduced.

Acknowledgement

None.

Conflict of Interest

No conflict of interest.

References

- Greenberg MS, Glick M Burket's (2003) Oral Medicine: Diagnosis and Treatment. (10th edn.) BC Decker INC.
- Draid YA, Olmamat AF, Hyasat A, Othman EF (2014) The most common chief complaint among Jordanian children at first dental visit. Pakistan Oral & Dental Journal 34: 549-564.
- Lewis C, Lynch H, Johnston B (2003) Dental complaints in emergency departments: a national perspective. Ann Emerg Med 42: 93-99.
- American Dental Education Association (2005) Competencies for Entry into the Profession of Dental Hygiene. Journal of Dental Education 69: 803-809.
- Stefanac SJ (2001) Treatment Planning in Dentistry. St. Louis, Mosby 20-25.
- Masiga MA (2005) Presenting chief complaints and clinical characteristics among patients attending the Department of Paediatric Dentistry Clinic at the University of Nairobi Dental Hospital. East Afr Med J 82(12): 652-655.
- Shqair AQ, Gomes GB, Oliveira A, Goettens ML (2012) Dental emergencies in a university pediatric dentistry clinic: a retrospective study. Braz Oral Res 26(1): 50-56.
- Maheswaran T, Ramesh V, Krishnan A, Joseph J (2015) Common chief complaints of patients seeking treatment in the government dental institution of Puducherry, India. J Indian Acad Dent Spec Res 2: 55-58
- Abdullah BA, Al-Tuhafi AA (2007) Chief complaints of patients attending the college of dentistry at Mosul University. Al-Rafidain Dent J 7: 201-205.
- Kalenderian E, Xiao Y, Spallek H, Franklin A (2020) Covid-19 and Dentistry: Challenges and Opportunities for Providing Safe Care. The PSNet Collection.
- Akande T, Salaudeen A, Babatunde O (2011) The effects of national health insurance scheme on utilization of health services at Unilorin Teaching Hospital staff clinic, Ilorin, Nigeria. Health Sci J 2(6): 98-106.
- Christina CP, Latifat TT, Collins NF, Olatunbosun AT (2014) National health insurance scheme: How receptive are the private healthcare practitioners in a local government area of Lagos state. Niger Med J 55(6): 512-516.
- Awosika L (2005) Health insurance and managed care in Nigeria. Annals of Ibadan Postgraduate Medicine 3(2): 40-51.
- News Agency of Nigeria (2021) Presidency cries out over poor funding for State House Clinic. Peoples gazette.
- Okunseri C, Hodges JS, Born D (2005) Self-reported toothache experience in an adult population in Benin City, Edo State, Nigeria. Oral Health Prev Dent 3(2): 119-125.
- Abdullah BA, Al-Tuhafi AA (2007) Chief complaints of patients attending college of Dentistry at Mosul University. Al-Rafidain Dental Journal 7(2): 201-205.
- Agostini FG, Flaitz CM, Hicks MJ (2001) Dental emergencies in a university-based pediatric dentistry postgraduate outpatient clinic: a retrospective study. ASDC J Dent Child 68(5-6): 316-321.
- Ali WM (2009) Chief complaint, treatment need, and factors affect late attendance to dental clinic in a sample collected from Iraqi patients. Marietta Daily Journal 6: 65-68.
- Warnakulasuriya S (1985) Demand for dental care in Sri Lanka. Community Dent Oral Epidemiol 13(2): 68-69.
- Selwitz RH, Ismail AI, Pitts NB (2007) Dental caries. The Lancet 369(9555): 51-59.
- Peres KG, Luzzi L, Harford J, Peres MA (2019) Socioeconomic gradients in toothache experience among Australian adults: a time trend analysis from 1994 to 2013. Community dentistry and oral epidemiology 47(4): 324-332.
- Alexander GC, Nadanovsky P, Lopes CS, Faerstein E (2006) Prevalence and Factors associated with dental pain that prevents the performance of routine tasks by civil servants in Rio de Janeiro, Brazil. Cad Saude Publica 22(5): 1073-1078.