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Pattern of Oral Diseases Presented at a Secondary Health Clinic in Ibadan, Nigeria

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Abstract

Objective: To determine the pattern of oral diseases presented at a secondary health clinic in Ibadan.

Methods: This retrospective study was conducted at a secondary health clinic in Egbeda, Ibadan. Data on socio-demographic characteristics, primary diagnosis and treatments were retrieved from case notes of patients presenting at the clinic, from January 2014 to June 2016. Data obtained was analysed using SPSS Version 23 and the level of significance was set at $p \leq 0.05$.

Result: A total of 1015 patients were seen, age ranged from 1year to 119 years and the mean age was 39.1(±19.9) years. Majority (63.3%) were adults and more than half (57.4%) of patients were females. The dependent patients (39.9%) presented more than the unskilled (39.4%) and skilled (20.7%) patients. Dental caries and its sequelae (32.0%) were the diagnosis of most patients, followed by periodontal diseases (24.6%). Tooth extraction (20.2%) constituted the highest treatment received. Age has significant effect on primary diagnosis, as adult patients (41.1%) presented more with acute apical periodontitis due to caries ($p = 0.0001$). Gender appears to have a significant impact on primary diagnosis, with more of females (28.7%) having acute apical periodontitis due to caries than males (22.6%) ($p = 0.04$). The dependent patients (48.9%) had more of dental abscesses than unskilled and skilled patients.

Conclusion: Dental caries and its sequelae were the predominant oral diseases, with diverse age group presentation.

Keywords: Dental caries, Periodontal disease, Tooth extraction

Introduction

Oral health is the health of the oral cavity and related tissues which enables an individual to eat, speak and socialize without active disease, discomfort or embarrassment and contributes to general wellbeing[1, 2]. Oral health is a window to overall body health, it means much more than healthy teeth. There is a growing challenge of oral diseases such as dental caries, periodontal disease, dental trauma and oral cancer in resource challenged countries[3, 4].

Deterioration in oral health is attributed to low awareness, poverty, inadequate access to good oral health care[5]. Ibadan is Nigeria's largest city by geographical area (8,244.87km) and the third most populous city in the country, after Kano and Lagos, with a population of 3,419,986 people. Egbeda is the 4th most populous local government area in Ibadan with a population of 319,388 people.

The pattern of presentation of oral conditions by the patients, considered in this study were of the individuals that presented over a period of 30 months to an out-station clinic of the department of Family Dentistry, University College Hospital, at Egbeda Ibadan. The outcome of this study may be useful in planning oral health programs in Oyo state, Nigeria.

Materials and Method

This retrospective study was conducted at a Family Dentistry clinic in Egbeda, Ibadan.

Using purposive sampling technique, the clinical records of 1015 patients, who attended the clinic, from visit, the primary diagnosis and the treatment received. The diagnosis includes dental caries and its sequelae (January 2014 to June 2016. Case notes were retrieved and studied in retrospect, after obtaining approval from the ethical committee of the Hospital.

Data collected were the sociodemographic of the patients, reason(s) for the reversible/irreversible pulpitis, acute/ chronic apical periodontitis, cellulitis, dentoalveolar abscess), periodontal diseases (acute/chronic gingivitis, general-ized/ localized gingivitis, acute/chronic periodontitis, generalized/ localized periodontitis, aggressive periodontitis) edentulism and others.Data was analysed using SPSS. Inc. version 23 and presented in tables and charts. Chi-square test was used to test association between the categorical variables and the level of significance was set at $p \leq 0.05$.

Result

A total of 1015 patients were seen, age ranged from 1 to 119 years. Mean age of the patients was 39.1 (±19.9) years. Majority of the patients were adults (63.3%). There were more female patients (57.4%). The dependent patients (39.9%) presented more than the unskilled (39.4%) and skilled (20.7%) patients. Dental caries and its sequelae (32.0%) were the diagnosis of many patients, followed by Periodontal diseases (24.6%). Tooth extraction constituted the highest (20.2%) treatment received.

Table 1: Age and sex distribution of respondents.

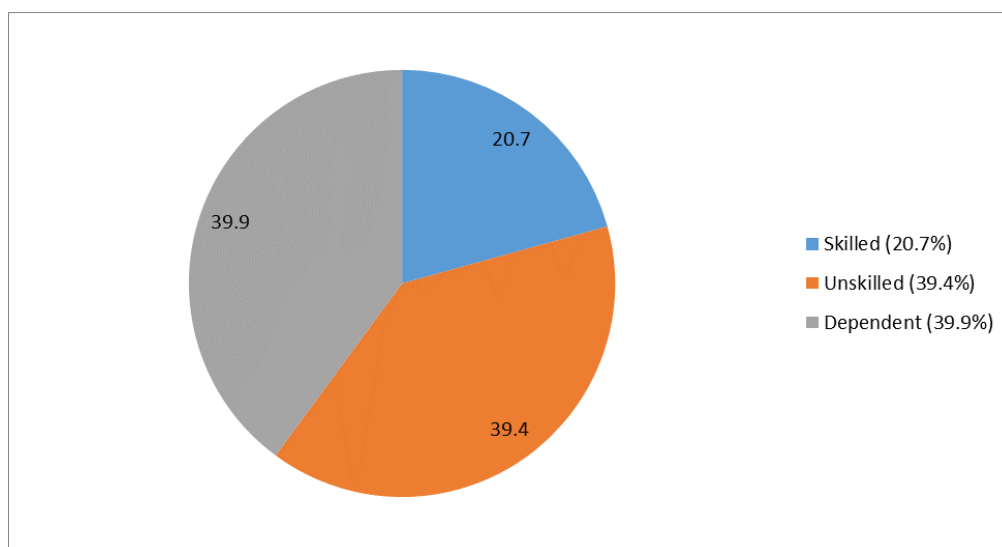| Age Group	Frequency (F)	Percentage (%)
0 - 9 years	86	8.5
10-19	99	9.8
20-29	173	17.1
30-39	160	15.8
40-49	162	16.0
50-59	146	14.4
60-69	125	12.3
70-79	41	4.0
80-89	20	2.0
90-99	1	0.1
110-119	1	0.1
Sex		
Male	430	42.6
Female	585	57.4
Total	1015	100.0

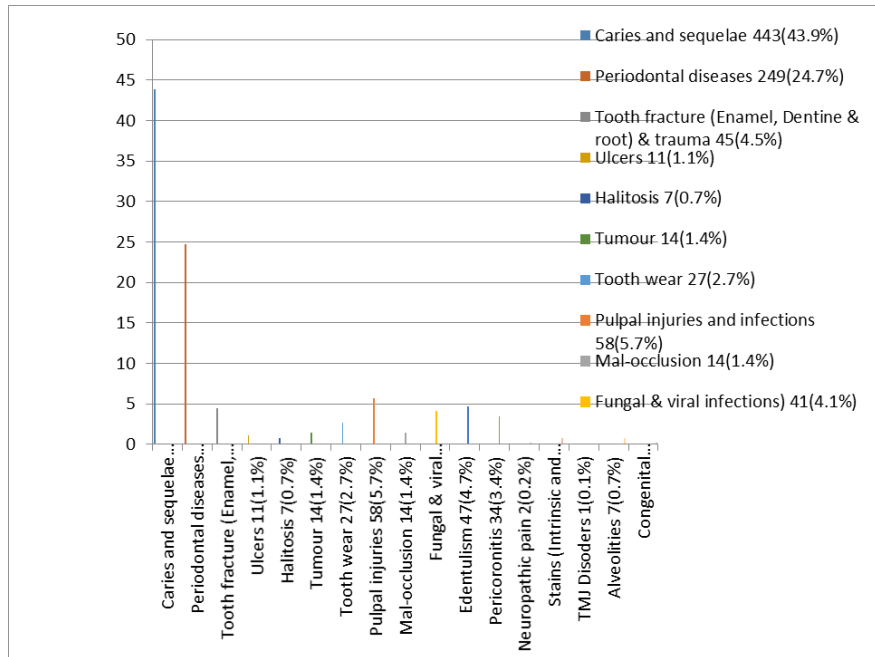*Figure 1: Distribution of respondents by their occupation.*

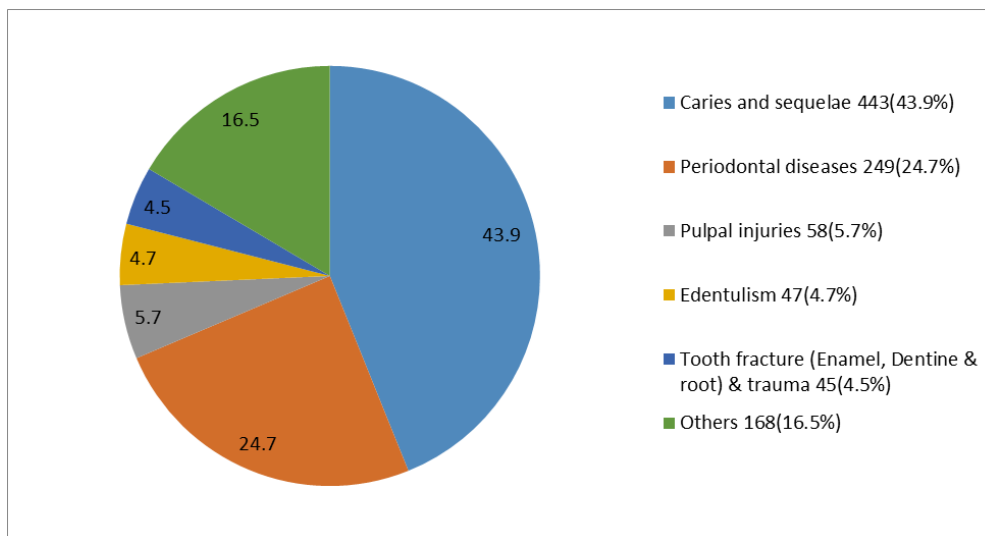*Figure 2: Oral disease presented by the patients during the study period.*

Figure 3:Major oral diseases presented.

Discussion

In this study, more females than males presented to the dental clinic for treatment, this is in agreement with similar studies on oral health seeking behaviours in the southern Nigeria[6], but in contrast to findings from northern Nigeria where males rather than females dominated the dental attendance[7].

The higher distribution of young adults among the patients has been seen in the previous studies and other dental healthcare settings in Nigeria[8]. There was diversity in the occupation, as most of the patients were students. The diversity in the occupation of the patients is in tandem with the pattern seen in the metropolitan cities like Ibadan[9, 10].

Dental caries and its sequelae, followed by periodontal diseases were the most frequent reasons for receiving dental treatment in the present study. Increase in the incidence of dental caries is due to a shift from the traditional diet to a more westernized one[11]. The prevalence of dental caries in Nigeria, as reported by a national survey carried out in 1995 revealed that 30% of 12year old and 43% of 15year old children had caries[12]. Increase in the prevalence of dental caries was more in developing countries, due to increase in the consumption of refined sugars, inadequate use of fluoridated products and low attendance to dental clinic[13, 14].

Studies from sub-Sahara Africa and other developing nations observed that tooth extraction remains the most frequent dental treatment[15, 16].

Conclusion

Dental caries and its sequelae were the predominant oral diseases, with diverse age distribution. Tooth extraction was the most frequent dental treatment sought by the patients.

Recommendation

There is need to encourage more delivery of oral health education and regular utilization of dental services for preventive treatments, to reduce the enormous burden of oral diseases.

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