

## Original Research

### Oral Health Conditions among Elderly Patients Attending a Nigerian Tertiary Health Facility

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#### ABSTRACT

**Background:** Ageing is an undeniable process. Oral diseases is strongly influenced by patient's belief, attitudes and values. In elderly individuals, daily oral care requires knowledge and self-skill from the individual or assistance from those providing care. **Objective:** To determine the pattern of presentation of oral conditions among elderly patients attending a tertiary health facility in South-east Nigeria.

**Methodology:** A retrospective review of the hospital records of elderly patients who attended and had oral clinical evaluation done in Dental clinic, University of Nigeria Teaching Hospital, Enugu State, Nigeria from January 2018 to December 2018 was done. **Results:** A total of 106 elderly patients were clinically evaluated, 49(46.2%) were males, 57(53.8%) were females giving a male to female ratio of about 1:1.2 The age range of the patients was 61 to 90 years with a mean age of  $68.7 \pm 6.5$  years. The highest presentation of oral conditions (61.3 %) was found in the 60-69 years age group, followed by the 70-79 years age group. Periodontal diseases and sequelae of dental caries were the common presentations.  $P=0.11$ . **Conclusion:** Ageing is a natural process and should be regarded as a normal or inevitable biological phenomenon. Early presentation, early diagnosis, early intervention and preventive treatments can prevent or decrease the progress of most oral diseases.

**Key words:** Elderly, Oral conditions, Oral health, Health facility.

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#### INTRODUCTION

Early presentation, early diagnosis, early intervention and preventive treatments can prevent or decrease the progress of most oral diseases, that when left untreated, can cause pain, negative health consequences and affect quality of life. Dental health is often neglected by a vast majority of the population and has contributed to the global burden of oral diseases. This burden is more severe in poor and disadvantaged population groups [1]. Globally, poor oral health amongst older people has been particularly evident in high levels of tooth loss, dental caries experience, and the prevalence rates of periodontal disease, xerostomia and oral precancer/cancer [2]. The negative impact of poor oral conditions on the quality of life of older adults is an important public health issue, which must be addressed by

policy-makers. Oral diseases such as dental caries, periodontitis, halitosis, orofacial tumours and oral cancers are serious public health problems in both developed and developing countries. The mouth is considered to be the gateway to the body and a primary mechanism for human communication [3]. The prevalence of oral lesions is an important parameter in evaluating older people's oral healthcare status, which is significant for health related planning [4]. The World Health Organization recommends that countries adopt certain strategies for improving the oral health of the elderly. Control of oral disease and illness in older adults can be strengthened through organization of affordable oral health services, which meet their needs.[5] The needs for care are highest among disadvantaged,

vulnerable groups in both developed and developing countries.

Utilization of dental services by elderly patients is predominantly a consequence of patient- perceived need for such treatment and perceived need has been considered to be an accurate predictor of utilization of dental services by elderly individuals.[6] Although there is evidence to suggest that attitudes toward, and perception of dental care are influenced by former dental experiences, this factor is unlikely to be the sole cause for the large difference between perceived and normative needs for dental care among elderly people [7]. Epidemiological studies had reported that persons of low social class or income and individuals with little or no education are more likely to be edentulous than persons of high social class and high levels of income and education [5]. Studies had reported the presentation of some oral conditions more on the right side [8-9] of the dental arch than the left. Previous study reported that 35.5 % of elderly people believe they don't need dental care.[10] Gingival recession is common in elderly patients and its occurrence correlated with age, which is supported by reports of other studies [11-13]. According to the World Health Organization (WHO), people with 60 years of age and older are considered as elderly individuals [14] and the Nigerian National Population Commission define the elderly in Nigeria as person's age 60 years and above [15]. There are various studies on elderly individuals in Nigeria. The aim of this study is to determine the pattern of presentation of oral conditions among elderly patients attending a tertiary health facility in South-east Nigeria. It would also contribute to the existing data on elderly patients in Nigeria and the West African sub-region.

## MATERIAL AND METHODS

A retrospective review of the hospital records of elderly patients who presented and received oral clinical evaluation in Dental clinic, University of Nigeria Teaching Hospital, Enugu State, Nigeria from January 2018 to December 2018 was done. University of Nigeria teaching hospital is a tertiary health facility serving many local government areas of Enugu State and neighbouring States. The demographic and clinical data, such as age, sex, imaging reports (where necessary), histopathology report (where necessary) and diagnosis made were retrieved from the patients' records and analyzed using SPSS version 20. Medical records with incomplete data and patients less than 61 years were excluded. Ethical clearance for this study was sought from Ethical Committee of University of Nigeria Teaching Hospital, (HREC, UNTH) Enugu, and obtained before commencement. Data were analysed using a computer software programme, Statistical Package for Social Sciences (SPSS) Version 20. P values < 0.05 were accepted as being statistically significant.

## RESULTS

A total of 106 elderly patients were clinically evaluated, 49(46.2%) were males, 57(53.8%) were females giving a male to female ratio of about 1:1.2. The age range of the patients was 61 to 90 years with a mean age of 68.7 ± 6.5 years as shown in Table 1. The highest presentation of oral conditions (61.3 %) was found in the 60-69 years age group, this was followed by the 70-79 years age group as shown in Table 1. Periodontal diseases and sequelae of dental caries were the common presentations as shown in Table 2. P=0.11

**TABLE 1: SOCIO-DEMOGRAPHIC CHARACTERISTICS OF ELDERLY PATIENTS**

Variable	Number	Percent
<b>Gender</b>		
<b>Male</b>	<b>49</b>	<b>46.2</b>
<b>Female</b>	<b>57</b>	<b>53.8</b>
<b>Age group(yrs)</b>		
<b>60-69</b>	<b>65</b>	<b>61.3</b>
<b>70-79</b>	<b>36</b>	<b>34.0</b>
<b>80-89</b>	<b>3</b>	<b>2.8</b>
<b>90-99</b>	<b>2</b>	<b>1.9</b>
	<b>106</b>	<b>100</b>

**TABLE 2: PRESENTATION OF ORAL CONDITIONS SEEN AMONG ELDERLY PATIENTS**

Variable	Number	Percent
Irreversible Pulpitis	16	13.4
Acute apical periodontitis	20	16.8
Fascial space infection	4	3.4
Dentoalveolar abscess	1	0.8
Chronic Osteomyelitis	2	1.7
Dental caries	5	4.2
Failed restorations	1	0.8
Vertical root fracture	2	1.7
Dentine hypersensitivity	3	2.5
Periodontal diseases	24	20.2
Complicated crown fracture	2	1.7
Uncomplicated crown fracture	1	0.8
Mandibular fracture (dentoalveolar)	1	0.8
Red lesion	1	0.8
TMJ dysfunction syndrome	1	0.8
Benign tumours	7	5.9
Malignant tumours	12	10.1
White lesion	1	0.8
Others	15	12.5
	119	100
<b>P-value = 0.11</b>		

**DISCUSSION**

Ageing is an undeniable process. Oral diseases are strongly influenced by patient’s belief, attitudes and values. In the prevention of oral diseases, much emphasis has been laid on factors such as knowledge, attitudes and beliefs.[10] The aetiology of many dental diseases for example dental caries, periodontal disease and oral cancer are greatly influenced by behavioural and lifestyle factors. Dental caries and its sequelae affects both sexes, all races, all socioeconomic status and all age groups.[9] Periodontal diseases are seen more in the elderly population due to the cumulative progression of disease over time. Several epidemiological surveys have found that the prevalence and severity of periodontal diseases increase with age.[16-17] In this study, periodontal diseases and sequelae of dental caries were the most common presentations and was more

in the 60-69 years age group, followed by the 70-79 years age group. Many elderly persons are hindered in their efforts of effectively performing plaque control procedures due to reduced manual dexterity or impaired vision or due to physical limitations associated with conditions such as stroke, Parkinson’s disease or severe arthritis. Daily oral care requires knowledge and self-skill from the individual or assistance from those providing care.[18] As a result of ageing process, the oral cavity of older people will not only become susceptible to dental caries and periodontal diseases but also to oral lesions [19]. In addition to age, other factors such as gender, socioeconomic status, smoking, wearing dentures, trauma, systematic diseases, medications and oral hygiene are among the effective factors in development of oral lesions [20-21]. Another finding in this study was that oral

squamous cell carcinoma followed by salivary gland malignancies were the common oral cancer seen, other oral presentations were pleomorphic adenoma, lichen planus, ameloblastoma, tooth loss, chronic osteomyelitis, pyogenic granuloma, fascial space infections, temporomandibular joint dislocation, maxillary antral carcinoma and dentoalveolar abscess. These oral lesion/conditions were seen mostly in the seventh decade of life and was similar to previous reports [22-24] High frequency of oral lesions in this decade of life highlights the necessity of better preventive activities/services to decrease morbidity and mortality of geriatric patients.

### CONCLUSION:

Ageing is a natural process and should be regarded as a normal or inevitable biological phenomenon. Early presentation, early diagnosis, early intervention and preventive treatments can prevent or decrease the progress of most oral diseases.

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