

Prevalence of Edentulism and Unmet Prosthetic Needs among Market Women in Benin City

OMO J₁, Faje KE₁

Department of Restorative Dentistry, University of Benin

Correspondence

Dr. J. Omo

Department of Restorative Dentistry

University of Benin

Benin City, Edo State

Nigeria

Email: julie.omo@uniben.edu

ABSTRACT

Citation: OMO J, Faje KE (2022). Prevalence of Edentulism and Unmet Prosthetic Needs among Market Women in Benin City. *Nig J Dent Maxillofac Traumatol*; 5(1&2):c1-c2.

INTRODUCTION

Edentulism is defined as the loss of all natural teeth and it is a major public health problem worldwide due to its high prevalence and associated disability especially among aged population (Global Burden of Disease Study, 2015; Nordenram, G et al., 2013). Edentulism can be partial or complete. It is said to be complete when there is total loss of teeth and partial when there is loss of some teeth with some others still in place (Tokita et al., 2013; Preidt, 2015). Edentulism is a condition that have been reported to have numerous aetiologies. Majority are attributable to dental extraction especially in adulthood (Jahangiri et al., 2015). The reason for the extraction may or may not be because of dental caries, periodontal disease, trauma or other pathologies of the mouth and face such as cysts, tumors etc (Jahangiri et al., 2015). In individuals that are 45 years of age and above, periodontal disease is considered as the commonest cause of tooth loss while for those below 45 years of age, dental caries has been reported as the commonest cause of edentulism (Michaud et al., 2017; Borg-Bartolo et al., 2022). In rare cases edentulism is due to failure of the teeth to develop in the first place in

which case it is referred to as anodontia (Jahangiri et al., 2015). Many members of the society including market women take for granted the relevance and significance of their teeth till they become unable to carry out the basic function they previously could do due to tooth loss. This is more in developing countries where there is an increase in the prevalence of edentulism as the available prosthetics options are scarce and unfamiliar to many (Rajaraman, 2017). Many who need prostheses are limited either by finance or by lack of knowledge of the available options. Several persons are totally in the dark about the prosthetics options they can get, this may be attributed to poor enlightenment program amongst other possible factors (Emami et al., 2013).

The objective of the study was to assess the prevalence of edentulism and the unmet prosthetics need among market women

METHODS

A descriptive cross-sectional study was carried out among 218 market women in Urelu Market. A multi-stage sampling technique was utilized in this

study. Data were collected with the aid of pretested interviewer-administered questionnaires consisting of open and closed - ended questions. The questionnaire was divided into sections that elicited the sociodemographic characteristics, type of edentulism, awareness of options for replacement and limiting factor for non-replacement of missing tooth/teeth. Data collated was analyzed using IBM SPSS version 22.0. The statistical tools employed were descriptive statistics in the form of frequency counts, percent and cross tabulations.

RESULTS

The prevalence of edentulism among

respondents in this study was found to be 18.3% and incidence of edentulism was 2.8% per year. Most of the respondents with edentulism, 38 (95%) of the respondents had partial edentulism, with half 19 (50%) of them having upper right quadrant affectation and caries accounting for the aetiology of most, 24 (60.0%) cases. Only 15.1% of the market women were aware of missing tooth replacement options. Of the respondents with missing tooth/teeth, 17.5% had replaced their missing tooth/teeth with majority of those who were yet to do so, stating lack of finance as their major limiting factor in obtaining a prosthesis.

Table 1: Incidence and prevalence of edentulism

Variable	Frequency	Percent
Missing tooth (N=218)		
Yes	40	18.3
No	178	81.7
Number of missing teeth (n=40)		
1	20	50.0
2	12	30.0
3	3	7.5
4	2	5.0
5	1	0.5
32	2	5.0
When tooth was lost (n= 40)		
Less than 1 year	6	15.0
Greater than 1 year	34	85.0

CONCLUSION

The prevalence of edentulism was low among the market women with a high prosthetic unmet need.

REFERENCES

- Bartolo RB, Rocuzzo A, Mourelle PM, Schimmel M, Gambetta-Tessini K, Chaurasia A, Koca-Unsal RB, Tennert C, Giacaman R, Campus G. (2022) Global prevalence of edentulism and dental caries in middle age and elderly persons: A systematic review and meta-analysis. *J Dent* 127:104335
- Global Burden of Disease Study (2015). Global, regional, and national incidence, prevalence, and years lived with disability for 301 acute and chronic diseases and injuries in 188 countries, 1990–2013: a systematic analysis for the Global Burden of Disease Study 2013. *Lancet* 386, 743–800, doi: 10.1016/S0140-6736(15)60692-4.
- Jahangiri L, Choi M, Moghadam M, Jawad S. (2015). Interventions for missing teeth:

Removable prostheses for the edentulous mandible. *Cochrane Database of Systematic Reviews*, (2).

- Michaud DS, Fu Z, Shi J, Chung M (2017). Periodontal disease, tooth loss and Cancer risk. *Epidemiol Rev* 39(1)29-5
- Peltzer, K. et al (2014). Prevalence of loss of all teeth (edentulism) and associated factors in older adults in China, Ghana, India, Mexico, Russia and South Africa. *Int J Environ Res Public Health*; 11:11308–11324, doi: 10.3390/ijerph111111308)
- World Health Organization (WHO). Mortality and Burden of Disease Estimates for WHO Member States in 2002. *World Health Organization*. 2002.