Oral Health Attitudes and Practices of the Elderly People in South East Local Government Area (SELGA) In Ibadan

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Abstract

The aetiology of many dental diseases is influenced by behavioral and lifestyle factors. It is the aim of this study to determine the oral health attitude and practices of the elderly people in SELGA in Ibadan, Nigeria. The study was conducted on 690 randomly selected individuals from 23 wards in SELGA. Two trained interviewers interviewed them on their oral health knowledge attitude and practices. Positive attitude was demonstrated towards care of the teeth, infection of the gum and regular cleaning of the teeth (99.3%, 88.1%, 97%) and negative attitude towards dental treatment (74.6%). Majority (59.86%) clean their teeth twice daily but only 13% visit the dental clinic regularly and 65.7% have not been to the dental clinic before. Whilst there was strong correlation between frequency of tooth cleaning and attitude to tooth cleaning, the desire to visit the dental clinic (84.2%) did not translate into regular dental clinic attendance.

Keywords: Oral Health, Attitudes, Practices, Elderly.

1. Introduction

Oral health has been defined as a standard of health of the oral and related tissues which enables an individual to eat, speak and socialize without active disease, discomfort or embarrassment and which contributes to general well being. (Department of Health 1989).

Oral diseases and the provision of dental treatment is strongly influenced by patient's belief, attitudes and values. The aetiology of many dental diseases for example dental caries, periodontal disease and oral cancer are greatly influenced by behavioural and lifestyle factors (Chestnut 1998)

Health practices are defined as activities undertaken by people in order to protect, promote or maintain health and prevent disease (Steptoe et al 1994)

Oral health practices have been categorized according to brushing practices, complex dental practices and sugar consumption practices (Rise et al 1990).

The study on the knowledge opinions and practices related to cancer demonstrated that adults and elderly in inner-city in UK lack correct knowledge of the signs, symptoms and risk factors of oral cancer and exhibited risk behaviour associated with oral cancer. (Yellowitz et al 1997)

In the prevention of diseases much emphasis has been laid on factors such as knowledge, attitudes, beliefs and emotions and the way these may be subjected to behaviour modification techniques (Freeman et al 1993)

Locker D in 1989 demonstrated that both adults and children in Canada lack basic knowledge about diseases and their method of prevention. (Locker 1989).

Previous studies on the elderly in SELGA demonstrated high oral health needs and poor oral hygiene, yet participants had a very low demand for oral health care. (Taiwo et al 2004).

2. Aims and Objectives

It is therefore the aim of this study to determine the oral health attitudes and practices of the elderly people in South East Local Government Area (SELGA) in Ibadan, Nigeria.

3. Subjects and Methods

It is a descriptive cross-sectional study of the elderly people in SELGA in Ibadan. SELGA has a population of 222,800 and the elderly people constitute 3% of the population (National Population Commission 1998) (Population Reference Bureau 1998).

Using a two stage sampling technique 690 elderly individuals were randomly selected from 23 randomly selected wards in the local government and invited for the study which took place in a church compound, mosque compound, school or primary health care (PHC) clinic according to convenience.

Two interviewers, were trained in the use of a coded questionnaire which enquired into their socio-demographic status, oral health knowledge, attitude and practices as well as the oral health related habits of the study group.

3.1 Methods of Analysis

Attitude was determined as a binary outcome, indicating positive or negative attitude depending on whether they are likely to encourage good oral health practices or poor oral health practices. Attitudes considered as contributing positively to good oral health practices in the authors opinion are if a patient regards

- Care of the teeth important
- Every day cleaning of the teeth necessary
- Regular yearly check up at the dental clinic necessary
- Gum infection as serious and
- Have health of the gum and teeth as the main purpose for brushing the teeth.

Also if a participant expects treatment of the teeth rather than extraction as solution to his/her dental problem and if he/she does not consider tooth loss and gum disease as an integral part of ageing.

Oral health practice was determined as a binary outcome indicating good or poor oral health practice.

What constitutes good oral health practice as documented in the literature include regular, daily and conscious cleaning of the teeth (Health Education Authority 1989).

Twice cleaning of the teeth daily is regarded as the minimum frequency acceptable for a preventive oral health practice (Health Education Authority 1989).

Regular attendance to the dental clinic at least once every year (Health Education Authority 1989).

Eating a balanced diet rich in vitamins and minerals and low in refined carbohydrates are attributes of good oral health practice.

The information collected was computed and analyzed on a computer programmed with a statistical package for social sciences (SPSS II).

4. Results

The sample consisted of 687 (99.6%) elderly individuals from the Yoruba ethnic group and 3 (0.4%) from Igbo/Edo ethnic groups.

There were 403 (58.4%) males and 287 (41.6%) females with age range between 65 and 90yrs and mean age of 69.7 ± 7.6 years.

Among the 690 elderly in the study 99.3% consider care of the teeth and gum important, 88.1% feel it is necessary to clean their teeth regularly, and 97% consider infection of the gum seriously.

Quite a number (39.1%) expect extraction as solution to their dental problem although a few (26.4%) would want the dental surgeon to give them the treatment he/she considers appropriate. The rest 35.5% said they don't need dental care.

A considerable number (41.7%) and (40.6%) are of the opinion that tooth loss and periodontal diseases (gum diseases) are normal consequences of ageing.

Fig1 illustrates the attitude of the elderly in SELGA, towards oral health. Fig. 2 demonstrates oral health practices of the elderly people in SELGA in Ibadan.

Table 1 and 2 demonstrate the tooth cleaning practices and tooth cleaning methods of the elderly people in SELGA in Ibadan. Whilst Table 3 depicts the dietary habits of the elderly in SELGA.

Four hundred and thirteen elderly individuals (59.86%) claim they clean their teeth more than once daily.

Many 453(65.7%) of the elderly have never visited the dental clinic before, 147 (21.3%) attended the dental clinic when they had problems. Whilst 90 (13.0%) claim they visit the dental clinic regularly once a year. The mean Last dental clinic visit was 7.73 ± 7.6 yrs

5. Discussion

One of the major criteria of successful ageing is maintaining a natural healthy functional dentition throughout life, including social and biological benefits such as aesthetics, comfort and ability to chew, taste and speak (Kalk et al 1992).

In the prevention of oral diseases much emphasis has been placed on factors such as knowledge, attitude beliefs and emotions and the way these may be subjected to behaviour modification techniques.

The traditional health educator perspective aims to change knowledge and attitudes of individuals or groups with the view of encouraging the adoption of health related practices.

Generally a greater percentage of the study group have positive oral health attitudes but this did not translate into good oral health practice in all cases. Whilst there was strong correlation between frequency of tooth cleaning and attitude towards tooth cleaning, the desire to visit the dental clinic (84.2%) did not translate into regular dental clinic attendance (13%).

Also, even though 97% consider gum infection seriously, a previous study in this group of elderly highlighted the high prevalence of periodontal disease (94.8%). (National Population Commission 1998).

Although the study group exhibited a high frequency of tooth cleaning, previous studies in the study demonstrated very poor oral hygiene with gross accumulation of plaque and calculus (Taiwo et al 2004).

It is of great interest to note that many of the participants clean their teeth using the chewing stick but a very high percentage 66.4% did not brush their teeth with the tuft of the chewed sticks. It is apparent that the elderly participants have a different conception of oral cleaning. Chewing the chewing sticks without brushing the teeth with the tuft was equated to cleaning the whole mouth. This is a clear demonstration of a tooth cleaning behaviour which is oral health related. In various studies the elderly have demonstrated poor oral hygiene and poor oral health (Population Reference Bureau 1998) (Health Education Authority 1989).

The elderly in Finland demonstrated poor oral health with Community Periodontal Index of treatment needs (CPITN) scores ranging from 2-4 in 94.8% and 98.6% in hospitalized and non-hospitalized elderly (Pajukoshi et al 1999).

Various studies have highlighted the efficiency of cleaning rather than the frequency, as the more important aspect of cleaning the teeth and have shown that brushing the teeth efficiently once daily will keep plaque at low-levels compatible with gingival health (Kalk et al 1992) (Theilade et al 1966) (Maizels et al 1987).

Majority of the elderly in the study exhibited good sugar consumption practices and other dietary habits. This was confirmed by their low caries experience in a previous study (Taiwo et al 2007). The dental clinic attendance pattern among the elderly people in SELGA was very poor and it reflects the dental clinic attendance pattern in Ibadan and Nigeria (Taiwo et al 2007). Similarly studies in Britain demonstrated poor dental clinic attendance pattern among the elderly and the commonest reason given for non attendance was lack of perceived need for dental care (Steel et al 1996).

6. Conclusion

Generally the elderly in SELGA have good attitudes towards oral health. Looking at the frequency of tooth cleaning and their dietary habits, the elderly have some good oral health habits and it is not surprising that the prevalence of caries amongst them is low. However, their dental clinic attendance is poor.

8. Recommendation

There is need to re-examine the effectiveness of the chewing stick in maintaining oral hygiene even though some authors have demonstrated its efficacy in removing dental plaque in supervised tooth cleaning studies.

Oral health educators should therefore be looking at the methods used by the elderly in cleaning their teeth and to find out the reasons why the elderly as well as other members of the community have poor oral hygiene with gross accumulation of plaque and calculus.

Oral health promotional efforts should be directed at improving the elderly people's method of cleaning their teeth rather than the frequency.

References

Chestnut I G. (1998). Psychological aspect of dental care . Clinical Dentistry. Edited by I G Chestnut and J Gibson. Michael Parkinson. London; 2-9.

Department of Health (DOH). (1989). Dietary sugars and human disease. Report of the panel on dietary sugars of the committee on medical aspects of food policy. Report no. 37,HMSO London. 1-101.

Freeman R, Maizels J, Wyllie M, and Sheiham A. (1993). The relationship between healths related knowledge, attitudes and dental health behaviour in 14-16 year old adolescents . Community dental health. 10;4: 397-404

Health education authority. (1989). The scientific basis of dental health education a policy document 3rd edition.

London. Health Education Authority: 13-14

Kalk W, De Baat C, Meeuwiseen J.H. (1992). Is there a need for gerodontology. Int. Dent. J. 42; 4: 209-216.

Locker D. (1989). Oral health education. An introduction to behaviour science and dentistry. 1st Edition. Tavistock: Routledge; 39-58

Maizels A, Sheiham A (1987). A new measure of teeth cleaning efficiency and periodontal disease. Journal of clinical periodontology. 14; 25: 105-109.

National Population Commission. (1998). Final results of 1991 census. Nigeria. Population Census of Nigeria; 996.

Pajukoski H., Meurman J.H., Suellman Grohns, Sulkava R. (1999). Oral health in hospitalized and non-hospitalized community dwelling elderly patients. Oral Surgery, Oral Medicine, Oral Biology, Oral Radiology and Endodontics. 88(4): 437-443.

Population Reference Bureau. (1998). Population data for Africa. World Population Data Sheet 2:25.

Rise J, Hollund U. (1990). Prediction of sugar behaviour. Community dental health. 7: 267-272.

Steel J G, Walls A W, Ayatollahi S M, Murray J J, (1996). Dental attitudes and behaviour among a sample of dentate older adults from three English communities. British Dental Journal. 180; (4):131-136

Steptoe A, Wardle J, Vinck J, et al. (1994). Personality and attitudinal correlates of health and unhealthy lifestyles in young adults. Psychology and health. 9: 331-343.

Taiwo J O, Jeboda S O, Motayo T O, Obiechina A E. (2004). Periodontal health of the elderly people in South East Local Government area in Ibadan, Nigeria African Journal of Medicine and Medical Sciences 33:285-291.

Taiwo J.O., Onyeaso CO, Kolude BO, Ibiyemi O., (2007). Dental caries experience among the elderly population in South East Local Government area in Ibadan, Nigeria, Odontostomatol. Trop. 30 (118): 31-36.

Taiwo, J.O., (2006). Pattern of dental clinic, attendance in registered diabetic patients in Ibadan, Nigeria Journal of Medicine and Biomedical Research 5(1): 34-41.

Theilade E, Wright W.H, Jensen S.B and Loe H. (1966). Experimental gingivitis in man. A Longitudinal clinical and bacteriological investigation. Journal of periodontal Research. 1: 1-13.

Yellowitz J A, Goodman A S, Farooq N S. (1997). Knowledge, opinions, practices related to oral cancer; Results of three elderly racial groups. Special care in dentistry. 17 (3) :100-104.

Number of Elderly	Frequency of Cleaning			
267 (38.70%)	Once daily	Once daily		
330 (47.83%)	Twice daily			
83 (12.03%)	Thrice daily			
5 (0.72%)	Not at all			
1 (0.14%)	Not every day			
4 (0.58)	Others/No response			
690 (100%)	Total			

Table 1: Tooth Cleaning Practices Of the Elderly People in SELGA in Ibadan

Table 2: Tooth Cleaning Methods of the Elderly in SELGA in Ibadan

Number of elderly	Tooth Cleaning Methods		
86 (12.46%)	Tooth brush and tooth paste and chewing sticks		
486 (70.43%)	Only Chewing stick		
88 (12.75%)	Only tooth brush and tooth paste		
3 (0.44%)	Chewing sponge		
4 (0.58%)	Foam or Cotton wool and soap		
6 (0.87%)	Nothing		
4 (0.58%)	Only water		
3 (0.44%)	Foam and Cotton wool & water		
2 (0.29%)	Tooth brush and soap		
8 (1.16%)	Others		
690 (100%)	Total		

Among those who use chewing stick (409) 66.4% do not brush their teeth with the chewed sticks.

Frequency	Sugary diet	Fruits	Cooked vegetables	Proteins (Beans, Meat, Fish, Iru)
Not at all	282 (40.9%)	42 (6.09%)	7 (1%)	5 (0.7%)
Every day	40 (5.8%)	0 (0%)	10 (1.5%)	10 (1.4)
More than three times a week	34 (4.9%)	279 (40.43%)	469 (68.0%)	496 (71.9%)
More than once a week	188 (27.2%)	194 (28.12%)	143 (20.7%)	144 (20.9%)
Once a week	146 (21.2%)	159 (23.04%)	61 (8.8%)	35 (5.1%)
Others (No Response)		16 (2.32%)		

Figure 1. Oral Health Practices of the Elderly People in SELGA in Ibadan





Figure 2. Oral Health Attitude of the Elderly people in SELGA in Ibadan

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