



## The Elderly's Perception about their Oral Health

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### Abstract

**Aim:** Acquire knowledge of the elderly's perception about their oral health.

**Methods:** A prospective, exploratory and descriptive study was done. Questionnaires were applied and anamneses and clinic exam were done in 400 older adults assisted in the Family Health Strategy.

**Results:** Hypertension, cardiology diseases and diabetes were the most mentioned chronic illnesses, controlled by the donated drugs. The oral health was considered bad although the last dental consultation to the majority had been done between 6 months and 1 year ago, because they were with tooth pain, wishing to do extraction. In the extra oral examination, elderly's 6% showed angular cheilitis. In the intraoral examination only 8% were with cold sore, 6% were with inflamed alveolar ridge and 3% with hyperplasic gum. The odontogram showed that 74% of the sample have used prosthesis, total or partial, 3.2% were toothless with necessity of prosthesis. Only 4% of old adults had healthful remaining teeth.

**Conclusion:** The elderly considered their oral health conditions precarious and there was accumulated necessity of tooth treatment. The habit and frequency of oral hygiene need to be improved and should be oriented in the Family Health Strategy during the dental treatment.

**Keywords:** Oral Health; Elderly; Dentistry

### Introduction

The aging process is occurring rapidly, both globally and in developing countries, such as Brazil. Estimates indicate that in 2025, among the ten countries with the largest number of elders, five will be developing countries, with Brazil ranked in sixth position [1].

Oral health is an integral part of the general health of individuals, and therefore, must be contemplated in policies relative to the health of elders [2-6]. In the case of Brazil, oral health has been observed to be relegated to forgetfulness when the conditions of health of elderly persons are discussed [2].

Reality has shown us that aging has become a stage of human degradation, particularly when these elders are dependent and institutionalized, due to the failure and lack of organizational structure, and because those in charge do not have sufficient knowledge in order to perform the functions, in practice, in an adequate manner. Because these elders present chronic or systemic diseases, or for reasons of another nature, the majority of them are abandoned in rest or care centers [6-11].

The intensity of oral diseases, state of conservation of the teeth and prevalence of edentulism are reflections, mainly of their con-

dition of life and access to actions and oral health services, with a strong social component. Understanding of the systemic, emotional, cognitive, social and economic situation of the elders is important for the formulation of an adequate preventive/therapeutic plan suited to their reality [12-18].

Therefore, it is extremely necessary to broaden the knowledge about the oral health of elders, in order to achieve an improvement in the quality of life of persons in this age group [19-21]. The Family Health Strategy (FHS) has brought about various specific actions as regards the oral health problems found in elders, suggesting a new perspective for improvement in oral health and well-being of Brazilian elders [2,8,10,12].

In accordance with the context, it is necessary to conduct a study that is broad in scope with regard to the diverse aspect of oral health of elderly individuals cared for by the FHS, so that the epidemiological profile and oral conditions of this population may be known.

### Aim of the Study

The aim of this research was to acquire knowledge of the elderly's perception about their oral health.

### Material and Methods

The researcher obtained a Term of Consent from the Municipality of Parnaíba, authorizing the development of research to be conducted, after ethical appreciation by the Research Ethics Committee of the State University of Piauí – CEP/ UESPI (Process CAAE: 16210813.4.0000.5209) and integrated Report No 458519.

The research participants signed the Term of Free and Informed Consent (Resolution 196/96) after having been informed that their participation was not mandatory.

The research consisted of a non-probabilistic, prospective, exploratory and descriptive study, in which all the Primary Health Care Units (PHCU) of the Health Municipal Foundation (HMF) (n = 10) in the urban zone of Parnaíba-PI were visited, in search of 40 patients in each Unit, totaling 400 patients. The inclusion criterion was male or female patients over the age of 60 years, cared for by the HMF, who wished to participate in the research. Excluded from the research were patients who did not wish to participate in the research, and those who were hospitalized or bedridden at home.

Firstly, a pilot plan was carried out in which an objective questionnaire was applied, and a clinical exam performed by a single examiner, in 10 elders, in total, in two FMS Units.

In the period of the research - between January and October, 2014, in two weekly visits, in two shifts, when the elders were being attended in the PHCU, the research was conducted by a single researcher, who obtained complete participation by the patients.

A few minutes before the patients were attended, the objective questionnaires were applied, by means of which the registration

data were collected, to verify oral hygiene habits, general health determinants, social condition, and knowledge of the importance of self-examination for the prevention of oral cancer. During habitual anamnesis, with the support of the HMF dentist of each PHCU, clinical exams, filling out of clinical record charts, and detection of possible orofacial alterations were performed.

The questionnaires and clinical record chart data were cataloged in a database in Excel Windows 2007 Microsoft®, and afterwards these were submitted to statistical analysis by means of the descriptive statistical technique, with absolute and percentage distributions. The results were presented in contingency tables, and the Pearson Correlation test was applied at the level of significance of 5%, to determine whether general health was related with the use of medications, and whether the oral health condition was correlated with appearance, frequency of oral hygiene and use of dental floss.

### Results

The majority of the interviewees were of the female gender (54%, n = 216), with 200 being between 65 and 70 years of age (50%). All had a monthly income between 1 and 2 minimum wages, and were being cared for by the HMF. As regards the chief complaint reported, a large portion of the interviewees sought attendance for dental interventions (89.2%, n = 357) and a small portion for routine examination, verification of maladapted dental prostheses, for example. (10%, n = 40).

The results obtained by means of the questionnaires were shown in tables 1-5.

Schooling (%)			Nativity (%)	Smoking habits (%)			Alcoholic habits (%)			
Illiterate	Secondary School	High School	Parnaíba	Another City	Yes	Ex- smoking	Never smoke	Yes	Ex-Alcoholic	Never drank
22	57.2	20.8	68	32	42.8	37.2	20	48.8	34.8	16.4

**Table 1:** Educational level, place of origin and smoking and alcoholic habits.

Hypertension	Diabetes	Parkinson Disease	Respiratory troubles	Cardio troubles	Physical deficiency	Psychological troubles
38.8%	18.8%	2.8%	8.8%	22.8%	4.8%	2%

**Table 2:** Systemic Diseases.

Use of Medication (%)		General Health (%)			Oral health (%)			1. Period of Dental Prostheses using (%)				
Yes	No	Good	Regular	Bad	Good	Regular	Bad	No use	Less than 1 year	Between 1 and 4 years	Between 4 and 10 years	More than 10 years
86.8	13.2	48	33.2	18.8	26	32	42	24	7.2	9.2	31.2	28.4

**Table 3:** The use of medication, general health, oral conditions, time period of dental prosthesis TT3.

Change in dietary habits (%)		Deglutition with comfort (%)			Satisfaction with the appearance (%)		Periodicity of Oral Hygiene (%)			Using of dental floss (%)			
Yes	Sometimes	No	Yes	Sometimes	No	Yes	No	1	2	3	Sometimes	Yes	No
7.2	28	64.8	56	28	16	66	34	42.8	46.8	10.4	12	18	70

**Table 4:** Change in dietary habits, deglutition, satisfaction with the appearance, periodicity of oral hygiene and using of dental floss. 1: On Time a Day; 2: Twice a Day; 3: Three Times a Day.

Last dental treatment (%)					Reason (%)			
< 6m	Between 6m to 12m	Between 1 and 2 y	> 2y	Don't remember	Dental	Pain and Tooth removal	Prostheses	Routine
11.2	38	28	16	6.8	2	46	41.2	10.8

**Table 5:** Time of the last dental treatment and the reason. <: Below; >: Above; m: Months; y: Years.

In the extraoral exam, elderly patients with angular cheilitis were detected (16%). In the intraoral exam, the following were found: aphthous ulcerations caused by maladapted dental prostheses, in 18%, inflamed alveolar ridge, in 36% and gingival hyperplasia, in 3.2%. The other patients presented no lesions.

After filling out the odontogram, it was observed that 76% of the sample made use of Complete Dental Prostheses (CDP) or Partial Removable Dentures (PRD); of these 52% with the use of CDP in at least one arch, 3.2% edentulous with need for complete dental prostheses, and 20.8% using PRD in at least one of the arches. Of the patients who wore dental prostheses (n = 304), 56% needed to have them replaced, because they had worn them for over four years.

With regard to the need for dental treatment, among the patients who did not wear dental prostheses, only 4% of the elders presented healthy remaining teeth, without the need for treatment. The remaining 20% presented teeth of deficient quality, requiring treatment. All the patients who wore dental prostheses, even when only in one arch, required dental treatment. No pre-malignant or malignant lesions were found in any of the patients during the clinical exam.

**Discussion**

The majority of the elders involved in the research were between 65 and 70 years old, resident with their families, in their own homes in Parnaíba, with a monthly income between 1 and 2 minimum wages. There was higher prevalence of smokers and alcoholics, with a Primary School level of education (Table 1), and all were cared for by the HMF. The chronic diseases that most affected them were hypertension, cardiopathies and diabetes (Table 2). However, they routinely received medical-dental care, since a large portion of the elders received medications at the PHCUs on a monthly basis, presented good general health status, but paradoxically, they presented poor oral health as they required new CDP or PRD, since the present appliances had been acquired over 4 years previously (Table 3).

Other authors have also observed similar results with regard to chronic diseases, finding that these caused an accentuated reduction in quality of life. They suggested prioritizing control of morbidities and providing full and continuous care were policy strategies focused on the prevention and management of chronic diseases

[10-14]. This was observed in the elders included in this research, since there was resolution and control of the diseases that affected them, due to the high level of activity of the HMF.

Psychosomatic problems among the elderly presented low prevalence (2%), among them depression and anxiety (Table 2), in disagreement with some authors who affirmed that the presence of these disturbances is associated with lower satisfaction with life and worse patterns of quality of life. Problems arising from emotional issues, such as depression, may lead to elders neglecting care of their body, among others, general and oral hygiene [15-17].

A high number of edentulous individuals, high prevalence of caries and periodontal disease in the remaining teeth was observed. The majority wore some type of dental prosthesis, with the highest number being CDP. Dental appointments were previously scheduled by the Community Health Agents (CHA) or by spontaneous demand, and it was found that a high number of procedures were performed, such as extractions, tooth restorations, periodontal disease treatment and control, probably because there was low frequency of tooth brushing (twice a day), without the habit of using dental floss. However, in spite of the oral problems related, in general the patients did not relate changes in dietary habits, and swallowed with a certain degree of comfort (Table 4).

They reported being happy with their appearance, in spite of 25% requiring some type of dental prosthesis, or 31.2% needing replacement of these appliances (Tables 3 and 4). The stereotype of the dependent, weak, sad and lonely old person was not shared by all the interviewees. Possibly, this positive view of old age was shown to be associated with the capacity to perform diverse activities, including pleasurable accomplishments, which has also been found by some authors who affirmed that the connotation of a good old age, free of day to day obligations, and that this was the stage of enjoying life, playing, learning and teaching, and not one of social exclusion, also appears to be associated with old age [6,11,18-20].

In spite of receiving periodic dental care, the majority presented the use of dentures or the need to have them replaced, which is not a good indication of oral health. It is believed to be necessary to remove the stigma of naturally being sick from the elderly population, an idea that elderly individuals also have of themselves, because only then, would the needs of health be perceived (Tables 3 and 5).

In the literature there are differences between the need observed and felt with respect to the need for prosthetic treatment in elders. The greater report of dissatisfaction predominates, as well as the lower percentage use of dental prosthesis, especially the mandibular removable type, due to instability and problems of adapting to them [15,18-20].

The majority of elders were observed to seek dental attendance only in the case of pain and extractions, with this also being the behavior of their families. Moreover, many changes that may occur in the oral cavity of elders are mistakenly viewed as being natural, resulting from the aging process, as has been observed by other authors when they affirmed that these factors, associated with a precarious perception of the need for treatment, most certainly contribute to the low proportion of elders who believe they need to visit the dentist for routine care [4].

There was correlation between general health and the use of medications (0.34), suggesting that as the chronic diseases are being controlled with daily specific medications obtained from the pharmacies of the PHCU of the HMF, the elders presented good general health, and consequently, quality of life, as has also been observed by other authors [14,21-23].

There was no significant correlation between the oral health condition and the degree of satisfaction with appearance (0.04), but there was correlation between the oral health condition and the frequency of oral hygiene and use of dental floss, with the values (0.31 and 0.28), respectively. This corroborated the findings of some authors, who affirmed that oral hygiene is a signaler of oral health, however, when it was inadequate, this would predispose the patient to caries, periodontal disease, and consequent reduction in the quality of life [14,15,18,20,21].

Oral health is believed to be associated with general health and biologic aspects, extrapolating to the dental office and it must be contemplated in the policies relative to the health of elders. Our hope is that the results of this study may encourage the offer of a larger number of training and qualification courses to dentists and members of the HMF, who intend providing elders with a higher quality of care, as well as the elaboration of preventive and educational programs.

## Conclusion

The elderly considered their oral health conditions precarious and there was accumulated necessity of tooth treatment.

The oral health conditions of the population evaluated are precarious and there is great accumulated need for dental treatment. Oral hygiene habits and frequency need to be improved and patients must be provided with instructions at the Primary Health Care Units during dental treatment, even in routine appointments. The basic information and instruction provided to the population at the HMF may be effective means for changing self-perception with regard to the oral health of elders.

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