

IDEATIONAL REPRESENTATIONS OF EDENTULISM AND PROSTHETIC REHABILITATION FROM THE POINT OF VIEW OF THE ELDERLY

Representações ideativas sobre edentulismo e reabilitação protética na percepção de idosos

Representaciones de ideas sobre el edentulismo y la rehabilitación protética desde la perspectiva de mayores

Original Article

ABSTRACT

Objective: To identify the ideational representations of upper and/or lower edentulous elders regarding tooth loss and oral prosthetic rehabilitation. **Methods:** Qualitative study conducted between January and March 2011 with seven elders living in a Public Long-term Care Institution in Recife, PE, and 14 elders attending the Dental Prosthesis Clinic of the Universidade Federal de Pernambuco – UFPE (Federal University of Pernambuco). Data were collected through semi-structured interview and underwent content analysis. **Results:** The results enabled to identify that, for the elders, the teeth contribute to health and facilitate the social interactions, while edentulism has been associated with a plurality of negative feelings. Regarding prosthetic rehabilitation, they emphasized the harms to health due to poorly fitted dental prosthesis. **Conclusion:** The elderly believe that edentulism and prosthetic rehabilitation are mainly associated with a mechanistic concept of the profession that is widely spread among the professionals who focus more on curative Dentistry at the expense of prevention. In this context, so that aging can be considered a stage of life with the same qualities and difficulties of any other stage, we suggest that managers and health professionals themselves should undertake a humanizing and preventive dental practice in order to provide the minimum requirements for an aging with dignity.

Descriptors: Elderly; Aging; Dental Prosthesis; Rehabilitation; Oral Health; Quality of Life.

RESUMO

Objetivo: Identificar as representações ideativas de idosos edêntulos uni ou bimaxilares acerca das perdas dentárias e da reabilitação protética oral. **Métodos:** Estudo qualitativo, realizado entre janeiro e março de 2011 com sete idosos residentes em uma Instituição Pública de Longa Permanência do Recife-PE, com 14 idosos em atendimento na Clínica de Prótese Dentária da Universidade Federal de Pernambuco (UFPE). Coletaram-se os dados através de uma entrevista semiestruturada que passou por análise de conteúdo. **Resultados:** Os achados possibilitaram identificar que, para os idosos, os dentes contribuíam tanto para a saúde quanto como para facilitar interações sociais, enquanto o edentulismo foi associado a uma pluralidade de sentimentos negativos. Quanto à reabilitação protética, eles enfatizaram os prejuízos para a saúde devido a próteses mal adaptadas. **Conclusão:** Os idosos acreditam que o edentulismo e a reabilitação protética estão associados, principalmente, a um conceito mecanicista da profissão, amplamente difundido entre os profissionais que privilegiam mais a odontologia curativa em detrimento da prevenção. Nesse contexto, para que o envelhecimento possa ser considerado uma etapa da vida com as mesmas qualidades e dificuldades de qualquer outra, sugere-se aos gestores e aos próprios profissionais em saúde que se comprometam mais com uma prática odontológica humanizadora e preventiva, a fim de proverem os requisitos mínimos para um envelhecimento com dignidade.

Descritores: Idosos; Envelhecimento; Prótese Dentária; Reabilitação; Saúde Bucal; Qualidade de Vida.

Silvana Orestes-Cardoso⁽¹⁾
Kamilla Karla Maurício Passos⁽¹⁾
Saulo Lôbo Chateaubriand do
Nascimento⁽¹⁾
Milena Vieira da Silva Melo⁽¹⁾
Marilenede Oliveira Trindade⁽¹⁾

¹⁾ Federal University of Pernambuco
(Universidade Federal de Pernambuco -
UFPE) - Recife (PE) - Brazil

Received on: 11/11/2014
Revised on: 03/03/2015
Accepted on: 06/30/2015

RESUMEN

Objetivo: Identificar las representaciones de ideas de mayores edentulos uni o bimaxilares sobre las pérdidas dentarias y de la rehabilitación protética oral. **Métodos:** Estudio cualitativo realizado entre enero y marzo de 2011 con siete mayores residentes de una Institución Pública de Larga Permanencia de Recife-PE con 14 mayores asistidos en la Clínica de Prótesis Dentaria de la Universidad Federal de Pernambuco (UFPE). Se recogieron los datos a través de una entrevista semi-estructurada que pasó por el análisis de contenido. **Resultados:** Los hallazgos posibilitaron identificar que para los mayores los dientes contribuyen para la salud y para facilitar las interacciones sociales mientras el edentulismo se asoció a una pluralidad de sentimientos negativos. Respecto la rehabilitación protética los mismos enfatizaron los perjuicios para la salud debido las prótesis mal adaptadas. **Conclusión:** Los mayores creen que el edentulismo y la rehabilitación protética se asocian principalmente al concepto mecanicista de la profesión muy difundido entre los profesionales que privilegian más a la odontología curativa que la prevención. En ese contexto, para que el envejecimiento pueda ser considerado una etapa de la vida con las mismas calidades y dificultades de cualquiera, sugiérase que los gestores y los propios profesionales de salud se involucren más con una práctica odontológica humana y preventiva para proveer los requisitos mínimos para el envejecimiento con dignidad.

Descriptores: Anciano; Envejecimiento; Prótesis Dental; Rehabilitación; Salud Bucal; Calidad de Vida.

INTRODUCTION

Epidemiological studies conducted in different countries have shown that the older population has presented the highest growth rate in recent years compared to other age groups^(1,2). This is mainly due to factors such as the decline in fertility and mortality rates, which have enabled a greater number of individuals to reach old age⁽²⁾. In Brazil, estimates of the Brazilian Institute of Geography and Statistics have already signaled an increase from 12.6% of older people in 2013 to 25.1% in 2025, which will put the country in the sixth global position of individuals aged 60 years and older⁽³⁾.

Old age is a social and cultural construction whose definition has undergone several changes over time according to different cultures⁽⁴⁾. For instance, Chinese, Arabic and Israeli people devote respect and veneration for older people as a means of disseminating their history, wisdom and experience. However, it is currently observed in the Western civilization the existence of a strong negative feeling about old age⁽⁵⁾.

In this context, it can be said in principle that the concept of older person is divergent among experts; in addition to objective aspects based on measurable evidence, there are subjective aspects that exert considerable influence over old age. There are authors who consider an older person anyone aged 60 years and older⁽⁶⁾. However, others believe that using only the chronological criteria for the identification of geriatric patients is not appropriate. For them, older people should be understood in its complexity, as the concept involves biological, psychological, social, cultural and spiritual aspects⁽⁷⁾.

Studies show that earlier social representations of old age may vary in different population groups according to gender and age⁽⁸⁾. For young people, the older person can be considered an arrogant, sick, tired and lonely person; and for women over the age of 50, the older person is a quiet and experienced person, despite the organic and psychological weaknesses that may arise.

Given the themes investigated in the present study, it is important to note that in Brazil, the epidemiological indicators on oral health for the older population show individuals with mucosal lesions, presence of a large number of periodontal pockets, partial or total edentulism, and also the inadequate use of prostheses, which reveals a mutilating dental practice^(1,9). The main etiologic factors for tooth loss are decays, followed by periodontal diseases and dental trauma^(6,10,11).

Ministry of Health data on the oral health status of the Brazilian population revealed that for the age group 65-74 years the national percentage of wearers of full upper denture was 63.7%, and full lower denture 37.5%. Considering the same age group, the study also assessed the need for dental prosthesis and found that the highest national percentage was for partial denture on just one jaw: 34.2%. Bimaxillary full denture was needed by 15.4% of the population⁽⁹⁾.

In order to provide the older population with an adequate biopsychosocial well-being, there should be the provision of the functionality of mastication, swallowing and speech, in addition to dentofacial aesthetic care to improve both self-esteem and social interactions, minimizing, consequently, possible stigmatizing situations^(6,11,12). It is important to emphasize that from both the aesthetic and psychosocial point of view, the meaning of the absence of teeth will vary depending on the relationship the older person has with the body and the social group to which they belong^(6,13). In this context, the health of the stomatognathic system successfully contributes to providing better social and family integration, as the appearance, speech, smile and kiss are compromised when the oral condition is inadequate⁽¹⁴⁾.

The biopsychosocial balance of older people should integrate biological, emotional and spiritual functions. Depending on how these functions are interrelated, any changes in any of them can cause repercussions for the others⁽¹⁵⁾.

Recognizing the psychological dynamics of older people as being rich and complex, especially due to its emotional and physiological adaptive difficulty⁽¹⁶⁾, does not mean that the aging process is synonymous with disease, as many organic and emotional disorders can be prevented in this age group⁽¹⁷⁾.

Thus, healthy aging means that in addition to a good physical health, older people need respect, safety and opportunity to freely express their feelings, emotions, interests, opinions and experiences⁽⁸⁾.

One of the common emotional changes in the aging process is the affective lability, characterized by rapid changes in emotions clinically ranging from hypomania to temper outbursts or anger demonstrations in face of insignificant stimuli^(7,18,19).

Positive emotions experienced lifelong protect the immune system and help the body fight infections⁽⁸⁾. Therefore, it is appropriate to emphasize the effects of good mood and good feelings on the quality of life and general health of people⁽¹³⁾.

Given the psychosocial characteristics and the epidemiological profile of the oral health of Brazilians over 60 years old, we assume that this population symbolizes edentulism and the use of prostheses as natural consequences of the aging process.

The representations that older people have about their feelings in relation to the investigated categories have not been sufficiently explored by the Geriatric Dentistry. Such studies are important because they allow a qualitative and broader understanding of the concept of health throughout the aging process.

Based on the above, this study aimed to identify the ideational representations of upper and/or lower edentulous elders regarding tooth loss and oral prosthetic rehabilitation.

METHODS

This is a qualitative research conducted with seven older women from the *Abrigo Espírita Lar de Jesus - Associação Filantrópica* (Spiritist Shelter Jesus House - Philanthropic Foundation) and 14 older patients (seven men and seven women) attending the *Clínica de Prótese Dentária da Universidade Federal de Pernambuco - UFPE* (Dental Prosthetics Clinic of the Federal University of Pernambuco). It should be noted that in the city of Recife, Pernambuco, there are no public or philanthropic long-stay

institutions for older men. The research excluded older people who presented expression and communication difficulties. The definition of the number of individuals was not made based on probability sampling; the number of subjects was defined by the saturation of the speeches⁽²⁰⁾.

The present research was conducted between January and March 2011. Data were collected using a semi-structured interview to obtain socioeconomic and demographic variables (gender, age, color, marital status, origin, individual income and education) and clinical information (time since last tooth loss, use and manufacture of dentures) about the patients. Open-ended questions were: Why did you lose all your teeth? What is the importance of them to you? How did you feel when you lost them? What are the sufferings of not having teeth? What changes have occurred in your life with the loss? Did you get any health problems for wearing prosthesis? What are the benefits and difficulties of wearing it? Are you satisfied with it?

Data were organized using the content analysis method⁽²¹⁾, which can be divided into three stages: pre-analysis, exploration of results and interpretation of information. The pre-analysis is the organization of the work itself. It is in this stage that we get to choose the object of study and formulate the objectives of the research. After deciding on what to study, it is necessary to build up the *corpus*. The *corpus* is nothing more than the whole material to be subjected to analysis. The exploration of the material consists of a long stage, with coding or enumeration procedures on the basis of pre-formulated rules. The last phase of the content analysis process is the interpretation of results, which consists in literally interpreting the results⁽²¹⁾.

After transcribing the recorded interviews, the information obtained was thoroughly read, summarized and categorized into four thematic categories: Reason for tooth loss; Importance of tooth loss; Feelings and life changes after tooth loss; and Benefits and difficulties of wearing dentures, which were discussed in light of the theoretical framework previously selected.

The research was approved by the Human Research Ethics Committee of the *Centro de Ciências da Saúde da Universidade Federal de Pernambuco - CCS/UFPE* (Health Sciences Center of the Federal University of Pernambuco), CAAE - 0096.0.172.000-09. All participants agreed to sign the Informed Consent form and anonymity was preserved by using code names of philosophers for men and names of Greek mythology goddesses for women.

RESULTS AND DISCUSSION

Initially, it is presented the sociodemographic, economic and clinical data of respondents and then the themes that emerged from the study.

Through a structured form, it was found that the 21 older people who participated in the research were predominantly: women; aged between 60 and 69 years; self-proclaimed leukoderma; single; from the Metropolitan Region of Recife; retired; had an individual income of one minimum wage and incomplete elementary education.

Considering the total sample, the majority of respondents had lost the last tooth between 30 and 59 years of age, have worn full dentures for over 20 years, and were using the prosthesis for the first time - the prostheses were manufactured over the past 1 to 5 years.

The history of Dentistry in Brazil refers to an epidemiological picture of a high prevalence of edentulism^(1,9,16), especially among older people, reflecting, at first, a model of surgical-restorative dental care responsible for numerous extractions and subsequent use of dentures⁽⁶⁾.

Reason for tooth loss.

The investigation of the reasons why the respondents had become totally edentulous revealed that tooth loss was mainly caused by the evolution of the caries process, periodontal diseases and dental trauma.

Below are some of the transcripts of the reasons for tooth loss:

"The teeth got spoiled, decayed, weak and aching."
(Aphrodite)

"The fillings fell out" (Plato)

"In the past, dentists were not concerned about such thing as prevention." (Aristotle)

"This thing of losing teeth is inherited from parents."
(Hegel)

In the context of this study, most reasons presented by respondents for edentulism could be categorized into two major groups. The first group included more realistic justifications, given that they could identify that tooth decays were mainly caused by their own neglect, by the lack of a Dentistry focused on prevention and/or by the difficult access to dental services, among other reasons. In this sense, the perceptions they had of tooth loss reinforce the existing consensus in the literature that oral health care actions have historically been structured as a curative practice^(6,11).

The second group included the justifications that were little addressed by the authors consulted, as they are more emotional and forged by the popular imagination through internalized beliefs and myths - for instance, the idea that the teeth get decayed naturally or that there is a hereditary predisposition to weak teeth. This set of beliefs can also be

assessed from the point of view of the racial and cultural identity of the individual: some ethnic groups present an ideation of stronger resistance and others present a resigned weakness.

Importance of tooth loss

When questioned about the importance of the teeth, the participants answered:

"They serve for the person to have a good digestion."
(Spinoza)

"Feel the taste of food." (Nietzsche)

"Not having bad breath." (Athena)

The same asymmetry observed for the justifications presented by them about edentulism was also observed in relation to the importance of the teeth for the biopsychosocial well-being. On one hand, they predominantly associated natural teeth with the preservation of mastication, digestion, aesthetics, speech and satisfactory social interactions, functions that are widely discussed in the literature due to the loss of teeth and the use of partial and/or full dentures^(5,11,17). They also mentioned the importance of the teeth in biting, chewing and grinding objects, real primary functions that go back to the early years of life of the individual. On the other hand, there were some beliefs that the teeth were responsible for taste, and their absence caused halitosis.

With regard to these beliefs, the difficulty in grinding and chewing food interfered negatively in the pleasure they felt when they ate. This is clinically justified by the need edentulous people or full denture wearers have to select food or use other strategies to facilitate ingestion, such as previous grinding. Another injury associated with tooth loss is the physiological reduction of salivary flow, which decreases the ability to swallow food⁽¹⁶⁾.

Changing from a healthy diet to one rich in carbohydrates and less consistent foods may not provide the proper nutrients for the biological needs, causing anemia and apathy in more susceptible people. Moreover, this type of diet can cause atrophy of the masticatory muscles, with repercussions for facial aesthetics and self-esteem of older people⁽¹⁶⁾.

Feelings and life changes after tooth loss

When asked about how they felt after losing all their teeth, the majority of respondents answered:

"I got sad when I lost my teeth. I see people around with their teeth, smiling, and it is beautiful, isn't it? When you cannot laugh at others and eat appropriately, life gets dull." (Sartre)

"I felt devastated because the prosthesis is never the same"

as having our own teeth. The person can barely feel the taste of food. Everything is bad.” (Dion)

Given the plurality of feelings of negative valence identified in the interviews, such as sadness, guilt, shame, humiliation, low self-esteem, and others, it should be highlighted that the aging process involves physiological changes (loss of visual and auditory acuity, muscle tone, metabolic disorders, etc.) and psychosocial (status loss, social isolation, sense of worthlessness, etc.) that affect the individual's quality of life. Edentulism in older people can turn into depressive disorders, ranging from 10% to 24% among non-institutionalized individuals and 25% to 80% among institutionalized individuals^(17,22-24).

It is important to emphasize that all these characteristics, which are commonly found in older people, get worse when patients are edentulous, as the decline in quality of life is even more evident. On the other hand, it is pertinent to point out the existing significant difference of the reasons for tooth loss between genders, as the oral cavity is a source of nutrition and erogenous zone par excellence⁽²⁵⁾. In the group of institutionalized and non-institutionalized women, teeth that *“broke, ached, got loose, decayed, weak, diseased, spoiled, fell out and cracked”* were no good for mastication, and thus *“the mouth got withered”*. In the group of men, the teeth were more associated with virility concepts, referring to a pragmatic view of the situation, given that *“decayed, loose, old and tired”* teeth needed to be *“uprooted”*.

The most common changes reported by respondents were:

“I find it difficult to feed myself because I need to prepare the food in a blender for me to eat. If I do not chew it right, my stomach and my esophagus will work more. This harms my health.” (Aristotle)

“Without teeth, it is difficult to smile. And it is also difficult to kiss.” (Nietzsche)

Regarding the problems that were reported as being associated with tooth loss, such as compromised health, aesthetics and speech, the difficult mastication should be highlighted for being commonly reported. In addition to compromising health, it generated anxiety, impatience and discomfort because it was necessary to change eating habits in order to adapt to the edentulous condition. Thus, the act of eating was no longer pleasurable.

There is consensus among the authors consulted with regard to the aesthetic and functional importance of the teeth; they suggest that in addition to interfering with the individual's vital functions and compromising health, edentulism decreases well-being^(23,26-28).

As for the changes that occurred in their lives due to tooth loss, the respondents' answers could be grouped as follows: changes in eating habits - difficulties in cutting, biting and grinding food, which generated *“impatience, nervousness, anxiety, irritability and agony in the mouth”* - and social behaviors (avoid interacting with others); and changes in body image, with consequent feelings of shame, embarrassment, social isolation and inferiority due to the loss of facial aesthetics and smile, because:

“Without the teeth, we feel bad, like a crap.” (Aphrodite)

Specifically in the group of men, some participants reported that changes were few, as they did not depend on their appearance to survive; furthermore, extracting bad teeth and wearing a denture was a benefit for health:

“Because I used to feel earache, headache, and pain in the eyes. Now, thanks God I got a denture!” (Spinoza)

We emphasize that the act of chewing is one of the most important oral functions, and the masticatory capacity of denture wearers may be reduced by up to 25%⁽²⁹⁾. Therefore, older people tend to seek softer foods because they realize that chewing no longer has the same effectiveness⁽¹⁾. Tooth loss, coupled with decreased salivary flow in older people, favors decreased masticatory capacity, compromising general health and psychosocial well-being⁽⁶⁾.

Satisfaction, benefits and difficulties caused by the use of dentures

In this category, the speech of the respondents about the level of satisfaction with the prosthetic device they were wearing was predominantly positive, as the prosthesis was well adapted and did not hurt them; additionally, they could chew, smile and interact with others without fear. However, some claimed to be dissatisfied due to the lack of retention and stability.

It was observed, therefore, that the level of satisfaction was associated with functional (ability to chew better and comfort in the use of the prosthesis) and social (better social interaction) aspects. In this context, as long as the artificial teeth meet the needs of the individuals, its use is able to improve self-esteem and interpersonal relationships⁽⁶⁾. Given that eating may be associated with obtaining pleasure, edentulous individuals would be deprived of this kind of satisfaction; therefore, the prosthesis can become a means to ease such problem⁽¹⁾.

As for the benefits of wearing a denture, we found that these were related to improvements in mastication,

aesthetics, self-esteem, speech, interpersonal relationships and the possibility of recovering, through dentures, the body image lost due to edentulism.

With regard to these benefits, the results of the present research are in accordance with the literature as for the fact that edentulism can cause significant biopsychosocial disorders^(13,26,27), which makes evident the complexity of prosthetic rehabilitation both for the restoration of vital functions (such as speech and chewing) and the preservation of the quality of life of older people.

With regard to the difficulties of wearing dentures among those who reported health harms, it was found that:

"A poorly adapted denture causes sores in the gums and stomatitis." (Iris)

"This denture is giving me earache." (Hegel)

"As I cannot chew properly, I get gastritis." (Socrates)

Regarding this aspect, the literature corroborates our results and suggest that the dentist-surgeon should be concerned with various aspects when planning a dental prosthesis, including the function of the temporomandibular joint (TMJ), the oral mucosa health, muscle tone, oral and denture hygiene, occlusal conditions, size and shape of the ridge, distribution of masticatory forces and systemic condition of the patient⁽³⁰⁾. Noteworthy is the fact that most dentist-surgeons lose interest in the patient after installing the denture, which compromises the prognosis of treatment, as this attitude influences negatively in the maintenance of oral health⁽³¹⁾.

Different studies have shown the high prevalence of disorders caused by technical problems in the manufacture of dentures and the lack of maintenance and monitoring of the oral condition during its use⁽³²⁻³⁴⁾.

The most common problems regarding the use of dentures reported were related to mastication, communication and adaptation to the denture, especially when it had not been made with all the technical and scientific rigor. Some authors^(6,35) highlight as the main difficulty the poor aesthetics, while others^(1,13) confirm the importance of mastication for the physical and psychological well-being.

FINAL CONSIDERATIONS

The ideational concepts identified by the interviewees, both in relation to their edentulous condition and the use of full denture, were widely permeated by an eminently mechanistic and little humanista Dentistry that is mostly focused on the treatment of pathological processes rather than prevention and education, disregarding aspects such

as transdisciplinary approach and specific psychosocial conditions of older people. The results sadly confirm the initial assumption that tooth loss was considered a natural part of the aging process.

Despite the difficulty in having the respondents freely express their feelings, emotions, perceptions, interests, opinions and experiences regarding the investigated categories, we consider important to highlight how promising it is to have individuals within this age group consider the conditions relating to tooth loss and poor adaptation of dentures as factors that interfere with the pleasures of everyday life, such as taste, smile and kiss. Thus, they can be committed to taking care of their health and improving their quality of life.

Given the above, and that aging can be considered a stage of life with the same qualities and difficulties as any other, health professionals and managers should be more committed with a humanizing dental practice in order to provide the minimum requirements for an aging with dignity.

REFERENCES

1. Piuvezam G, Ferreira AAA, Soares SCM, Souza DLB, Alves MSCL. As perdas dentárias sob a ótica do idoso. *Odontol Clín-Cient.* 2006;5(4):299-306.
2. Veras R. Envelhecimento populacional contemporâneo: demandas, desafios e inovações. *Rev Saúde Públ.* 2009;43(3):548-54.
3. Instituto Brasileiro de Geografia e Estatística - IBGE. Censo Demográfico 2010 [accessed on 2014 Sep 20] Available from: http://www.ibge.gov.br/home/estatistica/populacao/condicaodevida/indicadoresminimos/sinteseindicais2013/default_tab_xls.shtm.
4. Beauvoir S. A velhice. Rio de Janeiro: Nova Fronteira; 1990.
5. Freitas AS, Costa MJ. A identidade social do idoso: memória e cultura popular. *Rev Conexão UEPG.* 2011;7(2):202-11.
6. Unfer B, Braun K, Silva CP, Pereira Filho LD. Autopercepção da perda de dentes em idosos. *Interface Comun Saúde Educ.* 2006;10(19):217-26.
7. Santos SSC. Concepções teórico-filosóficas sobre envelhecimento, velhice, idoso e enfermagem gerontogeriatrica. *Rev Bras Enferm.* 2010;63(6): 1035-39.

8. Silva DD, Sousa MLR, Wada RS. Autopercepção e condições de saúde bucal em uma população de idosos. *Cad Saúde Pública*. 2005;21(4):1251-9.
9. Ministério da Saúde (BR). Projeto SB Brasil 2010. Pesquisa nacional de saúde bucal. Resultados Principais. Brasília: Ministério da Saúde; 2012.
10. Moreira RS, Nico LS, Tomita NE. O risco espacial e fatores associados ao edentulismo em idosos em município do sudeste do Brasil. *Cad Saúde Pública*. 2011;27(10):2041-53.
11. Narvai PC, Antunes JLF. Saúde bucal: a autopercepção da mutilação e das incapacidades. In: Lebrão ML, Duarte TAO. SABE no município de São Paulo: uma abordagem inicial. Brasília: Editora da OPAS; 2003. p. 121-40.
12. Kimura C. Por que idosos desdentados precisam do dentista? *Rev Portal Divulg*. 2011;13: 7-11.
13. Pesquero ACB. Uso de prótese dentária total por idosos: aspectos psicológicos [tese]. Goiânia: Universidade Católica de Goiás; 2005.
14. Musacchio EM, Perissinotto E, Binotto P, Sartori L, Silva-Neto F, Zambon S, et al. Tooth loss in the elderly and its association with nutritional status, socio-economic and lifestyle factors. *Acta Odontol Scand*. 2007;65(2):78-86.
15. Maciel ACM, Guerra RO. Influência dos fatores biopsicossociais sobre a capacidade funcional de idosos residentes no nordeste do Brasil. *Rev Bras Epidemiol*. 2007;10(2):178-89.
16. Montenegro FLB, Brunetti RF, Manetta CE. Interações entre a Medicina e a Odontologia. In: Brunetti RF, Montenegro FLB. Odontogeriatría: noções de interesse clínico. São Paulo: Artes Médicas; 2002. p. 99-114.
17. Silva EMM, Silva Filho CE, Fajardo RS, Fernandes AUR, Marchiori AV. Mudanças fisiológicas e psicológicas na velhice relevantes no tratamento odontológico. *Rev Ciênc Ext*. 2005;2(1):63.
18. Aas M, Aminoff SR, Lagerberg TV, Etain B, Agartz I, Andreassen AO, et al. Affective lability in patients with bipolar disorders is associated with high levels of childhood trauma. *Psychiatry Res*. 2014;218(1-2):252-5.
19. Aminoff SR, Jensen J, Lagerberg TV, Hellvin T, Sundet K, Andreassen OA, et al. An association between affective lability and executive functioning in bipolar disorder. *Psychiatry Res*. 2012;198(1):58-61.
20. Bauer MW, Aarts B. A construção de corpos: um princípio para coleta de dados qualitativos. In: Bauer MW, Gaskell G, editores. Pesquisa qualitativa com texto, imagem e som. 11ª ed. Petrópolis: Vozes; 2013. p. 39-63.
21. Bardin L. Análise de conteúdo. São Paulo: Edições 70; 2011.
22. Smith JM, Sheiham A. How dental conditions handicap the elderly. *Community Dent Oral Epidemiol*. 1979;7(6):305-10.
23. Fiske J, Davis DM, Frances C, Gelbier S. The emotional effects of tooth loss on edentulous people. *Br Dent J*. 1998;184(2):90-3.
24. Pena FB, Santo FHE. O movimento das emoções na vida dos idosos: Um estudo com um grupo da terceira idade. *Rev Eletrônica Enferm*. 2006;8(1):17-24.
25. Freud S. Três ensaios sobre a teoria da sexualidade. In: Edição Standard Brasileira das Obras Psicológicas Completas de Sigmund Freud. Rio de Janeiro: Imago; 1996. p.119-229.
26. Strauss RP, Hunt RJ. Understanding the value of teeth to older adults: influences of quality of life. *JADA*. 1993;124(1):105-10.
27. Nakata M. Mastigatory function and its effects on general health. *Int Dent J*. 1998;48(6):540-8.
28. Scott BJJ, Leung KCM, Mcmillan AS, David DM, Fiske J. A transcultural perspective on the emotional effect of tooth loss in complete denture wearers. *Int J Prosthodont*. 2001;14(5):461-5.
29. Moriguchi Y. Aspectos geriátricos no atendimento odontológico. *Odontol Mod*. 1992;19(4):11-3.
30. Turano JC, Turano LM, Turano MV. Fundamentos de prótese total. 9ª ed. São Paulo: Santos; 2012.
31. Wendt D. How to promote and maintain good oral health in spite of wearing dentures. *J Prosthet Dent*. 1985;53(6):805-7.
32. Medeiros JJ, Rodrigues LV, Azevedo AC, Lima Neto EA, Machado LS, Valença AMG. Edentulismo, uso e necessidade de prótese e fatores associados em município do Nordeste brasileiro. *Pesq Bras Odontoped Clin Integr*. 2012;12(4):573-8.
33. De Carli JP, Giaretta BM, Vieira RR, Linden MSS, Ghizoni JS, Pereira JR. Lesões bucais relacionadas ao uso de próteses dentárias removíveis. *Salusvita*. 2013;32(1):103-15.

-
34. Al-Imam H, Özhayat EB, Benetti AR, Pedersen AML, Gotfredsen K. Oral health-related quality of life and complications after treatment with partial removable dental prosthesis. *J Oral Rehabil.* 2015;42(8):1-8.
 35. Roumanas ED. The solution-denture esthetics, phonetics and function. *J Prosthodont.* 2009;18(2): 112-5.

Mailing address:

Silvana Orestes Cardoso
 Rua Djalma Farias, 29
 Bairro: Torreão
 CEP 52030-190 - Recife - PE - Brasil
 E-mail: silvanaorestes@hotmail.com