ORAL HEALTH CONDITIONS IN OLD AGE: OLDER ADULTS’ PERCEPTION

CONDIÇÕES DE SAÚDE BUCAL NA VELHICE: PERCEPÇÃO DE IDOSOS

LAS CONDICIONES DE SALUD BUCAL EN LA VEJEZ: PERCEPCIÓN DE LOS ADULTOS MAYORES

Mílена Нунес Альвеш дус Соуса1, Андре Луиз Дантас Бецерра2, Elisângela Vilar de Assis3, Carolina Bezerra Cavalcante Nóbrega4, José Eduardo Pelizon Pelino5

ABSTRACT

Objective: to assess oral health conditions self-perceived by older adults from a community center in the State of Paraíba, Brazil. Method: study of exploratory-descriptive and transversal design, using the entire research universe. A form with objective questions was applied as data collection instrument and it was validated through pre-testing. Data collection was performed in July 2009 and the material was analyzed by means of simple statistics. The research project was approved by the Research Ethics Committee, CAAE 0275.0.133.000-09. Results: regarding older adults’ self-referred oral health condition, some aspects were unsatisfactory (tooth loss/edentulism, use of prostheses and halitosis) and others were satisfactory (absence of chewing difficulties and swallowing problems, absence of xerostomia and oral wounds, for example). Conclusion: oral health conditions referred by the older adults studied were partially positive. Among the variables assessed, only the items dental loss, use of prostheses and halitosis were unsatisfactory.

Descriptors: Oral Health; Older Adult; Older Adult’s Health; Self-Perception.

RESUMO

Objetivo: avaliar as condições de saúde bucal autoapreciadas por idosos de um centro de convivência paraibano. Método: estudo de delineamento exploratório-descritivo e transversal, utilizando-se todo o universo de pesquisa. Como instrumento de coleta de dados foi aplicado um formulário com perguntas objetivas, tendo sido validado por meio de pré-teste. A coleta de dados foi executada no período de julho de 2009 e o material foi analisado por meio da estatística simples. O projeto de pesquisa foi aprovado pelo Comitê de Ética em Pesquisa, CAAE 0275.0.133.000-09. Resultados: quanto às condições de saúde bucal auto-referidas pelos idosos, alguns aspectos foram insatisfatórios (perdas dentárias - edentulismo, uso de próteses e halitose) e outros satisfatórios (ausência de dificuldades mastigatória e de deglutição, ausência de xerostomia e feridas bucais, por exemplo). Conclusão: as condições de saúde bucal apresentadas pelos idosos estudados foram parcialmente positivas. Entre as variáveis analisadas, somente os itens perda dentária, uso de prótese e halitose foram insatisfatórios. Descritores: Saúde Bucal; Idoso; Saúde do Idoso; Autopercepção.

RESUMEN

Objetivo: evaluar las condiciones de salud bucal autopercibidas por adultos mayores en un centro comunitario del Estado de Paraíba, Brasil. Método: estudio de delineamiento exploratorio-descriptivo y transversal, utilizando todo el universo de la investigación. Como instrumento de recogida de datos se aplicó un formulario con preguntas objetivas, habiendo sido validado a través de pre-test. La recogida de datos se realizó en julio de 2009 y el material fue analizado mediante estadística simple. El proyecto de investigación fue aprobado por el Comité de Ética de Investigación, CAAE 0275.0.133.000-09. Resultados: con respecto a las condiciones de salud bucal auto-referidas por los adultos mayores, algunos aspectos fueron insatisfactorios (pérdidas dentales/edentulismo, uso de prótesis y halitosis) y otros satisfactorios (ausencia de dificultades para masticar y tragar, ausencia de xerostomia y heridas bucales, por ejemplo). Conclusión: las condiciones de salud bucal presentadas por los adultos mayores estudiados fueron parcialmente positivas. Entre las variables analizadas, solamente los items de pérdida dental, uso de prótesis y halitosis fueron insatisfactorios.

Descripciones: Salud Bucal; Adulto Mayor; Salud del Adulto Mayor; Auto percepción.
INTRODUCTION

Brazilian life expectancy has increased. In the country, the number of older adults reaches 19 million people approximately. However, there are regional differences. The southeast region emerges with the largest number of older adults, followed by the northeast and south regions, and ending with the mid-western and the northern regions.\(^1\)

Correlating the data from the states of Paraíba (PB) and São Paulo (SP), it is possible to observe large disparities in terms of population; however, minor discrepancies are observed regarding the percentage of older adults. The State of Paraíba has almost 350,424 older adults, 155,769 males and 194,655 females, corresponding to 10.17% of the population. With respect to the State of São Paulo, there are 3,318,204 older adults, 1,452,952 men and 1,865,252 women, corresponding to 8.96% of the population.\(^2\)

According to the World Health Organization (WHO), Brazil has an ageing population, since the proportion of individuals aged 60 years or more represents at least 7% of the population and it still tends to grow. The current scenario demands the outcome of research to be developed on aging and its consequences. These studies are intended to contribute to improving older adults’ quality of life and health actions aimed at this population, especially in this times in which ageing growth percentage is an insurmountable reality.\(^3\)

Although the prolongation of lifetime is an achievement and also a challenge for societies not prepared, that have few resources and which have not yet resolved countless characteristic problems of underdevelopment, it points to the outcome of specific initiatives directed to the process of aging. In the field of health, many demands and needs of the Brazilian older adult contingent need to be met. The oral health field seems to be more problematic, because the model of national dental practice has deficiencies.\(^4\)

There is a large number of oral problems in maturity and the most obvious are: prevalence of caries; parodontitis; xerostomia; loss of taste; and edentulism. This situation is the most emphasized in the studies, because according to a survey, 75% of older adults have not even a tooth in the oral cavity.\(^5\) Edentulous people are considered mutilated, because this condition deteriorates the basic functions of the stomatognathic system, reflecting negatively on satisfactory eating, i.e., the chewing function. This fact is able to modify the dignity of older adults, causing sadness, depression, low self-esteem and social withdrawal.\(^6\)

From these assumptions, the goal of this study was to assess oral health conditions self-perceived by older adults from a community center in the State of Paraíba. Epidemiological information is essential for planning, organizing and monitoring oral health services; however, it is limited to healthcare professionals. In addition, this information has another connotation if associated with the analysis of the self-perception of the oral health conditions in the view of the subjects, especially understanding that the behavior of individuals is determined by their own perceptions, as well as by the importance attributed to them. Self-perceived oral health conditions impact positively or not on the demand for dental services.\(^7\)

This study aims to enable reflection on the object of study, contributing to a better understanding on the part of health professionals about older adults' oral reality. The goal is to promote strategies for the purpose of intervening in the problems identified, improving the quality of life and health in maturity.

METHOD

This article was drawn from the dissertation “Oral health in old age: perceptions of a group of older adults from Campina Grande, State of Paraíba, Brazil” submitted to the Stritu Sensu Graduate Program in Health Sciences, Cruzeiro do Sul University (UNICSUL), São Paulo, SP, Brazil, 2009.

An exploratory-descriptive and transversal design was used. The research universe corresponded to 80 older adults who attended a community center in Paraíba frequently (three times per week). All subjects participated in this study during data collection conducted in July 2009.

A form with objective questions was used as an instrument for data collection. This questionnaire was validated through pre-testing, with the purpose of verifying understanding, clarity, readability, form of presentation, and the objectivity of the instrument.

The variables investigated were: sex; age (collected as continuous variable and subsequently categorized every five years); marital status (married; single; separated; divorced; widow or widower; stable union); education (did not study; complete or incomplete elementary school; complete or incomplete high school; complete or incomplete higher education); monthly family
income in minimum wage (MW) (without fixed income; less than 1 MW; 1 MW; 2 MW; 3 or more MW); tooth loss/edentulism (yes, no); use of dental prosthesis (yes, no); chewing difficulties after 60 years of age (never, sometimes, always); swallowing problems (always, sometimes, never); dry mouth/xerostomia (never, sometimes, always); mouth wounds (never, sometimes, always); altered taste (always, sometimes, never); sensitivity or pain in the mouth (never, sometimes, always); and halitosis (never, sometimes, always).

The last nine variables influenced older adults’ self-perception regarding oral health conditions. Those variables that had the answer ‘never’ as majority were considered a satisfactory condition, and the answers ‘sometimes’ and ‘always’ given by most older adults were considered negative. The material was analyzed by means of simple statistics, because its use has a considerable possibility of truthfulness. The data were processed using Microsoft Excel Software, version 2007. The study received a favorable opinion from the Research Ethics Committee of the State University of Paraíba, under certificate CAEE 0275.0.133.000-09. Therefore, all the ethical aspects of research involving human beings complied in accordance with the Resolution 196/96 of the National Health Council. The participants of the study were contacted and the goals were clearly explained to them. Subsequently, they were requested to sign an informed consent form.

The data collection form begun with data concerning the socio-demographic and economic profile of the older adults with the question about sex. This inquiry showed that 68.8% (n=55) of the subjects were female and 31.2% (n=25) were male. As for the age bracket, it is remarkable that the majority, i.e., 32.5% (n=26), were aged between 60 and 65 years, 23.8% (n=19) between 71 and 75 years, 17.5% (n=14) between 76 and 80 years, 16.2% (n=13) between 66 and 70 years, 7.5% (n=6) between 81 and 85 years and, finally, 2.5% (n=2) above 85 years.

With respect to marital status, 48.8% (n=39) of the older adults were widows and widowers, 33.8% (n=27) married, 8.7% (n=7) separated, 6.2% (n=5) single, and 2.5% (n=2) reported to be in stable union. Regarding the family monthly income in MW, it was found that: most of them affirmed they had an income of 1 MW (68.8%/n=55); 21.2% (n=17) 2 MW; 7.5% (n=6) had no income; and 2.5% (n=2) had income less than 1 MW.

With respect to oral health conditions self-perceived by the subjects, the answers ranged according to the variables analyzed and presented in Table 1.

### RESULTS

The data collection form begun with data concerning the socio-demographic and economic profile of the older adults with the question about sex. This inquiry showed that 68.8% (n=55) of the subjects were female and 31.2% (n=25) were male. As for the age bracket, it is remarkable that the majority, i.e., 32.5% (n=26), were aged between 60 and 65 years, 23.8% (n=19) between 71 and 75 years, 17.5% (n=14) between 76 and 80 years, 16.2% (n=13) between 66 and 70 years, 7.5% (n=6) between 81 and 85 years and, finally, 2.5% (n=2) above 85 years.

With respect to marital status, 48.8% (n=39) of the older adults were widows and widowers, 33.8% (n=27) married, 8.7% (n=7) separated, 6.2% (n=5) single, and 2.5% (n=2) reported to be in stable union. Regarding the family monthly income in MW, it was found that: most of them affirmed they had an income of 1 MW (68.8%/n=55); 21.2% (n=17) 2 MW; 7.5% (n=6) had no income; and 2.5% (n=2) had income less than 1 MW.

With respect to oral health conditions self-perceived by the subjects, the answers ranged according to the variables analyzed and presented in Table 1.

<table>
<thead>
<tr>
<th>Tooth loss (edentulism)</th>
<th>n=80</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Yes</td>
<td>80</td>
<td>100</td>
</tr>
<tr>
<td>No</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Use of dental prosthesis</td>
<td>n</td>
<td>%</td>
</tr>
<tr>
<td>Yes</td>
<td>68</td>
<td>85</td>
</tr>
<tr>
<td>No</td>
<td>12</td>
<td>15</td>
</tr>
<tr>
<td>Chewing difficulties after 60 years of age</td>
<td>n=80</td>
<td>%</td>
</tr>
<tr>
<td>Never</td>
<td>48</td>
<td>60</td>
</tr>
<tr>
<td>Sometimes</td>
<td>14</td>
<td>17.5</td>
</tr>
<tr>
<td>Always</td>
<td>18</td>
<td>22.5</td>
</tr>
<tr>
<td>Swallowing problems</td>
<td>n=80</td>
<td>%</td>
</tr>
<tr>
<td>Never</td>
<td>68</td>
<td>85</td>
</tr>
<tr>
<td>Sometimes</td>
<td>8</td>
<td>10</td>
</tr>
<tr>
<td>Always</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>Feeling of dry mouth (xerostomia)</td>
<td>n=80</td>
<td>%</td>
</tr>
<tr>
<td>Never</td>
<td>41</td>
<td>51.3</td>
</tr>
<tr>
<td>Sometimes</td>
<td>28</td>
<td>35</td>
</tr>
<tr>
<td>Always</td>
<td>11</td>
<td>13.7</td>
</tr>
<tr>
<td>Mouth wounds</td>
<td>n=80</td>
<td>%</td>
</tr>
<tr>
<td>Never</td>
<td>51</td>
<td>63.8</td>
</tr>
<tr>
<td>Sometimes</td>
<td>26</td>
<td>32.5</td>
</tr>
<tr>
<td>Always</td>
<td>3</td>
<td>3.7</td>
</tr>
<tr>
<td>Altered taste</td>
<td>n=80</td>
<td>%</td>
</tr>
<tr>
<td>Never</td>
<td>45</td>
<td>56.3</td>
</tr>
<tr>
<td>Sometimes</td>
<td>24</td>
<td>30</td>
</tr>
<tr>
<td>Always</td>
<td>11</td>
<td>13.7</td>
</tr>
<tr>
<td>Sensitivity or pain in the mouth</td>
<td>n=80</td>
<td>%</td>
</tr>
<tr>
<td>Never</td>
<td>50</td>
<td>62.5</td>
</tr>
<tr>
<td>Sometimes</td>
<td>23</td>
<td>28.8</td>
</tr>
<tr>
<td>Always</td>
<td>7</td>
<td>8.7</td>
</tr>
<tr>
<td>Halitosis</td>
<td>n=80</td>
<td>%</td>
</tr>
<tr>
<td>Never</td>
<td>30</td>
<td>37.5</td>
</tr>
<tr>
<td>Sometimes</td>
<td>42</td>
<td>52.2</td>
</tr>
<tr>
<td>Always</td>
<td>8</td>
<td>10</td>
</tr>
</tbody>
</table>
It can be observed that 100% (n=80) of the older adults reported tooth loss and 85% (n=68) wore dental prostheses. With respect to chewing difficulties after 60 years of age, 60% (n=48) answered never; 85% (n=68) had never experienced swallowing problems; 51.3% (n=41) stated that they had never experienced dry mouth/xerostomia; 68.3% (n=51) said that they had never suffer from mouth wounds; 56.5% (n=5) had never had altered taste; 62.5% (n=50) had never felt sensitivity or pain in the mouth; and 52.2% (n=42) had sometimes experienced halitosis.

**DISCUSSION**

The group of older adults in this study was predominantly constituted by women (68.8%). These data are similar to those found in the Brazilian Demographic Census conducted in 2009, estimating that the national population, as well as the population of the State of Paraíba, was mostly composed of women.

In addition to sex differences, it can be observed that the universe of this research was essentially constituted by the age bracket between 60 and 65 years, whose results are similar to those found in other national surveys, which show the Brazilians' average with life expectancy between 60 and 75 years.

Regarding marital status, most older adults were widows and widowers (48.8%/n=39). These results differed from those found in Brazilian surveys. Data may have showed disparities due to cultural, financial and quality of life differences between the southern and northeastern regions. However, regardless of the discrepancies, the results are important; because studies highlight that the coexistence with other subjects (such as children, spouse and others) is a determinant for self-care.

With respect to the education level, it was found to be low. This finding was worrying and similar to data found in other studies. Nevertheless, the results were expected; after all, in the course of the history of the country, concerns about education were not significant in the speeches and political practices. This situation reflects the indisputable relevance of checking the education level in studies that address the link health/oral health, since education level is decisive regarding such conditioning factors.

The average family income in MW was considered low. This pattern is prevalent among older adults as pointed out in other studies. This fact raises the need for public policies that seek to improve such levels, because low economic conditions relate to general and oral health with worse prognoses. It must be also considered that reduced purchasing power can make access to health services difficult, impeding early dental treatment. Also, low income, which is a feature in this population, prevents access to private services.

With respect to tooth loss/edentulism, the data obtained for this issue were worrisome, because all older adults had already partially or totally lost their teeth. Still, due to tooth loss, this study sought to reflect on the use of dental prostheses. It was found that 85.0% (n=68) of the target population made use of artificial dental elements. The results highlight the problems experienced in Brazil in the context of old age, i.e., edentulism and use of prostheses, which are already expected due to the evidence showed by national and international studies. Although the literature data highlight high rate of tooth loss, none of the research presented such a high degree as this research did. This fact fosters the need of dental prosthesis, in favor of improving chewing, swallowing, and speech functions, as well as aesthetics and self-esteem restoration.

Most older adults surveyed reported that they had never experienced chewing difficulties and swallowing problems, even though studies suggest that, in maturity, chewing and swallowing capacities are affected by the physiological aging, tooth loss and prostheses poorly adapted. This perception is associated with the presence of well adapted prostheses, since the usage time exceeds six months, which is the time referred in the literature regarding the adaptation to prosthetic element usage. It is worth noting the association between chewing satisfaction and use of dental prostheses by the subjects of this research. With respect to swallowing, this study disagrees with other surveys. This fact is evidenced by the statement that aging, naturally, causes swallowing difficulties in older adults.

Other determinants that reflected the oral health conditions of the subjects were satisfactory. With respect to feeling dry mouth (xerostomia), the older adults stated, predominantly, that they had never felt it. These results contradict the findings of the literature about old age. There seems to be correlation with the low age of the subjects, because the age bracket was characterized as young older adults, whose physiological changes resulting from aging would still expand with advancing age.

Other data referred to the presence of mouth wounds. In general, the older adults...
stated that they had never experienced them. The absence of mouth wounds in this research, however, can be related to the practice of oral self-examination and the removal of the prostheses at bedtime, allowing the zone where the artificial dental elements are supported to rest and, also, not being exposed to risk factors for the development of oral cancer, such as alcohol consumption and smoking.

Altered taste was also disjointed with the literature, since most older adults affirmed that they had never experienced it. However, there was no significant taste alteration in this research, because the older adults did not report having felt dry mouth, which would cause taste loss. Still, it must be added the fact that the respondents were young older adults.

With respect to the frequency of sensitivity or pain in the mouth (teeth/gums), 62.5% (n=50) stated that they had never felt those sensations, and 28.8% (n=23) affirmed they had felt them sometimes. Such results may have been obtained due to the fact that the older adults had partially or totally lost their teeth and they were already well adapted to dental prostheses, for having used them for more than six months without any discomfort. On the other hand, regarding the older adults that claimed to feel pain sometimes, it is believed that this fact is connected with those individuals that do not change their prosthesis for over 10 years, damaging the tissue of tooth support.

The item halitosis was unsatisfactory, because 52.5% (n=42) of the individuals surveyed stated they had experienced bad breath sometimes. This problem is frequently observed in older adults and it may be related to tooth loss, common use of medicines, aging of the salivary glands and gastrointestinal disorders arising from this physiological process. Halitosis in the older adults surveyed seems to be associated with the physiological aging of the gastric tract, as well as with tooth loss, the use of medicines and a possible incorrect cleaning resulting from insufficient information about proper oral hygiene. An international study emphasizes that older adults are often subjected to a large number of risk factors, preventable oral diseases and deficient knowledge about oral hygiene.

It is considered that the limitation of this study referred to the fact that the older adults were mostly women, from low economic class and with low education level. These factors may have interfered on the results presented, although they correspond to the characteristics of Brazilians' lives in old age. The non-realization of clinical assessment in association with the older adults' self-perception can be also pointed to as a barrier, because it might assist in the results on oral health conditions of the older adults surveyed.

CONCLUSION

This study assessed older adults' self-perception of their own oral health conditions. With respect to the variables assessed (tooth loss/edentulism; use of dental prostheses; chewing difficulties after 60 years of age; swallowing problems; feeling of dry mouth/xerostomia; mouth wounds; altered taste; sensitivity or pain in the mouth; and halitosis), only the items tooth loss, use of prosthesis and halitosis were unsatisfactory.

In view of the results obtained, it can be observed that the older adults on the whole considered satisfaction with respect to their oral health conditions, even with significant tooth loss and use of prostheses. Having these results in mind, it is worth noting the need for qualified health professionals—especially nurses and dental surgeons—to act on promotion, prevention and rehabilitation of oral health in old age. Promoting educational strategies can assist in the improvement and a better prognosis of the oral health of these subjects.

It is essential to provide access to health services, particularly dental services, and minimize the inequalities; after all, the Brazilian Federal Constitution and the other infra-constitutional laws ensure all Brazilian citizens, including older adults, the right to health access.

The data showed that new approaches, linking oral health, self-perception and older adults, along with clinical assessment, should be carried out, since both provide essential information for healthcare completeness in the area. In the nursing field, knowing the self-perception of oral health conditions can facilitate integral healthcare, aiming at the promotion and the prevention of health during aging. Impaired oral health can harm chewing, speaking, swallowing, aesthetics and socialization, thus affecting the quality of life.

REFERENCES


English/Portuguese
J Nurs UFPE on line., Recife, 7(spe):6610-6, Nov., 2013
Sousa AN, de Bezerra ALD, Assis EV de et al.


English/Portuguese

Corresponding Address
André Luiz Dantas Bezerra
Rua do Prado, 369 /Ap. 806
Centro
CEP: 58700-010 – Patos (PB), Brasil

DOI: 10.5205/reuol.5058-41233-3-SM.0711esp201307

O Oral health conditions in old age...