

Presbyphagia and quality of life: is there a relationship?"

Presbifagia e qualidade de vida: existe essa relação?

Presbifagia y calidad de vida: ¿existe esa relación?

RESUMO

Objetivo: Verificar os sintomas de presbifagia em idosos ativos e o impacto na qualidade de vida. Métodos: Participaram 186 indivíduos, sendo 93 idosos ativos de um centro de convivência e 93 adultos universitários. Foram excluídos aqueles com doenças neurológicas, gástricas, disfagia, ocasiões anormais no MEEM e na escala BOMFAQ. A média de idade foi de 72,3 anos para idosos e 24,8 para adultos. Os participantes responderam a um questionário sobre alimentação e deglutição, além do protocolo WHOQOL (versão bref). Resultados: Os sintomas de presbifagia incluíam dificuldade em mastigar, deglutir saliva, comprimidos, líquidos finos, sólidos secos e dupla consistência. Apesar dos sintomas, a qualidade de vida dos idosos foi melhor, exceto no domínio das relações sociais. Conclusão: mesmo idosos saudáveis apresentam sintomas de presbifagia, mas o impacto na qualidade de vida não foi evidente, possivelmente devido à adaptação natural à idade.

DESCRITORES: Deglutição; Envelhecimento; Disfagia; Idoso; Qualidade de Vida.

ABSTRACT

Objective: To verify the symptoms of presbyphagia in active elderly people and the impact on their quality of life. Methods: 186 individuals took part, 93 of them active elderly people from a community center and 93 university adults. Those with neurological or gastric diseases, dysphagia or abnormal scores on the MMSE and the BOMFAQ scale were excluded. The average age was 72.3 for the elderly and 24.8 for the adults. The participants answered a questionnaire on eating and swallowing, as well as the WHOQOL protocol (bref version). Results: Presbyphagia symptoms included difficulty chewing, swallowing saliva, tablets, thin liquids, dry solids and double consistency. Despite the symptoms, the quality of life of the elderly was better, except in the area of social relationships. Conclusion: Even healthy elderly people have symptoms of presbyphagia, but the impact on quality of life was not evident, possibly due to natural adaptation to age.

DESCRIPTORS: Deglutition; Aging; Dysphagia; Elderly; Quality of Life.

RESUMEN

Objetivo: Determinar las principales manifestaciones neurológicas resultantes de la infección humana por el virus Zika. Metodología: Revisión sistemática de artículos publicados en Science Direct y Scielo, con el siguiente algoritmo de búsqueda: Zika virus and neurological manifestations and diseases of the nervous system. Se incluyeron los estudios epidemiológicos que informaban de trastornos neurológicos relacionados con la infección por el virus Zika. Se excluyeron los estudios con animales y las revisiones sistemáticas. Los datos fueron extraídos y revisados por 3 investigadores, que acordaron los artículos seleccionados. Resultados: En esta revisión se seleccionaron 26 artículos, que revelaron como principales alteraciones el síndrome de Guillain-Barré, microcefalia, encefalitis, meningoencefalitis, mielitis, parálisis facial, cambios congénitos, cambios oculares, así como cambios radiológicos y electroencefalográficos. Conclusión: La infección por el virus Zika ha causado una serie de alteraciones neurológicas en la población infectada, ya sean adultos o recién nacidos. La afección más frecuente fue el síndrome de Guillain-Barré, siendo la microcefalia la más grave como consecuencia de la infección prenatal.

DESCRIPTORES: Virus Zika; Manifestaciones neurológicas, Enfermedades del sistema nervioso.

RECEBIDO EM: 26/05/2023 APROVADO EM: 18/07/2023

How cited: Venites J, Carro CZ, Pimenta AJ, Luiz RN, Bilton TL, Roque FP. Presbyphagia and quality of life: is there a relationship?!. Saúde Coletiva (Edição Brasileira) [Internet]. 2024 [acesso ano mês dia];14(89):13180-13191. Disponível em:
DOI: 10.36489/saudecoletiva.2024v14i89p13180-13191

Artigo Original EN

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Presbyphagia and quality of life: is there a relationship?"

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INTRODUCTION

OThe increase in the elderly population is a worldwide reality. It is estimated that in fifteen years the population aged over 60 will number 1.2 billion people. In developing countries like Brazil, this increase is even more significant. Brazil has more than 28 million people in this age group, which represents 13% of the country's population and this percentage is likely to double in the coming decades, according to the Population Projection released in 2018 by the Brazilian Institute of Geography and Statistics (IBGE) ⁽¹⁾.

Understanding aging and its particularities is essential for structuring social and health support in the most varied institutions that serve this part of the population. Because it is inexorable and inherent to each individual, aging

is a global and multidimensional process that takes into account not only biological issues, but also psychological and social aspects ⁽²⁾.

For the elderly, the concept of health is strongly linked to their functional and intrinsic capacity, i.e. their ability to determine and carry out their own plans. The ability to manage their lives without or with minimal assistance is a determining factor for active and healthy ageing ⁽³⁾. However, for most people, old age is a time of chronic illnesses and multiple comorbidities, such as focal and progressive neurological conditions, frailty and dementia.

A symptom associated with these diseases is dysphagia, which can be defined as an alteration in the route of food from the mouth to the stomach, putting the individual at risk of malnutrition and/or pulmonary aspiration, worsening their physical and functional capacity

and leading to death. Even in healthy, active elderly people, the body undergoes changes as a result of age. Presbyopia and presbycusis are well-known examples with a low impact on quality of life, but only recently has presbyphagia (normal aging of swallowing), its symptoms and impacts been studied.

Most of the time, the symptoms of presbyphagia go unnoticed by both patients and health professionals. However, in the event of a clinical deterioration or worsening of a health condition, dysphagia can develop, causing even more comorbidities ⁽⁴⁾.

In the light of a gap in the scientific literature on a population that is becoming increasingly numerous and demanding social and health attention, this study aims to verify the presence of symptoms of presbyphagia in active elderly people and the impact of these symptoms on quality of life.

METHODS

This is an analytical cross-sectional study approved by the Research Ethics Committee under protocol number 638.798/201.

1 - Location

In order to interview active elderly people, a senior citizens' center in a municipality in the greater São Paulo area was chosen as the setting for part of the data collection. Most of the people who attend the center seek out the activities spontaneously and attend of their own volition, enjoying the classes and activities, acquiring new knowledge and making new friends. In this sense, it can be said that the population present at this location has characteristics that demonstrate balance and harmony in the multidimensional interaction formed by physical health, mental health and social integration, in other words, healthy and active ageing.

The subjects included in the adult group were students from a private university in the city of São Paulo, interviewed in the school environment itself. Participation in the research was voluntary for both groups. The interviewers went around the classrooms and activities of the senior citizens' center and the university publicizing the interview and making themselves available to people who wished to participate, informing them of the place where they could be found and the telephone number where they could be contacted.

2 - Casuistry

The sample size of at least 93 subjects per group was calculated according to the statistical query. A total of 196 subjects were interviewed, divided into 93 active elderly people and 93 university adults, between February and November 2015. Although the choice of environments considerably reduced the possibility of the research subjects not being in good health, au-

tonomous and independent, an initial screening was carried out to exclude cognitive, functional and swallowing alterations.

At this stage, three protocols were applied to both groups:

a-) Mini-Mental State Examination (MMSE), which included interviewees who obtained a score greater than or equal to their school grade, as suggested by the authors⁽⁵⁾.

b-) BOMFAQ (Brazilians Older Multidimensional Functional Assessment Questionnaire), a functional capacity scale validated for Portuguese⁽⁶⁾. Only those interviewees who said they had no difficulty in any activity or little difficulty in only two of the daily activities and tasks questioned were included in the study.

c-) EAT-10 (Eating Assessment Tool)⁽⁷⁾ provides information on the functionality, emotional impact and physical symptoms of a swallowing problem. Only individuals who answered negatively to all the questions were included.

3 - Research instruments

Next, the subjects who met the sample selection criteria were subjected to an interview divided into three instruments:

3.1- Socio-cultural questionnaire

This included the following general data: name, telephone number, gender, age, schooling, profession, previous and current occupation, per capita income, self-reported health problems, co-habitation (living alone, with family or other people) and previous reading and writing skills.

3.2- Characteristics of Presbyphagia

It was not possible to find a validated protocol in the literature that included specific swallowing questions for active elderly people. Therefore, in order to find out about the changes caused by presbyphagia, it was necessary to draw up a questionnaire (Appendix I) which investigates whether these changes are only common in active ageing or whe-

ther they are also present in the adult life of an individual who reports good health.

3.3- Investigation of Quality of Life

The abbreviated World Health Organization Quality of Life Questionnaire (WHOQOL - World Health organization Quality of life group - brief version) was used. The WHOQOL-bref, validated in Brazil (8) is an instrument with a broad, sociological content, unlike other quality of life instruments aimed at patients or populations facing a specific problem. It is a shortened version of the WHOQOL and has 26 questions, two of which are general and the others are divided into four general domains: physical, psychological, social relationships and environment. The score is calculated using SPSS Syntax. The higher the score, the better the quality of life.

3.4- Procedures and statistics

The interviews were carried out at the entrance and break times of the activities, for both the elderly and young groups, so as not to disturb their activity in the research environment. The total duration of the approach (reading/signing the form, screening and interview) was between 50 and 80 minutes. SPSS V17, Minitab 16 and Excel Office 2010 were used for the statistical analysis, with the following tests: ANOVA test, test of equality of two proportions, Pearson correlation, test for correlation coefficient and confidence interval for the mean.

RESULTADOS

Socio-cultural aspects:

Of the 196 individuals interviewed, there was a predominance of females. Women accounted for 76.3% of the adult group and 80.6% of the elderly group, with no statistical difference between the groups. The average age of the population studied was 24.8 (± 7) years for adults and 72.3 (± 5) for the elderly. The comparison of the number of years studied by the groups was

significant. The adults reported having studied 12.4 (± 1) years and the elderly 5.6 (± 3.7) years. The differences between the groups when comparing schooling (adults 12.4 years and the elderly 5.6 years) and per capita income (1,311.00 reais for adults and 1,954.00 for the elderly) were also statistically significant. Illiteracy was not observed in either group.

When describing occupations prior to the time of the survey, there were statistical differences in manual occupations (none of the adults and 72% of the elderly) and medium-level manual occupations (100% of the adults and 18.3% of the elderly). When asked about cohabitation, there was a statistical difference, only among those who reported living alone (6.5% of adults and 29% of the elderly).

Presbyphagia characteristics

There was a statistical difference between the groups when comparing the absence of teeth (28% of the elderly and none of the young) and the presence of all teeth (39.8% of the young and none of the elderly). With regard to the use of prostheses and their type, there was a very varied picture, but no statistically significant difference, as can be seen in the graph below:

(Graph 01 - Comparison between the use and types of prostheses and dental implants among adults and the elderly).

When it came to chewing and swallowing tablets, saliva, thin liquids, solids and double consistencies, all aspects showed statistical significance, except for the swallowing of pastes, as shown in Graph 2:

(Graph 02 - Comparison of chewing and swallowing difficulties between adults and the elderly).

Quality of life research

When comparing the WHOQOL bref for both groups, there was a statistical difference for all domains, with the quality of life of the elderly being better than that of the adults. Only in

the "Social Relationships" domain did the adult group have a higher average (82.26) than the elderly group (72.76), as can be seen in Graph 3:

(Graph 3 - Comparison of the findings in the quality of life questionnaire (WHOQOL bref) for the adult and elderly groups).

DISCUSSION

It was found that women were the majority of those interviewed (76.3% of adults and 80.6% of the elderly), a fact justified by the Brazilian Institute of Geography and Statistics - IBGE (2010 census), where women are the majority in higher education, as well as among the population over 60 years of age⁽¹⁾.

Swallowing is defined as a very dynamic and complex phenomenon which, in order to occur properly and effectively, requires the joint action of various structures of the stomatognathic system. One of the main factors that can alter the functionality of swallowing is ageing, which is characterized as a natural human phenomenon that involves various structural and functional changes⁽²⁾.

The study sample showed a variation in dentition, with the elderly interviewed having more preserved dentition when compared to the dentition of the elderly in the Brazilian population⁽⁹⁾. One hypothesis is that the data collection from the elderly group was carried out in a municipality with a high Human Development Index (HDI) and which offers its residents adequate infrastructure for caring for the elderly, with several municipal dental clinics.

Even with this more privileged dental profile, chewing difficulties were statistically significant in relation to the adult group. This reflects the fact that the muscle loss inherent in ageing can interfere with masticatory efficiency, and not just the dental condition⁽¹⁰⁾.

This study found that 40.9% of the elderly had difficulty swallowing tablets. Solid pharmaceutical forms for

oral use (tablets and capsules) are the most commonly used⁽¹¹⁾. Thus, when we consider individuals who have difficulty swallowing tablets, we must list two worrying factors: the potential risk of choking and the occurrence of aspiration pneumonia, as well as the loss or reduction of the drug's effect due to the suppression of the indicated dosage.

Reflecting on the results of the study, the growing ageing of the world's population and its implications, an interesting proposal for the pharmaceutical industry would be to adopt strategies for oral pharmaceutical forms aimed entirely at this population profile, for example, drugs in liquid form. This would facilitate swallowing and, consequently, adherence to drug treatment. In addition, it would be very important for these drugs to be thickened, so as to include those who have difficulty swallowing thin liquids - 21.5% of the elderly in the sample.

Presbyphagia is generally caused by anatomical and physiological changes to head and neck structures with advancing age, muscle loss (sarcopenia), reduced functional reserve and age-related diseases⁽¹²⁾. The swallowing difficulties of the elderly found in this study (saliva, thin liquids, solids and double consistencies) were compatible with the scientific literature^(13,14,15,16). These difficulties generally don't appear in a clear and self-reported way during routine medical consultations with the elderly, when more serious events have already taken place, such as repeated pneumonia or malnutrition, i.e. when there is a dysphagic process present. This is because they adapt their routine and eating habits, for example, eating smaller pieces, moistening dry food, giving greater preference to soft food, avoiding liquids and/or food that is difficult to swallow. They see it as a change in preference or as something to be expected as part of the natural aging process^(4,14).

Another factor that contributes to late referral for speech therapy as-

essment and treatment is the lack of knowledge among health professionals about the timid but very relevant onset of swallowing complaints. There are no questions about swallowing performance in geriatric screenings and assessments. If the professional doesn't ask, the symptom goes unnoticed and masked by a spontaneous change in the patient's dietary consistency. It is therefore extremely important for health professionals to pay attention to the symptoms of presbyphagia and to question the elderly about possible difficulties and/or complaints in relation to chewing and swallowing, so that they can be identified and referred early on in order to avoid the onset of dysphagia and its resulting comorbidities and its resulting comorbidities.

In order to understand how presbyphagia affected quality of life, there were higher scores in the "Physical", "Psychological" and "Environment" domains of the WHOQOL brief in the elderly group than in the adults. Only in the "Social Relationships" domain did the adult group have a higher average (82.26) than the elderly group (72.76).

In the specialized literature, only one study was found that related active elderly people's chewing and swallowing difficulties with quality of life, carried out by ⁽¹⁷⁾. They found a correlation between these difficulties and lower scores in the physical and mental health domains of the SF-8 quality of life questionnaire, which was not observed in this study. However, the data from this study seems to be in line with research ⁽¹⁸⁾ which, when studying life satisfaction among university-educated adults, found low rates, but the group that thought they were "happier" attributed this feeling of happiness to social attention, i.e. socializing with other people, which is in line with the "Social relations" domain in which adults had a higher average than the elderly.

We can therefore think that the intense daily routine of work and study, coupled with few opportunities for rest

and leisure experienced by the group of university adults, had a negative influence on their quality of life compared to the group of elderly people studied.

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As expected, the only domain in which the adult group outperformed the elderly group, "social relationships", can be explained by the fact that a significant number of elderly people (29%) live alone.

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Carrying out activities of daily living without the company of another person can generate a feeling of loneliness, which is reflected in the answers to the WHOQUOL.

CONCLUSION

Aging is a multifaceted process. The decline in organic functions, changes in social roles, alterations in functional capacity and the proximity of finitude

are some of these facets.

However, the way in which this transformation takes place for each individual is very particular, as it will depend on their life history and the environment in which they live. Their way of seeing the world, their beliefs and the marks of a lifetime that one organism carries are quite different from another.

Although the elderly group outperformed the adult group in terms of quality of life in three of the four items studied, they had significant chewing and swallowing difficulties, in line with international findings.

The natural adaptation of the consistency of the diet assigned as a preference and the belief that getting older implies functional losses may mean that the negative impact of these findings has not been verified.

However, the difficulties reported become even more relevant when associated with information on another scenario: in the face of an acute neurological, infectious or systemic condition, elderly people with swallowing difficulties can become frail, a condition that increases the rate of complications such as aspiration pneumonia, malnutrition and dehydration ^(2, 15, 19).

Given this panorama, programs for prevention, early detection and warning of the nutritional and physical consequences of swallowing problems should be developed and widely disseminated in institutions focused on caring for the elderly, both in the public and private spheres ⁽²⁰⁾.

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