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Analysis of the profile, autonomy and self-perception of oral health of institutionalized elderly

Análise do perfil, da autonomia e da autopercepção da saúde bucal de idosos institucionalizados

Análisis del perfil, autonomía y autopercepción de la salud bucal de ancianos institucionalizados

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ABSTRACT

Introduction: The institutionalization of the elderly population grows proportionally to the rise in life expectancy. **Aim:** The profile of institutionalized elderly at home Lição de Vida in Uberaba, family coexistence, autonomy, functionality in performing basic activities of daily living (BADL) and self-perception of oral health were evaluated. **Outlining:** The medical records of 60 elderly people were analyzed regarding gender, age, ethnicity, schooling, time in the institution, prevalence of health problems and medication. Autonomy and functionality in performing BADL were evaluated using the modified Katz index. Through the GOHAI Index, self-perception about oral health was evaluated. **Results:** The majority of the elderly are male (56%), white (64%), aged between 65 and 74 years (54%) and have a low educational level. Hypertension (40%) and mental disorders (36%) are the most prevalent diseases. Antipsychotics/neuroleptics (53.33%) and antihypertensives (41.66%) are the most used drugs. Most have free walking (62.5%), are independent when performing daily activities (67.3%) and consider their oral health to be good. **Implications:** A population with several health problems is identified. Polypharmacy, whether major or minor, occurs in most seniors, who in turn are independent and have a good perception of oral health.

DESCRIPTORS

Aged; Homes for the Aged; Oral Health; Personal Autonomy.

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INTRODUCTION

In the new world scenario, there is an increase in life expectancy, which represents new challenges for health care.¹⁻² It is noted that the theme of health promotion in aging is an object of global interest since health planning, in the short, medium and long term, results in increased longevity and favors the well-being of the elderly.³⁻⁴ There is a concern focused on active aging, that is, on maintaining the health of the elderly so that their daily activities are enhanced, resulting in a better quality of life.⁵

Although the importance of active aging and a better quality of life for the elderly is clear, care aimed at this population has ceased to be an exclusive domain of the family sphere and has been transferred to organizations outside it, as is the case with long-stay institutions.⁶

Given the high rates of institutionalization, nursing homes must offer a good quality of life for their residents. The situation of clinical complexity frequently observed in aging represents a complicating factor for the assistance to the elderly. Professionals must be aware of the physical, psychological and social changes that usually occur, requiring individualized care.⁷ Common activities of daily living, such as walking, eating and performing personal hygiene are impaired, often requiring greater help from caregivers. However, the people responsible for care are often lay people and assume the responsibility of performing complex tasks to maintain the well-being of the elderly, such as oral cavity hygiene.⁸

In Brazil, there are few programs that aim to guide and train these caregivers to perform tasks, such as oral hygiene, which makes it a complex activity for them. For this reason, the precariousness of the oral health of institutionalized elderly people has been observed.⁹, although it is known to be closely linked to general health and quality of life.¹⁰

Given this scenario, it is important to know the profile, autonomy and self-perception of the elderly regarding oral health in order to support institutions

for the elderly in carrying out actions aimed at a better quality of life for this population.

METHOD

This study was initiated with the approval of the Research Ethics Committee of the University of Uberaba (CAAE: 09885519.1.0000.5145).

This is an experimental qualitative field study involving institutionalized elderly at home Lição de Vida in the city of Uberaba, carried out from August 2019 to July 2020. The elderly were invited to participate in the research and those who accepted, signed an informed consent form.

The participants of this study were selected by the convenience method, of direct approach, at the time of the visit to the foster home. Sixty elderly people participated in this study. The inclusion criteria included institutionalized elderly in the Lição de Vida foster home.

The data were collected from semi-structured questionnaires. From the medical records were obtained data such as age, sex, ethnicity, time in the institution, schooling, general health status, medication, medical or dental complications.

The GOHAI Index (General Oral Health Assessment Index) assesses the self-perception of the elderly regarding oral health. It consists of 12 questions associated with functional, psychological, social and pain dimensions, related to frequency in the last three months, being: 1. Do you limit the type or amount of food you eat due to problems with your teeth or dentures? 2. Do you have problems biting or chewing foods such as solid meat or apples? 3. Were you able to swallow comfortably? 4. Did your teeth or dentures prevent you from speaking as you wanted? 5. Was able to eat anything without feeling uncomfortable? 6. Have you limited your contacts with other people due to the condition of your teeth or dentures? 7. Were you satisfied or happy with the appearance of your teeth or dentures? 8. Did you use medication to relieve pain or discomfort related to the mouth? 9. Worried about your teeth, gums or

dentures? 10. Felt nervous or become aware of problems with your teeth, gums or dentures? 11. Did you feel discomfort when eating in front of other people due to problems with teeth or dentures? 12. Have your teeth or gums been sensitive to contact with heat, cold or sweets?

The data collection instrument was applied by members of the executing team, in order to facilitate the participant's understanding. To facilitate the application and understanding of the elderly, three alternatives were used: "always", "sometimes", or "never".⁸ To obtain the final index, the values were added together. The value of each item ranged from 1 to 5 points, therefore, each individual received a score from 12 to 60, and the higher this value, the better the oral conditions and the lower its impact on the elderly's quality of life. The answer NEVER corresponded to 5 points, SOMETIMES to 3 points and ALWAYS to 1 point. For questions 3, 5 and 7, it was scored inverted, depending on the question: the answer NEVER corresponded to 1 point, SOMETIMES to 3 points and ALWAYS to 5 points.

The locomotion capacity of the elderly was evaluated, through which they were classified as bedridden (without walking), gait with assistance (from third parties or orthoses) and free gait (does not need any assistance for locomotion). Also, the elderly answered a questionnaire related to family life, where they answered if they had any contact with someone in the family in the last 3 months, regardless of frequency; or if there has been no contact with anyone in the family in the last 3 months.

To evaluate daily activities, the modified Katz index was used, through a questionnaire composed of 6 questions, as follows: 1. Do you bathe completely alone or receive help in only one part of the body? (It can be helped with a bath or shower sponge to wash a certain part of the body); 2. Choose clothes and get dressed without assistance, except for shoes?; 3. Do you go to the toilet, use it, organize your clothes and return without assistance? (can use cane or walker);

4. Do you lie down or get out of bed or sit in a chair without assistance? (can use cane or walker); 5. Do you have bowel (stool) and bladder (urine) self-control? (do not consider occasional "accidents") and 6. Do you feed yourself without assistance? (can be used to cut meat or butter bread).

For each affirmative answer, the elderly person received one point; at the end, the points were added up, being considered dependent the elderly people who scored from 0 to 2 points, semi-dependent those who scored from 2 to 4 and independent those who scored 5 and 6.

To analyze the ability to perform daily oral hygiene activities, the following actions were considered: 1. Open the toothpaste; 2. Put paste on the brush; 3. Bring the brush to mouth; 4. Brush teeth; 5. Spit out saliva; 6. Dental Flossing and 7. Clean the brush. According to the activities, a score was established. The lower the score obtained by the elderly, the greater their independence for these activities. The reference for scoring was: 0 - independent; 1 - needs adaptations or assistance; 2 - totally dependent.

To analyze the results, the data were tabulated and processed in electronic spreadsheets prepared in Excel and then described in the form of graphs and tables. Descriptive statistics, expressed as a percentage, were used.

RESULTS

Most of the elderly participants in the study are male (56%), white (64%), aged between 65 and 74 years (54%), with a low educational level, with 48% having not completed elementary school and 21 % are illiterate, and have lived in the institution for more than 1 year (64%). Most elderly people report having had any contact with someone in the family in the last 3 months (71%).

Table 1 shows information on the prevalence of diseases and medication use by the elderly. The most common diseases are: Hypertension (40%), Mental disorders (36%), Cerebral vascular accident (20%),

Alzheimer's (20%), Diabetes (13%) and Depression (10%).

Polypharmacy is characterized as the concomitant use of multiple drugs, divided into minor polypharmacy (2 to 4 drugs) and major polypharmacy (5 or more drugs) and is considered an important problem in the care of the elderly.⁸ Long-Term Care Institutions have increased risks because they have many limiting diseases, greater frailty and are treated by different professionals. The number of elderly people who fit the polypharmacy profile and the most used drugs in Home Lição de Vida were evaluated.

The vast majority of geronts make use of at least 1 medication. 47% of the male elderly fit the profile of major polypharmacy, 50% of minor polypharmacy and only 3.8% do not use any medication. Of the female sex, 40% fit the profile of major polypharmacy and 60% of minor polypharmacy.

The most used drugs in the institution are: antipsychotics/neuroleptics (53.3%), followed by antihypertensives (41.6%), antiplatelet agents (26.6%), antiulcer (26.6%), antidepressants (25%), anticonvulsants (21.6%), diuretics (21.6%), anxiolytics (20%), antilipemic (20%), analgesics (16.6%) and vitamins and mineral supplements (16.6%).

Table 1 - Prevalence of diseases and medication use (% of elderly people).Uberaba, Minas Gerais, Brazil.

Diseases	Polypharmacy	Medicament
Hypertension 40%	Major polypharmacy Men 47%	Antipsychotics / Neuroleptics 53.3%
Mental disorder 36%	Major polypharmacy Woman 40%	Anti-Hypertensives 41.6%
Cerebral vascular accident 20%	Minor polypharmacy Men 50%	Anti-ulcer 26.6%
Alzheimer's 20%	Minor polypharmacy Woman 60%	Antidepressants 25%
Diabetes 13%	Does not use medication 3.8%	Anticonvulsants 21.6%
Depression 10%		Diuretics 21.6%
		Anxiolytics 20%
		Antilipemics 20%
		Analgesics 16.6%
		Vitamins and supplements 16.6%

Source: Direct search.

Each question in the GOHAI Index has three possible answers. Table 2 shows the frequency of responses according to each question.

Table 2 - Frequency of responses to each GOHAI index question.Uberaba, Minas Gerais, Brazil.

	ALWAYS	SOMETIMES	NEVER
Do you limit the type or amount of food you eat because of problems with your teeth or dentures?	19.5%	31.8%	48.7%
Do you have problems biting or chewing foods like solid meat or apples?	22%	34.1%	43.9%
Were you able to swallow comfortably?	7.5%	22%	70.5%
Did your teeth or dentures prevent you from speaking the way you wanted?	2.5%	9.7%	87.8%
Was able to eat anything without feeling uncomfortable?	7.5%	36.5%	56%
Have you limited your contacts with other people due to the condition of your teeth or dentures?	2.5%	4.8%	92.7%
Were you satisfied or happy with the appearance of your teeth or dentures?	24.3%	31.8%	43.9%
Did you use medication to relieve pain or discomfort related to the mouth?	2.5%	9.7%	87.8%
Worried about your teeth, gums or dentures?	34.1%	41.5%	24.4%
Did you feel nervous or become aware of problems with your teeth, gums or dentures?	14.7%	34.1%	51.2%
Did you feel uncomfortable eating in front of other people because of problems with your teeth or dentures?	4.8%	12.1%	83.1%
Have your teeth or gums been sensitive to contact with heat, cold or sweets?	2.5%	9.7%	87.8%

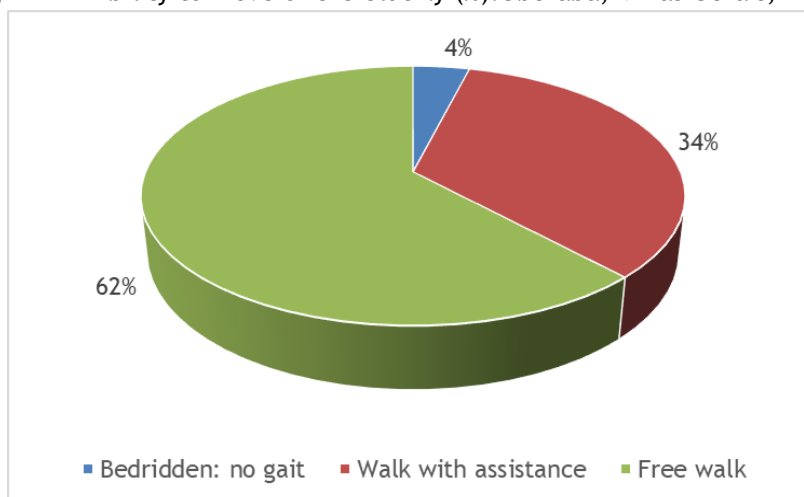
Source: Direct search.

When considering the score obtained by each elderly person, it is observed that all of them had scores above 40, except for 3 elderly people. Therefore, the self-perception evaluated about oral

health was positive because in general they are satisfied with their own oral health.

As for locomotion, a large portion of the residents has free walking, not needing any assistance.

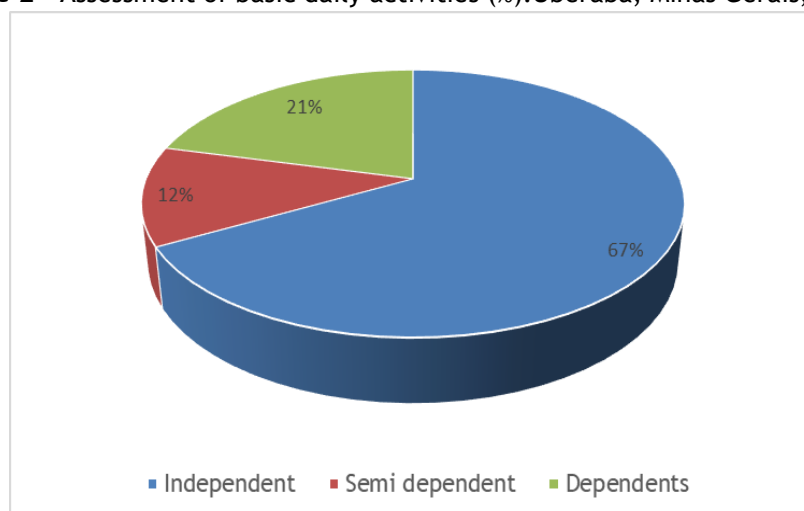
Figure 1 - Ability to move of the elderly (%).Uberaba, Minas Gerais, Brazil.



Source: Direct search

As for the ability to perform daily oral hygiene activities, most institutionalized patients were classified as independent (Figure 2 and Table 3).

Figure 2 - Assessment of basic daily activities (%).Uberaba, Minas Gerais, Brazil.



Source: Direct search.

Table 3 - Assessment of activities related to oral hygiene (%).Uberaba, Minas Gerais, Brazil.

	Independent	Needs adaptations or aid	Totally dependent
Open the toothpaste	80%	13.3%	6.6%
Putting Paste on the Brush	80%	13.3%	6.6%
Bring the brush to your mouth	82.2%	11.1%	6.6%
To brush teeth	80%	13.3%	6.6%
Spit the saliva	88.8%	6.6%	4.4%
Floss	68.8%	20%	11.1%
Clean the brush	82.2%	11.1%	6.6%

Fonte: Pesquisa direta.

DISCUSSION

The present research evaluated the profile of institutionalized elderly at Lição de Vida in the city of Uberaba, Minas Gerais, the family life, autonomy, functionality in carrying out Basic Activities of Daily Living (BADL), and self-perception of oral health.

It was found that the majority of the elderly are male, although the literature reports a greater number of female individuals residing in Long Stay Institutions due to greater life expectancy and, consequently, greater chances of having diseases and disabilities.¹¹⁻¹² In addition, women are more likely to lose their husbands and remain in disadvantageous socioeconomic situations, requiring the care of these institutions.¹³ However, the results of this study can be attributed to changes in family dynamics and society in recent years or even the regional difference focused on the profile of institutionalized people.¹⁴ It was evident that most of the elderly people involved in this study have a low educational level, which may reflect the difficulty of accessing schools when they were younger. The educational level, as well as the functional capacity are related to the autonomy of the elderly. Studies report greater susceptibility to dementia and a deficit in cognitive functions in people with a low level of education.¹⁵⁻¹⁷

The feeling of vulnerability and lack of protection is often associated with the aspect of loneliness, which can lead to a setback in the humanizing process.¹⁸ When evaluating family life, most elderly people report having had contact with their family in the last 3 months, an extremely important fact because the absence of family support could worsen depression, which involved 10% of the population studied.

Aging is an inevitable process in the life of any individual, and the physiological decline and the worsening of the disease state are intertwined. Corresponding to this, regarding the health conditions of the elderly, data similar to previous studies were found. There is a high rate of Arterial Hypertension (40%) and Diabetes Mellitus (13%), health conditions that could often have been prevented in adult stage through the adoption of healthy lifestyle habits such as physical activity, interruption smoking and the use of alcohol and other drugs.¹⁹ Hypertension is a serious risk factor for cardiovascular disease and cerebral vascular accident, the leading cause of death in recent times,²⁰ and observed in 20% of the elderly.

The increase in polypharmacy in the elderly is mainly determined by the prevalence of chronic diseases, which require the association of several drugs. It is common for the elderly to present medical prescriptions in which more than one drug is prescribed and, often, with therapeutic duplicity, that is, active principles with the same purpose.²¹ A high prevalence of polypharmacy was identified in this study. This population fits into the global context of widespread use of drugs for the cardiovascular system and mental disorders, in line with the pattern of prevalence of chronic non-communicable diseases among the elderly.

According to the World Health Organization (WHO), “quality of life is an individual's perception of their position in life, in the context of the culture and value systems in which they live, and in relation to their goals, expectations, standards and concerns”.²²

The Geriatric Oral Health Assessment Index (GOHAI) allows the assessment of quality of life related to oral health. In the present study, the

self-perception of oral health evaluated was positive, as in general the elderly are satisfied with their own oral health. Bulgarelli and Manço,²³ detected in their research with the elderly that 65.1% of them were satisfied and/or very satisfied with their own oral health. In the study by Unfer,²⁴ the elderly recognized the importance of natural teeth; however, they did not understand how tooth loss could alter health. This contradiction leads to a reflection that the elderly may consider poor oral health as a natural condition. In the elderly, perception can also be affected by personal values, such as belief, since some pain and disabilities are inevitable at this age. Thus, according to Sarti,²⁵ the feeling of pain of the elderly is seen as a natural phenomenon, making it more difficult to conceive the idea of well-being for themselves.

CONCLUSION

Through the study it was possible to identify a population with several health problems. Polypharmacy, whether major or minor, occurs in most of the institutionalized gerontas at Lição de Vida. Most of the elderly are independent and have a good perception of their oral health, however, it should be verified whether this is related to oral conditions, since the elderly may consider poor oral health as a natural condition

RESUMO

Introdução: A institucionalização da população idosa cresce proporcionalmente à ascensão da expectativa de vida. **Objetivo:** Avaliou-se o perfil dos idosos institucionalizados no Lar Lição de Vida de Uberaba, a convivência familiar, a autonomia, a funcionalidade na realização de atividades básicas da vida diária (ABVD) e a autopercepção sobre a saúde bucal. **Delineamento:** Foram analisados os prontuários de 60 idosos quanto ao sexo, idade, etnia, escolaridade, tempo na instituição, prevalência dos problemas de saúde e medicamentos. A autonomia e funcionalidade na realização de ABVD foram avaliadas pelo índice de Katz-modificado. Através do Índice de GOHAI foi avaliada a autopercepção acerca da saúde bucal. **Resultados:** A maioria dos idosos é do sexo masculino (56%), branca (64%), com idade entre 65 a 74 anos (54%) e nível educacional baixo. Hipertensão (40%) e transtornos mentais (36%) são as doenças mais prevalentes. Os antipsicóticos/neurolépticos (53,33%) e os anti-hipertensivos (41,66%) são os medicamentos mais utilizados. A maioria apresenta marcha livre (62,5%), é independente ao realizar as atividades diárias (67,3%) e considera a saúde bucal boa. **Conclusão:** Identifica-se uma população com vários problemas de saúde. Polifarmácia seja ela maior ou menor ocorre em grande parte dos gerontas que por sua vez são independentes e tem boa percepção sobre a saúde bucal.

DESCRITORES

Idoso; Instituição de Longa Permanência para Idosos; Saúde bucal; Autonomia.

RESUMEN

Introducción: La institucionalización de la población anciana crece proporcionalmente al aumento de la esperanza de vida. **Objetivo:** Se evaluó el perfil de los ancianos institucionalizados en la casa Lição de Vida de Uberaba, la convivencia familiar, la autonomía, la funcionalidad en la realización de las actividades básicas de la vida diaria (ABVD) y la autopercepción de la salud bucal. **Delineación:** Se analizaron los prontuarios de 60 ancianos en cuanto a género, edad, etnia, escolaridad, tiempo de internación, prevalencia de problemas de salud y medicación. La autonomía y la funcionalidad en la realización de BADL se evaluaron mediante el índice de Katz modificado. A través del Índice GOHAI se evaluó la autopercepción sobre la salud bucal. **Resultados:** La mayoría de los ancianos son hombres (56%), blancos (64%), con edades entre 65 y 74 años (54%) y con bajo nivel educativo. La hipertensión (40%) y los trastornos mentales (36%) son las enfermedades más prevalentes. Los antipsicóticos/neurolépticos (53,33%) y los antihipertensivos (41,66%) son los fármacos más utilizados. La mayoría tiene deambulacion libre (62,5%), son independientes a la hora de realizar las actividades diarias (67,3%) y consideran que su salud bucal es buena. **Implicaciones:** Se identifica una población con varios problemas de salud. La polifarmacia, ya sea mayor o menor, se presenta en la mayoría de los adultos mayores, quienes a su vez son independientes y tienen una buena percepción de la salud bucal.

DESCRIPTORES

Anciano; Hogares para Ancianos; Salud bucal; Autonomía personal.

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COLLABORATIONS

CSS: substantial contributions in the collection, analysis of results and writing of the manuscript. CSS: substantial contributions in the data collection, analysis of results and writing of the manuscript. GCA: substantial contributions in the review of the manuscript. GRP: substantial contributions in the data collection, analysis of results and review of the manuscript. SSJ, CPL e DTC. **All authors agree and are responsible for the content of this version of the manuscript to be published.**

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CONFLICTS OF INTEREST

There are no conflicts of interest to declare.