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**QUALITY OF LIFE IN OLDER ADULTS LIVING IN NURSING HOMES:
THE ROLE OF HEALTH, SATISFACTION, AND MOOD**

**QUALIDADE DE VIDA EM IDOSOS INSTITUCIONALIZADOS:
O PAPEL DA SAÚDE, SATISFAÇÃO E HUMOR**

**CALIDAD DE VIDA EN ANCIANOS INSTITUCIONALIZADOS:
EL PAPEL DE LA SALUD, LA SATISFACCIÓN
Y EL ESTADO DE ÁNIMO**

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ABSTRACT

Introduction: Given the increase in the older adults population in Brazil, the supply of long-term care becomes a growing demand. Long-term care institutions are characterized as the second most offered care offering and the promotion of residents' quality of life becomes the target of professionals, public managers, and care managers.

Objective: To investigate the factors associated with quality of life in institutionalized Brazilian older adults.

Method: This is a cross-sectional, exploratory, and quantitative research that assesses quality of life in the context of long-term care. 39 elderly people were evaluated in long-term care institutions in Salvador and Brasília, Brazil. Data was collected between January and March 2020, before the COVID-19 pandemic. The variables evaluated were gender, age group, functional performance, comorbidities, health conditions, WHOQOL-OLD questionnaire, mood variables and satisfaction with life.

Results: Regarding health status, an association was observed between urinary incontinence and the WHOQOL-OLD domains "Autonomy" ($p = 0.017$) and "Social Participation" ($p = 0.014$); loss of appetite, "Autonomy" ($p = 0.018$) and "Past, Present and Future Activities" ($p = 0.044$); and scores in the "Sensory Skills" domain ($p = 0.001$) and chewing difficulty. There were associations between satisfaction with life and related domains, mood, and quality of life domains of the WHOQOL-OLD, with emphasis on the domains "Autonomy", "Social Participation" and "Past, Present and Future Activities" ($p = 0.05$).

Conclusion: It is concluded that the quality of life of institutionalized older adults is associated with health complaints, mood and satisfaction with life. These data suggest that promoting the Quality of Life of institutionalized elderly people requires actions to prevent functional decline, promote autonomy, develop meaningful activities, and provide mental health care.

Keywords: Aged; Health; Homes for the Aged; Quality of Life; Satisfaction.

RESUMO

Introdução: Diante do aumento da população idosa no Brasil, a oferta de cuidados de longa duração torna-se uma demanda crescente. As Instituições de Longa Permanência caracterizam-se como a segunda oferta de cuidados mais ofertada e a promoção da qualidade de vida dos residentes passa a ser alvo dos profissionais, gestores públicos e gestores de cuidados.

Objetivo: Investigar os fatores associados a qualidade de vida em pessoas idosas brasileiras institucionalizadas.

Método: Trata-se de pesquisa transversal, exploratória e quantitativa que a qualidade de vida no contexto dos cuidados de longa duração. Foram avaliadas 39 pessoas idosas em instituições de longa permanência em Salvador e Brasília, Brasil. Os dados foram coletados entre janeiro e março de 2020, antes da pandemia COVID-19. As variáveis avaliadas foram: sexo, faixa etária, desempenho funcional, comorbidades, condições de saúde, questionário WHOQOL-OLD, variáveis humor e satisfação com a vida.

Resultados: Em relação ao estado de saúde, foi observada associação entre incontinência urinária e os domínios “Autonomia” do WHOQOL-OLD ($p = 0,017$) e “Participação Social” ($p = 0,014$); perda de apetite, “Autonomia” ($p = 0,018$) e “Atividades Passadas, Presentes e Futuras” ($p = 0,044$); e escores no domínio “Habilidades Sensoriais” ($p = 0,001$) e dificuldade de mastigação. Houve associações entre satisfação com a vida e relativa aos domínios, humor e aos domínios de qualidade de vida do WHOQOL-OLD, com destaque para os domínios “Autonomia”, “Participação Social” e “Atividades Passadas, Presentes e Futuras” ($p = 0,05$).

Conclusão: Conclui-se que a qualidade de vida dos idosos institucionalizados está associada a queixas de saúde, humor e satisfação com a vida. Esses dados sugerem que a promoção da Qualidade de vida de pessoas idosas institucionalizadas requer ações de prevenção do declínio funcional, promoção da autonomia, desenvolvimento de atividades significativas e de cuidados de saúde mental.

Palavras-chave: Idoso; Instituição de Longa Permanência para Idosos; Qualidade de Vida; Satisfação; Saúde.

RESUMEN

Introducción: Dado el aumento de la población anciana en Brasil, la oferta de cuidados de larga duración se convierte en una demanda creciente. Las instituciones de cuidados a largo plazo se caracterizan por ser la segunda oferta asistencial más ofertada y la promoción de la calidad de vida de los residentes pasa a ser el objetivo de profesionales, gestores públicos y gestores de cuidados.

Objetivo: Investigar los factores asociados a la calidad de vida en ancianos brasileños institucionalizados.

Método: Se trata de una investigación transversal, exploratoria y cuantitativa que evalúa la calidad de vida en el contexto de cuidados de larga duración. Fueron evaluados 39 ancianos en instituciones de atención a largo plazo en Salvador y Brasilia, Brasil. Los datos se recopilaron entre enero y marzo de 2020, antes de la pandemia de COVID-19. Las variables evaluadas fueron: género, grupo etario, desempeño funcional, comorbilidades, condiciones de salud, cuestionario WHOQOL-OLD, variables del estado de ánimo y satisfacción con la vida.

Resultados: En cuanto al estado de salud, se observó asociación entre la incontinencia urinaria y los dominios del WHOQOL-OLD "Autonomía" ($p = 0,017$) y "Participación social" ($p = 0,014$); pérdida de apetito, "Autonomía" ($p = 0,018$) y "Actividades pasadas, presentes y futuras" ($p = 0,044$); y puntuaciones en el dominio "Habilidades Sensoriales" ($p = 0,001$) y dificultad para masticar. Hubo asociaciones entre satisfacción con la vida y los dominios relacionados, estado de ánimo y calidad de vida del WHOQOL-OLD, con énfasis en los dominios "Autonomía", "Participación social" y "Actividades pasadas, presentes y futuras" ($p = 0,05$).

Conclusión: Se concluye que la calidad de vida de los adultos mayores institucionalizados está asociada con quejas de salud, estado de ánimo y satisfacción con la vida. Estos datos sugieren que promover la Calidad de Vida de los ancianos institucionalizados requiere acciones para prevenir el deterioro funcional, promover la autonomía, desarrollar actividades significativas y brindar atención en salud mental.

Descriptores: Anciano; Calidad de Vida; Hogares para Ancianos; Salud; Satisfacción.

INTRODUCTION

The aging population challenges health systems in Brazil and worldwide to design satisfactory and successful long-term care. In Brazil, after family care, Long-Term Care Facilities for Older Adults (LTCF) represent the most provided form of long-term care⁽¹⁾. LTCF are institutions that offer shelter and care to older adults. An increase in the number of these institutions has been observed, and it is estimated that there are more than 7,000 such institutions across Brazil, with variability in their organizational profile and the services they offer⁽²⁾.

In this context, studying the quality of life of institutionalized elderly people can offer clues on how to improve their living and health conditions, as well as indicate ways to humanize care⁽³⁾. In the literature, quality of life refers to the individual's understanding of their position in life, according to culturally constructed components and the socially built system of values related to their own life, goals, and expectations⁽⁴⁾. In old age, quality of life is a multi-dimensional component that involves both personal evaluation criteria and socio-normative criteria in the relationship between the individual and the environment. It considers four interconnected dimensions of functional performance, such as environmental conditions, behavioral competence, perceived quality of life, and psychological well-being⁽⁵⁾.

Fekih-Romdhane *et al*, when investigating 42 institutionalized older adults without dementia, observed that quality of life levels were associated with physical performance, mental health, and comorbidities⁽³⁾. However, after analyzing the variables together, the authors found that only social support was associated with quality of life, reinforcing the role of subjective variables and social participation in the expectations and understandings of life among elderly individuals living in LTCFs.

In another study, Xu *et al* also emphasized the role of social support, especially the number of visits and family support, in the quality of life of 371 Chinese older adults⁽⁶⁾. Thus, contrary to what is culturally expected, entry into institutions can occur with the continuation of emotional support and family bonds. In their absence, affective connections can be valued to preserve emotional support, autonomy, and social participation.

It is noticeable, in this context, that a set of parameters is associated with the quality of life of institutionalized elderly individuals, such as health status, clinical conditions, functional performance, chronic non-communicable diseases, and well-being, mood, and social networks^(7,8). In Brazil, institutionalized elderly individuals exhibit a higher prevalence of frailty, depressive symptoms, chronic diseases, and poorer general health, which may negatively affect their quality of life^(9,10). On the other hand, there may be components that favor a

better quality of life, such as life satisfaction and conditions related to autonomy, social participation, and behavioral competence^(3,6). Studying the variables associated with quality of life in institutionalized older adults can contribute to the design of interventions that promote the well-being of this population^(7,8).

Considering the increase in institutions and the movement to humanize care, the present study investigated the conditions associated with quality of life, considering functional performance, health complaints, chronic diseases, and well-being variables, such as mood and self-rated health. The questions are: What types of variables are associated with the quality of life of institutionalized elderly individuals in multiple health and psychosocial parameters? Given the frailty and high morbidity of institutionalized older adults' individuals, which variables are associated with quality of life?

METHODS

This is a cross-sectional and exploratory study conducted with cognitively healthy Brazilian older adults residing in Long-Term Care Institutions Facilities for Older Adults (LTCF).

Sample

Three LTCF participated in the study: one located in the city of Brasília/Brazil, and two in the city of Salvador/Brazil. From the initial total sample of 185 residents (90 from Brasília and 95 from Salvador), only 86 were evaluated. The loss of potential participants was higher in Brasília: out of the 90 older adults, 70 were potentially eligible, but only 22 were investigated. In Salvador, out of 95 participants, 75 were potentially eligible, and 64 were investigated. Based on the 86 participants evaluated, 39 individuals without cognitive decline, who answered all the questionnaires, were selected for the present study. The study was initiated in January 2020 but had to be interrupted in March due to the Covid-19 pandemic.

The three participating institutions were selected based on the following inclusion criteria:

- a. They must be public or philanthropic.
- b. They must have been in the same physical space for at least 2 years.
- c. They must have a technical supervisor available to participate in the activities.
- d. They must agree to participate in the study.

In both cities, four institutions met all the inclusion criteria. Two institutions in Brasília and three in Salvador provided informed consent, but only one in Brasília and two in Salvador were included due to limitations imposed by the Covid-19 pandemic.

As for participant inclusion criteria, they had to have been residing in the institutions for at least 6 months and agree to participate in the study. There were no age or gender restrictions. Exclusion criteria included sensory impairments and difficulty understanding the questions; aphasia, agnosia, or speech and language issues that could hinder communication; and bedridden individuals or those with untreated psychiatric comorbidities. These criteria were applied due to the self-report nature of the questions used in the evaluations.

Instruments and Variable Definition

Participants were interviewed using the following tools:

- A semi-structured sociodemographic questionnaire with information on age, sex, education, and marital status.
- Katz's Functional Performance Questionnaire for Basic Activities of Daily Living⁽¹¹⁾. Presence or absence of difficulties in Basic Activities of Daily Living (BADLs), related to self-care (bathing, dressing, using the bathroom, transferring, continence, eating).
- A semi-structured questionnaire with questions related to the number of self-reported chronic diseases such as hypertension, diabetes, stroke, cardiovascular diseases, Parkinson's disease, and osteoporosis.
- A semi-structured questionnaire with variables related to self-reported health complaints, including questions about the presence or absence of urinary incontinence, fecal incontinence, loss of appetite, memory difficulties, difficulty chewing solid foods, and swallowing difficulties.
- The Mini-Mental State Examination (MMSE) to assess global cognitive status. The cutoff points for cognitive impairment were adapted to Brazilian education levels: 13 for illiterate individuals, 18 for those with 1 to 8 years of schooling, and 26 for those with 9 or more years of schooling⁽¹²⁾.
- The Geriatric Depression Screening Scale (GDS)^(13,14), a simplified version composed of 4 items, with scores ranging from 0 to 4 points. The questions included: "Are you basically satisfied with your life?", "Do you feel that your life is empty?", "Do you fear that something bad will happen to you?", and "Do you feel happy most of the time?". The cutoff score for a possible response compatible with depression was 1 point.

- **Quality of Life – World Health Organization Quality of Life-OLD (WHOQOL-OLD)** – A questionnaire with 24 questions on a Likert scale from 1 to 5, divided into six domains: “Sensory Abilities”; “Autonomy”; “Past, Present, and Future Activities”; “Social Participation”; “Death and Dying”; “Intimacy”. In this study, the score of each domain and the overall score were analyzed⁽¹⁵⁾.
- **Life Satisfaction** – A questionnaire was used to assess participants’ life satisfaction, containing six items divided into global satisfaction (one item), satisfaction with health (one item), and domain-specific satisfaction (four items), including: memory, friendships, family relationships, and relationships with the environment⁽¹⁶⁾. For each item, participants selected from five options: “Very little” (score 1), “Little” (score 2), “More or less” (score 3), “Much” (score 4), and “Very much” (score 5). In this study, responses were categorized into three groups: “Very little or little,” “More or less,” or “Much or very much.”

Procedures

Initially, visits to the institutions were scheduled to establish rapport, explain the study's objectives, and agree on the days and times for data collection. After the visits, deadlines were set with the institution managers for conducting individual interviews with participants. The interviews took place from January to early March 2020, before the Covid-19 pandemic, with the participation of a team of 15 undergraduate and graduate students from each city.

For the evaluations, all participants were informed about the study's objectives and received instructions regarding the signing of the Informed Consent Form, in accordance with Health Ministry Ordinance No. 466 of 2012⁽¹⁷⁾. After consenting to participate in the study, individual interviews were scheduled to be held in a calm and quiet environment within the institution where the participant resided, at previously agreed times that were compatible with the institution's routine.

Data Analysis

The data were analyzed using descriptive and inferential statistics. The data followed a normal distribution, as assessed by the Shapiro-Wilk test. Comparisons between groups were made using the independent samples t-test (for two groups) or ANOVA (for three or more groups). The dependent variable was composed of the quality of life domains from the WHOQOL-OLD, and the independent variables included sociodemographic, health, functional, and satisfaction variables. The JAMOV 2.3.24 software was used. The significance level for the analysis was set at < 0.05 .

RESULTS

Among the 39 older adults investigated, the majority resided in Salvador/BA, were female, unmarried, with 5 to 8 years of schooling, identified as Black or Mixed Race, without difficulties in Basic Activities of Daily Living (BADLs), using medications continuously, and exhibiting depressive symptoms. They were from only one ILPI. Regarding the characteristics of the institutions, resources came from various sources, and the rooms were shared by more than three people.

According to Table 1⁷, most of the sample reported taking at least one medication continuously (84.6%) and had a GDS score suggestive of depression (68.4%). Table 2⁷ presents the scores for the WHOQOL-OLD domains (Sensory Abilities, Autonomy, Past, Present, and Future Activities, Social Participation, Death and Dying, and Intimacy) as a basis for analyzing the quality of life of institutionalized older adults. Among the domains investigated, the highest scores were for "Sensory Abilities" and "Death and Dying", followed by "Past, Present, and Future Activities", "Social Participation", "Intimacy", and "Autonomy".

As observed in Table 3⁷, there was no association between the WHOQOL-OLD domains and sex, age group, education, marital status, or difficulties in basic activities of daily living, indicating that scores for WHOQOL Total and subdomains did not vary in relation to these variables.

Table 4⁷ compares the WHOQOL-OLD domains with the investigated health variables. There was an association between urinary incontinence and the WHOQOL domains "Autonomy" ($p = 0.017$) and "Social Participation" ($p = 0.014$); loss of appetite and the WHOQOL domains "Autonomy" ($p = 0.018$) and "Past, Present, and Future Activities" ($p = 0.044$); and chewing difficulty and the WHOQOL domain "Sensory Abilities" ($p = 0.001$).

In all domains, higher scores were observed in older adults without urinary incontinence, loss of appetite, or chewing difficulties, suggesting that urinary incontinence and issues related to eating are associated with quality of life in the investigated group. Regarding other variables, no statistically significant associations were observed between quality of life and the number of chronic diseases, fecal incontinence, memory difficulties, or difficulty swallowing food.

Regarding subjective factors and mood-related variables (Table 5⁷), there was an association between quality of life, mood, and life satisfaction. Notably, there were statistically significant associations between:

- a. GDS Total (0, 1, 2 points or more) and WHOQOL "Autonomy" ($F = 4.507$; $p = 0.018$), "Past, Present, and Future Activities" ($F = 5.660$; $p = 0.018$), "Social Participation" ($F = 6.679$; $p = 0.004$), and WHOQOL Total Score ($F = 7.195$; $p = 0.003$).
- b. Life satisfaction and WHOQOL "Sensory Abilities" ($F = 4.846$; $p = 0.014$), "Autonomy" ($F = 5.790$; $p = 0.007$), "Past, Present, and Future Activities" ($F = 8.379$; $p = 0.001$), "Social Participation" ($F = 8.259$; $p = 0.001$), "Intimacy" ($F = 4.095$; $p = 0.026$), and WHOQOL Total Score ($F = 14.679$; $p = 0.000$).
- c. Health satisfaction and WHOQOL "Sensory Abilities" ($F = 5.539$; $p = 0.008$), "Autonomy" ($F = 8.527$; $p = 0.001$), "Social Participation" ($F = 7.181$; $p = 0.003$), and WHOQOL Total ($F = 7.327$; $p = 0.002$).
- d. Satisfaction with memory and WHOQOL "Past, Present, and Future Activities" ($F = 3.885$; $p = 0.031$), "Intimacy" ($F = 6.109$; $p = 0.005$), and WHOQOL Total Score ($F = 5.189$; $p = 0.011$).
- e. Satisfaction with family relationships and WHOQOL "Autonomy" ($F = 6.301$; $p = 0.005$), "Intimacy" ($F = 3.696$; $p = 0.036$), and WHOQOL Total ($F = 4.319$; $p = 0.023$).
- f. Satisfaction with the environment and WHOQOL "Autonomy" ($F = 6.177$; $p = 0.005$), "Past, Present, and Future Activities" ($F = 4.707$; $p = 0.016$), "Social Participation" ($F = 4.910$; $p = 0.014$), and WHOQOL Total ($F = 9.929$; $p = 0.000$).

It was observed that older adults with more depressive symptoms and lower life satisfaction had lower quality of life scores.

DISCUSSION

The results of the present study indicate that the quality of life of institutionalized older adults was associated with mood, life satisfaction, loss of appetite, difficulty chewing, and urinary incontinence. Based on these data, the quality of life of institutionalized older people may involve assessing their nutritional status, preventing functional decline, promoting autonomy, developing meaningful activities, and providing mental health care. Given the growth of Long-Term Care Facilities (ILPIs), there is a need to create multidimensional health care protocols addressing both physical and mental health for institutionalized older adults.

Regarding the subjective components, the strong association between mood, life satisfaction, and satisfaction with life in relation to domains across nearly all components of the WHOQOL-OLD may be supported by the relationship between mental health and beliefs and values about life; and by the link between life satisfaction and quality of life, suggesting that satisfaction tends to be an important health indicator among older adults in general⁽⁸⁾. The present study observed that overall satisfaction and domain-specific life satisfaction involved evaluative components of functionality, self-governance capacity, social participation, and intimacy.

For instance, Xiao⁽⁸⁾ found that depressive symptoms moderate the relationship between functional performance and quality of life. One hypothesis is that depression is linked to both negative self-perception and changes in objective health components, including inflammatory, hormonal, and neuroendocrine pathways. Although the duration of depressive symptoms was not determined in this study, these findings suggest that screening for depressive symptoms should be a routine practice in institutions. This will help us to understand the relationships between mental health, quality of life, and variables related to functional performance and health.

The relationship between urinary incontinence and the domains “Autonomy” and “Social Participation” could be explained by the significant impact urinary incontinence can have on the lives of institutionalized older adults, leading to social isolation, low self-esteem, and loss of autonomy, potentially related to the ability to perform daily activities^(18,19). Jachan *et al*⁽¹⁹⁾ found an association between the average amount of urine loss and health-related quality of life. Although this study did not investigate the type of incontinence or its impact on the lives of the participants, addressing incontinence may improve quality of life and should be the target of interdisciplinary and rehabilitation interventions⁽¹⁹⁾.

Regarding the association between loss of appetite and the domains “Autonomy” and “Past, Present, and Future Activities”; and the association between difficulty chewing and “Sensory Abilities”, previous studies have highlighted that anorexia is associated with higher mortality, regardless of age and other clinical and functional variables⁽²⁰⁾. Syed⁽²¹⁾ demonstrated that disturbances in taste and smell can cause food aversion in patients, affecting their ability to maintain optimal nutrition. This can lead to reduced strength, muscle mass, functionality, and, consequently, a poorer quality of life.

In clinical and caregiving practice with older individuals, loss of appetite can be a warning sign of unfavorable health outcomes and, according to the data presented, lower levels of quality of life⁽²²⁾. Therefore, it is necessary to conduct a nutritional assessment of eating habits and factors that may contribute to appetite loss in institutionalized older people⁽²³⁾.

Although frailty syndrome was not investigated in this study, in theory, conditions such as loss of appetite, urinary incontinence, and difficulty chewing may be predisposing factors for frailty, which, in turn, can trigger functional decline in institutionalized older adults. Addressing these variables may promote health, maintain autonomy, and prevent functional dependency in institutionalized older adults⁽²⁴⁾.

Among the intervention proposals, a Nordic study conducted by Bashkireva⁽²⁴⁾ established that regular physical activity improves quality of life and positively affects the health of the studied groups, but older adults represent the most physically inactive segment of the population.

In this study, there was no association between quality of life, sociodemographic variables, functional performance, and chronic diseases, which may be related to the sample's homogeneity, the high prevalence of morbidities, and the low prevalence of limitations in Activities of Daily Living (ADL) in the investigated population.

Considering the data presented, promoting the quality of life for institutionalized older adults may involve both managing their clinical and caregiving conditions and implementing health promotion actions, social participation, qualified listening, meaningful activities, and the development of life projects. These data support the need for a comprehensive health evaluation of institutionalized older individuals to address and intervene in the biopsychosocial demands of aging. Unfortunately, many Brazilian institutions face a shortage of human and financial resources that hinder technically grounded work in geriatrics and gerontology⁽²⁵⁾. The Unified Health System (SUS – Sistema Único de Saúde), although universal, lacks a programmatic focus on institutionalized older adults^(25,26). Current discussions, especially with the creation of the National Front for Long-Term Care Facilities, have contributed to the need for health policies aimed at this group.

Despite the study's contribution regarding factors associated with quality of life in institutionalized older adults, the research has limitations. The data are exploratory and based on a small, non-probability sample, which does not allow for generalizations. Studies involving ILPIs are typically challenging due to issues such as permissions, funding, use of adapted instruments, and scheduling assessments that do not interfere with the institutions' activities. Furthermore, the COVID-19 pandemic significantly impacted the conduct of this study.

For all these reasons, this study represents the collaborative efforts of the research team to explore the factors associated with quality of life. Nevertheless, the findings are relevant due to the large number of functionality and health variables collected and investigated among Brazilian institutionalized older adults, an area where the literature still requires further investment. Future studies are recommended to investigate longitudinally the rela-

tionships between the variables presented and to further explore the connections between quality of life, mood, urinary incontinence, and nutrition through more specific and detailed assessments.

CONCLUSION

The quality of life of institutionalized older adults is associated with urinary incontinence, loss of appetite, difficulty chewing solid foods, life satisfaction, and mood. These data suggest that promoting the quality of life of institutionalized older adults requires multidimensional actions focusing on preventing functional decline, promoting autonomy, developing meaningful activities, and providing mental health care.

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MC: Coordination of the study, study design, data collection, storage and analysis, review and discussion of results.

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All authors have read and agreed with the published version of the manuscript.

Ethical Considerations

The study was approved by the Ethics Committee of the Catholic University of Brasília, CAAE: 18151019.1.1001.0029, **Opinion Number:** 3.621.190; and by the Ética Committee of the Federal University of Bahia, CAAE: 18561419.5.1001.5023, **Opinion Number:** 3.793.529, respecting the rights of research participants, confidentiality, anonymity and voluntary participation. All participants consented to participate in the research through a Free and Informed Consent Form.

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Table 1 – Characterization of cognitively healthy institutionalized older people investigated according to type of institution, sociodemographic variables, mood and health, Salvador/BA and Brasília/DF, 2020.⁵

	N	Relative Frequency
Home Institution		
Institution 1 – SSA	6	15.4
Institution 2 – SSA	24	61.5
Institution 3 – BSB	9	23.1
Sex		
Female	21	53.8
Male	18	46.2
Marital status		
Married/Partner	3	7.7
Single	20	51.3
Divorced/Separated	7	17.9
Widower/Widow	9	23.1
Schooling		
Illiterate	7	17.9
1 to 4 years	10	25.6
5 to 8 years	15	38.5
9 years and over	7	17.9
Self-identified Ethnicity		
White	4	10.3
Black	15	38.5
Brown	13	33.3
Asian	1	2.6
Other	5	12.8
DNR	1	2.6
NI		
BADL performance		
No difficulties	29	76.3
Limitation in one BADL or more	9	23.7
Continuous Medication Intake		
No	6	15.4
Yes	33	84.6
Depressive symptoms – GDS 4 points		
0 points	12	31.6
1 point or more	26	68.4
Where do the resources for LTCF payment come from?		
Own resources	6	15.4
Own and family resources	1	2.6
Public funds	4	10.3
Other	26	66.7
Don't Responded	1	2.6
Not informed	1	2.6
How many people sleep in the same room?		
1	6	15.4
2	9	23.1
3	19	48.7
4	3	7.7
Don't Responded	2	5.1
Been to another institution before		
No	35	89.7
Yes	4	20.3

DNR – Did not respond; NI – Not Informed.

Table 2 – Score in the WHOQOL-OLD domains in institutionalized older people from Brasília/DF and Salvador/BA (n=39), 2020.⁶

	Mean	Standard Deviation	Media	Minimum	Maximum
Sensory Abilities	16.30	3.36	17.00	7.00	20.00
Autonomy	12.32	3.20	13.00	5.00	19.00
Past, Present and Future Activities	13.33	3.56	14.00	5.00	20.00
Social Participation	13.22	3.73	14.00	4.00	19.00
Death and Dying	16.29	4.13	17.00	4.00	20.00
Intimacy	12.49	4.19	12.00	4.00	20.00
WHOQOL Total Score	83.71	13.73	83.00	45.00	109.00

Table 3 – Scores of WHOQOL OLD institutionalized older people from Brasília/DF and Salvador/BA (n=39) according to sociodemographic variables, basic activities and mood, 2020.^κ

	Sensory Abilities Average (SD)	P value	Autonomy Average (SD)	P value	Past, Present and Future Activities Average (SD)	P value	Social Participation Average (SD)	P value	Death and Dying Average (SD)	P value	Intimacy Average (SD)	P value	WHOQOL Total Score Average (SD)	P value
Gender		P = 0.919		P = 0.070		P = 0.373		P = 0.191		P = 0.963		P = 0.500		P = 0.385
Female	16.35 (3.36)		13.20 (3.38)		13.84 (3.28)		14.00 (2.53)		16.31 (4.88)		12.05 (4.60)		85.66 (13.03)	
Male	16.23 (3.45)		11.29 (2.71)		12.76 (3.86)		12.35 (4.66)		16.25 (3.17)		13.00 (3.72)		81.50 (14.56)	
Age group		P = 0.245		P = 0.397		P = 0.376		P = 0.753		P = 0.480		P = 0.137		P = 0.176
60 to 69 years	17.25 (3.69)		11.25 (3.57)		14.37 (3.42)		12.50 (3.62)		16.85 (2.96)		12.37 (3.99)		84.00 (9.46)	
70 to 79 years	16.64 (2.30)		13.40 (3.20)		12.71 (3.66)		13.28 (4.12)		15.23 (4.93)		13.42 (3.50)		84.00 (14.22)	
80 to 89 years	14.50 (4.11)		11.50 (3.34)		12.33 (3.53)		12.88 (4.25)		16.10 (4.43)		10.10 (4.30)		77.22 (14.32)	
90 and more	17.40 (3.20)		13.40 (3.20)		15.20 (3.42)		14.80 (1.78)		18.60 (1.94)		14.80 (4.96)		94.20 (13.08)	
Schooling		P = 0.360		P = 0.956		P = 0.887		P = 0.589		P = 0.536		P = 0.843		P = 0.726
Illiterate	17.16 (3.54)		13.00 (3.22)		13.50 (2.25)		14.16 (1.60)		18.60 (3.13)		13.66 (3.26)		89.40 (8.53)	
1 to 4 years	15.10 (5.02)		12.10 (3.81)		14.11 (4.48)		12.55 (4.53)		15.55 (4.18)		11.80 (4.89)		80.50 (19.31)	
5 to 8 years	16.00 (2.21)		12.28 (3.31)		12.92 (3.60)		12.57 (3.71)		16.42 (3.58)		12.71 (3.26)		82.92 (10.21)	
9 years and over	17.85 (1.57)		12.14 (2.54)		13.00 (3.65)		14.57 (4.15)		15.28 (5.70)		12.00 (5.91)		84.85 (16.80)	
Marital status		P = 0.898		P = 0.054		P = 0.900		P = 0.274		P = 0.415		P = 0.109		P = 0.497
Married/Partner	15.66 (3.05)		15.33 (2.51)		13.33 (2.51)		16.00 (2.64)		14.00 (2.64)		16.00 (3.60)		90.33 (9.01)	
Single	16.47 (3.45)		11.89 (3.01)		13.22 (3.05)		13.50 (2.85)		16.29 (4.22)		11.57 (3.76)		82.25 (8.27)	
Divorced/Separated	15.57 (4.61)		10.42 (2.57)		12.71 (4.71)		11.14 (3.84)		18.28 (2.42)		11.00 (4.58)		79.14 (18.89)	
Widower/Widow	16.75 (2.31)		13.87 (3.31)		14.12 (4.32)		13.37 (5.23)		15.37 (5.28)		14.62 (4.17)		88.12 (18.58)	
BADL		P = 0.329		P = 0.486		P = 0.916		P = 0.361		P = 0.796		P = 0.746		P = 0.551
No difficulties	16.60 (3.20)		12.53 (3.09)		13.37 (3.11)		13.55 (3.47)		16.18 (3.93)		12.35 (3.99)		84.50 (11.60)	
With difficulties	15.33 (3.84)		11.66 (3.60)		13.22 (4.89)		12.22 (4.49)		16.62 (5.04)		12.88 (5.01)		81.12 (19.92)	

Table 4 – Score in the WHOQOL-OLD domains in institutionalized older people from Brasília/DF and Salvador/BA (n=39) according to health variables, 2020.^κ

	Sensory Abilities Average (SD)	P value	Autonomy Average (SD)	P value	Past, Present and Future Activities Average (SD)	P value	Social Participation Average (SD)	P value	Death and Dying Average (SD)	P value	Intimacy Average (SD)	P value	WHOQOL Total Score Average (SD)	P value
Number of chronic diseases		F = 0.207; P = 0.891		F = 1.978; P = 0.136		F = 0.707; P = 0.555		F = 0.469; P = 0.706		F = 0.432; P = 0.732		F = 1.691; P = 0.188		F = 0.447; P = 0.721
No Diseases	15.86 (4.38)		14.86 (2.12)		14.50 (2.17)		14.00 (1.41)		14.50 (4.37)		13.71 (3.50)		88.00 (11.55)	
1 chronic disease	15.88 (4.02)		11.50 (4.63)		12.00 (4.21)		11.88 (5.72)		16.75 (3.33)		12.63 (4.34)		80.63 (19.23)	
2 chronic diseases	16.92 (2.39)		11.75 (2.30)		13.92 (3.85)		13.33 (3.70)		16.55 (4.01)		13.67 (3.39)		85.91 (9.26)	
3 or more chronic diseases	16.20 (3.46)		11.90 (2.92)		13.00 (3.43)		13.70 (2.95)		16.70 (4.99)		10.10 (4.91)		81.60 (14.80)	
Urinary incontinence		P = 0.450		P = 0.017		P = 0.110		P = 0.014		P = 0.754		P = 0.940		P = 0.059
No	16.55 (3.22)		13.07 (2.60)		13.92 (2.91)		14.15 (2.46)		16.15 (4.54)		12.51 (4.22)		86.36 (11.55)	
Yes	15.60 (3.77)		10.30 (3.88)		11.80 (4.70)		10.80 (5.32)		16.66 (2.78)		12.40 (4.32)		76.33 (17.13)	
Fecal incontinence		P = 0.168		P = 0.244		P = 0.882		P = 0.103		P = 0.334		P = 0.374		P = 0.693
No	16.38 (3.26)		12.29 (3.17)		13.12 (3.50)		13.12 (3.62)		16.45 (4.19)		12.23 (4.27)		83.46 (14.12)	
Yes	13.00 (4.24)		15.00 (1.41)		13.50 (2.12)		17.50 (2.12)		13.50 (0.70)		15.00 (1.41)		87.50 (2.12)	
Loss of Appetite		P = 0.277		P = 0.018		P = 0.044		P = 0.233		P = 0.140		P = 0.117		P = 0.100
No	16.69 (3.08)		13.11 (2.98)		14.12 (3.52)		13.72 (3.56)		15.58 (4.59)		13.19 (4.07)		86.39 (12.52)	
Yes	15.36 (3.93)		10.45 (3.01)		11.54 (3.07)		12.09 (4.03)		17.81 (2.40)		10.81 (4.16)		78.09 (15.00)	
Memory difficulty		P = 0.329		P = 0.670		P = 0.973		P = 0.117		P = 0.183		P = 0.552		P = 0.808
No	16.62 (3.54)		12.18 (3.13)		13.34 (3.69)		12.61 (3.52)		16.88 (3.91)		12.74 (4.23)		84.08 (14.37)	
Yes	15.40 (2.75)		12.70 (3.49)		13.30 (3.36)		14.80 (3.99)		14.80 (4.49)		11.80 (4.21)		82.80 (12.69)	
Difficulty chewing solid food		P = 0.001		P = 0.705		P = 0.585		P = 0.828		P = 0.482		P = 0.382		P = 0.222
No	17.38 (2.26)		12.19 (3.21)		13.53 (3.25)		13.30 (3.59)		16.62 (3.84)		12.88 (4.04)		85.58 (10.87)	
Yes	13.72 (4.17)		12.63 (3.29)		12.80 (4.41)		13.00 (4.26)		15.54 (4.82)		11.54 (4.59)		79.20 (18.87)	
Difficulty swallowing food		P = 0.533		P = 0.340		P = 0.623		P = 0.325		P = 0.377		P = 0.842		P = 0.602
No	16.45 (3.20)		12.54 (3.34)		13.46 (3.25)		13.50 (3.42)		16.00 (4.39)		12.54 (4.38)		84.28 (12.63)	
Yes	15.50 (4.32)		11.16 (2.13)		12.66 (5.16)		11.83 (5.19)		17.66 (2.25)		12.16 (3.31)		81.00 (19.25)	

Table 5 – Score in the WHOQOL-OLD domains in institutionalized older people from Brasília/DF and Salvador/BA (n=39) according to mood, self-assessed life satisfaction and domain-related variables, 2020.^κ

	Sensory Abilities Average (SD)	P value	Autonomy Average (SD)	P value	Past, Present and Future Activities Average (SD)	P value	Social Participation Average (SD)	P value	Death and Dying Average (SD)	P value	Intimacy Average (SD)	P value	WHOQOL Total Score Average (SD)	P value
Depression		F = 0.020; P = 0.980		F = 4.507; P = 0.018		F = 5.660; P = 0.008		F = 6.679; P = 0.004		F = 1.570; P = 0.224		F = 1.823; P = 0.177		F = 7.195; P = 0.003
0 points	16.42 (2.68)		13.17 (2.76)		14.83 (2.89)		14.92 (2.31)		15.00 (4.88)		13.08 (4.93)		87.42 (10.71)	
1 point	16.31 (3.63)		13.13 (3.01)		13.93 (2.60)		13.87 (3.34)		17.67 (2.32)		13.31 (3.63)		88.36 (10.65)	
2 to 4 points	16.11 (4.01)		9.78 (2.99)		10.33 (4.24)		9.89 (4.08)		15.63 (5.24)		10.22 (3.67)		70.00 (14.70)	
Satisfaction With Life		F = 4.846; P = 0.014		F = 5.790; P = 0.007		F = 8.379; P = 0.001		F = 8.259; P = 0.001		F = 0.902; P = 0.416		F = 4.095; P = 0.026		F = 14.679; P = 0.000
Very Little or Little	12.50 (4.12)		9.50 (2.65)		8.50 (3.42)		8.75 (3.77)		13.75 (6.95)		8.25 (3.50)		61.25 (15.11)	
More or Less	17.92 (2.11)		10.92 (2.71)		12.42 (3.53)		11.83 (2.37)		16.27 (5.04)		11.50 (2.94)		80.18 (6.66)	
Much or Very Much	16.10 (3.28)		13.67 (2.94)		14.85 (2.54)		14.95 (3.41)		16.80 (2.82)		13.86 (4.35)		90.47 (10.71)	
Satisfaction With Health		F = 5.539; P = 0.008		F = 8.527; P = 0.001		F = 1.908; P = 0.164		F = 7.181; P = 0.003		F = 1.077; P = 0.353		F = 1.597; P = 0.217		F = 7.327; P = 0.002
Very Little or Little	12.67 (4.72)		10.67 (3.67)		11.80 (5.81)		9.60 (3.85)		14.20 (4.71)		12.33 (5.39)		66.50 (17.79)	
More or Less	17.60 (2.27)		10.00 (2.54)		12.10 (2.73)		11.60 (2.17)		17.50 (4.88)		10.60 (2.37)		79.40 (10.23)	
Much or Very Much	16.71 (2.72)		13.90 (2.45)		14.29 (3.13)		14.86 (3.45)		16.20 (3.56)		13.43 (4.38)		89.30 (11.07)	
Satisfaction With Memory		F = 0.706; P = 0.501		F = 2.664; P = 0.084		F = 3.885; P = 0.031		F = 1.356; P = 0.272		F = 0.853; P = 0.435		F = 6.109; P = 0.005		F = 5.189; P = 0.011
Very Little or Little	14.50 (2.12)		10.00 (4.24)		12.00 (4.24)		13.00 (4.24)		18.50 (2.12)		4.00 (0.00)		72.00 (12.73)	
More or Less	15.64 (3.96)		10.91 (4.13)		11.18 (3.12)		11.73 (5.20)		15.00 (4.81)		12.00 (3.46)		75.10 (15.42)	
Much or Very Much	16.75 (3.15)		13.17 (2.37)		14.48 (3.33)		13.96 (2.72)		16.65 (3.93)		13.42 (3.88)		88.68 (10.59)	
Satisfaction With Friendships		F = 0.869; P = 0.429		F = 1.879; P = 0.169		F = 2.112; P = 0.138		F = 0.871; P = 0.428		F = 1.098; P = 0.346		F = 2.929; P = 0.067		F = 3.195; P = 0.055
Very Little or Little	15.00 (4.00)		11.20 (3.42)		14.00 (3.81)		12.60 (2.97)		14.25 (5.62)		13.60 (3.58)		79.25 (6.70)	
More or Less	17.23 (3.32)		11.62 (2.72)		11.92 (4.07)		12.46 (4.41)		15.42 (5.28)		10.69 (2.32)		78.42 (15.48)	
Much or Very Much	16.17 (3.24)		13.44 (3.15)		14.47 (2.72)		14.18 (3.40)		17.11 (2.74)		13.94 (4.60)		89.71 (11.15)	
Satisfaction With Family Relationships		F = 0.116; P = 0.891		F = 6.301; P = 0.005		F = 0.473; P = 0.628		F = 1.701; P = 0.200		F = 3.160; P = 0.057		F = 3.696; P = 0.036		F = 4.319; P = 0.023
Very Little or Little	16.00 (2.52)		11.86 (2.79)		13.29 (5.35)		12.29 (4.11)		12.50 (5.72)		13.57 (3.15)		78.67 (15.02)	
More or Less	16.55 (2.88)		10.18 (2.99)		12.73 (2.41)		12.45 (2.46)		17.18 (4.02)		9.91 (3.30)		79.00 (7.27)	
Much or Very Much	16.69 (3.57)		14.00 (2.61)		14.00 (2.70)		14.60 (3.70)		16.80 (2.98)		13.94 (4.57)		90.43 (11.31)	
Satisfaction With Environment		F = 0.608; P = 0.550		F = 6.177; P = 0.005		F = 4.707; P = 0.016		F = 4.910; P = 0.014		F = 0.990; P = 0.383		F = 1.413; P = 0.257		F = 9.929; P = 0.000
Very Little or Little	15.43 (4.50)		9.00 (1.63)		10.43 (4.79)		9.71 (3.35)		14.17 (7.17)		10.43 (4.54)		66.33 (14.73)	
More or Less	16.00 (2.70)		13.40 (2.13)		13.13 (2.95)		13.67 (3.83)		16.50 (2.65)		12.33 (3.98)		84.57 (8.86)	
Much or Very Much	17.00 (3.46)		12.80 (3.69)		15.00 (2.57)		14.50 (2.82)		16.93 (3.77)		13.60 (4.14)		90.29 (11.38)	