Anais da Faculdade de Medicina de Olinda
Annals of Olinda Medical School

afmo.emnuvens.com.br ISSN: 2674-8487 Original Article

Characterization of the quality of life of institutionalized older adults

Caracterização da qualidade de vida de idosos institucionalizados

Flávia Souza Rosa Brandão[1] Mariana Lima de Morais Inocêncio[1]
Gilberto da Costa Quintino Júnior[1] Larissa Di Paula Souza Pires[1]
Paulo Acioli Alves Pinto[1] Vinícius Souza Brandão[2]

[1] Faculdade de Medicina de Olinda. Olinda, Pernambuco, Brazil.
[2] Universidade Católica de Pernambuco. Recife, Pernambuco, Brazil.

Abstract

Objective: To assess the quality of life of institutionalized older adults. **Methods:** A descriptive cross-sectional study was conducted with 20 older adults using a sociodemographic questionnaire for sample characterization and the WHOQOL-bref to assess the quality of life. Descriptive statistical analyses were performed. **Results:** Most participants were males (62.5%) aged between 70 and 80 years (43.7%), with income of up to one minimum wage (87.5%), no partner (87.5%), with children (75.0%), and some level of education (68.7%). The study revealed that the quality of life among participants was moderate across the physical, psychological, social relationships, and environment domains of the WHOQOL-bref. A statistically significant difference was observed in the environment and physical domains when dividing the sample according to age and presence of hypertension. **Conclusion:** In older adults, the higher the age, the lower the quality of life. Hypertension impacted the physical domain and quality of life. Developing and implementing strategies and interventions are important to improve the quality of life of institutionalized older adults.

Keywords: Aging; Older adults; Long-term care facilities; Quality of life.

Corresponding Author:
Flávia Souza Rosa Brandão
E-mail:
fsrbrandao@hotmail.com
Funding: Not applicable
Research Ethics Committee (CAAE): 62254222.4.0000.8033
Received: 10/05/2023
Approved: 11/10/2023

How to cite: Brandão **FSR**, Inocêncio **MLM**, Quintino Júnior **GC**, Pires **LDPS**, Pinto **PAA**, Brandão **VS**. Characterization of the Quality of Life of Institutionalized Elderly. An Fac Med Olinda 2023; 1(10):1 https://doi.org/10.56102/afmo.2023.294

Resumo

Objetivo: Avaliar a qualidade de vida de idosos institucionalizados. **Métodos:** Estudo transversal descritivo, realizado com 20 idosos, a partir de um questionário de caracterização sociodemográfica e do instrumento WHOQOL-bref para avaliação da qualidade de vida. Os dados foram submetidos à análise estatística descritiva. **Resultados:** A maioria dos participantes do estudo referiram ser do sexo masculino (62,5%); com idade entre 70 e 80 anos (43,7%); com renda de até um salário mínimo (87,5%); sem companheiro(a) (87,5%); com filhos (75,0%); e com escolaridade (68,7%). O estudo evidenciou que a qualidade de vida dos participantes como moderada, segundo escores gerais do questionário WHOQOL-bref, nos domínios Físico, Psicológico, Relações Sociais e Meio Ambiente. Foi possível observar diferença estatisticamente significativa na variável Idade, em relação ao domínio Meio Ambiente e na variável Hipertensão Arterial Sistêmica referente ao domínio Físico. **Conclusão:** O estudo demonstrou que quanto maior a idade dos idosos institucionalizados, menor a qualidade de vida, assim como a presença de Doenças Crônicas Não Transmissíveis causa impacto no domínio físico e, consequentemente, na redução da qualidade de vida. Sendo importante o desenvolvimento e implementação de estratégias e ações para melhorar a qualidade de vida dos longevos institucionalizados.

Palavras-chaves: Envelhecimento; Idoso; Instituição de longa permanência para idosos; Qualidade de vida.

INTRODUCTION

In Brazil, the reduction in mortality and birth rates influenced the increase in the older adult population and the decrease in the number of children and young individuals. The population above 60 years represented 26.1 million in 2013, and it is estimated to increase to approximately 32 million by 2025[1]. In this context, demographic shifts lead to population aging, which is characterized by morphological, physiological, biochemical, psychological, social, and environmental changes that progressively impairs the adaptation of the individual to the environment[2,3].

The decline in functional capacity and inactivity of older adults are associated with aging and involve changes that impact the quality of life[3]. These alterations are common in senescence and result in progressive loss of physical vigor that may interfere with basic activities of daily living and instrumental activities of daily living. Both are needed to maintain an independent and autonomous life[4].

Despite the reduction in physical and cognitive capacities and the onset of comorbidities, it is crucial to maintain autonomy and independence among this population[5]. In this context, quality of life (QoL) does not solely refer to physical and psychological well-being and health. It is a broad concept fragmented into several aspects that predispose the perception, satisfaction with life and daily events, socio-cultural values, autonomy, and independence; thus, generating expectations and goals for each individual[6].

Functional limitations generate an increasing demand for health services by this population, accompanied by transformations in family, social, and economic dynamics. The growing trend in seeking long-term care facilities (LTCF) is also notable[4]. Although public policies in Brazil

prioritize family care for this population, LTCF becomes an important choice because it ensures the care of older adults and their families[7].

Placing older adults in a LTCF may result in a decline in physical capacity, function, and interpersonal relationships. The combination of these situations may also compromise the autonomy, independence, and QoL of older adults. Additionally, these individuals experience changes in societal roles and life spaces, increasing the risk of anxiety and depression[8].

QoL can be assessed in older adults using the World Health Organization Quality of Life (WHOQOL-bref) questionnaire, developed by the World Health Organization, as a tool to support the management and evaluation of public policies. This instrument was translated and validated for use in Brazil by a group of researchers of the Federal University of Rio Grande do Sul, which assessed the QoL of individuals across different contexts[9,10].

Therefore, the objective of this study was to assess the QoL of institutionalized older adults using the WHOQOL-bref and correlate the findings with sociodemographic variables.

METHODS

A descriptive cross-sectional study was conducted from April 2022 to April 2023 at a LTCF in Abreu e Lima, Pernambuco (Brazil). The study was a census involving 20 older adult residents in the LTCF; four did not participate: one declined, and three presented impaired cognition. Thus, the final sample was composed of 16 participants.

Inclusion criteria consisted of participants aged 60 or older, with preserved communication capacity, who resided in the studied city and the LTCF for more than three months and consented to participate in the study. Those diagnosed with cognitive diseases were excluded; refusal was considered when the individual did not consent to participate in the research.

Data were collected through interviews that lasted approximately 30 minutes. During these interviews, researchers individually read the questions in a room at the LTCF. A sociodemographic questionnaire was used to characterize social (age, gender, marital status, skin color, income, and education), lifestyle habits (smoking, alcohol, and other drug use), family network (number of children), and clinical data (pathologies and comorbidities).

Variables were stratified by age (60 to 70 years, 70 to 80 years, and older than 80 years), gender (male or female), marital status (with or without a partner), skin color (white and black or brown), income (up to one minimum wage or more than one minimum wage), education (with or without education), and non-communicable diseases (NCDs) (hypertension, diabetes mellitus, chronic obstructive pulmonary disease, or other diseases).

QoL was assessed using the WHOQOL-bref[11], which comprises 26 questions distributed into four domains: physical, psychological, social relationships, and environment. The scores of each domain range from 0 to 100 points. The mean score for each domain indicates the level of

satisfaction of individuals in each aspect of their lives. Since the final scale score ranges from 0 to 100, the higher the score, the higher the perceived satisfaction in the domain: 0 to 20 (very dissatisfied), 21 to 40 (dissatisfied), 41 to 60 (neither satisfied nor dissatisfied), 61 to 80 (satisfied), and 81 to 100 (very satisfied)[11].

Statistical analysis was performed using the Statistical Package for the Social Sciences, version 25.0 (SPSS, IBM Corp, USA) and Excel 365. Continuous variables were represented by central tendency and dispersion measures. The Mann-Whitney test was used to compare quantitative variables between two groups, whereas Kruskal-Wallis with Dunn's post-hoc compared more than two groups. All tests were conducted with a 95% confidence level.

The study was approved by the research ethics committee of the Faculdade de Medicina de Olinda (CAAE: 62254222.4.0000.8033) following Resolution 466/2012 of the National Health Council. All participants signed the informed consent form.

RESULTS

Most participants were male (62.5%), aged between 70 and 80 years (43.7%), and had an income of up to one minimum wage (87.5%), a partner (87.5%), children (75.0%), and some level of education (68.7%).

Table 1. Sociodemographic characteristics and family network of institutionalized older adults in Abreu e Lima - Pernambuco, 2022 to 2023. (n=16)

Variables	n	%
Age (years)		
60 - 70	5	31.3
70 - 80	7	43.7
≥ 80	4	25.0
Gender		
Male	10	62.5
Female	6	37.5
Skin Color		
White	4	25.0
Black or Brown	12	75.0
Education		
Without education	5	31.3
With education	11	68.7
Marital Status		
Without partner	14	87.5
With partner	2	12.5
Religion		
Catholic	7	43.8
Evangelical	7	43.8
Others	2	12.4
Children		
Without children	4	25.0
With children	12	75.0
Income		
Up to one minimum wage	14	87.5
More than one minimum wage	2	12.5

Table 2 presents the clinical characteristics and lifestyle habits of participants, indicating that most had hypertension (56.3%). All older adults were non-smokers, and none consumed alcoholic beverages during the study period. Most individuals had been at the LTCF for 3 to 12 months (62.5%).

Table 2. Clinical characteristics and lifestyle habits of institutionalized older adults in Abreu e Lima - Pernambuco, 2022 to 2023. (n=16)

Variables	n	%
Alcohol		
Yes	0	0.0
No	16	100.0
Smoking		
Yes	6	37.5
No	10	62.5
Illicit Drugs		
Yes	0	0.0
No	16	100.0
Hypertension		
Yes	9	56.3
No	7	43.8
DM		
Yes	1	6.3
No	15	93.8
COPD		
Yes	1	6.3
No	15	93.8
Other conditions		
Yes	4	25.0
No	12	75.0
Length of stay in the LTCF		
3 to 12 months	10	62.5
12 to 24 months	2	12.5
More than 36 months	4	25.0

DM: Diabetes mellitus; COPD: Chronic obstructive pulmonary disease; LTCF: Long-term care facility

Table 3 presents the QoL of older adults according to the WHOQOL-bref. A statistically significant difference was observed in the environment and physical domains between age and hypertension groups, respectively.

Table 3. Associations between WHOQOL-bref domain scores and sociodemographic variables, family network, and clinical aspects of older adults in Abreu e Lima - Pernambuco, 2022 to 2023. (n=16)

Variables	WHOQOL-Bref			
	Physical Mean ± SD	**Psychological Mean ± SD**	**Social Relationships Mean ± SD**	**Environment Mean ± SD**
Age (years)				
60 - 70	59.3 ± 23.8	68.3 ± 28.7	63.3 ± 26.7	60.0 ± 12.2
70 - 80	66.8 ± 28.8	54.8 ± 13.5	70.2 ± 15.1	66.1 ± 12.4
≥ 80	48.2 ± 22.3	33.3 ± 21.8	43.8 ± 12.5	32.0 ± 17.0
*p-value**	*0.581*	*0.121*	*0.129*	***0.040***
Gender				
Male	61.1 ± 26.5	46.7 ± 20.2	58.3 ± 20.0	52.5 ± 22.1
Female	57.7 ± 25.5	65.3 ± 26.7	66.7 ± 23.0	60.9 ± 12.6
*p-value***	*0.828*	*0.191*	*0.583*	*0.383*
Education				
Without education	59.3 ± 32.0	56.7 ± 27.7	71.7 ± 19.2	52.5 ± 18.5
With education	60.1 ± 23.5	52.3 ± 23.2	56.8 ± 20.7	57.1 ± 20.1
*p-value***	*1.000*	*0.864*	*0.229*	*0.609*
Children				
Without children	49.1 ± 34.9	52.1 ± 39.2	62.5 ± 32.3	49.2 ± 28.5
With children	63.4 ± 22.1	54.2 ± 18.9	61.1 ± 17.5	57.8 ± 16.0
*p-value***	*0.467*	*0.951*	*0.951*	*0.903*
Hypertension				
Yes	48.0 ± 24.0	45.8 ± 24.8	56.5 ± 18.5	49.7 ± 19.0
No	75.0 ± 18.9	63.7 ± 19.8	67.9 ± 23.3	63.4 ± 17.5
*p-value***	***0.034***	*0.099*	*0.284*	*0.137*
Length of stay in the LTCF				
Up to 12 months	54.3 ± 21.7	52.9 ± 20.2	57.5 ± 20.2	54.1 ± 17.8
More than 12 months	69.0 ± 30.2	54.9 ± 31.1	68.1 ± 22.0	58.3 ± 22.6
*p-value***	*0.329*	*0.785*	*0.227*	*0.785*

*Kruskal-Wallis; **Mann-Whitney; LTCF: Long-term care facility.

DISCUSSION

In this study, the perceived QoL was assessed among institutionalized older adults in Abreu e Lima (Pernambuco, Brazil). Among sociodemographic characteristics, most were male (62.5%), differing from the profile of older adults living in LTCFs[8,14]. Generally, females are pre-

dominant in LTCF due to a longer life expectancy than males, widowhood situations, and the presence of NCDs[6,15].

Most individuals had no partners, corroborating studies that showed a higher occurrence of widowed older adults[20,21]. The interviewed participants had some level of education and an average institutionalization period of approximately one year. In this sense, the level of education did not interfere with QoL. Also, education is an important factor that mediates the participation of older adults in society. Thus, it is expected that the lower the level of education, the greater the difficulties faced by individuals in seeking the rights; thus, impacting the QoL[15,22].

Although most participants had children (75%), QoL was not significantly different compared to those without children. Another study also conducted in Pernambuco[4,5] supported these data, emphasizing that family plays an important role in the lives of human beings. Nevertheless, most family members do not return to visit the institutionalized older adults, entrusting their care to LTCF professionals[5]; therefore, evidencing a breakdown in the bond between family and older adults.

The results of this study revealed a moderate QoL related to the physical, psychological, social relationships, and environmental domains. This corroborates similar studies conducted in São Paulo and Porto Alegre[4,21].

The environmental domain assesses the satisfaction of individuals based on aspects related to safety and protection, financial resources, availability and quality of healthcare, opportunities to acquire new information and skills, participation in recreational and leisure activities, and physical environment, including pollution, noise, traffic, climate, and transportation[15,22]. When assessing the QoL of older adults, significant differences in the environment domain were observed between age groups. Also, according to the environmental domain, older adults aged > 80 years (25%) had a lower quality of life. These data indicate that octogenarians feel more discomfort with the physical structure and healthcare in the LTCF environment; the environmental domain is also related to the safety and integrity of the individual[14,20].

Older adults with hypertension (53.1%) exhibited a low quality of life according to the physical domain, demonstrating that NCDs directly interfere with QoL of this population[13]. Studies showed that older adults engaging in regular physical activity presented a high QoL, favoring autonomy and independence for maintaining activities of daily living in this population[12,16,17,18]. A similar study conducted in an LTCF in Portugal demonstrated that older adults had low QoL scores, especially in the physical domain[5].

Differences in the remaining domains were not significant, possibly due to the moderate QoL pattern and relevant differences in most analyzed aspects. Additionally, the small sample size contributed to these findings.

Importantly, the profile of the older adult population is an important marker of quality of life. The better the socioeconomic status, lifestyle, and clinical characteristics, the higher the satisfac-

tion with life and aging.

The National Health Policy for the Elderly determines that care practices for these individuals must be based on a global, interdisciplinary, and multidimensional approach. Therefore, these care practices, especially for institutionalized older adults, should consider the interaction between physical, psychosocial, and spiritual factors since the primary purpose of this public policy is to restore, maintain, and promote the autonomy and independence of these individuals[5, 19, 20].

CONCLUSION

The QoL of older adults in the LTCF was moderate, according to the scores in the physical, psychological, social relationships, and environmental domains of the WHOQOL-bref. Also, the older the institutionalized individuals, the lower the QoL, while the presence of NCDs impacted the physical domain, consequently reducing the QoL.

The study had a limitation regarding the number of participants, emphasizing the importance of conducting further studies correlating data with other LTCFs in the region. These studies should also assess the factors associated with institutionalization of the older adult, expanding the capacity for analysis and the influence of the determinants of QoL, independence, autonomy, and functionality of this population.

CONFLICTS OF INTEREST

The authors declare no conflicts of interest.

AUTHOR CONTRIBUTIONS

FSRB: conceptualization, data curation, methodology, project administration, supervision, validation, visualization, writing of original draft, and review and editing. **MLMI**: investigation, resources, visualization, writing of the original draft, and review and editing. **GCQJ**: investigation and resources. **LDPSP**: investigation and resources. **PAAP**: investigation and resources. **VSB:** visualization, writing of the original draft, and review and editing. All authors approved the final version.

REFERENCES

1. Instituto Brasileiro de Geografia e Estatística-IBGE. Projeções da população: Brasil e unidades da federação: revisão 2018. Coordenação de População e Indicadores Sociais. 2. ed. Rio de Janeiro, 2018. https://biblioteca.ibge.gov.br/index.php/biblioteca-catalogo?view=detalhes&id=2101597.
2. Brandão FSR, Inocêncio MLM, Stefani MA, Brandão VS. Desenvolvimento de Atividades Lúdicas e Interativas com Idosos Institucionalizados: Relato de Experiência. An Fac Med Olinda, Olinda, 2022; 8 (2) : 70.
3. Barbosa TCP, Bessa AM, Assis FO, Rezende e Silva FM, Santos RC, Andrade SN. Contribuição de

acadêmicos de enfermagem na melhoria da qualidade de vida de idosos institucionalizados: revisão. Revista Nursing, 2020; 23 (269): 4711. DOI: https://doi.org/10.36489/nursing.2020v23i269p4711-4722.

4. Bassler TC, Santos FR, Junior AGS et. al. Avaliação da qualidade de vida de idosos residentes em instituição de longa permanência para idosos. Rev enferm UFPE on line.2017; Recife, v. 11, n. 1:10-7. DOI: 10.5205/reuol.9978-88449-6-110120170 ISSN: 1981-8963.

5. Ratuchnei ES, Marquete VF, Prado E, Costa JR, Seguraço R, Marcon SS. Qualidade de vida e risco de depressão em idosos institucionalizados. 2021 jan/dez; 13:982-988. DOI: http://dx.doi.org/0.9789/2175-5361.rpcfo.v13.9752.

6. Barbosa RC, Souza ALL. Associação da autopercepção da qualidade de vida e saúde, prática de atividade física e desempenho funcional entre idosos no interior do Brasil. Rev. Bras. Geriatr. Gerontol. 2021;24(4):e210141. DOI: https://doi.org/10.1590/1981-22562022025.210141.

7. Melo LA, Andrade L, Silva HRO, Zazzetta MS, Santos-Orlandi AA, Orlandi FS. Fragilidade, sintomas depressivos e qualidade de vida: um estudo com idosos institucionalizados. Rev. baiana enferm. 2018. DOI: https://doi.org/10.18471/rbe.v32.26340.

8. Haddad PCMB, Calamita Z. Aspectos sociodemográficos, qualidade de vida e saúde do idoso institucionalizado. Rev Enferm UFPE On Line. 2020;14:e243416. DOI: 10.5205/1981-8963.2020.243416

9. Hoffmann-Horochovski MT, Castilho-Weinert LV. O WHOQOL-Bref para avaliar qualidade de vida como instrumento de apoio à Gestão Pública. NAU Social. 2018; 9 (16). DOI: https://doi.org/10.9771/ns.v9i16.31412

10. Moura CB. Avaliação da qualidade de vida emidosos por meio do instrumento WHOQOL-OLD da Organização Mundial e Saúde. Revista RH Visão Sustentável. 2021; 3 (5).

11. Fleck MPA, Louzada S, Xavier M, Chachamovich E, Vieira G, Santos L, et al. Aplicação da versão em português do instrumento abreviado de avaliação da qualidade de vida "WHOQOL-bref". Rev Saúde Pública.2000;34(2):178-83. DOI: 10.1590/S0034-89102000000200012

12. Schlemmer GBV, Machado AS, Santos TD, Tavares DI, Müller M, Pereira MB, Braz MM. Correlação entre qualidade de vida e independência funcional de idosos institucionalizados. Revista Kairós - Gerontologia, 21(1), 411-426. ISSNe 2176-901X. São Paulo, SP, 2018. DOI: http://dx.doi.org/10.23925/2176-901X.2018v21i1p411-426

13. Sousa MC, Viana JA, Silva RA, Quixabeira AP, Santana MDO, Ferreira RKA. Qualidade de vida de idosos: um estudo com a terceira idade. Temas de Saúde. Volume 19, Número 6 - João Pessoa, 2019.

14. Alcântara RKL, Cavalcante MLSN, Fernandes BKC, Lopes VM, Leite SFP, Borges CL. Sociodemographic and health profile of institutionalized older adults. Rev Enferm UFPE On Line. 2019;13(3):674-9. DOI: 10.5205/1981-8963-v13i03a237384p674-679-2019

15. Vasconcelos CLB, BASTOS GCFC, SouSa IF, Almeida RJ. Qualidade de vida de idosos institucionalizados no Brasil: uma revisão integrativa. Revista Brasileira Militar de Ciências, V. 8, N. 20, 2022. DOI https://doi.org/10.36414/rbmc.v8i20.133

16. Massi G, Carvalho TP, Paisca A, Guarinello AC, Hey AP, Berberian AP, Tonocchi R. Promoção de saúde de idosos residentes em instituições de longa permanência: uma pesquisa dialógica. Saúde e Pesqui. 2020 jan-mar; 13(1):7-17 - e-ISSN 2176-9206. DOI: 10.17765/2176-9206.2020v13n1p7-17

17. Faria LB, Monteiro J.de SS, Alves MLFN, & Leão KA. Benefícios da implementação de Práticas Integrativas e Complementares na qualidade de vida de idosos institucionalizados. Revista Eletrônica Acervo Científico, 41, 2022. DOI: https://doi.org/10.25248/reac.e9768.2022

18. Esteve-Clavero A, Ayora-Folch A, Maciá-Soler L, Molés-Julio MP. Factores asociados a la calidad de vida de las personas mayores. Acta Paul Enferm. 31 (5), 2018. DOI: https://doi.org/10.1590/1982-0194201800075.

19. Brasil. Ministério da Saúde. Portaria nº 2.528 de 19 de outubro de 2006. Aprova a Política Nacional de Saúde da Pessoa Idosa. Brasília, DF, 2006. Disponível em: https://bvsms.saude.gov.br/bvs/saudelegis/gm/2006/prt2528_19_10_2006.html.

20. Junior AGS, Casais TR, Arantes WS, et al. Avaliação da Qualidade de Vida de Idosos De Um Centro de Convivência. Revista de Enfermagem do Centro Oeste Mineiro. 2019;9: DOI: http://dx.doi.org/10.19175/recom.v9i0.3053

21. Silva EI, Lacerda TTB, Souza JA, Carvalho PF, et al. Avaliação da qualidade de vida do idoso institucionalizado com sinais de demência. Estud. interdiscipl. Envelhec. 2019; 24 (2).

22. Scherrer Júnior G, Passos KG, Oliveira LM, Okuno MF, Alonso AC, Belasco AG. Atividades de vida diária, sintomas depressivos e qualidade de vida de idosos. Acta Paul Enferm. 2022;35. DOI: http://dx.doi.org/10.37689/acta-ape/2022AO0237345