



## Domains and facets of the quality of life of older adults according to sexual practice

*Domínios e facetas da qualidade de vida de pessoas idosas segundo a prática sexual*

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### ABSTRACT

The research aimed to compare the domains and facets of elderly people's quality of life based on their sexual activity in the past six months. A quantitative, cross-sectional, observational study, conducted with 219 older adults from a municipality in Minas Gerais, Brazil. The *WHOQoL-Bref* and *WHOQoL-Old* instruments were applied to collect data on quality of life, and the Mann-Whitney test ( $p < 0.05$ ) was used for analysis. The Physical Health ( $p = 0.002$ ), Psychological Health ( $p < 0.001$ ), and Social Relationships ( $p < 0.001$ ) domains, as well as the facets of Past, Present, and Future Activities ( $p = 0.013$ ), Social Participation ( $p = 0.007$ ), and Intimacy ( $p = 0.018$ ), were associated with sexual activity in the past six months, with higher scores among those who reported being sexually active.

**Keywords:** Aged. Elderly health. Quality of Life. Sexuality.

### RESUMO

A pesquisa objetivou comparar os domínios e facetas da qualidade de vida de idosos segundo a prática de relação sexual nos últimos seis meses. Estudo quantitativo, transversal e observacional realizado com 219 idosos de um município do Estado de Minas Gerais. Aplicaram-se os instrumentos *WHOQoL-Bref* e *WHOQoL-Old* para a coleta de dados referentes à qualidade de vida, e o teste Mann-Whitney ( $p < 0,05$ ) para análise. Os domínios físico ( $p = 0,002$ ), psicológico ( $p < 0,001$ ) e relações sociais ( $p < 0,001$ ), e as facetas atividades passadas, presentes e futuras ( $p = 0,013$ ), participação social ( $p = 0,007$ ) e intimidade ( $p = 0,018$ ) estiveram associados à prática de relação sexual nos últimos seis meses, com maiores escores entre aqueles que referiram ser ativos sexualmente.

**Palavras-chave:** Idoso. Qualidade de vida. Saúde do idoso. Sexualidade.

## **INTRODUCTION**

The aging process, due to various factors such as advances in medicine and public health policies, stands out on the global stage for having repercussions on demographic, economic, social, political, cultural, and ethical issues<sup>1</sup>.

Thus, there is a need to expand the discussion on health issues involving this population in a holistic and comprehensive manner, aiming to promote quality of life (QoL) and well-being, which includes sexual health since it is closely related to the QoL of older individuals<sup>2</sup>.

According to the World Health Organization (WHO), for complete physical, mental, emotional, and social well-being, in other words, good quality of life, sexual health needs to be considered<sup>3</sup>, as it is important for maintaining appropriate human relationships, a sense of belonging to society, as well as well-being in adulthood and among the elderly. However, aging can have a significant impact on the quality and functioning of sexual relationships, which are affected by physical restrictions and social norms that regulate sexuality, potentially having detrimental effects on self-esteem, social relationships, and the health of older individuals<sup>4,5</sup>.

Comorbidities, bodily changes, sexual impotence, and distorted social views on sexuality are some of the factors cited as reasons for the decrease in sexual activity, contributing to older individuals feeling uncomfortable or guilty about expressing their desires<sup>6</sup>.

Additionally, old age, both in contemporary society and among healthcare professionals, remains marked by negative stereotypes that encompass both physical and social aspects. Sexuality, when related to aging, is silenced, and carries along myths, taboos, and prejudices, resulting in the misconception that older people are asexual. It suggests an activity inherent only to the young, while its meaning is largely reduced to genital organs and sexual intercourse, limiting it to sexual activity<sup>7</sup>.

Sexual activity in old age and its relationship with QoL is still a relatively unexplored subject in the scientific community<sup>2,4</sup>. Specifically, much of the research that focuses on the QoL of the older population examine its association with functional capacity<sup>8</sup>, physical activity<sup>9</sup>, and diseases<sup>10</sup>, rather than sexuality or the sexual act itself.

Considering the above, this research aims to address the relation between sexual activity in older individuals and their QoL, with the goal of expanding the discussion on the subject and facilitating the establishment of health promotion, prevention of health issues, and sexual education actions.

Therefore, the objective of this study was to compare the domains and facets of QoL among community-dwelling older individuals, according to their sexual activity in the past six months.

## **METHODOLOGY**

### **DESIGN**

The present study has a quantitative, cross-sectional, and observational approach.

### **SETTING AND PERIOD**

Data collection took place in a municipality in the State of Minas Gerais, Brazil, from October 2020 to May 2021.

### **SAMPLE AND INCLUSION AND EXCLUSION CRITERIA**

The sample is part of a larger project called *Inquérito sobre Sexualidade de Idosos – Projeto ISI* "Survey on Elderly Sexuality - ISI Project", conducted by members of the Research Group in Collective Health at the *Universidade Federal do Triângulo Mineiro*, in which there was a pre-existing list containing 803 elderly individuals.

People aged 60 years or older, of both sexes, who resided in the urban area of a municipality in the State of Minas Gerais at the time of the survey, and who were able to answer the survey over the phone, were included.

Among the initial list, 219 elderly individuals responded to the questionnaire. Regarding exclusions and losses: 31 elderly individuals had passed away; 45 did not have physical or psychological conditions to respond; 98 declined to participate; 195 no longer had the same phone number or the phone number was nonexistent; and 215 could not be reached after at least six attempts by the interviewers.

## DATA COLLECTION AND INSTRUMENTS

Data were collected over the phone by 10 interviewers trained in proper completion of the data collection instruments and in how to approach the interviewees. The interviewers recorded the elderly individuals' responses on the computer using a Google Forms questionnaire, and the resulting data spreadsheet was exported to Excel®.

A questionnaire developed by the researchers was used for the characterization of sociodemographic data. QoL was assessed through the application of the World Health Organization Quality of Life - BREF (WHOQoL-Bref)<sup>11</sup> and the World Health Organization Quality of Life Assessment for Older Adults (WHOQoL-Old)<sup>12</sup>, both validated in Brazil. The question about sexual activity in the last six months was formulated by the researchers.

## STUDY VARIABLES

Sociodemographic variables: sex (female and male); age range in years (60 to 69, 70 to 79, 80 years and older); marital status (never married or cohabited, married or cohabiting, separated/divorced, widowed, unknown); education level (incomplete primary education, complete primary education, incomplete secondary education/technical course, complete secondary education/technical course, incomplete higher education, complete higher education, complete post-graduate education); family income in minimum wages (less than two minimum wages, two to three, four to five, six or more, does not know/refuses to answer); race (Black, Mixed race, White, Asian, other);

Quality of life: WHOQoL-Bref - domains: physical health; psychological health; social relationships; and environmental health. WHOQoL-Old - facets: Sensory abilities; Autonomy; Past, present, and future activities; Social participation; Death and dying; and Intimacy.

Had sexual intercourse in the last six months: yes, no.

## DATA ANALYSIS

Statistical analysis was performed using absolute and percentage frequencies for categorical variables, and measures of central tendency (mean or median) and dispersion (standard deviation, minimum and maximum) for numerical variables, using the Statistical Package for Social Sciences (SPSS), version 22.0. Considering the non-normality of the data

assessed by the Kolmogorov-Smirnov test and/or the non-homogeneity of variances assessed by the Bartlett's test, the nonparametric Mann-Whitney test was used to compare the QoL scores between groups with and without sexual intercourse in the last six months.

## ETHICAL ASPECTS

The project was approved by the Research Ethics Committee of the Federal University of Triângulo Mineiro (*Universidade Federal do Triângulo Mineiro*), through the *Plataforma Brasil*, under opinion number 4.342.951. When contacting the elderly individuals, the informed consent form was read, the research objectives were presented, and any existing doubts were addressed. After receiving verbal consent from the elderly, we proceeded to the interview.

## RESULTS

Among the 219 elderly individuals interviewed, most were female (63.0%), aged between 70 and 80 years (44.7%), married or cohabiting (46.1%), followed by widowed (38.4%), had incomplete primary education (64.4%), had a family income of less than two minimum wages (42.9%), followed by two to three minimum wages (39.7%), were White (55.7%), and it was found that most participants (63.5%) did not have sexual activity in the last six months (Table 1).

**Table 1.** Socioeconomic-demographic characteristics and sexual activity of elderly individuals residing in the community. Uberaba, Brazil, 2021

Variables	No.	%
<b>Sex</b>		
Female	138	63.0
Male	81	37.0
<b>Age range (in years)</b>		
60 to 69	63	28.8
70 to 79	98	44.7
80 and above	58	26.5
<b>Marital status</b>		
Married or cohabiting	101	46.1
Widowed	84	38.4
Separated, divorced	20	9.1
Single, never married or cohabited	13	5.9
Did not respond	1	0.5

<b>Education</b>		
No education	16	7.3
Incomplete Primary education	141	64.4
Complete Primary education	13	5.9
Incomplete secondary education/technical course	3	1.4
Complete secondary education/technical course	29	13.2
Incomplete Higher Education	4	1.8
Complete Higher Education	11	5.0
Complete post-graduate education	1	0.5
Did not respond	1	0.5
<b>Family Income (in minimum wage salaries)</b>		
Above 2 minimum wage salaries	94	42.9
2 to 3	87	39.7
4 to 5	27	12.3
6 or more	9	4.1
Does not know/refuses to answer	2	0.9
<b>Skin Color</b>		
White	122	55.7
Brown	63	28.8
Black	21	9.6
Yellow	11	5.0
Others	2	0.9
<b>Had sexual intercourse in the last six months</b>		
No	139	63.5
Yes	80	36.5

Source: Prepared by the authors, 2021.

Regarding the WHOQoL-Bref, in the domains of Physical Health ( $p=0.002$ ), Psychological Health ( $p<0.001$ ), and Social Relationships ( $p<0.001$ ), the mean score for those who reported sexual activity in the last six months was significantly higher than those who did not. There was no statistically significant difference between the groups in the Environmental Health domain ( $p=0.568$ ) (Table 2).

In the application of the WHOQoL-Old, the facets of Past, Present, and Future Activities ( $p=0.013$ ), Social Participation ( $p=0.007$ ), and Intimacy ( $p=0.018$ ) were associated with sexual activity in the last six months (Table 2).

**Table 2.** Descriptive summaries and Mann-Whitney test regarding the Domains and Facets of Quality of Life (QoL) assessed by the WHOQoL-Bref and WHOQoL-Old instruments, according to sexual activity in the last six months of elderly individuals in the community. Uberaba, Brazil, 2021

Domains and facets of Quality of Life	Sexual Activity in the last 6 months					p	1st quartile	Median	3rd quartile
	Yes (n=80)		No (n=139)						
	Mean	SD	Mean	SD					
<b>WHOQoL-Bref</b>									
Physical Health	68.1	17.2	59.7	20.7	0.002	50.0	64.3	78.6	
Psychological Health	70.4	12.9	61.8	17.8	<0.001	54.2	66.7	75.0	
Social Relations	72.1	18.6	64.3	19.4	<0.001	58.3	75.0	75.0	
Environmental Health	62.4	14.5	61.3	14.1	0.568	50.0	62.5	71.9	
<b>WHOQoL-Old</b>									

Sensory abilities	79.5	17.0	75.0	22.1	0.321	62.5	81.2	93.7
Autonomy	62.8	16.8	61.1	19.7	0.744	50.0	62.5	75.0
Past, present, and future activities	71.9	15.6	65.7	18.3	0.013	56.2	68.7	81.2
Social participation	67.0	17.0	61.1	17.3	0.007	50.0	68.7	75.0
Death and dying	72.9	25.9	75.8	25.4	0.361	56.2	81.2	100
Intimacy	73.9	15.7	61.6	29.4	0.018	56.2	75.0	81.2

Source: Prepared by the authors, 2021.

## DISCUSSION

The results regarding sociodemographic data corroborate research conducted with elderly people assisted at a Family Health Unit in Belém, PA, which had a predominance of women, married individuals, with low education and income, but they differ regarding age group, where those aged 60 to 69 prevailed<sup>8</sup>. This divergence may be due to the fact that the Northeast region has a lower life expectancy compared to the Southeast, for example, due to socioeconomic differences that impact life expectancy<sup>13</sup>. Regarding ethnicity, it is consistent with research related to the sexuality of elderly people, where self-declared White individuals predominated, followed by Mixed race individuals<sup>14</sup>.

Regarding sexual activity in the last six months, a study conducted in São Paulo, SP, showed that most elderly participants reported sexual inactivity (56.8%), which is congruent with the findings of the present study<sup>14</sup>. Factors such as advancing age, not having a partner, and poorer health perception can influence this condition<sup>15</sup>. However, scientific literature indicates that a large portion of elderly individuals do not engage in sexual intercourse but still maintain interest in various aspects of sexuality as they age<sup>16</sup>.

Sexuality among elderly individuals has a direct relationship with the perception of QoL, encompassing more than just health status, as it also involves physical, psychological, and social issues<sup>2,6,14</sup>.

In this regard, the physical health domain of the WHOQoL-Bref allows for understanding certain aspects such as pain, discomfort, energy, mobility, dependence on medication or treatment, and the ability to perform daily life activities or work<sup>11</sup>.

Therefore, it should be considered that sexual activity can contribute to maintaining energy levels in elderly individuals, increasing self-confidence, and affirming their physical capacity, helping them cope with the aging process<sup>17</sup>.

On the other hand, when analyzing the physiological context, in women, after menopause, there is a decrease in vaginal and hormonal secretions, vaginal dryness, atrophy of the smooth muscles in the vaginal wall, contraction of the cervix, uterus, and breast size<sup>18</sup>. In

men, notable factors include atrophy of the sexual organs, decreased hormonal levels of testosterone, erectile dysfunction, and an inability to maintain arousal<sup>17,20</sup>.

Additionally, in both sexes, the presence of comorbidities can result in reduced capacity for activities of daily living, higher levels of depression, and increased healthcare consumption<sup>21</sup>. These factors may influence, although were not investigated, those elderly individuals who reported not engaging in sexual activity and thus had lower scores in the physical health domain.

On the other hand, sexual activity can lead to psychological benefits, such as improved memory, higher cognitive function, and a lower propensity of feeling depressed and lonely, impacting the QoL among adults and elderly individuals<sup>22</sup>.

As for the psychological health domain, the aging process can affect sexuality, as societal prejudices and cultural stereotypes often associate sexual activity with youth, primarily affecting women, who report being judged and disrespected when expressing their sexuality<sup>5</sup>. In this regard, a study conducted in some cities in the State of Pernambuco found that a significant portion of elderly women (42.15%) reported it was shameful to express interest in sex, in contrast to men, who reported it at a rate of 20.83%<sup>23</sup>.

Furthermore, an international study showed that men and women who reported any sexual activity had significantly higher average scores of enjoyment of life compared to those who were not sexually active, impacting the overall well-being of sexually active elderly individuals<sup>24</sup>.

Given these findings and considering that the results of the present study revealed higher scores in the psychological health domain for those who reported engaging in sexual activity in the last six months, it is important for healthcare professionals to be attentive to the impact of maintaining or not maintaining sexual activity throughout all stages of their patients' life, including old age. Actions such as sexual education, investigation during anamnesis of conditions that may influence sexual activity, and the implementation of public policies that address the specific needs of this population should be established.

With regard to the Social Relationships domain and the Social Participation facet of the WHOQoL-Bref and WHOQoL-Old, respectively, a Brazilian study with elderly individuals revealed that those who were engaged in various social contexts, such as leisure activities, or physical activities offered by the Family Health Team, had a better perception of QoL<sup>25</sup>.

From this perspective, participation in social groups is beneficial in old age<sup>26</sup>, as it allows for meeting and interacting with new people, creating friendships, and strengthening

emotional connections<sup>26</sup>. Leisure activities conducted in groups are recognized as determinants for promoting healthy aging, as they can improve aspects related to mental and psychological health<sup>26</sup>.

On the other hand, the loss of social interaction outside one's home, stress, and distance from potential sexual partners, as experienced during the coronavirus pandemic, could be impactful factors on sexual health<sup>27</sup>, which may justify the results obtained in this research, considering that the data was collected during the critical period of the pandemic when isolation and/or social distancing were prioritized.

Sexual practice can also be related to intimacy. A Brazilian study with couples showed that sex contributes to marital relationships, with sexual relations being a form of intimacy for women that involves care, affection, attention, and generates greater closeness for a couple. Therefore, sexual satisfaction increases the intimacy of spouses and has a positive effect on their relationship<sup>28</sup>. This was corroborated by the present investigation, where a higher average score was observed in the Intimacy facet among those who had sexual relations in the past 6 months.

Regarding the facet of Past, Present, and Future Activities, which involves happiness with what can be expected from the future, recognition and satisfaction with the past, and opportunities to continue achieving other goals<sup>12</sup>, a national survey reveals that life satisfaction, represented by the congruence between desired and achieved goals, is related to the autonomy of elderly individuals<sup>29</sup>.

It should be noted that autonomy in the aging process is multifactorial and involves level of functionality, interpersonal and family relationships, perception of life, overall health status, and QoL<sup>29</sup>. Thus, as life satisfaction, QoL, and autonomy are interrelated, older people believe that sex improves QoL<sup>6</sup>, thereby altering their understanding of and experience with life.

Gratitude, which consists of a feeling of satisfaction and joy in appreciating positive aspects of life, can be a protective factor in aging, as it allows older individuals to positively resignify and reflect on their memories, as well as to enhance their ability and capacity to seek external support in support networks, such as family and social groups<sup>30</sup>.

Therefore, it is possible that older individuals who reported having sexual activity in the past six months have a more positive perception of their life history, achievements, and future projects. This is an important aspect for the actions of healthcare professionals and various other sectors, considering the increasing life expectancy in the country and the world.

Encouraging older individuals to reflect on their accomplishments and maintain a sense of optimism for new projects and social interactions can contribute to the enhancement of their sexual life for as long as they desire.

The study has limitations, such as its cross-sectional design, which does not allow for establishing a cause-and-effect relationship between the associated variables. Additionally, the fact that data collection was conducted by telephone affected sample losses. However, this was the feasible method encountered for conducting the research, aiming to comply with the safety measures established during the COVID-19 pandemic and preserve the reliability of the obtained data.

## **CONCLUSION**

The present study demonstrated a better QoL among older individuals who engaged in sexual activity in the last six months, in the domains of Physical Health, Psychological Health, and Social Relationships, as well as in the facets of Social Participation, Intimacy, and Past, Present, and Future Activities.

Thus, these findings have important implications for healthcare professionals, caregivers, and policymakers, highlighting the need to recognize that older people can be sexually active if they so desire, and to promote reflection and discussion on this topic to promote healthy aging. Furthermore, it is necessary to understand that sexuality encompasses much more than just the sexual act itself, and healthcare professionals should be prepared to address these issues among the older population, starting with their academic and professional training.

In terms of government actions, public policies that encourage the inclusion of sexuality in comprehensive health throughout life, and not just during youth, are essential to prepare people to experience aging to the fullest, encompassing all aspects that can contribute to a better QoL.

The study has expanded the knowledge about the relationship between sexual activity in older individuals and QoL. Further research on this topic is recommended, particularly longitudinal and/or experimental studies that analyze sexuality and its influence on the various variables that comprise the QoL of older individuals. Qualitative studies that assess the perception of older adults on sexuality, focusing on the facets and domains of QoL, can be useful for a better understanding of the subject.

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