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CORRELATIONAL ANALYSIS BETWEEN ELDERLY PEOPLE'S SEXUALITY AND QUALITY OF LIFE

Edison Vitório de Souza Júnior[1]
Cícero Santos Souza[2]
Gabriele da Silva Santos[3]
Cristiane dos Santos Silva[4]
Diego Pires Cruz[2]
Namie Okino Sawada[5]

[1]Universidade de São Paulo, Escola de Enfermagem de Ribeirão Preto, Programa de Pós-Graduação em Enfermagem Fundamental. Ribeirão Preto, São Paulo, Brasil.
[2]Universidade Estadual do Sudoeste da Bahia, Departamento de Saúde. Jequié, Bahia, Brasil.
[3]Universidade Federal da Bahia, Escola de Enfermagem. Salvador, Bahia, Brasil.
[4]Universidade Norte do Paraná, Departamento de Ciências Biológicas e da Saúde. Jequié, Bahia, Brasil.
[5]Universidade Federal de Alfenas, Programa de Pós-Graduação em Enfermagem. Alfenas, Minas Gerais, Brasil.

ABSTRACT

Objective: to analyze the correlation between the experiences of elderly people's sexuality and quality of life.
Method: this is a sectional, descriptive and analytical study carried out with 592 elderly people living in northeastern Brazil. Data were collected exclusively online through Facebook, between August and October 2020. The Affective and Sexual Experiences Scale for Elderly was used to assess sexuality and the World Health Organization Quality of Life – Old to assess quality of life. Non-parametric statistics were used through the Mann-Whitney test, Spearman and Kruskal-Wallis correlations with application of Bonferroni correlation when necessary, with 95% confidence interval ($p<0.05$) for all statistical analyses.
Results: there was a predominance of male elderly (60.5%), aged between 60 and 64 years (44.6%) and who had never received guidance on sexuality by healthcare professionals (75.8%). The best correlations found were positive between "intimacy" with "sexual activity" ($\rho=0.561$; $p<0.001$) and "affective relationships" ($\rho=0.626$; $p<0.001$).
Conclusion: it was found that the dimensions "sexual activity" and "affective relationships" of sexuality had the best positive correlations with the "intimacy" facet of elderly people's quality of life. In this sense, it is evident that healthcare professionals can adopt approaches with these dimensions in their consultations as a way to promote and protect elderly people's quality of life, thus fulfilling the proposal of active aging.

DESCRIPTORS: Public health. Health of the elderly. Quality of life. Sexuality. Health promotion. Healthy aging.

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ANÁLISE CORRELACIONAL ENTRE SEXUALIDADE E QUALIDADE DE VIDA DE IDOSOS

RESUMO

Objetivo: analisar a correlação entre as vivências da sexualidade e a qualidade de vida de idosos.
Método: trata-se de um estudo seccional, descritivo e analítico realizado com 592 idosos residentes no Nordeste do Brasil. Os dados foram coletados exclusivamente de forma on-line por meio da rede social Facebook, entre os meses de agosto e outubro de 2020. Foi utilizada a Escala de Vivências Afetivas e Sexuais do Idoso para avaliar a sexualidade e o *World Health Organization Quality of Life – Old* para avaliar a qualidade de vida. Empregou-se a estatística não paramétrica por meio dos testes de Mann-Whitney, correlação de Spearman e Kruskal-Wallis com aplicação do *post hoc* de Bonferroni quando necessário, com intervalo de confiança de 95% ($p < 0,05$) para todas as análises estatísticas.
Resultados: houve predominância de idosos do sexo masculino (60,5%), com idade entre 60 e 64 anos (44,6%) e que nunca receberam orientações sobre sexualidade pelos profissionais da saúde (75,8%). As melhores correlações encontradas foram positivas entre a faceta da qualidade de vida "intimidade" com o "ato sexual" ($\rho=0,561$; $p < 0,001$) e "relações afetivas" ($\rho=0,626$; $p < 0,001$).
Conclusão: constatou-se que as dimensões "ato sexual" e "relações afetivas" da sexualidade possuíram as melhores correlações positivas com a faceta "intimidade" da qualidade de vida dos idosos. Nesse sentido, evidencia-se que os profissionais de saúde podem adotar abordagens com essas dimensões em suas consultas como forma de promoção e proteção da qualidade de vida da pessoa idosa, cumprindo, desse modo, a proposta do envelhecimento ativo.

DESCRITORES: Saúde pública. Saúde do idoso. Qualidade de vida. Sexualidade. Promoção da saúde. Envelhecimento saudável.

ANÁLISIS CORRELACIONAL ENTRE SEXUALIDAD Y CALIDAD DE VIDA DEL ANCIANOS

RESUMEN

Objetivo: analizar la correlación entre las experiencias de la sexualidad y la calidad de vida del ancianos.
Método: se trata de un estudio seccional, descriptivo y analítico realizado con 592 ancianos residentes en el Nordeste de Brasil. Los datos se recolectaron exclusivamente en línea a través de la red social Facebook, entre los meses de agosto y octubre de 2020. Se utilizó la Escala de Experiencias Sexuales y Afectivas del Anciano para evaluar la sexualidad y el World Health Organization Quality of Life – Old para evaluar la calidad de vida. Se utilizaron estadísticas no paramétricas mediante las pruebas de correlación de Mann-Whitney, Spearman y Kruskal-Wallis, con aplicación post hoc de Bonferroni cuando fue necesario, con un intervalo de confianza del 95% ($p<0,05$) para todos los análisis estadísticos.
Resultados: predominó el sexo masculino de edad avanzada (60,5%), con edades comprendidas entre los 60 y 64 años (44,6%) y que nunca habían recibido orientación sobre sexualidad por parte de profesionales de la salud (75,8%). Las mejores correlaciones encontradas fueron positivas entre la faceta calidad de vida "intimidad" con "acto sexual" ($\rho=0,561$; $p<0,001$) y "relaciones afectivas" ($\rho=0,626$; $p<0,001$).
Conclusión: se encontró que las dimensiones "acto sexual" y "relaciones afectivas" de la sexualidad tenían las mejores correlaciones positivas con la faceta "intimidad" de la calidad de vida del anciano. En este sentido, es evidente que los profesionales de la salud pueden adoptar enfoques con estas dimensiones en sus consultas como una forma de promover y proteger la calidad de vida del ancianos, cumpliendo así con la propuesta de envejecimiento activo.

DESCRIPTORES: Salud pública. Salud del ancianos. Calidad de vida. Sexualidad. Promoción de la salud. Envejecimiento saludable.

INTRODUCTION

The increase in life expectancy of populations and the growing phenomenon of aging occur on a global scale so that the World Health Organization (WHO) treats aging as a powerful and transforming demographic force capable of changing perspectives on the health-illness process[1]. Among the factors responsible for this increase are the improvements in healthcare, the evolution of medical sciences, education and economics, especially in more developed countries. This sum of factors directly affects elderly people's quality of life (QoL), defined by the WHO as the perception that individuals have of their position in life, linked to the culture and value system in which they are and related to their goals, expectations, standards and concepts[2].

Elderly people's QoL is dynamically expressed and is associated with a sense of well-being that is built based on their experiences, beliefs and sociocultural values. It is also the expression of the activities that these individuals are able to perform, the interpersonal relationships they maintain over the years and the satisfaction of individual needs, needs and desires. In this sense, sexuality in old age appears as an important factor related to QoL, and understanding this relationship becomes relevant to elucidate elderly people's behavior[3].

Sexuality must be understood as a broad construct of identities, behaviors, thoughts and cognition, which is not limited to physical and sexual aspects, but encompasses several others of a quantitative-qualitative order. In this way, expressions of affection, hugs, touch, love, eroticism, intimacy[4], fantasies, values, practices, beliefs, attitudes, desires, roles and relationships[3], including the sexual activity itself[4]. Therefore, it is observed that sexuality is a component that transcends genitality and is present in all phases of life, starting at birth and ending only with individuals' death[4].

Thus, sexuality can play an important role in terms of maintaining eldrly people's mental health, feelings, level of satisfaction and QoL[5]. Furthermore, it brings benefits to their physical and mental health, as it is related to a reduction in morbidity and mortality, less propensity to develop depression, anxiety and low self-esteem[6]. However, even in the face of such benefits, there is a social stigma that makes elderly people be seen as asexual beings and that they should not get involved in issues related to sexuality, treating it as a taboo or something unattainable so that the QoL of this group becomes compromised[7].

Socially, it is clear that there is a lack of information about the aging process and changes that occur in sexuality during old age. This lack contributes, for example, to support the thought of sexual activity in old age as something impractical, an understanding linked to ancient cultural, religious and educational principles that see elderly people as a being already in their finiteness of life and that, therefore, should be free from desires and pleasure[8]. In addition to cultural and mythical beliefs about elderly people's sexuality, it is known that the increase in the burden of chronic diseases resulting from aging, such as diabetes, cardiovascular, cancer and respiratory diseases, can influence sexual expressions and practices in old age and negatively impact the mood, self-confidence and self-esteem of this population, resulting in decreased QoL[9].

In this sense, it is relevant to invest in research that goes beyond the biological aspects of sexuality and value those subjective and expanded aspects of sexuality in old age. Thus, scientific information on the relationship between sexuality and QoL in this age group is essential to support the development of new health strategies capable of providing better quality to the additional years of life of this population.

Considering the above, the scenario in which there is little appreciation of elderly people's health and well-being, as well as the lack of health promotion strategies aimed at sexuality in aging and its impacts on QoL, the development of this study, whose objective was to analyze the correlation between the experiences of elderly people's sexuality and QoL.

METHOD

This is a sectional, descriptive and analytical study built with the aid of the STROBE checklist[10].

Data collection was carried out between August and October 2020 exclusively through Facebook. The authors created a page for the development of scientific research, in which a playful post was published, inviting participants to click on the link and be directed to the questionnaire. The strategy of monthly boosting the post was used so that Facebook could expand the dissemination of research to all elderly people in the Northeast previously established in the geolocation resource.

The link posted on the page gave access to the questionnaire organized by Google-Forms with validated and standardized instruments for the Brazilian population, which gave rise to three thematic chunks: biosociodemographic, sexuality and QoL. It is noteworthy that, in order to avoid bias, before participants had access to the questionnaire, it was required to include a valid e-mail so that the authors could identify a possible multiplicity of responses by the same participant.

The biosociodemographic chunk was built with questions elaborated by the authors themselves in order to describe the profile of participants. In this chunk, there was information on sex, age, education, sexual orientation, ethnicity, religion, time spent with a partner, among others.

The sexuality chunk was constructed using the Affective and Sexual Experiences Scale for Elderly (EVASI)[11]. This is a psychometric instrument in which the highest/lowest score indicates, respectively, the best/worst experience of sexuality. The scale consists of 38 items that comprise three dimensions: sexual activity, affective relationships and physical and social adversities. The answers are organized as follows: 1 – never; 2 – rarely; 3 – sometimes; 4 – frequently; 5 – always[11].

The third chunk was structured with the World Health Organization Quality of Life – Old (WHOQOL-Old)[12]. It is an instrument built by the World Health Organization and specific for elderly people population, containing 24 questions distributed in six facets: sensory skills; autonomy; past, present and future activities; social participation; death and dying; and intimacy. The answers are organized on a Likert-type scale from 1 to 5 points. The final score can vary between 24 and 100 points; and, the higher the score, the better the participants' QoL[12–13].

The sample size was defined *a priori* having α equal to 0.05% and confidence interval equal to 95% ($z\alpha/2=1.96$), with adjustment for an infinite population, in which the need for at least 385 participants was evidenced. However, as data collection was done online using post boosting, it was preferred to continue collection until the last day of the last contracted month, even after reaching the sample size. Thus, there was the non-probabilistic recruitment of 592 elderly people, which corresponds to an increase of more than 50% of the minimum necessary sample.

All participants are 60 years old or older, live in northeastern Brazil, are married, in a stable relationship or with a fixed partner, and have access to the internet and an active Facebook account. The fact that we did not include single elderly people was due to the characteristic of EVASI, as it is only aimed at elderly people who have a partner, as they assess their perception of sexuality in relation to themselves and their spouse[11]. All elderly residents in long-term care facilities or similar and those who were hospitalized during the data collection period were excluded. It is noteworthy that, due to the skills required to handle electronic devices that give access to the internet, as

well as the active interaction in social networks, there was no application of instruments to assess elderly cognition.

Data tabulation and analysis were performed using the IBM SPSS Statistics program. After evidencing data distribution abnormality by the Kolmogorov-Smirnov test ($p<0.05$), nonparametric statistics were used through Mann-Whitney (for variables with two categories) and Kruskal-Wallis (for variables with more than two categories) tests. Bonferroni post hoc was applied to identify differences between groups after the Kruskal-Wallis test. The comparison between independent (sexuality) and dependent (QoL) variables was performed using Spearman's correlation (ρ). Furthermore, the results are presented in absolute and relative frequencies, median, interquartile range and mean rank, with 95% confidence interval ($p < 0.05$) for all statistical analyses.

This study followed all ethical and bioethical principles that guide the development of research with human beings. Participants read and accepted the Informed Consent Form (ICF) online, and the duplicate was sent in blind copy to all emails, making it impossible for participants to have access to other people's data and, guaranteeing the anonymity and confidentiality of the information provided.

RESULTS

Table 1 shows biosociodemographic characteristics of participants, in which it is possible to see the predominance of male elderly (60.5%; n=358); aged between 60 and 64 years (44.6%; n=264), Catholics (53.9%; n=319); self-declared white (67.9%; n=402); with higher education (42.60%; n=252) and who had never received guidance on sexuality by healthcare professionals (75.8%; n=449). The other characteristics are described in Table 1.

Table 1 – Biosociodemographic variables of participants. Ribeirão Preto, SP, Brazil, 2020. (n=592)

Variables	n	%
Sex		
Male	358	60.5
Female	234	39.5
Age group		
60 to 64 years	264	44.6
65 to 69 years	206	34.8
70 to 74 years	86	14.5
75 to 79 years	32	5.4
80 to 84 years	4	0.7
Religion		
Catholicism	319	53.9
Protestantism	76	12.8
Spiritism	67	11.3
African reigions	9	1.5
Others	49	8.3
No religion	72	12.2
Ethnicity		
White	402	67.9

Table 1 – Cont.

Variables	n	%
Yellow	9	1.5
Black	29	4.9
Brown	139	23.5
Indigenous	8	1.4
Do not know	5	0.8
Education		
Elementary school I	96	16.2
Elementary school II	42	7.1
High school	201	34.0
Higher education	252	42.6
Without degree	1	0.1
Marital status		
Married	366	61.8
Stable union	103	17.4
With a fixed partner	123	20.8
Time spent with the partner		
≤5 years	104	17.6
Between 6 and 10 years	43	7.3
Between 11 and 15 years	49	8.3
Between 16 and 20 years	34	5.7
> 20 years	362	61.1
Live with children		
Yes	179	30.2
No	383	64.7
No children	30	5.1
Sexual orientation		
Heterosexual	520	87.8
Homosexual	15	2.5
Bisexual	9	1.5
Others	48	8.2

In Table 2, in the context of sexuality, it is observed that elderly people experience better affective relationships, which is evidenced by the higher median. Furthermore, it is noted that the sexual activity, although it obtained the lowest score, did not have a very different value from the affective relationships analyzed together with the interquartile range.

With regard to QoL, it was observed that sensory skills and intimacy have the highest medians, indicating better QoL in these facets. However, it is worth mentioning that the score obtained in the overall QoL stands out for having the lowest value among the facets, as observed in Table 2.

As observed in Table 3, there was a statistical difference for gender, showing that men face worse physical and social adversities (308.78; p=0.030), and women have better perception of QoL in sensory skills (330.31; p<0.001).

Table 2 – Median and interquartile range of sexuality and quality of life. Ribeirão Preto, SP, Brazil, 2020. (n=592)

Variables	Median (IQ)
Sexuality	
Sexual activity	73.00 (61.25-80.00)
Affective relationships	74.00 (62.00-81.00)
Physical and social adversity	7.00 (5.00-9.00)
Quality of Life	
Sensory skills	75.00 (62.50-93.75)
Autonomy	68.75 (56.25-75.00)
Past, present, and future activities	68.75 (51.56-75.00)
Social participation	68.75 (50.00-75.00
Death and dying	68.75 (43.75-87.50)
Intimacy	75.00 (62.50-81.25)
Overall quality of life	67.70 (59.37-78.12)

Elderly people aged between 65 and 69 years experience the sexual activity better (308.08; p=0.027) and have better QoL in the "intimacy" domain (309.45; p=0.037). Elderly people aged between 80 and 84 years face worse physical and social adversities (512.25; p=0.039). Finally, elderly people between 60 and 64 years have greater autonomy (308.43; p=0.030), and Bonferroni's post hoc showed that there is a difference between the group aged 75 to 79 years (329.69; p= 0.040) and those aged 80 to 84 years (63.88; p=0.040).

Participants belonging to African religions experience better affective relationships (430.89; p=0.026), have greater autonomy (408.72; p=0.015), greater social participation (369.33; p=0.018), greater intimacy (411.22; p=0.011) and better overall QoL (367.00; p=0.022).

With regard to marital status, elderly people with a fixed partner experience sexual activity better (342.21; p<0.001) and have more autonomy (326.45; p=0.020). Finally, elderly people who live with their partners for a period equal to or less than 5 years experience the sexual activity better (356.45; p < 0.001) when compared to those who live for more than 20 years (264, 63; p < 0.001), as evidenced by Bonferroni's post hoc.

According to Table 4, it is noted that all dimensions of sexuality are statistically correlated with all facets of QoL (p<0.001). In addition to this, there is a positive correlation between sexual activity and affective relationships with QoL, indicating that these variables have a directly proportional behavior, while the dimension "physical and social adversities" showed negative correlations, thus having an inversely proportional behavior with QoL.

DISCUSSION

In the present study, it was revealed that, in the context of sexuality, elderly people experience better affective relationships. These relationships involve love, partnership, complicity, friendship, companionship, support, expression of feelings and other qualitative variables that are related to affection[11].

These results corroborate a study[14] carried out with 213 elderly Brazilians, Portuguese and English in which it was identified that elderly people express sexuality, above all, with the expressions of altruism, positive communication, eroticism, affection, attention and attractiveness, and the sexual activity was not readily revealed as a priority, although it is within the field of sexuality.

Table 3 – Comparison of biosociodemographic variables with sexuality and quality of life. Ribeirão Preto, SP, Brazil, 2020. (n=592)

	Sexuality		Quality of Life							
	Sexual activity	Affective relationships	Physical and social adversity	Sensory skills	Autonomy	Past, present and future activities	Social participation	Death and dying	Intimacy	Overall quality of life
	Average ranks									
Sex										
Male	298.07	297.19	308.78	274.40	294.49	295.95	294.08	304.70	294.59	291.97
Female	294.10	295.44	277.71	330.31	299.58	297.34	300.20	283.96	299.43	303.44
P value	0.783	0.903	0.030*	< 0.001*	0.721	0.923	0.668	0.148	0.731	0.425
Age group										
60-64	302.36	298.29	284.12	286.42	308.43	299.85	297.12	285.91	303.38	295.99
65-69	308.08	309.42	300.10	300.77	301.98	302.77	302.73	311.81	309.45	308.74
70-74	272.26	269.04	321.44	303.40	255.42	267.22	278.15	290.91	267.68	271.67
75-79	267.05	290.06	281.44	333.09	294.78	325.06	329.69‡	285.83	254.78	311.84
80-84	70.13	155.13	512.25	300.75	123.50	153.38	63.88‡	413.00	129.25	111.25
P value	0.027†	0.184	0.039†	0.611	0.030†	0.154	0.040†	0.312	0.037†	0.098
Religion										
Catholicism	290.46	290.80	304.54	285.26	285.83	289.74‡	283.73	282.53	281.04	279.91‡
Protestantism	315.79	299.93	293.86	276.76	279.77	288.68	322.99	334.11	318.19	308.53
Spiritism	312.90	331.32	287.57	304.83	355.25	338.62‡	346.62	312.84	329.63	349.31‡
African religions	417.11	430.89‡	341.44	338.28	408.72	373.61	369.33	261.33	411.22	367.00
Others	245.46	247.86‡	287.74	309.27	301.50	267.44	258.16	293.91	259.87	272.78
No religion	301.18	302.02	272.23	345.47	289.35	305.66	295.47	309.65	321.88	315.49
P value	0.091	0.026†	0.679	0.094	0.015†	0.142	0.018†	0.201	0.011†	0.022†
Marital status										
Married	270.63‡,§	284.00	301.44	290.33	281.42‡	303.81	297.96	302.73	297.90	295.03
Stable union	333.85‡	324.76	305.02	313.19	314.33	289.89	294.10	297.93	309.45	303.98
Fixed partner	342.21§	310.04	274.66	300.89	326.45‡	280.27	294.18	276.76	281.48	294.60
P value	< 0.001†	0.062	0.272	0.458	0.020†	0.376	0.965	0.342	0.443	0.887
Time living together										
≤ 5	356.45§	319.04	281.69	313.78	333.00‡	307.15	292.29	298.85	297.18	310.55
6-10	336.70	321.12	271.77	278.47	314.80	274.07	302.73	299.65	291.14	294.14
11-15	351.73‡	328.21	319.87	302.43	361.41§	313.20	333.43	306.40	357.21	341.03
16-20	322.03	322.40	314.79	321.18	350.38	289.63	296.18	338.21	304.53	335.22
> 20	264.63‡,§	280.38	298.81	290.56	269.99‡,§	294.49	292.00	290.19	287.97	283.08
P value	< 0.001†	0.078	0.543	0.595	< 0.001†	0.784	0.610	0.604	0.112	0.091

*Statistical significance by the Mann-Whitney test ($p < 0.05$); † Statistical significance by the Kruskal-Wallis test ($p < 0.05$); ‡, § Differences between groups by Bonferroni's post hoc

Table 4 – Correlation between sexuality and quality of life of older adults. Ribeirão Preto, SP, Brazil, 2020. (n=592)

Dimensions of sexuality	Facets of quality of life	Spearman's ρ	P value
Sexual activity	Sensory skills	0.160†	< 0.001*
	Autonomy	0.377†	
	Past, present, and future activities	0.451†	
	Social participation	0.403†	
	Death and dying	0.219†	
	Intimacy	0.561‡	
	Overall quality of life	0.521‡	
Affective relationships	Sensory skills	0.161†	< 0.001*
	Autonomy	0.364†	
	Past, present, and future activities	0.468†	
	Social participation	0.387†	
	Death and dying	0.254†	
	Intimacy	0.626‡	
	Overall quality of life	0.539‡	
Physical and social adversity	Sensory skills	-0.298†	< 0.001*
	Autonomy	-0.201†	
	Past, present, and future activities	-0.278†	
	Social participation	-0.245†	
	Death and dying	-0.240†	
	Intimacy	-0.274†	
	Overall quality of life	-0.364†	

* Statistical significance by Spearman's ρ ($p < 0.05$); † Weak correlation; ‡ Moderate correlation

Another survey[15] carried out with one hundred elderly women revealed that participants' satisfaction involved caresses, kisses and auto-eroticism as a way of expressing their sexuality. It should be remembered that sexuality transcends sexual activity and involves several other qualitative aspects capable of providing pleasure[15]. Furthermore, it appears that, in old age, sexual activity takes a secondary position, and the manifestations of companionship, emotions, affection and care gain prominence in the experiences of sexuality in this age group[16].

With regard to QoL, it was observed that sensory abilities and intimacy had the highest medians, indicating better QoL in these facets, which corroborates other similar studies[17–18]. Sensory skills involve the impact of the loss of senses (hearing, vision, taste, smell and touch) on the capacity for elderly people's social interaction and activities of daily living, two dimensions considered in measuring QoL[13], with females having a better perception of QoL in this facet.

Furthermore, the score obtained in the overall QoL stands out for having the lowest value among the facets. Assuming that the score can vary between 0 and 100 points, the median of overall QoL of 67.70, found in this study, does not seem to show a good score that points to a good QoL.

Another relevant finding refers to the fact that men face physical and social adversities worse. This dimension highlights the health problems that interfere with sexual experiences, the discomfort caused by changes in sexuality resulting from aging, and the fear of suffering prejudice due to the attitudes taken to experience sexuality[11].

It is known that, with advancing age, elderly men experience sexual dysfunction, especially erectile dysfunction, which, in addition to interfering with sexual penetration, has a direct impact on

well-being and on the sense of masculinity[19]. Men with penile erection difficulties often experience psychosexual stressors, marital friction and loss of self-confidence, which significantly increases the aforementioned dysfunction[20].

In this way, the man without his satisfactory sexual capacity feels somehow diminished, less of a man[21]. This is because, from a young age, usually in adolescence, men are socially challenged to initiate and maintain sexual activities whenever they feel it is necessary. However, this situation occurred differently between the sexes, in which all sexual freedom guaranteed to men was prohibited to women before marriage, in addition to being forced to marry with their virginity preserved[16]. Hence, there is a need for scientific studies to go deeper into the male universe and value their insecurities, fears and uncertainties, beyond the stereotype of a dominant and invulnerable man[21].

In the present study, elderly people between 65 and 69 years old experience sexual activity better and have a better QoL in the "intimacy" domain. It is noteworthy that sexual relations do not end in old age;[15] in this sense, a study[22] carried out with 126 elderly individuals identified that 90.48% of participants reported sexual activity as an important factor in achieving happiness.

Furthermore, an investigation[15] carried out with elderly women revealed that, for 78% of participants, there is no age for the end of sexual relations, which contradicts the view that sexual experiences are incompatible with advancing age. Also, the study showed that, among sexually active elderly women, 80.8% continue to have sexual desire. However, due to society's lack of knowledge and prejudice, many elderly people show feelings of shame or guilt for expressing their natural desires, simply because of the desire to obtain pleasure[15].

In this study, it was observed that participants belonging to African religions experience better affective relationships, have greater autonomy, greater social participation, greater intimacy and better overall QoL.

It was expected that sexual activity was associated with religion, since some religious trends point to sex as something sinful, undignified and impure, depending on the context[16]; and, in this sense, adherents of Christian religions (Catholicism and Protestantism) were more conservative. This inference is supported by the results of a study[23] in which participants adherent to Christianity had more conservative attitudes regarding sexuality in old age. Still in this context, perhaps the conservatism among Christian religions has highlighted the better scores of African religions in terms of autonomy, social participation, intimacy and, therefore, better overall QoL.

Another finding found was that elderly people with a fixed partner experience the sexual activity better and have more autonomy. This is a curious fact, as married elderly people were expected to have a better experience in the "sexual activity" dimension, since marriage in Brazilian culture is seen as a legal space from the point of view of religious morality, in which it is allowed the expression of different sexual approaches as a way to strengthen marital bonds[24].

A possible explanation for this result concerns the monotony that affects spouses after a few years of marriage[25], and this clearly represents elderly people couples who, in overall, begin to relate from youth, maintaining the same relationship until the old age[26]. This context may also justify the reason why elderly people who live with their partners for a period equal to or less than 5 years experience sexual activity better than those who live together for more than 20 years.

It is reported that all dimensions of sexuality were statistically correlated with all facets of QoL. Furthermore, there was a positive correlation between sexual activity, affective relationships and QoL, indicating that these variables have a directly proportional behavior. This means that the better elderly people experience their sexuality in "sexual activity" and "affective relationships" dimensions, the better their QoL in all facets of assessment

On the other hand, the "physical and social adversity" dimension of sexuality showed negative correlations, having an inversely proportional behavior with QoL, i.e., the more elderly people face adversity, the lower their QoL in all facets.

Indeed, the literature states that sexuality is directly related to QoL[15,25,27] and plays a prominent role over the years, through new forms of pleasure when the person reaches old age, through sexual expressions and/or affective, also contributing to the promotion of pleasure, well-being, self-knowledge and self-esteem[16].

Even elderly people point to sexuality as a fundamental part of their QoL;[15] and they, even in the face of organic changes arising from the aging process, report that it is possible to satisfactorily live the expression of their sexuality. Furthermore, there are cases in which sexuality reaches its climax in old age, becoming more pleasurable in relation to sexuality experienced in youth[28].

However, although there are scientific reasons to believe in the benefits of sexuality in elderly people's QoL, there is still a predominance of social prejudices according to which their image is associated with that of deteriorated beings, especially in the sexual sphere. As a result of this cultural interference, elderly people do not find support from family members regarding the theme; the media network provides an unattractive stereotype of aging; and healthcare professionals do not provide the necessary support to elderly people in their sexuality[27].

This last evidence confirms the results of the present study, in which it was found that 75.8% of elderly people had never received guidance on sexuality by healthcare professionals. It is a reality that promotes several undesirable events for them, since, in addition to sexuality being essential for a good QoL, its denial generates negative impacts on social relationships and mental health[27].

A study[15] carried out with one hundred elderly women revealed that only 25% of the interviewees had already talked to a healthcare professional about aspects of sexuality. Another study[22] carried out with 126 elderly people showed that 73.81% reported difficulty in dialoguing about sexual activity. Thus, it is necessary for this population to find comfort in health spaces so that they can express their emotions and needs without feelings of shame[22].

In this sense, health education can be a strategy capable of building new perspectives and freeing elderly people from social prejudice so that they can live their sexuality fully. These actions can be implemented in different spaces: for example, in nursing consultations or in elderly groups[28]. It should work from the perspective that elderly's sexuality is something natural, pleasurable, healthy and with positive impacts on the overall well-being of those involved. Furthermore, it is worth emphasizing that the knowledge acquired in this holistic field becomes a strategic and constructivist tool that helps to break down existing derogatory stereotypes in society[16].

Healthcare professionals must consider that the development of educational approaches with elderly people requires different strategies in relation to those used in the overall population. Their values, beliefs and knowledge must be kept in mind, empowering them as active agents in the teaching-learning process[29].

It is noteworthy that elderly's sexuality is still a limited field of scientific research, since most available studies focus on physiological aspects (eg, sexual dysfunctions) and not sexuality as part of individuals' identity. Thus, investigations that apprehend the subjectivity of affective and sexual experiences in old age are relevant, as they allow the understanding of the feelings and emotions present in elderly people's daily lives and that guide the behavior of this population[27].

The online data collection raised some considerations that may influence future research and, therefore, guide researchers to the proper handling of difficulties that may be encountered. The great challenge of this modality was to convince elderly people that the research was really linked to a higher education institution and that it was not a criminal means to obtain personal data. In the

fixed postings of the invitations, elderly people commented in order to alert their virtual colleagues that our invitation was a fraudulent strategy to obtain personal information and harm the participants.

However, the researchers responded to these comments by informing the Ethics Committee approval number, the possibility of verifying its approval and legality with this committee, in addition to contact details so that elderly people could question the truth of the research. Moreover, elderly women often presented a conservative posture in the comments, criticizing other women who participate in research on sexuality and stating that this topic should not be discussed with people in this age group. Somehow, this may have influenced our results, especially in the smaller number of female participants, diverging from most investigations carried out with this population[3,6,22,27].

However, it was observed that the online collection has some strengths, such as the better reliability of the answers given to the instrument, a reality that could not be observed if the researcher was present at the time of collection, through the interview technique, for example. As the investigated object is an intimate component of human life, the online collection technique can be beneficial because, through the comfort provided, elderly people can feel more comfortable in revealing sensitive data.

It is worth mentioning that this study has some limitations: for example, comparisons with national and international surveys were compromised due to the quantitative limitations of studies that address sexuality in its expanded concept. As for statistics, data were limited to correlational analysis. Furthermore, the fact that the sample was recruited with elderly people in only one social network may have promoted a restriction of the public and discarded other elderly people with different characteristics that could impact the results found here.

Finally, it is noteworthy that elderly people with interaction on social networks have greater access to information on the subject, leading to the inference, therefore, that the results revealed here may not represent other elderly people in overall, especially those with restricted options for information. However, such limitations do not invalidate these data, as they constitute an instigation for further research on sexuality and its effects on elderly people's health and QoL.

CONCLUSION

It was found that "sexual activity" and "affective relationships" dimensions of sexuality had the best positive correlations with the "intimacy" facet of elderly people's QoL. In this regard, it is evident that healthcare professionals can adopt approaches with these dimensions in their consultations as a way to promote and protect elderly people's QoL, thus fulfilling the proposal of active aging.

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NOTES

CONTRIBUTION OF AUTHORITY

Study design: Souza Júnior EV.
Data collection: Souza Júnior EV.
Data analysis and interpretation: Souza Júnior EV, Souza CS, Santos GS.
Discussion of results: Souza Júnior EV, Souza CS, Santos GS.
Writing and/or critical review of content: Cruz DP, Sawada NO.
Review and final approval of the final version: Souza CS, Silva CS, Cruz DP, Sawada NO.

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CONFLICT OF INTEREST

There is no conflict of interest.

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CORRESPONDING AUTHOR

Edison Vitório de Souza Júnior
edison.vitorio@usp.br