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Sexual function and its association with sexuality and quality of life in older women

Função sexual e sua associação com a sexualidade e a qualidade de vida de mulheres idosas

Función sexual y su asociación con la sexualidad y la calidad de vida en mujeres mayores

Edison Vitório de Souza Júnior[1]
Randson Souza Rosa[2]
Diego Pires Cruz[3]
Benedito Fernandes da Silva Filho[3]
Brenaráise Freitas Martins dos Santos[3]
Cristiane dos Santos Silva[4]
Lais Reis Siqueira[5]
Namie Okino Sawada[5]

1. Universidade de São Paulo, Escola de Enfermagem de Ribeirão Preto, Programa de Pós-Graduação em Enfermagem Fundamental. Ribeirão Preto, SP, Brasil.

2. Universidade Estadual de Feira de Santana, Programa de Pós-Graduação em Saúde Coletiva. Feira de Santana, BA, Brasil.

3. Universidade Estadual do Sudoeste da Bahia, Programa de Pós-Graduação em Enfermagem e Saúde. Jequié, BA, Brasil.

4. Universidade Estadual do Sudoeste da Bahia, Programa de Pós-Graduação em Educação Física. Jequié, BA, Brasil.

5. Universidade Federal de Alfenas. Alfenas, MG, Brasil.

Corresponding author:
Edison Vitório de Souza Júnior.
E-mail: edison.vitorio@usp.br

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Abstract

Objective: to analyze the sexual function and its association with the sexuality and quality of life of elderly women. **Methods:** this is a cross-sectional web survey study developed with 166 elderly women. Four self-administered instruments were used to obtain biosociodemographic, sexual function, sexuality and quality of life data. The analysis was performed using the Mann-Whitney test, Spearman correlation and linear regression, considering a 95% confidence interval. **Results:** the greatest influence of sexual function was observed in the sexual act dimension of sexuality (β=0.524; [95%CI=0.451-0.597]; p<0.001; R^2=54.8%) and between the intimacy facet of quality of life (β =0.501; [95%CI=0.380-0.622]; p<0.001; R^2=29.0%). In general, the regression model showed that sexual function remained associated with sexuality (β=0.888; [CI95%=0.749-1.028]; p<0.001; R^2=49.1%) and the quality of life of the participants (β=0.352; [CI95%=0.264-0.439]; p<0.001; R^2=27.7%). **Conclusion and implications for the practice:** sexual function is associated with the sexuality and quality of life of older women, assuming a directly proportional behavior which, in turn, can become a strategy to add quality to the additional years of life of this population.

Keywords: Health Promotion Public Health; Sexual Health; Sex; Sexuality.

Resumo

Objetivo: analisar a função sexual e sua associação com a sexualidade e com a qualidade de vida de mulheres idosas. **Método:** trata-se de um estudo transversal, do tipo *web survey*, desenvolvido com 166 mulheres idosas. Foram utilizados quatro instrumentos autoaplicáveis para a obtenção dos dados biosociodemográficos, da função sexual, sexualidade e qualidade de vida. A análise foi realizada com o teste de Mann-Whitney, correlação de Spearman e regressão linear, considerando um intervalo de confiança de 95%. **Resultados:** a maior influência da função sexual foi observada na dimensão ato sexual da sexualidade (β=0,524; [IC95%=0,451-0,597]; p<0,001; R^2=54,8%) e entre a faceta intimidade da qualidade de vida (β=0,501; [IC95%=0,380-0,622]; p<0,001; R^2=29,0%). De modo geral, o modelo de regressão demonstrou que a função sexual permaneceu associada à sexualidade (β=0,888; [IC95%=0,749-1,028]; p<0,001; R^2=49,1%) e à qualidade de vida das participantes (β=0,352; [IC95%=0,264-0,439]; p<0,001; R^2=27,7%). **Conclusão e implicações para a prática:** a função sexual está associada à sexualidade e à qualidade de vida das mulheres idosas, assumindo comportamento diretamente proporcional que, por sua vez, pode se tornar uma estratégia para agregar qualidade aos anos adicionais de vida dessa população.

Palavras-chave: Promoção da Saúde; Saúde Pública; Saúde Sexual; Sexo; Sexualidade.

Resumen

Objetivo: analizar la función sexual y su asociación con la sexualidad y la calidad de vida de mujeres mayores. **Método:** se trata de un estudio transversal, del tipo *web survey*, desarrollado con 166 mujeres mayores. Se utilizaron cuatro instrumentos autoadministrados para obtener datos biosociodemográficos, función sexual, sexualidad y calidad de vida. El análisis se realizó mediante la prueba de Mann-Whitney, correlación de Spearman y regresión lineal, considerando un intervalo de confianza del 95%. **Resultados:** la mayor influencia de la función sexual se observó en la dimensión acto sexual de la sexualidad (β = 0,524; [IC 95% = 0,451-0,597]; p <0,001; R^2 = 54,8%) y entre la faceta intimidad de la calidad de vida (β = 0,501; [IC del 95% = 0,380-0,622]; p <0,001; R^2 = 29,0%). En general, el modelo de regresión mostró que la función sexual permaneció asociada con la sexualidad (β = 0,888; [IC95% = 0,749-1,028]; p <0,001; R^2 = 49,1%) y la calidad de vida de los participantes (β = 0,352; [IC95% = 0,264-0,439]; p <0,001; R^2 = 27,7%). **Conclusión e implicaciones para la práctica**: la función sexual está asociada a la sexualidad y calidad de vida de las mujeres mayores, asumiendo un comportamiento directamente proporcional que, a su vez, puede convertirse en una estrategia para agregar calidad a los años adicionales de vida de esta población.

Palabras clave: Promoción de la Salud; Salud Pública; Salud Sexual; Sexo; Sexualidad.

INTRODUCTION

In Brazil, there is a feminization process of aging. Women represent 55.5% of the elderly aged 60 years or more and 61% of the elderly over 80 years old. This event can be justified by the different risk factors to which women are exposed and by the greater adherence to health care, which reflects in a survival rate, on average, eight years longer than men.[1]

It is noteworthy that aging does not imply physical and emotional decline. It is a stage of life that offers opportunities for new explorations and experiences.[2] In this context, questions regarding the health of the elderly are raised, including the indispensability of ensuring quality of life (QoL) in this age group, which includes sexuality as a fundamental component.[3]

Sexuality is an integral part of women's overall QoL,[4] although it is still considered taboo.[3] There are many ways to express it, such as caresses, touch, hugs,[3] companionship, complicity, love, touch, intimacy, smell, glances, and affection, among other expressions, including the sexual practice itself.[5,6] It is, therefore, a complex component that involves physical, social, psychological,[3] genetic, cultural, religious, and behavioral aspects, as well as attitudes and experiences of individuals.[4]

As the aging process occurs, the human body undergoes changes in various aspects, including sexual function, which is considered an essential constituent for personal satisfaction,[1] well-being, and overall health.[7] Despite these changes, it is scientifically recognized that sexual desire is present at all stages of life.[3]

The female sexual function has four phases: sexual desire, arousal, orgasm, and relaxation. In general, sexual desire is characterized by fantasies and the expressed desire to have sex. During arousal, a set of physiological changes occur, such as vaginal lubrication and the sensation of sexual pleasure. The orgasm phase is the apex of pleasure, accompanied by a pleasant sensation of general well-being and muscle relaxation. In the face of any factors that break the homeostasis between these phases, sexual dysfunction is established, such as dyspareunia, lack of libido, and orgasmic dysfunction.[4]

Sexual dysfunction is a frequent problem among women at all ages.[4] A systematic review[8] identified considerable variations in the prevalence of female sexual dysfunction, about 13.3% to 79.3%. Regarding the specifics of the dysfunctions, a variation of 11% to 75% was noted for changes in desire; 8% to 68.2% in arousal; 29.1% to 41.4% in lubrication, and 18% to 55.4% in orgasm.

Nevertheless, the authors point out that, although there are divergences among studies, the prevalence of sexual dysfunction in the female population is considered high in Brazil,[8] which negatively impacts their QoL, sexual function, and the QoL of their partners. Thus, sexual dysfunction is already considered an important public health problem, and more specific investigations are required.[4]

QoL is related to individual and collective contexts, being determined by factors such as functionality, lifestyle, emotional state, health satisfaction, self-esteem, education, well-being, socioeconomic level, social relationships, self-care, ethical and cultural values, housing, safety, family relationships, and religiousness, among others.[9-11]

Nevertheless, the concept of QoL encompasses subjectivity and multidimensionality of the individual. In old age, QoL is related to the ability to adapt to physical, social, and emotional losses, to socioeconomic conditions, to family support, and to the maintenance of intellectual activity, among others. From this perspective, social relationships, leisure, and education are important dimensions in maintaining the QoL of the elderly.[2] Nevertheless, the World Health Organization (WHO) defines QoL as "an individual's perception of his or her position in life in the context of the culture and value systems in which he or she lives and concerning his or her goals, expectations, standards, and concerns."[12]

In this sense, the hypothesis is that older women with some type of sexual dysfunction have worse experiences of sexuality and worse QoL. If this hypothesis is confirmed, it means that these women present a mistaken concept of sexuality and are limited to experiencing it due to sexual dysfunctions. Therefore, the development of this study is justified, since health professionals, especially primary care nurses, may intervene in this context and invest in sexuality as a strategy to promote health and increase the QoL of elderly women. From this perspective, the objective of this study was to analyze the sexual function and its association with sexuality and QoL of elderly women.

METHODS

This is a cross-sectional, descriptive, and observational study, of the web survey type. The study scenario corresponded to the five Brazilian regions: North, Northeast, Midwest, Southeast, and South.

To guarantee a minimum representative number of participants, a priori a sample calculation was used, considering an infinite population, margin of error of 5%, confidence interval of 95%, and prevalence of sexual dysfunction of 88%,[13] which resulted in a minimum quantitative of 163 participants. However, there was the recruitment of 166 elderly women who fully met the inclusion criteria and were selected according to the non-probability consecutive technique.

The following inclusion criteria were adopted: being female, aged 60 years or older, with internet access and an active account on the social network Facebook, living in the community and married, in a stable union, or with a steady partner. This last inclusion criterion was necessary due to the requirement of the instrument that will assess sexuality, as it considers the perception of the elderly concerning themselves and their partner.[14] Finally, the exclusion criteria were: elderly women living in long-stay institutions and similar, hospitalized, and those with functional dependence, screened through three initial questions in the biosociodemographic block.

The recruitment of the participants occurred exclusively through Facebook, online, between August and October 2020. The Google Forms tool was used to structure the survey questionnaire, which was later posted on a social page through a hyperlink that gave direct access to the blocks of the instruments.

The questionnaire was structured into four surveys: biosociodemographic, sexuality, sexual function, and QoL. The biosociodemographic survey was organized with questions developed by the authors themselves in order to trace the profile of the participants through variables such as religion, marital status, sexual orientation, age, ethnicity, education, whether they have received guidance on sexuality from health professionals, geographic location, among others. It is noteworthy that before the participants had access to this block, the Free and Informed Consent Term (FICT) was made available for their complete and mandatory reading. In agreement with the document, the participants could proceed with the research, otherwise, they could leave the page without penalty.

The sexuality survey was carried out with the Affective and Sexual Experiences Scale for the Elderly (ASESE), built and validated in the Brazilian context for the elderly population.[14] It is a psychometric scale built with 38 items distributed in three dimensions: sexual acts, affective relationships, and physical and social adversities. There are five possibilities of Likert-type answers, ranging from one (never) to five (always). Furthermore, the ASESE does not delimit the cut-off point and its analysis is made from the perspective that the lower/higher the total score, respectively, the worse/better the experiences of sexuality in the dimensions "sexual act" and "affective relations". As the domain "physical and social adversities" has negative questions, the interpretation is from the perspective that the lower/higher the score, respectively, the better/worse the participants face such adversities related to sexuality.[14]

The sexual function survey was structured with the Sexual Quotient-Female Version (SQF), validated and standardized for the Brazilian population according to the sexual specificities of women.15 It is composed of ten items with five possible answers on a Likert scale: (0=never), (1=rarely), (2=sometimes), (3=approximately 50% of the time), (4=most of the time) and (5=always). The final score is obtained by adding the values corresponding to each answer and multiplying the result by two, generating a final score between zero and 100 points. It should be noted that only question seven is treated differently since the value of the answer given (from 0 to 5) must be subtracted by the constant five [5-q7] before adding it up. According to the final score, the participants can be classified as: with sexual dysfunction (<60 points) and without sexual dysfunction (≥60 points).[15]

Finally, the QoL survey was developed with the validated and standardized instrument for the Brazilian population called World Health Organization Quality of Life - Old (WHOQOL-Old).[16] It is a specific instrument composed of 24 items and six facets: sensory skills; autonomy; past, present, and future activities; social participation; death and dying and intimacy. This instrument is organized in a Likert-type scale whose possible answers range from one to five points, which totals a final score of 24 to 100 points. There is no cut-off point for this instrument and the lowest/ highest score indicates, respectively, worse/better QoL among the participants.

Since this is a population that interacts actively in social networks through technological devices such as smartphones, and laptops, among others, the use of instruments to assess cognitive status was dispensed with. Moreover, it is worth noting that, in order to correct possible biases and multiple responses by the same person, personal e-mail was required as mandatory before starting to answer the instruments.

The data were treated and fully analyzed in IBM® SPSS Statistics software, version 25. Qualitative variables were presented as absolute and relative frequencies. Quantitative variables were expressed as median (Md), interquartile range (IQ), average (A), standard deviation (SD), variance, and minimum and maximum values.

After verifying the abnormal distribution of the data, non-parametric statistics were applied, represented by the Mann-Whitney U test, for the comparison of two independent groups, and the Spearman correlation (ρ) to analyze the existing relationships between the independent variable (sexual function) and the dependent ones (sexuality and QoL). The correlation coefficients were interpreted as follows: weak magnitude ($\rho < 0.4$); moderate magnitude ($\rho \geq 0.4$ to < 0.5) and strong magnitude ($\rho \geq 0.5$).[17]

Subsequent to the correlation analysis, a simple linear regression model was built with sexual function as a factor and sexuality and QoL as attributes. The regression results were expressed with the β coefficients (standardized and non-standardized), 95% confidence interval, coefficient of determination (R^2), and the Durbin-Watson test as a verifier of the model quality.

This study followed all ethical and bioethical recommendations for research with human beings, as recommended in Resolution No. 466/2012 of the National Health Council. In addition, the study was reviewed and approved in 2020 by the Research Ethics Committee of the Ribeirão Preto School of Nursing of the University of São Paulo under Opinion No. 4.319.644.

RESULTS

Table 1 shows the biosociodemographic characteristics of the participants, highlighting the higher prevalence of elderly women aged between 60 and 64 years (56.0%), self-declared white (69.3%), with a high level of education (71.0%), considering high school and college levels, in addition to those who never received guidance on sexuality from health professionals (67.5%).

Table 2 shows that, in general, the elderly women have a good sexual function (Md=78.00 [IQ=60.00-88.00]), considering that the possible interval for the values varies between zero and 100 points. Nevertheless, regarding sexuality, one notices a greater experience in the dimension of affective relationships (Md=76.00) followed by sexual intercourse (Md=74.00). Finally,

Table 1. Biosociodemographic characteristics of the participants - Ribeirão Preto, São Paulo, Brazil, 2020.

Variables	n	%	Variables	n	%
Age Group			**Religion**		
60-64 years old	93	56.0	Catholic	95	57.2
65-69 years old	50	30,1	Protestant	16	9.6
70-74 years old	18	10.8	Spiritist	22	13.3
75-79 years old	3	1.8	African Origins	1	0.6
80-84 years old	2	1.2	Other	22	13.3
Education			No religion	10	6.0
Primary	15	9.0	**Etnia**		
Elementary	31	18.7	White	115	69.3
High School	61	36.7	Yellow	3	1.8
College	57	34.3	Black	10	6.0
No Education	2	1.2	Mixed race	37	22.3
Marital status			Indigenous	1	0.6
Married	79	47.6	**Received orientation about sexuality**		
Stable Union	31	18.7	Yes	54	32.5
Fixed Partner	56	33.7	Never	112	67.5
How long has lived with partner			**Sexual orientation**		
≤ 5 years	56	33.7	Heterosexual	145	87.3
From 6 to 10 years	9	5.4	Homosexual	1	0.6
From 11 to 15 years	4	2.4	Bisexual	1	0.6
From 16 to 20 years	12	7.2	Others	19	11.4
> 20 years	85	51.2	**Brazilian Region**		
Lives with children			North	10	6.0
Yes	40	24.1	Northeast	18	10.8
No	117	70.5	Midwest	19	11.4
Does not have children	9	5.4	Southeast	59	35.5
			South	60	36.1

Source: own elaboration. Survey data.

it is observed that elderly women have better QoL in the sensory skills (Md=84.37) and intimacy (Md=75.00) facets, as they show the highest medians.

Table 3 shows that elderly women without sexual dysfunction have better experiences in sexuality and better QoL, with statistically significant differences for all assessment dimensions. Regarding sexuality, it can be noticed that the affective relationships dimension only remained with the best experiences among elderly women with sexual dysfunction (Md=56.00). On the other hand, elderly women without dysfunction have the best experiences in sexuality through the sexual act (Md=79.00).

According to Table 4, in the correlation analysis, statistically significant coefficients with different magnitudes were observed. Among the assessment dimensions, the highest coefficients were found between "sexual desire and interest" with the sexual act of sexuality (ρ=0.678; p<0.001) and with the intimacy facet of QoL (ρ=0.478; p<0.001). Overall, it is noted that sexual function correlates positively and with strong magnitude with sexuality (ρ=0.677; p<0.001) and with QoL (ρ=0.524; p<0.001) of elderly women.

According to Table 5, it is noticeable that all dimensions of sexuality remained statistically associated in the model, with the greatest influence of sexual function being seen in the "sexual act" dimension (β=0.524; [95%CI=0.451-0.597]; p<0.001; R2=54.8%), with the model explaining 49.1% of the variance in the overall sexuality data. With regard to QoL, only the "death and dying"

Table 2. Descriptive analysis of the FQS ASESE and WHOQOL-Old instruments - Ribeirão Preto, São Paulo, Brazil, 2020.

VARIABLES	M_d (IQ)	A±SD	Minimum	Maximum	Variance
SEXUAL FUNCTION					
Sexual desire and interest	10.00 (8.00-13.00)	9.98±3.67	2.00	15.00	13.521
Foreplay	5.00 (4.00-5.00)	4.03±1.40	0.00	5.00	1.987
Personal excitement/sync with partner	8.00 (6.00-10.00)	7.33±2.79	0.00	10.00	7.787
Comfort	8.00 (6.00-10.00)	7.67±2.38	0.00	10.00	5.687
Orgasm and satisfaction	8.00 (5.00-9.00)	7.12±2.77	0.00	10.00	7.682
Overall sexual function	78.00 (60,00-88.00)	72.28±22.38	8.00	100.00	500.958
SEXUALITY					
Sexual act	74.00 (59.00-82.00)	69.35±15.83	20.00	87.00	250.715
Affective relationships	76.00 (62.00-82.00)	70.31±14.19	23.00	85.00	201.513
Physical and social adversities	7.00 (5.00-9.00)	6.95±3.03	3.00	15.00	9.229
Overall Sexuality	155.50 (130.50-170.00)	81.13±17.83	46.00	182.00	804.696
QUALITY OF LIFE					
Sensory Abilities	84.37 (73.43-93.75)	81.13±17.83	25.00	100.00	317.932
Autonomy	68.75 (50.00-81.25)	66.71±20.24	12.50	100.00	409.667
Past, present and future activities	68.75 (50.00-75.00)	64.68±19.39	6.25	100.00	376.358
Social Participation	62.50 (50.00-75.00)	62.72±21.36	0.00	100.00	456.388
Death and Dying	62.50 (37.50-81.25)	59.22±25.27	0.00	100.00	639.063
Intimacy	75.00 (62.50-81.25)	70.10±20.83	0.00	100.00	434.213
Overall quality of life	79.16 (58.33-79.16)	67.43±14.95	20.83	98.96	223.737

Source: own elaboration. Survey data.

Table 3. Comparison of sexuality and QoL among elderly women with and without sexual dysfunction - Ribeirão Preto, São Paulo, Brazil, 2020.

Variables	SEXUAL FUNCTION		U	P value
	With dysfunction	No dysfunction		
	M_d (IQ)	M_d (IQ)		
SEXUALITY				
Sexual act	53.00 (44.00-63.00)	79.00 (68.00-83.00)	540.50	**<0.001***
Affective relationships	56.00 (42.00-66.00)	78.00 (71.00-83.00)	698.00	**<0.001***
Physical and social adversities	9.00 (7.00-11.00)	6.00 (4.00-8.00)	1312.00	**<0.001***
Overall sexuality	120.00 (102.00-135.00)	164.00 (146.00-171.00)	641.50	**<0.001***
QUALITY OF LIFE				
Sensory Abilities	75.00 (56.25-87.50)	87.50 (75.00-93.75)	1652.00	**0.001***
Autonomy	56.25 (37.50-68.75)	75.00 (62.50-81.25)	1311.50	**<0.001***
Past, present and future activities	50.00 (43.75-68.75)	68.25 (56.25-81.25)	1425.50	**<0.001***
Social participation	50.00 (37.50-62.50)	68.75 (50.00-81.25)	1435.00	**<0.001***
Death and dying	56.25 (25.,00-75.00)	68.75 (43.75-81.25)	1934.50	**0.038***
Intimacy	62.50 (37.50-75.00)	75.00 (68.75-81.25)	1269.00	**<0.001***
Overall quality of life	57.29 (47.91-68.75)	72.91 (62.50-80.20)	1140.00	**<0.001***

Source: own elaboration. Survey data. * Statistical significance for Mann-Whitney test (p<0.05).

Table 4. Correlation between sexual function with sexuality and QL - Ribeirão Preto, São Paulo, Brazil, 2020.

SEXUAL FUNCTION	SEXUALITY				QUALITY OF LIFE						
	SA	AR	PSA	OS	SA	AUT	PPFA	SP	DD	INT	OQoL
	ρ	P	ρ	ρ	ρ	ρ	ρ	ρ	ρ	ρ	ρ
DOM 1	0.678*§	0.569*§	-0.357*	0.612*§	0.332*	0.392*	0.440*||	0.383*	0.096	0.478*||	0.460*||
DOM 2	0.613*§	0.543*§	-0.274*	0.578*§	0.285*	0.228†	0.303*	0.286*	0.051	0.343*	0.340*
DOM 3	0.626*§	0.585*§	-0.428*||	0.590*§	0.313*	0.333*	0.324*	0.337*	0.152	0.427*||	0.419*||
DOM 4	0.434*||	0.476*||	-0.367*	0.426*||	0.323*	0.342*	0.314*	0.298*	0.074	0.390*	0.389*
DOM 5	0.643*§	0.544*§	-0.472*||	0.572*§	0.363*	0.402*||	0.407*||	0.411*||	0.226†	0.447*||	0.499*||
OSF	0.732*§	0.663*§	-0.467*||	0.677*§	0.379*	0.431*||	0.447*||	0.437*||	0.155‡	0.525*§	0.524*§

Source: own elaboration. Survey data. Statistical significance for Spearman's correlation (ρ): *(p<0.001); †(p=0.003); ‡(p=0.046). §Strong correlation; ||Moderate correlation. DOM1: sexual desire and interest; DOM2: foreplay; DOM3: arousal, personal/sync with partner; DOM4: comfort; DOM5: orgasm and satisfaction; OSF: overall sexual function.

Table 5. Linear regression for the independent variables (sexual function) and the dependent ones (sexuality and QoL) - Ribeirão Preto, São Paulo, Brazil, 2020.

	β not standardized	β standardized	95%CI	P value	Durbin-Watson	R^2
SEXUALITY						
SA	0,524	0,741	0,451-0,597	**<0,001**	1,943	0,548
AR	0,418	0,658	0,344-0,491	**<0,001**	1,963	0,434
PSA	-0,053	-0,393	-0,073- -0,034	**<0,001**	1,926	0,155
OS	0,888	0,701	0,749-1,028	**<0,001**	1,958	0,491
QUALITY OF LIFE						
SA	0,297	0,372	0,183-0,411	**<0,001**	2,042	0,139
AUT	0,393	0,435	0,268-0,519	**<0,001**	1,932	0,189
PPFA	0,373	0,430	0,252-0,439	**<0,001**	2,084	0,185
SP	0,386	0,404	0,251-0,520	**<0,001**	2,089	0,163
INT	0,501	0,538	0,380-0,622	**<0,001**	2,045	0,290
OQoL	0,352	0,526	0,264-0,439	**<0,001**	2,051	0,277

Source: own elaboration. Survey data. SA: sexual act; AR: affective relationships; PSA: physical and social adversities; OS: general sexuality; SS: sensory skills; AUT: autonomy; PPFA: past, present and future activities; SP: social participation; INT: intimacy; OQoL: overall quality of life.

aspect did not remain associated with the model. It is noted that the greatest influence of sexual function was under the aspect of intimacy (β=0.501; [95%CI=0.380-0.622]; p<0.001; R2=29.0%), with the model explaining 27.7% of the overall QoL data.

DISCUSSION

This study included elderly women from different regions of Brazil, showing a predominance of participants self-declared white (69.3%) and with a high level of education (71.0%), considering high school and college levels, as shown in Table 1. These characteristics differ from other studies,[3,18] which included elderly women with different sociodemographic characteristics, especially those with low education.

These results were expected due to the online data collection method. It is assumed that there would be greater participation of literate people with sufficient financial conditions that would allow access to the Internet and electronic resources that enable interactions in social networks.

In this sense, a survey conducted by the Brazilian Institute of Geography and Statistics[19] revealed that there was an increase

from 24.7%, in 2016, to 31.1%, in 2017, of elderly people who had access to the internet. This increase was more evident as the educational level was observed, and the use of the internet had a higher percentage among people with higher educational levels.[19]

Regarding the descriptive evaluation of sexual function, Table 2 shows that, in general, elderly women have a good sexual function, reaching a median of 78.00 in a maximum interval of 100 points. Low scores in the areas of sexual evaluation were expected, especially regarding vaginal lubrication, which may be diminished in old age and, consequently, generate discomfort during penetration. However, it is pointed out that possibly the sociodemographic characteristics of the participants of this study may have contributed to the access to strategies to combat sexual dysfunction, such as obtaining intimate lubricants and even therapies with specialized professionals.

Nevertheless, concerning sexuality, it is noted that, in general, elderly women have a better experience in the affective relationships dimension, followed by sexual intercourse, according to Table 2. On the one hand, these results corroborate other studies[20,21] which also pointed to sexual activity as an aspect more valued by men.

In this context, an investigation[21] developed with nine couples from different stages of the life cycle identified that, while men seek pleasure and relaxation in the sexual act, valuing quantity, women attribute greater value to romanticism and intimacy, valuing the quality of the sexual relationship, which, in turn, is associated with affection and affection. Another study,[22] developed with 3,834 English women with an age average of 65.3 years, found that among sexually active women, the greatest joy in life was associated with kissing and caressing, but not with sexual intercourse.

On the other hand, it is questionable whether the decreased interest in sexual intercourse among elderly women actually reflects spontaneous choices or whether they are influenced by external factors, such as social prejudices or possible sexual traumas during life, since, in this study, the affective relations dimension of sexuality was only associated as the best experience among the elderly women with sexual dysfunction. On the other hand, the elderly women without dysfunction had the best experiences in sexuality through sexual intercourse, as shown in Table 3.

In light of this, one must consider that many elderly people have experienced their sexual relations in a traumatic way throughout their lives and, when they reach old age, prefer not to practice them.[23] Moreover, in the past context in which today's elderly people are married, marriage was strictly defined by the choice of the parents, who selected the person their children would marry, only in order to contemplate political-economic interests, without considering the feelings of the people involved in the marriage bond. Nevertheless, it was a time when Christian conservatism had a strong influence on marriage so divorce was repudiated.[24] Therefore, it is informed that this context must be taken into consideration when faced with the complaints of elderly women, who seem to have total contempt or aversion to sexual practice in old age.

Regarding QoL, it is observed that elderly women have a better perception of QoL in the aspects of skills and intimacy, as shown in Table 2. The sensory abilities facet evaluates how sensory losses impact daily life, participation in activities, and interactive capacity. The intimacy aspect evaluates the feeling of companionship, the experience of love, and the opportunities to love and be loved.[16]

It is noteworthy that these results can also be influenced by the sample characteristics since a study[25] developed with 40 educated elderly people revealed that the highest median was also found in the sensory skills facet. On the other hand, a study[26] developed with 217 elderly people, whose highest prevalence was low education, revealed higher scores on the death and dying facet. In this sense, evidence points out that years of education constitute a predictor for adverse health events in the elderly, and those with low education may experience social exclusion and less access to information, which negatively affects their QoL.[26]

It was found in this study that older women without sexual dysfunction have better experiences in sexuality and better QoL, according to Table 3. We question the fact that the greater experiences in sexuality are correlated, in a positive way, with sexual function. This is because the experience of sexuality is independent of any sexual involvement, since sexuality is a broader concept, with several possibilities of experiences and explorations of the imagination and the human body. In other words, it was expected that, even with the present sexual dysfunctions, elderly women would have greater experiences in sexuality through other quanti-qualitative demonstrations that involve it. It is inferred, therefore, that the elderly women in this study are unaware of the real concept of sexuality and reduce it to genital aspects, as has already been evidenced in other research.[27]

Regarding QoL, an investigation[28] involving 1,129 elderly people, with a predominance of females (59.7%), identified that sexually inactive elderly women were satisfied with this condition of sexual inactivity. However, when the relationship between sexual satisfaction and QoL was analyzed, it was observed that the elderly women who were active and satisfied with their sexual life showed better QoL in the physical and mental components, evaluated through the Short-Form Health Survey (SF-12).[28]

Another study,[29] developed with 203 Israeli Jews, with an age average of 69.59 years and a higher prevalence of elderly women (50.2%), revealed that the frequency of sexual activity is a predictor variable of QoL and exerts a mediating effect between attitudes towards sexuality and QoL. In this same study, the authors identified that the elderly who experience sexual intercourse with some frequency had better QoL, being classified as very good, when compared to the elderly who did not engage in sexual intercourse, who, in turn, presented worse QoL, all this evidence with statistical significance.[29]

The fact is that both affective and sexual relationships are important for the promotion of physical and mental well-being, in addition to the promotion of positive feelings such as joy and happiness, which ensure more vitality and greater pleasure in life, as revealed by most elderly women participating in a qualitative study.[30] Such evidence also corroborates the results shown in Table 5, in which the greatest influence of sexual function was observed in the sexual act dimension of sexuality and under the intimacy aspect of QoL, showing that both the sexual and affective aspects, involving intimacy, contribute to a better experience in sexuality and better QoL.

However, it is necessary that there is guidance from health professionals regarding sexual aspects and sexuality in the elderly population since knowledge and permissive attitudes related to sexuality are associated with greater frequency of sexual activities among this population.[29]

However, the reality is far from this need, since, in this study, 67.5% never received guidance on sexuality from health professionals. These results are similar to those found in an investigation[29] in which 88.2% of the elderly people interviewed did not consult health professionals to ask about the subject. These are important results to be reflected on, since several studies[28,29] show that the elderly continue to have sexual relations and, even so, there is a neglect of the theme in health services.

Such negligence can be overcome through dialogical educational strategies, being pointed out as an effective care instrument with applicability in primary health care, to offer comprehensive and emancipatory care. This is a strategy that has already been used and has shown positive impacts on the deconstruction of prejudices related to sexuality in old age and the conceptual expansion of the theme.[27]

It is noteworthy that the online collection method demonstrated some negative points that influenced the adherence of users to the survey. First, we mention the mistrust of the participants concerning the veracity and safety of the study, since there were comments, in the posts, that the hyperlink of the research was a criminal strategy to obtain personal data and, therefore, many potential users did not continue with the participation. Another impasse also concerns the comments. This time, the tenor of the comments was conservative and moralistic, in which users commented that it was an offense, and even a lack of respect, to address the issue with older women, especially on social networks.

It is noteworthy that these comments were not deleted in order to ensure freedom of speech and the right of the participants to consciously decide on the acceptance or refusal of participation. However, the authors responded to these comments, providing the approval number of the REC, along with the telephone number for clarification of doubts, in addition to being posted the justification and relevance of the study. These obstacles were the main reason for the low number of adherents to the study, although the outlined sample size was achieved.

Furthermore, it is noteworthy that this study presents some limitations. Besides the non-probabilistic characteristic not allowing generalizations, the unique participation of elderly women adept on Facebook reinforces the need for caution in comparing the results obtained here, since this is a specific public, which is not often observed among the Brazilian elderly population.

CONCLUSION AND IMPLICATIONS FOR PRACTICE

Sexual function is associated with sexuality and QoL of the elderly women investigated, assuming a directly proportional behavior that, in turn, can become a strategy to add quality to the additional years of life of this population.

Therefore, this study contributes, revealing that sexual function is strongly correlated to sexuality and QoL of elderly women, highlighting the sexual act and intimacy as two variables that were mostly explained by the linear regression model. Given these results, health professionals, especially in primary care, may intervene strategically in these aspects related to older women, thus fulfilling the proposal of active aging and promoting the health and QoL of this population group that has been growing steadily in recent years. It is suggested, then, the implementation of protocols directed to the sexual health of the elderly woman and the deepening of holistic relationships so that the biopsychosocial dimension of elderly women is considered in its entirety during healthcare practices.

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AUTHOR’S CONTRIBUTIONS

Study design. Edison Vitório de Souza Júnior. Randson Souza Rosa. Diego Pires Cruz. Cristiane dos Santos Silva. Namie Okino Sawada.

Data Collection or Production. Edison Vitório de Souza Júnior. Randson Souza Rosa. Diego Pires Cruz. Benedito Fernandes da Silva Filho. Cristiane dos Santos Silva. Lais Reis Siqueira.

Data Analysis. Edison Vitório de Souza Júnior. Randson Souza Rosa. Diego Pires Cruz. Benedito Fernandes da Silva Filho. Brenaráise Freitas Martins dos Santos. Cristiane dos Santos Silva. Lais Reis Siqueira. Namie Okino Sawada.

Interpretation of results. Edison Vitório de Souza Júnior. Randson Souza Rosa. Diego Pires Cruz. Benedito Fernandes da Silva Filho. Brenaráise Freitas Martins dos Santos. Cristiane dos Santos Silva. Lais Reis Siqueira. Namie Okino Sawada.

Writing and critical revision of the manuscript. Edison Vitório de Souza Júnior. Randson Souza Rosa. Diego Pires Cruz. Benedito Fernandes da Silva Filho. Brenaráise Freitas Martins

dos Santos. Cristiane dos Santos Silva. Lais Reis Siqueira. Namie Okino Sawada.

Approval of the final version of the article. Edison Vitório de Souza Júnior. Randson Souza Rosa. Diego Pires Cruz. Benedito Fernandes da Silva Filho. Brenaráise Freitas Martins dos Santos. Cristiane dos Santos Silva. Lais Reis Siqueira. Namie Okino Sawada.

Responsibility for all aspects of the content and integrity of the published article. Edison Vitório de Souza Júnior. Randson Souza Rosa. Diego Pires Cruz. Benedito Fernandes da Silva Filho. Brenaráise Freitas Martins dos Santos. Cristiane dos Santos Silva. Lais Reis Siqueira. Namie Okino Sawada.

ASSOCIATED EDITOR

SCIENTIFIC EDITOR

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