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Sexuality as a factor associated with the quality of life of the elderly

Sexualidade como fator associado à qualidade de vida da pessoa idosa

Sexualidad como factor asociado a la calidad de vida de las personas mayores

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Abstract

Objective: to analyze the association between experiences of sexuality with bio-socio-demographic variables and quality of life of elderly people. **Methods:** cross-sectional study, developed with 1,922 Brazilian elderly people, whose data were collected through a web survey. Three instruments were used to obtain bio-socio-demographic data, sexuality and quality of life. The analysis was carried out with the Mann-Whitney, Kruskal-Wallis, Spearman correlation and multivariate linear regression tests, with the "insert" input method, adopting a 95% confidence interval. **Results:** the overall assessment of sexuality was strongly associated with marital status (p<0.001); religion (p=0.001); not having children (p<0.001); sexual orientation (p=0.008) and receiving guidance on sexuality from health professionals (p=0.002). Sexuality correlated positively and with different magnitudes with all facets of quality of life (p<0.001). Regression analysis demonstrated that all dimensions of sexuality remained positively associated with quality of life: sexual act [β=0.154; 95%CI=0.083-0.225; p<0.001]; affective relationships [β=0.335; 95%CI=0.263-0.407; p<0.001] and physical and social adversity [β=1.388; 95%CI=1.206-1.571; p<0.001]. **Conclusion and implications for practice:** sexuality was significantly associated with some bio-socio-demographic variables and positively correlated with the quality of life of the elderly people investigated.

Keywords: Family Health Strategy; Quality of Life; Health of the Elderly; Sex; Sexuality.

Resumo

Objetivo: analisar a associação entre as vivências em sexualidade com as variáveis biossociodemográficas e a qualidade de vida de pessoas idosas. **Métodos:** estudo transversal, desenvolvido com 1.922 pessoas idosas brasileiras, cujos dados foram coletados por meio de *web survey*. Utilizaram-se três instrumentos para a obtenção dos dados biossociodemográficos, da sexualidade e da qualidade de vida. A análise foi realizada com os testes de Mann-Whitney, Kruskal-Wallis, correlação de Spearman e regressão linear multivariada, com método de entrada "inserir", adotando Intervalo de Confiança de 95%. **Resultados:** a avaliação geral da sexualidade esteve associada fortemente com estado civil (p<0,001); religião (p=0,001); não ter filhos (p<0,001); orientação sexual (p=0,008) e recebimento de orientações sobre sexualidade pelos profissionais de saúde (p=0,002). A sexualidade correlacionou-se de forma positiva e com diferentes magnitudes com todas as facetas de qualidade de vida (p<0,001). A análise de regressão demonstrou que todas as dimensões da sexualidade permaneceram associadas, positivamente, com qualidade de vida: ato sexual [β=0,154; IC95%=0,083-0,225; p<0,001]; relações afetivas [β=0,335; IC95%=0,263-0,407; p<0,001] e adversidades física e social [β=1,388; IC95%=1,206-1,571; p<0,001]. **Conclusão e implicações para a prática:** a sexualidade associou-se, significativamente, com algumas variáveis biossociodemográficas e esteve correlacionada, positivamente, com a qualidade de vida das pessoas idosas investigadas.

Palavras-chave: Estratégia Saúde da Família; Qualidade de Vida; Saúde do Idoso; Sexo; Sexualidade.

Resumen

Objetivo: analizar la asociación entre experiencias en sexualidad con las variables biosociodemográficas y la calidad de vida de los adultos mayores. **Métodos**: estudio transversal desarrollado con 1.922 ancianos brasileños, cuyos datos fueron recolectados a través de una encuesta web. Se usaron tres instrumentos para obtener datos biosociodemográficos, de sexualidad y de la calidad de vida. El análisis se realizó mediante las pruebas de Mann-Whitney, Kruskal-Wallis, correlación de Spearman y regresión lineal multivariada, con método de entrada "ingresar", adoptando un Intervalo de Confianza del 95%. **Resultados:** la evaluación general de la sexualidad se asoció fuertemente con el estado civil (p <0,001); religión (p = 0,001); no tener hijos (p <0,001); orientación sexual (p = 0,008) y recibir orientación sobre sexualidad por parte de profesionales de la salud (p = 0,002). La sexualidad se correlacionó positivamente y con diferentes magnitudes con todas las facetas de la calidad de vida (p <0,001). El análisis de regresión mostró que todas las dimensiones de la sexualidad permanecieron asociadas positivamente con la calidad de vida: relaciones sexuales [β = 0,154; IC95% = 0,083-0,225; p <0,001]; relaciones afectivas [β = 0,335; IC95% = 0,263-0,407; p <0,001] y adversidades físicas y sociales [β = 1,388; IC95% = 1,206-1,571; p <0,001]. **Conclusión e implicaciones para la práctica:** la sexualidad se asoció significativamente con algunas variables biosociodemográficas y se correlacionó positivamente con la calidad de vida de los ancianos investigados.

Palabras-clave: Estrategia de Salud Familiar; Calidad de Vida; Salud del Anciano; Sexo; Sexualidad.

INTRODUCTION

Population aging shows a rapid and growing behavior worldwide. The main causes that explain this phenomenon are the reduction in mortality and birth rates, advances in health technology, and better socio-environmental conditions.[1] It is estimated that by the year 2025, Brazil will be the sixth country in the world to have the largest number of elderly people. Moreover, the aging index in 2018 was 43.19%, and may reach 173.47% in 2060[2].

As a result of this demographic change, there is a need for a greater understanding of the elderly and the aspects inherent to age,[3] including the experiences in sexuality of this public. Sexuality is a component that integrates healthy aging[4] and constitutes an essential aspect of the human being. It is characterized as a set of several elements, including gender, pleasure, sexual orientation, identities, eroticism, reproduction,[5] desires,[6] hugs, flirtations, kisses, acts of bodily and/or emotional intimacy, touch, and even the sexual act.[7] Therefore, it is a human dimension that involves relationships, behaviors, attitudes and thoughts.[5]

In the elderly, it is worth mentioning that sexuality is influenced by several factors such as culture, religion, society, ethics, physical and psychological changes[8], and life experiences.[6] Experiences, in a healthy manner, have positive impacts throughout life, exerting effects of joy, strengthening and affirmation.[6]

It is worth mentioning that aging promotes a series of physiological alterations and the way in which the elderly experience sexuality differs between genders, and both men and women consider sexuality[9] and the sexual act[10] as an important part of life.[9-10] Nevertheless, many myths, prejudices, and inauthentic conceptions about sexuality in old age are perpetuated,[3] including by health professionals, the community, family members, and even among the elderly themselves,[1] which requires attention.[3]

As a result of all these concerns, sexuality among the elderly population is still neglected by researchers, since most of the current scientific investigations that approach the theme emphasize the physiological impacts of sexuality in this phase of life,[5] contributing with few reflections on the influence of this human behavior on the Quality of Life (QoL) of the elderly.

For decades, research on QoL has been the focus in the field of aging and considers broad aspects such as life satisfaction, good health, sense of control, independence, social involvement, well-being, self-esteem, happiness, autonomy, and self-efficacy.[4] From this perspective, the World Health Organization (WHO) has conceptualized 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 in relation to his or her goals, expectations, standards, and concerns."[11:1570]

It is noteworthy that understanding the perception of the elderly in relation to their QoL can help in directing support and effective resources for its promotion among this age group.[4] In this sense, the hypothesis of this study is that sexuality is associated with better QoL among the elderly and, therefore, may be a non-pharmacological strategy capable of adding quality to the additional years of the life of this age group in constant growth.

From this perspective, nurses play a central role in health promotion actions for the elderly, especially in the Family Health Strategy (FHS), which, by strengthening bonds, is able to stimulate the expression of the intimate needs of this group, such as those related to sexuality.[12]

Furthermore, given the need to rethink healthcare models for the elderly in the face of population aging, the development of this study is justified so that, through a comprehensive study, it is possible to identify how sexuality relates to the QoL of the elderly and, through the results presented here, there is encouragement and stimulus to break down barriers that annul the reality that the elderly also have desires and the right to enjoy a good old age through their intimate expressions, such as sexuality. Thus, the objective of this study was to analyze the association between experiences in sexuality with the bio-socio-demographic variables and the quality of life of elderly people.

METHODS

This is a quantitative and transversal study, of the web survey type,[13] developed according to the Strengthening the Reporting of Observational Studies in Epidemiology (STROBE) guide.

The study participants were 1,922 elderly people living in Brazil selected according to the non-probability consecutive sampling technique. We performed the sample calculation, a priori, considering an infinite population, α=5% and CI=95% ($z\alpha/2$ = 1.96) and a conservative proportion of 50%, which resulted in a minimum sample of 385 participants. However, because this was a web survey study, it was decided to recruit five times more participants so that it would be possible to have greater national representativeness, which totaled a final sample of 1,922 elderly people who met the inclusion criteria.

Inclusion criteria were considered as people aged ≥ 60 years;[14] male or female; married, with a fixed partnership or in a stable union; with internet access and active account on the social network Facebook and who lived in their homes in any region of Brazil. We excluded from the study all dependent elderly people, residents in long-stay institutions, hospitalized people, and those living with some neurodegenerative disease that made it impossible to understand the instruments. This screening was done by means of four dichotomous questions (yes/no) applied before accessing the instruments. Thus, the participant who marked "no" to all questions was considered able.

Data collection occurred exclusively online between July 2020 and January 2021. The authors created an interaction page on the social network Facebook with the objective of disseminating information about sexuality, health, and QoL, as well as developing research on these themes. Thus, there was the publication of an invitation to participate in the study which contained information about the research title, the inclusion criteria, the name of the institution and the researchers responsible, the e-mail and phone number, and a hyperlink that directed participants directly to the survey questionnaire.

This invitation was boosted, monthly, through the post-boosting option offered by Facebook, which allowed the wide dissemination

of the research to the entire Brazilian territory and to profiles with previously selected characteristics, in addition to increasing the engagement of users in the post and, consequently, increasing the likelihood of the page being liked, commented, and shared. Thus, it was possible to reach the sample needed for the study.

The research questionnaire was structured through Google Forms and composed of three instruments: 1) a bio-socio-demographic instrument; 2) a sexuality instrument and 3) a QoL instrument.

The first instrument was developed by the authors themselves in order to outline the profile of the participants. It contained information on gender (male and female); marital status (married, in a stable union, or with a steady partner); length of time living with a partner; age (≥60 years old); education (elementary school, high school, college, and no education); sexual orientation (heterosexual, homosexual, bisexual, and others); Brazilian region (North, Northeast, Midwest, Southeast and South); religious belief (Catholic, Protestant and others); ethnicity (white, brown, black, yellow and indigenous); whether they live with children and whether they have received guidance on sexuality by health professionals.

In the first instrument, the mandatory inclusion of an e-mail address was also requested for the subsequent sending of the Free and Informed Consent Term (FICT) and to allow researchers to track and correct possible multiplicity of responses by the same participant, thus reducing the chances of bias.

The second instrument was the Affective and Sexual Experiences Scale for Elderly (ASESE), built and validated for Brazilian elderly people. It is composed of 38 items distributed in three components: sexual act (Cronbach's α=0.96); affective relationships (Cronbach's α=0.96) and physical and social adversities (Cronbach's α=0.71). Responses are likert-type: (1=never), (2=rarely), (3=sometimes), (4=frequently), and (5=always).[15]

Since the dimension physical and social adversities contains negative questions (items 30, 32 and 37), we recoded (inverted) the answers to match the other dimensions. In this way, the higher the score, the greater the sexual and affective experiences and the better the confrontation with physical and social adversities related to sexuality.

The third instrument was the World Health Organization Quality of Life - Old (WHOQOL-Old), specific and validated for application among Brazilian elderly people. It consists of 24 questions with five possible answers distributed in six facets: sensory abilities; autonomy; past, present and future activities; social participation; death and dying and intimacy. According to the validation study, the WHOQOL-Old showed good internal consistency with Cronbach's α ranging from 0.71 to 0.88.[16]

There is no cut-off point for the WHOQOL-OLD and, the higher the score, the greater the QoL of the elderly. It is noteworthy that the following items were also recoded: 1, 2, 6, 7, 8, 9 and 10, as recommended.[17] The recoding consisted in assigning new values to the answered items. For both ASESE and WHOQOL-Old the following rule was followed: (1=5) (2=4) (3=3) (4=2) (5=1).

In time, the isolated use of the WHOQOL-OLD without a generic instrument is justified for two reasons. The first is related to the resistance of the elderly to answer online a relatively excessive amount of questions, which was evidenced by comments on the posts. In addition, the ASESE validation process occurred with the WHOQOL-OLD instrument, and a high correlation between the two constructs was evidenced, in which the sexuality scale predicts 41% of QoL measured only by WHOQOL-OLD.15 Moreover, the author identified a sample inclination between 0.24 and 0.33, $F(1,198)=11.74$ with Confidence Interval of 95% ($p<0.001$), which reveals the unlikelihood of the results being due to sampling error. Given these considerations, it is believed that the WHOQOL-OLD was used according to logistical needs and methodological reasons that required such conduct.[15]

After the end of the collection period, the data were transported to the statistical software IBM SPSS®, version 25, to proceed with the analyses. The first stage of the analysis consisted of identifying duplicate cases, that is, multiple answers registered with the same e-mail, which was not evidenced. Later, we proceeded to verify the distribution of data by the Kolmogorov-Smirnov test and by the analysis of diagrams, as recommended[18] where non-normal distributions were evidenced ($p<0.05$).

In view of this characteristic, the nonparametric Mann-Whitney[19] test (for variables with two categories) and the Kruskal-Wallis test (for variables with three or more categories) were used, with Bonferroni post-hoc when necessary, to verify in which group the difference was statistically significant. These tests were applied to investigate the existing relations between sexuality (dependent variable) and bio-socio-demographic characteristics (independent variable).

In order to investigate the relationship between sexuality as an independent variable and QoL (dependent variable), Spearman's correlation (ρ) was used. The variables that presented a p-value <0.05 were included in a multivariate linear regression model, with the "insert" input method, in order to assess the magnitude of the influence of the factors (sexuality components) on the attributes (QoL facets). The adequacy of the model was attested by the Durbin Watson test and its results expressed through the β coefficients (standardized and non-standardized); standard error; 95% confidence interval (95%CI), R^2 coefficient of determination and p value.[19-20]

Finally, categorical variables were presented as frequencies (absolute and relative) and quantitative variables as mean posts (MP), median (Md), interquartile range (IQ), variance, mean (M), standard deviation (SD), and minimum and maximum values. This study followed all ethical aspects regarding research with human beings, according to the recommendations of Resolution No. 466/2012 of the National Health Council.

The anonymity of the information collected was guaranteed for all participants so that they did not know who was participating in the research, since the instruments were made available individually in each social network. Only the researchers have access to personal information such as the e-mail that was requested for the forwarding of the FICT in the form of hidden copy in order to

preserve the identity of the participants. It is noteworthy that the project was approved in 2020 by the Research Ethics Committee (REC) of the Nursing School of Ribeirão Preto - University of São Paulo under Opinion No. 4.319.644.

RESULTS

Among the 1,922 participants, there was a higher prevalence of elderly men (n=1,176; 61.2%); aged between 60 and 64 years (n=930; 48.4%); Catholic (n=1,034; 53.8%); self-declared white (n=1,266; 65.9%); with complete High School (n=717; 37.3%), followed by Higher Education (n=709; 36.9%); married (n=1.180; 61.4%); living with a spouse for more than 20 years (n=1,162; 60.5%); not living with children (n=1,275; 66.3%); heterosexual (n=1,657; 86.2%); living in the Southeast region of the country (n=784; 40.8%) and who never received orientation on sexuality from health professionals (n=1,500; 78.8%).

According to Table 1, it is observed that there was a statistically significant difference between the bio-socio-demographic variables and some components of sexuality. It is noted that the elderly males better experience the sexual act (MP=982.55; p=0.037) and worse face the physical and social adversities arising from sexuality (MP=913.71; p<0.001). In addition, the components of sexuality were all significantly associated with marital status, religion, sexual orientation, and guidance on sexuality by health professionals such that the groups that showed higher mean ranks in certain components better experience them in relation to their sexuality.

A major finding in this study was the fact that the elderly who had already received guidance on sexuality presented the best experiences in all its dimensions: sexual act (MP=1010.40; p=0.040); affective relationships (MP=1037.29; p=0.001) and physical and social adversities (MP=1037.56; p=0.001), including the overall assessment of sexuality (MP=1034.69; p=0.002) as shown in Table 1. Nevertheless, these older persons also showed better QoL in the facets autonomy (p<0.001); past, present and future activities (p<0.001); social participation (p<0.001); intimacy (p=0.024) and general QoL (p<0.001).

As observed in Table 2, the elderly better experience their sexuality in affective relationships [Md=74.00 (IQ=62.00 - 81.00)], and the sexual act was positioned as the second most experienced component [Md=73.00 (IQ=63.00 - 80.00)]. With regard to QoL, the highest scores were identified in the sensory abilities [Md=81.25 (IQ=68.75 - 93.75)] and intimacy [Md=75.00 (IQ=62.50 - 81.25)] facets.

It is observed in Table 3 that all components of sexuality correlated positively and with different magnitudes with all facets of QoL at p<0.001 level. The highest correlations were strong, identified between general sexuality and the intimacy facet (ρ =0.641; p<0.001) and with affective relationships and intimacy (ρ =0.639; p<0.001). Finally, general sexuality correlated moderately with older people's general QoL (ρ =0.561; p<0.001).

As observed in Table 4, different components of sexuality remained associated with QoL facets, all with positive and statistically significant relationships. Moreover, only the sensory skills and death and dying facets were not associated with the entire sexuality scale, and the final regression model explained 36.3% of the relationships between sexuality and overall QoL.

DISCUSSION

It was observed in this study that male elderly people better experience the sexual act and worse faces physical and social adversities arising from sexuality. The sexual act dimension of the ASESE evaluates, in fact, sexual aspects and the elderly people's feelings towards them. On the other hand, the dimension referring to physical and social adversities concerns the obstacles that the elderly face to deal with their sexuality, such as changes resulting from the aging process, health problems and their impact on sexual experiences and the fear of suffering prejudice due to attitudes taken towards sexuality.[15]

Regarding sexual experiences, the results are in agreement with a previous study[9] carried out with 213 Portuguese aged 65 years or older. The authors identified that men attribute greater importance to sexual activity and are proportionally more sexually active than women, with statistically significant differences.[9] Another study[21] developed with nine couples at different stages of the life cycle, revealed that the sexual act has different representations between men and women, since, for men, sex is linked to obtaining pleasure, physical satisfaction and the relaxation achieved by orgasm, valuing quantity. For women, sex goes beyond the physical dimension and delves into the psychological field, valuing the quality of the act which, in turn, involves the couple's entire experience.[21]

Concerning the worst confrontation of physical and social adversities resulting from male sexuality, there is a strong influence of the patriarchal and macho culture, which transfigures the man as a being that cannot be deteriorated and should always demonstrate virility, strength, and power, characteristics that socially represent the sense of masculinity.

This inference is in agreement with the reality that, from a historical point of view, men have always been encouraged to initiate their sexual practices from adolescence. Women, on the other hand, have always been limited in this respect, having to protect themselves physically in order to reach marriage with their virginity preserved.[8] Therefore, when men, who grew up in this culture of sexual incentive, reach old age and are faced with declining physiological reserves, they begin to experience conflicts that affect their sense of masculinity and contribute to their inability to adequately face physical and social adversities, as was observed in this study, because men, without their full sexual capacity, feel less of a man[22] and are confronted with several psychosocial and environmental changes.[23]

Regarding religious beliefs, the elderly who informed the option "others" in the variable religion refer to adherents of spiritism, religions of African origin and those who have no religious beliefs. These elderly people had a better experience with sexuality, with statistical significance for all dimensions, when compared to Catholic elderly people.

Table 1. Comparison of bio-socio-demographic variables with sexuality in the elderly. Ribeirão Preto, SP, Brazil, 2020 (n=1,922).

VARIABLES	SEXUALITY			
	Sexual Act	Affective relationship	Physical and social adversities	ASESE
	AVERAGE RANKS			
Sex				
Male	982.55	968.04	913.71	970.11
Famale	928.31	951.16	1036.84	947.93
P value	**0.037***	0.516	**<0.001***	0.393
Marital Status				
Married	873.77	911.19	919.45	886.86
Stable Union	1050.56	1026.22	1005.97	1042.07
Fixed Partner	1148.56	1055.92	1049.48	1116.15
P value	**<0.001†**	**<0.001†**	**<0.001†**	**<0.001†**
Religion				
Catholic	927.94‡	918‡	927.67‡	918.95‡
Protestant	985.53	990.46	969.58	991.32
Others	1006.81‡	1019.77‡	1013.86‡	1019.21‡
P value	**0.015†**	**0.001†**	**0.008†**	**0.001†**
Living with children				
Yes	970.32‡	949.84‡	922.81	956.20‡
No	940.66§	951.63§	971.89	947.33§
No children	1204.70‡.§	1175.98‡.§	1055.19	1197.75‡.§
P value	**<0.001†**	**0.001†**	0.056	**<0.001†**
Level of Education				
Elementary	954.46	917.73	885.86‡.§	926.10
High School	955.75	953.10	988.25§	960.00
Higher Education	972.71	999.59	988.18‡	987.72
No education	887.50	1063.00	769.50	933.60
P value	0.911	0.081	**0.004†**	0.308
Sexual orientation				
Heterossexual	969.65	976.42‡	978.72‡	974.92‡
Homossexual	1082.73	1011.76	889.92	1030.82
Bissexual	796.95	744.27	923.94	759.44
Others	889.19	855.16‡	834.01‡	861.38‡
P value	**0.038†**	**0.004†**	**0.005†**	**0.008†**
Received orientation about sexuality				
Yes	1010.40	1037.29	1037.56	1034.69
No	947.74	940.18	940.10	940.91
P value	**0.040***	**0.001***	**0.001***	**0.002***

Source: own elaboration. Research data.
*Statistically significant difference by Mann-Whitney test (p<0.05) †Statistically significant difference by Kruskal-Wallis test (p<0.05) ‡ Statistically significant differences between groups by Bonferroni post-hoc §Statistically significant differences between groups by Bonferroni post-hoc

Table 2. Descriptive evaluation of sexuality and quality of life of elderly people. Ribeirão Preto, SP, Brazil, 2020 (n=1,922).

VARIABLES	M_d (IQ)	M±SD	MINIMUM	MAXIMUM	VARIANCE
SEXUALITY					
SA	73.00 (63.00 – 80.00)	69.78±13.65	20.00	88.00	186.423
AR	74.00 (62.00 – 81.00)	70.27±13.33	19.00	85.00	177.939
PSA	11.00 (9.00 – 13.00)	10.64±2.82	3.00	15.00	8.005
GS	158.00 (135.00 – 172.00)	150.71±26.93	54.00	187.00	725.352
QUALITY OF LIFE					
SS	81.25 (68.75 – 93.75)	76.88±19.13	6.25	100.00	365.967
AUT	68.75 (56.25 – 75.00)	65.92±18.41	0.00	100.00	339.223
PPFA	68.75 (50.00 – 75.00)	65.00±19.16	0.00	100.00	367.434
SP	68.75 (50.00 – 75.00)	64.24±20.48	0.00	100.00	419.442
DD	68.75 (43.75 – 87.50)	65.39±25.60	0.00	100.00	655.499
INT	75.00 (62.50 – 81.25)	70.42±13.31	0.00	100.00	373.127
GQoL	68.75 (59.75 – 78.12)	67.97±13.83	14.58	100.00	191.452

Source: own elaboration. Research data.
SA: sexual act; AR: affective relationships; PSA: physical and social adversities; GS: general sexuality; SS: sensory skills; AUT: autonomy; PPFA: past, present, and future activities; SP: social participation; DD: death and dying; INT: intimacy; GQoL: general quality of life.

Table 3. Correlation analysis between sexuality and quality of life of elderly people. Ribeirão Preto, SP, Brazil, 2020 (n=1,922).

SEXUALITY	QUALITY OF LIFE						
	SS	AUT	PPFA	SP	DD	INT	GQoL
	ρ	ρ	ρ	ρ	ρ	ρ	ρ
Sexual act	0.149*†	0.387*‡	0.429*‡	0.388*‡	0.197*†	0.580*‡	0.511*‡
Affective relationships	0.143*†	0.385*‡	0.437*‡	0.375*‡	0.206*†	0.639*§	0.524*‡
Physical and social adversities	0.284*†	0.251*†	0.276*†	0.284*†	0.279*†	0.287*†	0.408*‡
General sexuality	0.176*†	0.413*‡	0.463*‡	0.412*‡	0.231*†	0.641*§	0.561*‡

Source: own elaboration. Research data.
*Statistical significance for Spearman's correlation (ρ) (p<0.001) †Weak correlations; ‡Moderate correlations; §Strong correlations SS: sensory skills; AUT: autonomy; PPFA: past, present, and future activities; SP: social participation; DD: death and dying; INT: intimacy; GQoL: general quality of life.

Religion constitutes one of the main influencers of experiences in sexuality and has a strong influence on the behavior and conduct of the elderly. Some religious groups disseminate the belief that sex is sinful, impure and immoral when performed outside the reproductive conception, as is the case of Christianity, the religion with the largest number of adherents in Brazilian culture.[8] This evidence is corroborated by a study[5] carried out with 241 Brazilian elderly individuals in which it was revealed that conservative attitudes about sexuality in old age were strongly associated, among other variables, with Christian followers (evangelicals and Catholics). Therefore, the results of this study seem to be in agreement with the literature, since conservatism seems to be more present in Christian religions to the point of repressing behaviors considered natural, such as sexuality.

Another important finding was the fact that the elderly who do not have children better experience their sexuality in the sexual and affective dimension, also showing better experience of general sexuality when compared to the elderly who have children. The affective dimension of the ASESE evaluates the degree of satisfaction of the elderly with feelings of affection shared between spouses, such as affection, friendship, love, companionship, trust, desire, pleasure, complicity, among others.[15]

Family is considered one of the most difficult obstacles to be faced when it comes to the sexuality of the elderly. Several times, the family imposes prohibitions and/or limitations for the elderly to experience their pleasures and does not consider their sexual desires or aspirations, especially when they share the same residential environment. Thus, a role reversal occurs in which the

Table 4. Multivariate linear regression for the factors (sexuality components) and attributes (quality of life facets). Ribeirão Preto, SP, Brazil, 2020 (n=1,922).

	Non standardized β	Standardized β	95%CI	Standard error	p	Durbin-Watson	R^2
SENSORY SKILLS							
Physical and Social Adversity	1.777	0.263	1.475 – 2.080	0.154	**<0.001**	2.010	0.086
AUTONOMY							
Sexual act	0.232	0.172	0.125 – 0.339	0.055	**<0.001**		
Affective relationships	0.276	0.200	0.167 – 0.384	0.055	**<0.001**	1.879	0.182
Physical and social adversities	0.992	0.152	0.717 – 0.1267	0.140	**<0.001**		
PAST. PRESENT AND FUTURE ACTIVITIES							
Sexual act	0.220	0.156	0.111 – 0.328	0.055	**<0.001**		
Affective relationships	0.376	0.262	0.267 – 0.486	0.056	**<0.001**	1.972	0.227
Physical and social adversities	1.127	0.166	0.848 – 1.405	0.142	**<0.001**		
SOCIAL PARTICIPATION							
Sexual act	0.297	0.198	0.179 – 0.416	0.060	**<0.001**		
Affective relationships	0.244	0.159	0.124 – 0.364	0.061	**<0.001**	1.966	0.190
Physical and social adversities	1.359	0.188	1.054 – 1.664	0.155	**<0.001**		
DEATH AND DYING							
Affective relationships	0.263	0.137	0.104 – 0.421	0.081	**0.01**	1.969	0.097
Physical and social adversities	2.186	0.242	1.784 – 2.588	0.205	**<0.001**		
INTIMACY							
Sexual act	0.120	0.085	0.026 – 0.214	0.048	**0.013**		
Affective relationships	0.774	0.534	0.679 – 0.869	0.048	**<0.001**	1.985	0.428
Physical and social adversities	0.889	0.130	0.648 – 1.130	0.123	**<0.001**		
GENERAL QUALITY OF LIFE							
Sexual act	0.154	0.152	0.083 – 0.225	0.036	**<0.001**		
Affective relationships	0.335	0.323	0.263 – 0.407	0.037	**<0.001**	1.996	0.363
Physical and social adversities	1.388	0.284	1.206 – 1.571	0.093	**<0.001**		

Source: own elaboration. Research data.

elderly lose their autonomy and, consequently, submit to a new reality imposed by family oppression.[1] This reality may justify why the childless elderly in this study experienced their sexuality better.

Regarding sexual orientation, the literature indicates that homosexual elderly people are a more susceptible and vulnerable public when the subject is sex and sexuality.[24] However, as shown in this study, homosexual elderly people had better experiences in the affective and sexual dimensions, besides better experiencing their sexuality in general.

In contrast, an integrative review study[24] showed that the public of homosexual elderly people presents, even today, several vulnerabilities related to social and family networks, and homosexuality in the elderly is a reality difficult to accept by society and even by the homosexual elderly themselves, who still carry with them stigmas and prejudices, often resulting in social isolation, non-disclosure of their sexual identity and the incompleteness of their sexuality.[24]

The heterosexual elderly in this study showed better coping with physical and social adversities related to their experiences with sexuality. A study that evaluated sexual activity, satisfaction and QoL of elderly people showed that sexual satisfaction in the elderly is associated with the demonstration of better scores of QoL in the physical and mental components. In both components, sexually active elderly people presented higher QoL score averages.[25] In view of this, it is important to emphasize that the experience of sexuality in old age is discussed from different organic systems, and it is essential to highlight its importance for the maintenance of QoL in this public.[26]

Another major finding in this study was the fact that the elderly who had already received guidance on sexuality from health professionals presented the best experiences in all its dimensions: sexual intercourse, affective relationships and physical and social adversity, including the overall assessment of sexuality. Nevertheless, these elderly people also presented better QoL in the facets of autonomy, past, present and future activities, social participation, intimacy and general QoL.

It is noteworthy that, among health professionals, nurses are positioned as the main agents who should promote approaches

to sexuality with the elderly, since they are the most present professionals in various care settings, especially in the FHS, in which they perform most of the care actions, highlighting the construction of bonds between users.[27]

However, it was observed that 78.8% (n=1500) of the elderly never received orientation by health professionals. This finding may be associated with some difficulties faced in communication about sexuality between these two actors. Examples include fear of judgment, discouragement of sexual questioning, and the nullification of the presence of sexual interest in the elderly population.[28]

In this sense, a Brazilian study[27] conducted with 50 elderly women revealed that, besides the participants being afraid to talk about sexuality, especially with health professionals, the professionals themselves do not have enough training to achieve resoluteness in meeting the demands regarding sexuality in this age group.[27] Another Brazilian study[12] developed with 56 nurses revealed that most of these professionals had knowledge about sexuality in the elderly, but still maintained conservative behaviors on the subject. In addition, 75% of the participants did not perform group health education on sexuality with the elderly.[12]

However, it is worth noting that not only nurses who are part of the health team should explore sexuality among the elderly. The difficulties of bonding to talk about the subject are also present in other professional categories. For example, an international study[28] revealed a dichotomy between medical professionals and patients in which both wait for the other to initiate the dialogue about sexual matters.

Nevertheless, another study[7] of a systematic review on sexuality and sexual health of the elderly revealed that, although they are willing to acquire knowledge on the subject and strategies to prevent sexually transmitted infections, they feel that the biggest barrier is the inaccessibility of health professionals regarding sexual matters.[7] Moreover, other national scientific investigations[1,27] identified a feeling of shame among the elderly when discussing sexuality, and even the professionals themselves have prejudices that prevent the advancement of care in the field of sexuality for this age group.[29]

One should consider that older people are more likely to seek health services to discuss sexuality when there is a personal connection between them and professionals, which conveys confidence and freedom to talk about the topic. Therefore, building strong professional-user bonds is the best way to overcome these challenges[7], thus contributing to the promotion of their QoL, since the results of this study showed a positive correlation between sexuality and QL in this age group.

A study[9] developed with 213 Portuguese participants, with a 73.4 year-old mean age, revealed that an active sex life is associated with better QoL in both genders. Another study[10] developed with 203 Israeli Jews, with a mean age of 69.59 years, revealed that sexual activity was a predictor variable of QoL, exerting a mediating effect between attitudes towards the subject and the QoL of those investigated. Likewise, other studies developed with elderly people have identified a statistically significant association between being sexually active and having more pleasure with life,[30] and the decline in sexual activities was associated with depressive symptoms,[31-32] anxiety,[31] a greater chance of deterioration in the self-assessment of health,[33] besides worse life satisfaction and worse QoL.[31-32]

It is observed that the state of the art shows studies focused on the sexual act itself, contributing to restricted reflections on the influence of sexuality in its expanded meaning and as an individual identity factor on the QoL of the elderly population. However, the presentation of these studies does not weaken the discussion raised here, since the sexual act is also an integral component of sexuality.

However, it is important to clarify the importance of developing more studies that consider the sexuality of the elderly in its expanded context, since, in addition to being associated with QoL, it is encouraged, including among the elderly in palliative care[34] and living with some type of dementia[35] due to its bio-psychosocial benefits. On the other hand, a better understanding of sexuality among the elderly may contribute to the improvement of education, research, policies, and assistance to this growing public.[36]

CONCLUSION AND IMPLICATIONS FOR PRACTICE

It was found that general sexuality was strongly associated with the following bio-socio-demographic variables: marital status; religion; not having children; sexual orientation and receiving guidance on sexuality from health professionals. In addition, all dimensions of sexuality were positively associated with the QoL of the elderly people investigated in such a way that expressions in sexuality were associated with increased QoL of this age group. Therefore, it becomes unquestionable the need to address it with the elderly in primary care, stimulating their experiences, if they so wish, breaking prejudices and promoting quality to the additional years of life.

Due to the non-probabilistic design, the results of this study cannot be generalized. Moreover, due to the web survey characteristic, the participation in this study may have been limited to elderly people with lower social vulnerability, since most participants have a high level of education, a reality that does not represent most Brazilian elderly people. Therefore, other researchers should be cautious when comparing the results presented here with those of other populations or even with elderly people who have a divergent socio-demographic profile.

However, due to the new age profile that occurs worldwide, with a consequent increase in the number of elderly people, the urgent need to implement non-pharmacological strategic actions that add better QoL to the elderly becomes imperative, and the stimulation of sexuality can be one of these actions. Nonetheless, it is important to emphasize that the approach to sexuality should not occur in a prescriptive manner, but that there must be the desire of the elderly to know and experience it with knowledge and awareness. Health professionals should then

promote orientations and stimulate their experiences, since the results found here confirm that sexuality can be a factor to add better quality to the additional years of this age group.

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