Effects of Sexuality on Family Functionality and Quality of Life of Elderly People: A Cross-Sectional Study

Research Article

Open access

Efectos de la Sexualidad Sobre la Funcionalidad Familiar y la Calidad de Vida de las Personas Mayores: Un Estudio Transversal

Efeitos da Sexualidade na Funcionalidade Familiar e na Qualidade de Vida de Pessoas Idosas: Estudo Transversal

How to cite this article:
Souza Júnior, Edison Vitório de; Silva Filho, Benedito Fernandes da; Cruz, Diego Pires; Rosa, Randson Souza; Cairo, Gabriel Magalhães; Silva, Cristiane dos Santos; Siqueira, Lais Reis; Sawada, Namie Okino. Efeitos da Sexualidade na Funcionalidade Familiar e na Qualidade de Vida de Pessoas Idosas: Estudo Transversal. Revista Cuidarte. 2022;13(1):e2296.
http://dx.doi.org/10.15649/cuidarte.2296

Highlights

- The literature already points out that the family is often the main obstacle that prevents the old people from experiencing their sexuality at the national and international level.
- Receiving guidance on sexuality by health professionals was statistically associated with better experience of affective relationships and better QoL.
- The more the elderly deepen in their affective relationships regarding their sexuality, the better the family functionality, demonstrating a positive effect between these two variables.
- The experiences of sexuality benefit the QoL of this age group and, therefore, it is necessary that health professionals conduct health consultations holistically.

Revista Cuidarte
Rev Cuid. Ene - Abril 2022; 13(1): e2296
http://dx.doi.org/10.15649/cuidarte.2296
E-ISSN: 2346-3414

Edison Vitório de Souza Júnior[1]
Benedito Fernandes da Silva Filho[2]
Diego Pires Cruz[3]
Randson Souza Rosa[4]
Gabriel Magalhães Cairo[5]
Cristiane dos Santos Silva[6]
Lais Reis Siqueira[7]
Namie Okino Sawada[8]

1 Universidade de São Paulo (EERP/USP), Ribeirão Preto, São Paulo, Brasil. Email: edison.vitorio@usp.br Autor de correspondência
2 Universidade Estadual do Sudoeste da Bahia (UESB), Jequié, Bahia, Brasil. Email: ditofilho13@gmail.com
3 Universidade Estadual do Sudoeste da Bahia (UESB), Jequié, Bahia, Brasil. Email: diego_pcruz@hotmail.com
4 Universidade Estadual do Sudoeste da Bahia (UESB), Jequié, Bahia, Brasil. Email: enfrandson@gmail.com
5 Universidade Estadual do Sudoeste da Bahia (UESB), Jequié, Bahia, Brasil. Email: leirbag_@hotmail.com
6 Universidade Norte do Paraná (UNOPAR), Jequié, Bahia, Brasil. Email: cristianeimic@gmail.com
7 Universidade Federal de Alfenas (UNIFAL), Alfenas, Minas Gerais, Brasil. Email: laisreis.siqueira@gmail.com
8 Universidade Federal de Alfenas (UNIFAL), Alfenas, Minas Gerais, Brasil. Email: namie.sawada@unifal-mg.edu.br

Abstract

Introduction: the literature already points out that the family is often the main obstacle that prevents elderly people from experiencing their sexuality. However, there are no studies that identify the effects of sexuality on family functioning. **Objective:** analyzing the effects of sexuality on family functionality and on the quality of life of the elderly. **Materials and methods**: a cross-sectional study conducted with 692 elderly people between the months of July and October 2020 by self-administered instruments. Data were analyzed using the Kruskal-Wallis test, Pearson correlation and structural equation modeling. **Results:** the elderly with some degree of family dysfunction had a worse experience in sexuality and a worse quality of life. The affective relationships domain of sexuality was the only one to exert a positive effect, from moderate to strong magnitude on family functionality (PC=0.472 [CI95%=0.301-0.642] p<0.001). Quality of life, in turn, had a positive effect, from weak to moderate magnitude, in all domains of sexuality: sexual act (PC=0.339 [CI95%=0.190-0.488] p<0.001); affective relationships (PC=0.117 [CI95%= -0.041-0.275] p<0.001) and physical and social adversities (PC=0.150 [CI95%=0.074-0.226] p<0.001). **Conclusion:** sexuality among the elderly can be explored more frequently in health services, as it exerted positive effects on family functionality and quality of life in this population. It is expected that with the results of this study, there is an appreciation of the theme in care services and that sexuality in old age is explored with the elderly, especially in primary health care.

Keywords: Public Health; Health of the Elderly; Comprehensive Health Care; Sexuality; Family Relations.

Received: June 23th, 2021
Accepted: November 19th, 2021
Published: March 30th 2022

*Correspondence
Edison Vitório de Souza Júnior
E-mail: edison.vitorio@usp.br

Efectos de la Sexualidad Sobre la Funcionalidad Familiar y la Calidad de Vida de las Personas Mayores: Un Estudio Transversal

Resumen

Introducción: la literatura ya señala que la familia es muchas veces el principal obstáculo que impide que las personas mayores experimenten su sexualidad. Sin embargo, hasta donde sabemos, no existen estudios que identifiquen los efectos de la sexualidad en el funcionamiento familiar. **Objetivo:** analizar los efectos de la sexualidad sobre la funcionalidad familiar y la calidad de vida de las personas mayores. **Materiales y métodos:** un estudio transversal realizado con 692 adultos mayores entre los meses de julio y octubre de 2020 utilizando instrumentos autoadministrados. Los datos se analizaron mediante la prueba de *Kruskal-Wallis*, la correlación de *Pearson* y el modelado de ecuaciones estructurales. **Resultados:** los ancianos con algún grado de disfunción familiar tuvieron peor experiencia en sexualidad y peor calidad de vida. El dominio de las relaciones afectivas de la sexualidad fue el único que ejerció un efecto positivo, de moderada a fuerte magnitud acerca de la funcionalidad familiar (CP = 0,472 [IC95% = 0,301-0,642] p <0,001). La calidad de vida, a su vez, tuvo un efecto positivo, de débil a moderada magnitud, en todos los dominios de la sexualidad: acto sexual (CP = 0,339 [IC95% = 0,190-0,488] p <0,001); relaciones afectivas (CP = 0,117 [IC95% = -0,041-0,275] p <0,001) y adversidades físicas y sociales (CP = 0,150 [IC95% = 0,074-0,226] p <0,001). **Conclusión:** la sexualidad entre los adultos mayores puede ser explorada con mayor frecuencia en los servicios de salud, ya que ejerció efectos positivos acerca de la funcionalidad familiar y la calidad de vida en esta población. Se espera que, con los resultados de este estudio, se aprecie la temática en los servicios de atención y que se explore la sexualidad en la vejez con los ancianos, especialmente en la atención primaria de salud

Palabras-clave: Salud Pública; Salud del Anciano; Atención Integral de Salud; Sexualidad; Relaciones Familiares.

Efeitos da Sexualidade na Funcionalidade Familiar e na Qualidade de Vida de Pessoas Idosas: Estudo Transversal

Resumo

Introdução: a literatura já aponta que a família, muitas vezes, é o principal obstáculo que impede as pessoas idosas vivenciarem sua sexualidade. Porém, até onde sabemos, não existem estudos que identifiquem os efeitos da sexualidade na funcionalidade familiar. **Objetivo:** analisar os efeitos da sexualidade sobre a funcionalidade familiar e sobre a qualidade de vida pessoas idosas. **Materiais e métodos:** estudo seccional realizado com 692 pessoas idosas entre os meses de julho e outubro de 2020 por meio da utilização de instrumentos autoaplicáveis. Os dados foram analisados com o teste *de Kruskal-Wallis,* correlação de *Pearson* e modelagem de equações estruturais. **Resultados:** as pessoas idosas com algum grau de disfuncionalidade familiar apresentaram pior vivência na sexualidade e pior qualidade de vida. O domínio relações afetivas da sexualidade foi o único a exercer efeito de forma positiva, de moderada a forte magnitude com a funcionalidade familiar (CP=0,472 [IC95%=0,301-0,642] p<0,001). A qualidade de vida, por sua vez, sofreu efeito positivo, de fraca a moderada magnitude, de todos os domínios da sexualidade: ato sexual (CP=0,339 [IC95%=0,190-0,488] p<0,001); relações afetivas (CP=0,117 [IC95%= -0,041-0,275] p<0,001) e adversidades física e social (CP=0,150 [IC95%=0,074-0,226] p<0,001). **Conclusão:** a sexualidade entre as pessoas idosas pode ser explorada com maior frequência nos serviços de saúde, uma vez que exerceu efeitos positivos na funcionalidade familiar e na qualidade de vida dessa população. Espera-se que com os resultados deste estudo haja valorização da temática nos serviços assistenciais e que a sexualidade na velhice seja explorada com as pessoas idosas, especialmente na atenção primária à saúde.

Palavras-chave: Saúde Pública; Saúde do Idoso; Assistência Integral à Saúde; Sexualidade; Relações Familiares.

Introduction

It is estimated worldwide that the elderly population will double by 2050. In Brazil, according to epidemiological monitoring, the aging process is happening faster when compared to Europe at the beginning of the demographic transition. This process also has an influence on the family, since there are changes in the family constitution, such as the mutual aging of all members and other factors of imbalance and disharmony among its members[1].

According to the social evolution that has been happening in recent years, the concept of family has also undergone changes, which has made some components such as organizational, structural, cultural and religious emerge, making it difficult to understand. However, it is known that the family plays a key role in society and, especially, the elderly, noting the function related to affection, belonging, support and protection. It is a complex and unique institution in which existing interactions must be explored because the actions of only one member have the power to involve the whole group[2].

The functioning of a family is defined in which members manage routines and daily functions, communicate and emotionally relate to each other[3–5]. It is a complex phenomenon that specifies the structural and organizational characteristics of a family group and the interaction between its members[5]. In this perspective, there are functional (mature) and dysfunctional (immature) family systems[6].

The functional family system can respond to critical conflicts and events with a certain emotional balance; there is problem solving without harmonic destructuring and without overload between the limbs[6]. In general, the functional family is represented by the ability of members to fulfill and reconcile their functions in a clear and appropriate way to the identity and vocation of its members, regarding the dangers and opportunities that stand out in society[7]. In the dysfunctional family, there is prioritization of personal interests to the detriment of the group and there is no accountability of their roles within the system. Moreover, interpersonal relationships are superficial and intractable, there is rarely a problem-solving capacity of critical situations, members do not adapt according to situations and there is no readjustment of roles, when necessary, which causes disharmony in the family system[6].

Conviviality and family support are essential factors for the promotion of active aging. It is emphasized that the adaptation and coexistence of the elderly with their families have an influence on their development in general[1]. Nevertheless, aging is a challenge1 and innovative strategies of a natural nature are required that can be beneficial for the psychosocial health of the elderly. The healthy experience of sexuality is cited as an example. Sexuality is defined as a term that reflects the multidimensionality of individual expression regarding feelings, love, touch, intimacy, affection, companionship, embrace, affection, including the sexual act itself. It is observed that we cannot reduce sexuality to sex, since it is a broader construct characterized by feelings, thoughts and cognition[8–10].

The literature already points out that the family is often the main obstacle that prevents the old people from experiencing their sexuality at the national and international level. For example, according to Brazilian studies[11-12], the family contributes to the strengthening and reproduction of prejudices about sexuality in old age, culminating in the suppression of desires by the elderly

and submission to the socio-family system. Moreover, another study[13] developed with older people in Malaysia identified that the family ignores the reality that their support acts as a protective factor against the lack of intimacy in old age, especially in the sexual aspect.

Finally, a review study[14] developed by an Indian author revealed that the family begins to express stigmatizing attitudes towards its elderly members, so that their desires and/or desires in sexuality, especially sexuality, become impaired. Likewise, since 1999, Ribeiro[15] has stated that "as a family, children are generally the first to deny their parents' sexuality...".

It is noted through these surveys that there are several studies conducted that consider the relationship between the family and the sexuality of its elderly members. However, they all consider the family as an independent variable, identifying the impact of the family on experiences in sexuality. In our study, the independent variable is sexuality, because we want to investigate the effects of these experiences on family functionality, a relationship that is scarce in scientific circles therefore, the development of this research is justified.

Studies have shown that sexuality among the elderly constitutes a basic human need[16], making it essential for the maintenance of health[16], well-being[17] and quality of life (QoL)[18–20]. QoL involves the perception of the individual in relation to all aspects that are part of his life, that is, it reflects the harmony of achievements in various dimensions of his routine such as family, spirituality, leisure, sexual activity, work, among others[21]. It is a subjective and multidimensional term considered as a health indicator whose potentialities strengthen and stimulate care actions for its promotion[22-23].

The World Health Organization (WHO) defines QoL as "the individual's perception of their position in life, in the context of the culture and value systems in which they live and in relation to their goals, expectations, standards and concerns"[24]. It is emphasized that this reference will be adopted in this study to support the discussion about QoL. Our hypothesis is that the best experience of sexuality is associated with a functional family system and a better perception of QoL among the elderly, besides that sexuality has a strong and positive effect on family functionality and QoL of this population. If statistical significance is confirmed, this study may serve as a basis for us to begin to adopt new strategies for promoting and protecting the health of the elderly with a focus, especially on sexuality. Therefore, the aim of this study was to analyze the effects of sexuality on family functionality and on the quality of life of the elderly.

Materials and Methods

This is an analytical, descriptive, observational and cross-sectional study conducted according to the recommendations of the Strengthening the Reporting of Observational Studies in Epidemiology (STROBE) checklist. The study was developed online through the Facebook Social Network between July and October 2020.

The sample was calculated considering a sampling error of 5%, confidence level of 95%, conservative proportion of 50% and adjustment for infinite population, resulting in a minimum sample of 385 participants. However, due to the possibility of losses and insufficient completion of the questionnaires, more than 70% (n=307) were added to the calculation, which resulted in a final sample of 692 participants. According to Facebook's estimates during the collection period, there were 3,200,000 (three million and two hundred thousand) eligible for the study.

The following inclusion criteria were considered: participants aged 60 or older; of both sexes; married, in a stable union or with a fixed partner; community residents from anywhere in Brazil; with internet access and with active account on the Facebook Social Network. All hospitalized elderly, residents of long-term or similar institutions were excluded from the study. Because users are active in social networks and have skills with technological resources that guarantee access to these networks (mobile, laptop, computer and/or tablet), the application of instruments that assess cognitive status was dispensed with.

The researchers created a Facebook page in which an invitation to participate was published that contained information about the institution of bonding, contact of the responsible researchers, inclusion criteria and a hyperlink of direct access to the questionnaire, configuring itself as a sampling technique of the consecutive non-probabilistic type.

The questionnaire was elaborated with the Google-Forms tool and organized in four surveys: biosociodemographic, sexuality, family functionality and QoL. Only instruments with 100% completion were considered eligible for the analysis. In addition, it is emphasized that in this study all participants answered all the questions requested.

Before accessing the questionnaire, the participant was directed to an exclusive page for the Reading of the Free and Informed Consent Form (FICF). At the end of the reading, the participants clicked on the option "I accept to participate in the study" available in the informed footer of the FICF. This process was mandatory and only those who accepted participation had access to the instruments.

The biosociodemographic survey was elaborated by the researchers and contained questions that allowed to trace the profile of participants such as age group, gender, marital status, religion, ethnicity, schooling, number of children, sexual orientation, orientation on sexuality and geographic location.

The sexuality survey contained the questions of the Scale of Affective and Sexual Experiences of the Elderly (EVASI) constructed and validated in Brazil in 2012[25]. The EVASI is a psychometric scale composed of 38 items and three dimensions: sexual act, affective relationships and physical and social adversities, whose answers are Likert type, ranging from 1 (never) to 5 points (always)[25]. There is no cut-off point for this instrument and its analysis is whereby, the higher the score, the better the elderly are experiencing sexuality. The EVASI Scale has satisfactory reliability, reaching a Cronbach's alpha of 0.96 for the sexual act; 0.96 for affective relationships and 0.71 for physical and social adversities[25].

The family functionality survey was elaborated through the family APGAR instrument validated for the Brazilian population in 2001[26]. The APGAR acronym refers to Adaptation, Partnership, Growth, Affection and Resolve. It is an instrument composed of five questions capable of assessing the satisfaction of participants with the family support received. Questions are scored at 2 points (always), 1 point (sometimes) and 0 point (never). The result can be interpreted as follows: functional family (7 to 10 points), mild dysfunction (4 to 6 points) and severe dysfunction (0 to 3 points)27. The family APGAR instrument demonstrated good internal consistency using Cronbach's alpha in the value of 0.80[28].

The QoL survey was structured with the World Health Organization Quality of Life - Old (WHOQOL-Old) instrument, validated and adapted for the Brazilian population. The WHOQOL-Old is specific to assess the QoL of the elderly population, it is composed of 24 items that are distributed in six facets: sensory abilities; autonomy; past, present and future activities; social participation; death and death and intimacy[29]. This instrument has no cutoff point, and the results are interpreted on an upward scale in which the highest score indicates better QoL perception and, consequently, lower scores indicate worse QoL. Responses can achieve a total score of 24 to 100 points and are organized on a Likert scale (1 to 5)[30]. The WHOQOL-Old also demonstrated satisfactory internal consistency through Cronbach's coefficients ranging from 0.71 to 0.88[29].

It is noteworthy that, before the participants began to respond to the surveys, the e-mail was required in a mandatory way to avoid multiple completion by the same participant and, thus, reduce the chances of vice scans. Nevertheless, the authors used the posting boosting strategy monthly. This is an option available on Facebook that allowed the expansion of the dissemination of the invitation to the entire Brazilian territory, providing an increase in likes, shares and engagements in the post. Thus, the range of the sample size determined was achieved.

After verifying the nonnormality of our data[31] by the *Kolmogorov-Smirnov* test ($p<0.05$), the nonparametric statistic represented by the Kruskal-Wallis test was used, because there were only variables with more than two categories. The significance level adopted was 95% ($p<0.05$) for all analyses in the IBM SPSS® statistical software version 25. The qualitative variables were presented by means of absolute and relative frequencies and quantitative variables were presented by means of median and interquartile interval (IQI).

Nevertheless, the correlation matrix was evaluated so that one could know the paths (relationships) to be traced in the second stage of the analysis, the structural equation modeling (SEM), performed by the statistical software STATA version 15. The model was then constructed, composed of two latent variables: quality of life, formed by statistically significant domains and family functionality, consisting of the domains of the family APGAR; and by three observable variables: dimensions of EVASI. The results were presented together with their standardized coefficients (PC) and 95% confidence intervals (95% CI), being interpreted according to Kline (2012)[32], where a PC of 0.10 indicates a small effect of 0.30 an average effect and > 0.50 a strong effect. It is emphasized that, although the study is cross-sectional, the analysis through SEM allows the detection of effects from one variable under the other.

The following model adjustment indexes were considered: the Comparative Fit Index (CFI) and the Tucker–Lewis index (TLI), with values closer to 1 indicating better fit[33]; standardized root mean square residual (SRMR), with a value lower than 0.08 considered a good fit and less than 0.10 acceptable[32,34]; Root-Mean-Square Error of Approximation (RMSEA), with its 90% confidence interval (CI90%), whose interpreted values are: (0 = perfect fit); (<0.05 = good fit); (0.05–0.08 = moderate adjustment); (0.08–0.10 = mediocre fit) and (> 0.10 = inadequate adjustment)[35]; and the Adjusted Goodness-of-Fit Index (AGFI) that varies between 0 and 1 and it is generally accepted that values of 0.90 or higher indicate well-adjusted models[36].

Considering the ethical aspects of Resolution 466/2012 and 510/2016 of the National Health Council, this study was approved by the Research Ethics Committee of the Ribeirão Preto

School of Nursing of the University of São Paulo in 2020 under Opinion N 4,319,644. In addition, participants received the second way of the Informed Consent form by email, after reading and knowing the risks, benefits and relevance of the study.

Results

Among the participants, there was a predominance of elderly males (59.0%; n=408), aged between 60 and 64 years (48.0%; n=332), Catholics (54.3%; n=376), self-declared white (67,5%; n=467), with higher education (39.7%; n=275), married (63.6%; n=440), living with their spouse for a time longer than 20 years (62.4%; n=432), heterosexual (87.0%; n=602), living in the southeast (44.8%; n=310), who do not live with their children (67.2%; n=465) and who never received guidance on sexuality by health professionals (78.8%; n=545). Moreover, it was observed that most of the elderly live in a functional family system (60.5%; n=419), followed by mild dysfunction (30.5%; n=211) and severe dysfunction (9.0%; n=62).

Table 1 shows that there was a statistically significant difference between the Catholic and Spiritist elderly in two dimensions of sexuality: sexual act (p=0.023) and affective relationships (p=0.020), in addition to QoL (p=0.006), thus indicating that the Spiritist elderly better experience their sexuality and have better QoL when compared to Catholics. Another important finding was that the elderly with a fixed partner better experience their sexuality in all dimensions evaluated when compared to the elderly married and in stable union, verified by Bonferroni's post-hoc.

The time of coexistence was another variable that was statistically associated with all dimensions of sexuality, in addition to family functionality and QoL. However, Bonferroni's post-hoc did not show significance between these last two variables analyzed. The results indicate that the elderly living with their spouses for a period of less than five years differ statistically from those who have more than 20 years of coexistence in the dimensions of sexual act (p<0.001) and affective relationships (p<0.001).

Living with children differed statistically from the elderly who do not have children. This difference can be observed in the dimensions sexual act (p=0.004) and affective relationships (p=0.014), in which it is noted that the elderly who do not have children experience such dimensions better. Moreover, the elderly who have children, but do not live together, have better family functionality when compared to the elderly who do not have children (p=0.032).

Receiving guidance on sexuality by health professionals was statistically associated with better experience of affective relationships (p=0.0380 and better QoL (p=0.001). Finally, about sexual orientation, gay elderly have better experience in sexual intercourse (p=0.049), but statistical significance did not remain after Bonferroni's post-hoc application. Moreover, the heterosexual elderly differed statistically in affective relationships (p=0.002) and QoL (p=0.028), when compared to the elderly with other sexual orientations.

Table 1. Analysis of biosociodemographic variables with sexuality, family functionality and QoL of the elderly. Ribeirão Preto, São Paulo, Brazil, 2020 (n=692)

Variables	Sexuality			Family functionality	QoL general
	sexual Act	Affective relationships	Physical and social adversities		
	Medium posts				
Religion					
Catholic	327.82†	326.99†	334.39	351.79	332.02†
Protestant	365.44	360.44	336.99	328.83	333.36‡
Spiritist	405.69†	409.25†	386.86	402.19†	426.69†
African origins	414.81	394.96	315.00	317.69	309.04
Other	340.38	358.04	337.26	321.65	348.80
No religion	343.71	338.04	394.65	299.08†	352.26‡
P-value	0.023*	0.020*	0.099	0.027*	0.006*
Marital status					
Married	304.76†,‡	312.22†,‡	330.78†	357.83	333.30
Stable union	393.05†	390.07†	362.26	342.55	371.57
Stable partner	444.49‡	421.88‡	385.09†	311.62	367.62
P-value	<0.001*	<0.001*	0.015*	0.063	0.071
Time of coexistence					
≤ 5 Years	451.52†	432.33†	382.27	318.87	376.88
Between 6 and 10	413.44‡	399.31‡	409.68†	388.35	399.31
Between 11 and 15	340.24	339.77	312.19	280.38	354.41
Between 16 and 20	359.45	340.52	335.52	296.20	336.49
> 20 years	308.18†,‡	317.29†,‡	332.13†	358.94	331.14
P-value	<0.001*	<0.001*	0.009*	0.007*	0.046*
Lives with children					
Yes	347.87†	334.91†	337.77	334.19	333.37
No	337.75‡	344.07‡	346.85	357.12†	349.66
Does not have any children	452.33†,‡	439.32†,‡	388.36	274.72†	375.32
Valor p	0.004*	0.014*	0.373	0.032*	0.430
Has had guidance on sexuality					
Yes	364.88	376.77	355.42	393.30	364.51
No	341.54	338.33	344.09	333.88	341.64
P-value	0.209	0.038*	0.539	0.218	0.001*
Sexual orientation					
Heterosexual	352.59	356.20†	351.92	352.70	354.67†
Gay	400.54	373.92	385.38	268.71	354.42
Bisexual	255.00	210.54	351.63	284.46	292.88
Other	297.79	277.75†	289.02	315.37	280.32†
P-value	0.049*	0.002*	0.092	0.151	0.028*

* Statistical significance by *Kruskal-Wallis test* (p<0.05)
†, ‡ Differences between groups by *Bonferroni post-hoc*

According to Table 2, it is observed that the elderly with some degree of family dysfunction (mild or severe) presented the lowest medians in all dimensions of sexuality and QoL, when compared with the elderly belonging to the functional family. About the general evaluation of sexuality, it is noted that there is a better experience of affective relationships [75.00 (65.00-81.00)]. For QoL, sensory abilities presented the highest median [81.25 (68.75-93.75)], indicating that the elderly have better QoL in this facet.

Table 2. Sexuality and QoL of the elderly according to the classification of family functionality. Ribeirão Preto, São Paulo, Brazil, 2020 (n=692)

Variables	Family functionality			p-value	Evaluation General Median (IQI)
	Dysfunction Severe	Dysfunction Lightweight	Functional		
	Median (IQI)	Median (IQI)	Median (IQI)		
Sexuality					
AS	63.00 (50.75-78.00)	72.00 (60.00-80.00)	76.00 (68.00-81.00)	<0.001*	74.00 (64.00-80.00)
RA	62.00 (44.75-78.25)	72.00 (59.00-80.00)	77.00 (69.00-82.00)	<0.001*	75.00 (65.00-81.00)
AFS	10.00 (7.00-12.00)	10.00 (9.00-12.00)	11.00 (9.00-13.00)	<0.001*	11.00 (9.00-13.00)
Quality of life					
HS	78.12 (67.18-93.75)	75.00 (62.50-93.75)	81.25 (68.75-93.75)	<0.008*	81.25 (68.75-93.75)
AUT	50.00 (37.50-68.75)	62.50 (50.00-75.00)	75.00 (56.25-81.25)	<0.001*	68.75 (56.25-75.00)
APPF	50.00 (37.50-64.06)	62.50 (50.00-75.00)	75.00 (62.50-81.25)	<0.001*	68.75 (56.25-81.25)
PS	50.00 (35.93-68.75)	62.50 (50.00-75.00)	75.00 (62.50-81.25)	0.001*	68.75 (56.25-75.00)
MM	68.75 (43.75-93.75)	68.75 (43.75-87.50)	75.00 (50.00-87.50)	0.025*	75.00 (50.00-87.50)
INT	53.12 (31.25-70.31)	68.75 (56.25-75.00)	75.00 (68.75-87.50)	<0.001*	75.00 (62.50-81.25)
QVG	57.81 (46.87-68.75)	64.58 (56.25-72.91)	75.91 (64.58-81.25)	<0.001*	68.75 (59.63-79.16)

*Statistical significance for the *Kruskal-Wallis test* (p<0.05)
AS: sexual act; AR: affective relationships; AFS: physical and social adversities; HS: sensory abilities; AUT: autonomy; APPF: past, present and future activities; PS: social participation; MM: death and dying; INT: intimacy; QVG: General QoL

The correlations between QoL, family functionality and sexuality are positive and significant in their entirety, except for the relationship between physical and social adversities and family functionality and intimacy, as observed in Table 3.

Table 3. Pearson's correlation coefficient (r) among sexuality, QoL and family functionality. Ribeirão Preto, São Paulo, Brazil, 2020 (n=692)

	Sexualidade					
	Ato sexual		Relações afetivas		Adversidades física e social	
	r	p	r	p	r	p
DOM 2	0,411	<0,001	0,424	<0,001	0,102	<0,001
DOM 3	0,378	<0,001	0,384	<0,001	0,166	<0,001
DOM 4	0,317	<0,001	0,297	<0,001	0,151	<0,001
DOM 6	0,582	<0,001	0,631	<0,001	0,149	>0,05
APGAR	0,334	<0,001	0,409	<0,001	0,06	>0,05

DOM 2 - Autonomy; DOM 3 - Past, present and future activities; DOM 4 - Social Participation; DOM 6 - Intimacy

The analysis of the measurement components of the model allowed us to verify that, for the latent QoL, only the domains autonomy (DOM 2), past, present and future activities (DOM 3) and social participation (DOM 4), presented satisfactory factor load to be maintained in the model. For family functionality, only the observable APGAR_1 and APGAR_4. The APGAR_1 refers to how satisfied the elderly are in being able to turn to their families for help when something bothers or worries them. The APGAR_4 refers to how satisfied the elderly are with the way in which the family shows affection and reacts to their emotions such as hurt, love, and anger. These variables, together with the three dimensions of sexuality (EVASI), comprised the measurement model proposed here, as shown in Figure 1. Note the adequacy of all RMSEA adjustment indices [0.045 (95%CI 0.02-0.06)], CFI (0.987) and SRMR (0.02).

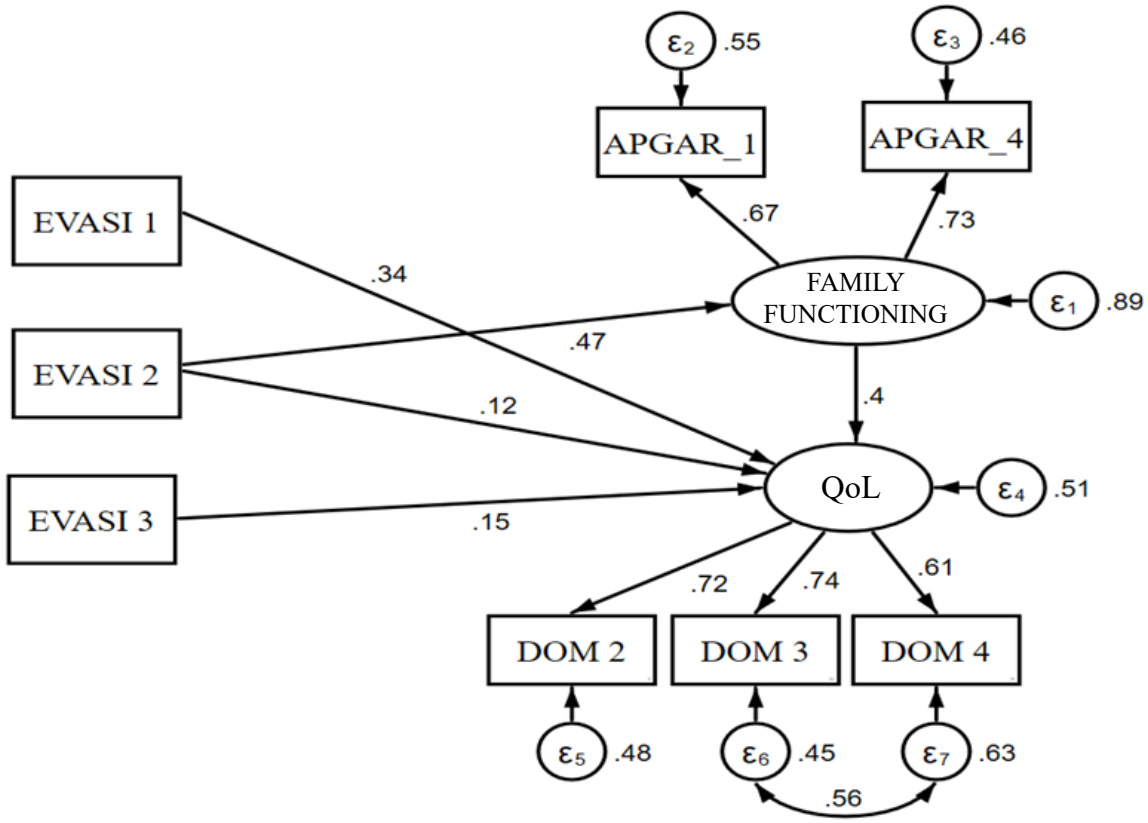

Figure 1. Structural equation model for sexuality, quality of life and family functionality. Ribeirão Preto, São Paulo, Brazil, 2020

As for the effects, table 4 shows that the domain "affective relationships" (EVASI 2) was the only one to be positively related, from moderate to strong with family functionality. QoL, in turn, has suffered a positive effect, from weak to moderate, from all areas of sexuality, as well as to family functionality.

Table 4. Standardized coefficients (PC) of structural equation modeling among Family Functionality, Sexuality and QoL. Ribeirão Preto, São Paulo, Brazil, 2020 (n=692)

	PC	CI 95%	p
Measurement model			
APGAR 1 ← Functionality	0.669	0.582 – 0.754	<0.001
APGAR 4 ← Functionality	0.715	0.644 – 0.822	<0.001
DOM 2 ← QoL	0.722	0.663 – 0.781	<0.001
DOM 3 ← QoL	0.742	0.682 – 0.801	<0.001
DOM 4 ← QoL	0.611	0.543 – 0.680	<0.001
Structural Model			
Functionality ← EVASI 2	0.472	0.301 – 0.642	<0.001
QoL ← Functionality	0.403	0.306 – 0.500	<0.001
QoL ← EVASI 1	0.339	0.190 – 0.488	<0.001
QoL ← EVASI 2	0.117	-0.041 – 0.275	<0.001
QoL ← EVASI 3	0.150	0.074 – 0.226	<0.001

DOM 2 - Autonomy; DOM 3 - Past, present and future activities; DOM 4 - Social Participation; DOM 6 - Intimacy; EVASI 1 - Sexual act; EVASI 2 - Affective Relations; EVASI 3 - Physical and social adversities.

Discussion

Most of the participants in this study live in a functional family system (60.5%; n=419), followed by mild dysfunction (30.5%; n=211) and severe dysfunction (9.0%; n=62), corroborating other Brazilian studies conducted with the elderly1 and with some caregivers of elderly older than 60 years[37] who also identified this same proportionality regarding family functionality assessed with the same instrument.

It was also observed that the Spirits elderly better experience their sexuality in the dimensions of sexual act and in affective relationships, besides having better QoL when compared to the Catholic elderly. These results can be justified, in part, by conservatism in relation to sexuality prevailing in Catholicism. It is noteworthy that religion is considered one of the main barriers that hinder the experiences of sexuality, especially in old age, in which the sexual act, for example, is considered impure and unworthy[38]. Corroborating this inference, a Brazilian study[39] developed with 241 elderly people in the State of Pernambuco revealed that those adherents to Catholicism and Protestantism demonstrated more conservative attitudes regarding sexuality in old age.

Another important finding was that the elderly with a fixed partner better experience their sexuality in all the dimensions evaluated. In this study, the elderly with a steady partner are those who are not married and are not in a stable union but maintain intimate relationships with a specific person. In this sense, it was expected that married elderly people would have the best scores in the evaluation of sexuality, because marriage is idealized, especially in Brazil, as in a space in which there is greater freedom of intimate expression[40]. This freedom is not observed in the elderly who are not within marriage, because the social burden of prejudices that already affect the elderly and, the inhibit of any expression in sexuality[41], is further strengthened when the elderly are not inserted in the wedding space.

The time that the elderly live with the spouses also presented statistically significant difference. The elderly who live for a period of less than five years have better experience in the dimensions

of sexual act and affective relationships when compared to the elderly who have more than 20 years of coexistence. This finding can be explained by the long time that the spouses remain together and may evolve to a certain state of complier resulting from the routine and monotony developed in daily life[42], a fact that is not observed, for example, among individuals with little time living with their partners.

It was found in the present study that the elderly who do not have children better experience sexual intercourse and affective relationships. In a way, this result corroborates a cross-sectional investigation[43] conducted with 200 Elderly Brazilians from the State of Pará, in which there were reports that the family is an impairment for the experiences of sexuality in the elderly. Another Brazilian study[11] with a qualitative approach conducted with older women in the state of Paraná identified that, among others, family oppression makes it difficult for participants to fully experience sexuality. These studies support the results found in the present investigation that the absence of children corroborates so that they can better express their experiences in sexuality.

Another finding of extreme relevance for health care practices is the fact that the elderly who received guidance on sexuality by health professionals showed better experience in affective relationships and better QoL. However, although the benefits of sexuality for health, well-being and QoL[44] are scientifically recognized, there are obstacles that need to be overcome, especially in the professional-patient relationship.

This is because some studies reveal that, on the one hand, the elderly feel fear, fear and/or shame to ask the health professional about aspects of their sexuality[45-46] and, on the other hand, professionals do not question their patients about the theme, either due to lack of training and/or disability during professional training[47-48]. These evidences may even justify the high rate (78.8%) of elderly who never received guidance on sexuality by health professionals in the present study. Therefore, the elderly assumes, in a way, a position of disadvantage because they do not enjoy the pleasures and benefits that sexuality provides.
This high rate may be related to the detention of conservative attitudes resulting from disability in the training process in addition to the influence of moral and social values present. In this sense, a Brazilian study[48] developed with nurses from the Family Health Strategy identified that most of these professionals have knowledge about sexuality in old age but have conservative attitudes towards the theme. In addition, 94.6% of the professionals stated that they knew how to guide the old person on issues related to sexuality, however, 75% of them do not perform educational activities on the theme with this public[48]. Thus, the authors emphasize the imprescindibility of implementing permanent educational strategies focused on expanding the knowledge of professionals and, consequently, improving care practices[48].

This is because according to another Brazilian study[49] developed with 477 elderlies, it was observed that participants who have ever received guidance on sexuality by some health professional, better experienced their sexuality in both sexual and affective aspects, besides better facing social obstacles to their experience, which reinforces the evidence that empowering health professionals is the best strategy to be made. Also in this perspective, it is also necessary to reorient the processes of nursing education regarding the integrality of care to the health of the elderly, strengthening the articulation between theory and practice, especially with regard to sexuality in old age, that must dialogue with sociocultural aspects in order to achieve holistic,

resolutive care[48], and free of prejudices and judgments[50], after all, sexuality in old age is natural, pleasurable and healthy, thus generating well-being to those involved[38].

In this study, the model by structural equations indicated that the affective relationships dimension was the only one to be positively related, from moderate to strong to family functionality. This result indicates that the more the elderly deepen in their affective relationships regarding their sexuality, the better the family functionality, demonstrating a positive effect between these two variables.

However, the literature shows barriers between families that hinder the experiences of sexuality by the elderly. In this context, although the family takes a prominent role in encouraging and supporting old age, when it comes to sexuality, there is an intensification of prejudices that culminates in the ridicule and suppression of sexuality in the elderly[12]. As a result, the elderlies are exposed to stressors that can negatively influence their health, because the suppression of sexuality can accelerate the aging process and cause undesirable impacts on their health[51].

QoL, in turn, has suffered a positive effect, from weak to moderate, on all areas of sexuality. This means that the experiences of sexuality benefit the QoL of this age group and, therefore, it is necessary that health professionals, especially in primary care, conduct health consultations holistically, ensuring aspects of the elderly's sexuality.

Primary care is one of the gateways to health services and is characterized by longitudinality and coordination of care, with educational practices as one of the care technologies frequently adopted, either through individual groups or consultations[52]. Health education focused on sexuality provides social empowerment with important contributions to QoL and a positive view of sexuality in aging. There are currently several active methodologies that can be applied in primary care during educational practices in sexuality in old age. Such methodologies are known to overcome the traditional model that establishes a relationship of passivity to the individual, thus becoming a critical, reflective and participative technology that places students as central agents of their learner[52].

In this sense, a study[53] of action-educational research developed with elderly women identified that this approach was an important care tool, because it allowed to weaken the existing prejudices on the theme, promoted the health of the participants and evidenced new alternatives for care. In addition, the authors reinforce that this methodology has applicability in primary health care to provide emancipatory health care[53].

The literature ratifies the direct relationship that exists between sexuality and QoL[46], in addition to the relevant function over the years lived through new ways of obtaining pleasure, self-knowledge, self-esteem and well-being[38]. In the elderly themselves, the elderly themselves report that sexuality constitutes a fundamental aspect for their QoL[46]. Thus, health professionals should consider that the sexuality of the elderly should, among other things, promote better QoL and health, minimizing care neglects, which is part of the care of the elderly[54].
However, it is worth noting that the quantitative limitation of studies related to elderly sexuality is characterized as one of the main challenges for researchers and health professionals. There is a scarcity of studies that address sexuality in its holistic meaning, with investigations prevailing with a focus on sexual dysfunctions and physiological decline resulting from the aging process[55].

Study limitations

This study has some limitations that should be considered. First, the non-probabilistic design weakens the external validity of the results. Moreover, because data collection is online, consequently, there was a restricted selection of participants with higher socioeconomic status, which can be confirmed, for example, by the high prevalence of elderly with higher education, a reality infrequent among most Elderly Brazilians.

Conclusion

The present study allowed us to conclude that the dimension affective relations of sexuality was the only one to relate positively, from moderate to strong magnitude with family functionality. Quality of life, in turn, suffered a positive effect, of weak to moderate magnitude of all domains of sexuality. Therefore, it is observed that sexuality among the elderly can be explored more frequently in health services, since it exerted positive effects on family functionality and quality of life of this population. Thus, it is expected that with the results of this study, there will be appreciation of the theme in care services and that sexuality in old age will be explored with the elderly, especially in primary health care, in which nurses can invest in the creation of a specific agenda in the ESF, which contemplates the elderly being in all its dimensions of life in what is consistent with their sexuality.

Finally, we also suggest that sexuality among the elderly be discussed more deeply during professional health education to break with the link of prejudices that hinders dialogue on the theme between the professional and the patient. Thus, the professional will have greater confidence and skills capable of conducting the discussion about sexuality with their patients as a way of promoting and protecting health and QoL.
In this sense, we believe that education in the field of aging sustains the commitment to active old age and contributes to the disruption of prejudices and erroneous beliefs that reduce to old age to a terminal stage and unable to offer pleasure. We highlight, then, that education transversalizes the environments of training and professional performance and can be explored through several individual and/or group methodologies and that through it, we can build a more just and egalitarian society in several areas of social interest such as gender, sexuality, aging and population minorities.

Conflicts of interest: The authors declare that there are no conflicts of interest.
Financing: This work was conducted with the support of the Coordination of Higher Education Personnel - Brazil (CAPES) - Financing Code 001.

References

1. **Campos ACV, Rezende GP, Ferreira EF, Vargas AMD, Gonçalves LHT**. Family functioning of Brazilian elderly people living in community. *Acta Paul Enferm* 2017;30(4):358–67. https://doi.org/10.1590/1982-0194201700053
2. **Elias HC, Marzola TS, Molina NPFM, Assunção LM, Rodrigues LR, Tavares DMS**. Relation between family functionality and the household arrangements of the elderly. *Rev Bras Geriatr Gerontol* 2018;21(5):582–90. https://doi.org/10.1590/1981-22562018021.180081
3. **Walton K, Horton NJ, Rifas-Shiman SL, Field AE, Austin SB, Haycraft** E, et al. Exploring the Role of Family Functioning in the Association Between Frequency of Family Dinners and

Dietary Intake Among Adolescents and Young Adults. *JAMA Netw open* 2018;1(7):e185217. https://doi.org/10.1001/jamanetworkopen.2018.5217

4. **Warnick JL, Stromberg SE, Krietsch KM, Janicke DM**. Family functioning mediates the relationship between child behavior problems and parent feeding practices in youth with overweight or obesity. *Transl Behav Med* 2019;9(3):431–9. https://doi.org/10.1093/tbm/ibz050
5. **Haines J, Rifas-Shiman SL, Horton NJ, Kleinman K, Bauer KW, Davison KK**, et al. Family functioning and quality of parent-adolescent relationship: Cross-sectional associations with adolescent weight-related behaviors and weight status. *Int J Behav Nutr Phys Act* 2016;13:68. https://doi.org/10.1186/s12966-016-0393-7
6. **Santos AA, Pavarini SCI**. Funcionalidade familiar de idosos com alterações cognitivas em diferentes contextos de vulnerabilidade social. *Rev Eletr Enf* 2011;13(2):367. https://doi.org/10.5216/ree.v13i2.10170
7. **Moreira LT, Rollo AC, Torre R, Cruz MA**. Abordagem familiar: quando, como e porquê? Um caso prático. *Rev Port Med Geral* Fam. 2018;34(2):29–36. http://www.scielo.mec.pt/scielo.php?script=sci_arttext&pid=S2182-51732018000400007&lng=pt
8. **Maataoui SL, Hardwick JS, Lundquist TS**. Creating space for relationships. *Psychol Serv* 2017;14(3):347–51. http://dx.doi.org/10.1037/ser0000179
9. **Nóbrega TMA, Vasconcelos SC, Beserra PJF, Bittencourt GKGD, Nóbrega MML**. Impact of sexuality in the life of the elderly person: integrative review . *Int J Dev Res*. 2017;7(10):16124–32. https://www.journalijdr.com/impact-sexuality-life-elderly-person-integrative-review
10. **Lobaina EC, Cortés JTA, Hechavarría GÁP, González PF, Verdecia RR**. Salud sexual en ancianos de un consultorio médico de la familia. *MEDISAN*. 2017;21(7):858. http://scielo.sld.cu/scielo.php?script=sci_arttext&pid=S1029-30192017000700012&lng=es
11. **Souza M, Marcon SS, Maria S, Bueno V, Carreira L, Denardi V**, et al. Elderly widows' experience of sexuality and their perceptions regarding the family's opinion. *Saúde e Soc* 2015;24(3):936–44. https://doi.org/10.1590/S0104-12902015132060
12. **Gois AB, Santos RFL, Silva TPS, Aguiar VFF**. Percepção do homem idoso em relação a sua sexualidade. *Enferm foco*. 2017;8 (3):14–8. https://doi.org/10.21675/2357-707X.2017.v8.n3.1024
13. **Minhat HS, Mat Din H, Hamid TA, Hassan Nudin SS**. Sexual intimacy in later life: From the perspectives of older couples in Malaysia. *Geriatr Gerontol Int*. 2019;19:492–496. https://doi.org/10.1111/ggi.13648
14. **Dhingra I, Sousa A, Sonavane S**. Sexuality in older adults: Clinical and psychosocial dilemmas. *J Geriatr Ment Health*. 2016;3:131-9. https://doi.org/10.4103/2348-9995.195629
15. **Ribeiro, A.** Sexualidade na Terceira Idade. In: NETTO, Matheus Papaleo. Gerontologia. A velhice e o envelhecimento em visão globalizada. *São Paulo, Athenen*, 2002. https://pesquisa.bvsalud.org/portal/resource/pt/lil-342988
16. **Waite LJ, Iveniuk J, Laumann EO, McClintock MK**. Sexuality in Older Couples: Individual and Dyadic Characteristics. *Arch Sex Behav* 2017;46:605–18. https://doi.org/10.1007/s10508-015-0651-9
17. **Eymann A, Baquero F, Bellomo MM, Busaniche J, Usandivaras I, Catsicaris C, et al**. Before and after assessment of a sexuality workshop in high-school students. *Arch Argent Pediatr* 2019;117(5):477–84. http://dx.doi.org/10.5546/aap.2019.eng.e477
18. **Stoffelen JMT, Herps MA, Buntinx WHE, Schaafsma D, Kok G, Curfs LMG**. Sexuality and individual support plans for people with intellectual disabilities. *J Intellect Disabil Res* 2017;61(12):1117–29. https://doi.org/10.1111/jir.12428
19. **Even-Zohar A, Werner S**. Older Adults and Sexuality in Israel: Knowledge, Attitudes, Sexual Activity and Quality of Life . *J Aging Sci* 2019;7(3):209. https://www.longdom.org/abstract/older-adults-and-sexuality-in-israel-knowledge-attitudes-sexual-activity-and-quality-of-life-44266.html

20. **Vera SO, Sousa GN, Araújo SNM, Alencar DC, Silva MGP, Dantas LRO**. Sexuality and quality of life of the ostomy patient: reflections for nursing care. *ReonFacema*. 2017;3(4):788–93. https://www.facema.edu.br/ojs/index.php/ReOnFacema/article/view/278
21. **Anversa AB, Mantovi D, Antunes M, Codonhato R, Oliveira DV.** Quality of life and body image of women practicing strength training and gymnastics. *Psicol Saúde Doença* 2019;20(1):149–59. http://dx.doi.org/10.15309/19psd200112
22. **Almeida-Brasil CC, Silveira MR, Silva KR, Lima MG, Faria CDCM, Cardoso CL**, et al. Quality of life and associated characteristics: application of WHOQOL-BREF in the context of Primary Health Care. *Cienc Saúde Coletiva* 2017;22(5):1705–16. https://doi.org/10.1590/1413-81232017225.20362015
23. **Neves LAS, Castrighini CC, Reis RK, Canini SRMS, Gir E**. Social support and quality of life of people with tuberculosis/. *Enferm Glob* 2018;(50):11–20. http://dx.doi.org/10.6018/eglobal.17.2.276351
24. **The Whoqol Group.** The world health organization quality of life assessment (whoqol): position paper from the World Health Organization. *Soc Sci Med* 1995;41(10):1403-09. http://dx.doi.org/10.1016/0277-9536(95)00112-k
25. **Vieira KFL**. Sexualidade e qualidade de vida do idoso: desafios contemporâneos e repercussões psicossociais. [*João Pessoa]: Universidade Federal da Paraíba*; 2012. https://repositorio.ufpb.br/jspui/bitstream/tede/6908/1/arquivototal.pdf
26. **Duarte YAO, Cianciarullo TI**. Família: rede de suporte ou fator estressor. A ótica de idosos e cuidadores familiares. *[São Paulo]: Universidade de São Paulo*; 2002. https://pesquisa.bvsalud.org/portal/resource/pt/bde-17739
27. **Vera I, Lucchese R, Munari DB, Nakatani AYK.** Índex APGAR de Família na avaliação de relações familiares do idoso: revisão integrativa. *Rev Eletr Enf* 2014;16(1):199–210. https://doi.org/10.5216/ree.v16i1.22514
28. **Silva MJ, Victor JF, Mota FRN, Soares ES, Leite BMB, Oliveira** ET. Analysis of psychometric properties of family APGAR with elderly in northeast Brazil. *Esc Anna Nery* 2014;18(3):527-32. https://doi.org/10.5935/1414-8145.20140075
29. **Fleck MP, Chachamovich E, Trentini C**. Development and validation of the Portuguese version of the WHOQOL-OLD module. *Rev Saúde Pública* 2006;40(5):785-91. https://doi.org/10.1590/S0034-89102006000600007
30. **Scherrer Júnior G, Okuno MFP, Oliveira LM, Barbosa DA, Alonso AC, Fram DS**, et al. Quality of life of institutionalized aged with and without symptoms of depression. *Rev Bras Enferm* 2019;72(2):127–33. https://doi.org/10.1590/0034-7167-2018-0316
31. **Souza Júnior EV; Silva Filho BF; Cruz DP; Rosa RS; Cairo GM; Silva CS et al**. Sexualidad, funcionalidad familiar y calidad de vida de las personas mayores. 2021. Mendeley Data: V1. https://doi.org/10.17632/k3468ytrtn.1
32. **Kline RB**. Principles and Practice of Structural Equation Modeling. 3rd ed. New York: The Guilford Press; 2011.
33. **Wang J, Wang X**. Structural equation modeling : applications using Mplus. United Kingdom: John Wiley & Sons; 2012.
34. **Hu LT, Bentler PM**. Cutoff criteria for fit indexes in covariance structure analysis: Conventional criteria versus new alternatives. *Struct Equ Model A Multidiscip J* 1999;6(1):1–55. https://doi.org/10.1080/10705519909540118
35. **Browne MW, Cudeck R**. Alternative Ways of Assessing Model Fit. *Sociol Methods Res* 1992;21(2):230–58. https://doi.org/10.1177/0049124192021002005
36. **Hooper D, Coughlan J, Mullen M.** Structural Equation Modelling: Guidelines for Determining Model Fit. *Electron J Bus Res Methods* 2008;6(1):53–60. https://doi.org/10.21427/D7CF7R
37. **Santos AA, Pavarini SCI**. Family functionality regarding the elderly with cognitive impairments: The caretaker's perception. *Rev esc enferm USP* 2012;46(5):1141–7. http://dx.doi.org/10.1590/S0080-62342012000500015

38. **Barros TAF, Assunção ALA, Kabengele DC**. Sexualidade na terceira idade: sentimentos vivenciados e aspectos influenciadores. *Ciências Biológicas e Saúde Unit*. 2020;6(1):47–62. https://periodicos.set.edu.br/fitsbiosaude/article/view/6560
39. **Aguiar RB, Leal MCC, Marques APO.** Knowledge and attitudes about sexuality in the elderly with HIV. *Ciênc Saúde Coletiva* 2020;25(6):2051-62. http://dx.doi.org/10.1590/1413-81232020256.18432018
40. **Silva LA, Scorsolini-Comin F, Santos MA**. Casamentos de longa duração: Recursos pessoais como estratégias de manutenção do laço conjugal. *Psico-USF* 2017;22(2):323–35. https://doi.org/10.1590/1413-82712017220211
41. **Vieira KFL, Coutinho MPL, Saraiva ERA**. A Sexualidade Na Velhice: Representações Sociais De Idosos Frequentadores de Um Grupo de Convivência. *Psicol Ciênc Prof* 2016;36(1):196–209. https://doi.org/10.1590/1982-3703002392013
42. **Silva EP, Nogueira IS, Labegalini CMG, Carreira L, Baldissera VDA**. Perceptions of care among elderly couples. *Rev Bras Geriatr Gerontol* 2019;22(1):180136. https://doi.org/10.1590/1981-22562019022.180136
43. **Uchôa YS, Costa DCA, Silva Junior IAP, Silva S de TSE, Freitas WMTM, Soares SCS**. Sexuality through the eyes of the elderly. *Rev Bras Geriatr Gerontol* 2016;19(6):939–49. http://dx.doi.org/10.1590/1981-22562016019.150189
44. **Souza Júnior EV, Silva CS, Lapa PS, Trindade LES, Silva Filho BF, Sawada NO**. Influence of Sexuality on the Health of the Elderly in Process of Dementia: Integrative Review. *Aquichan* 2020; 20(1):e2016. https://doi.org/10.5294/aqui.2020.20.1.6
45. **Souza CL, Gomes VS, Silva RL, Silva ES, Alves JP, Santos NR,** et al. Aging, sexuality and nursing care: the elderly woman's look. Rev Bras Enferm. 2019;72(supl 2):78–85. https://doi.org/10.1590/0034-7167-2018-0015
46. **Rodrigues LR, Portilho P, Tieppo A, Chambo Filho A**. Analysis of the sexual behavior of elderly women treated at a gynecological outpatient clinic. *Rev Bras Geriatr Gerontol* 2018;21(6):724–30. http://dx.doi.org/10.1590/1981-22562018021.180090
47. **Cherpak GL, Santos FC**. Assessment of physicians' addressing sexuality in elderly patients with chronic pain. *Einstein (Sao Paulo)* 2016;14(2):178–84. https://doi.org/10.1590/S1679-45082016AO3556
48. **Evangelista AR, Moreira ACA, Freitas CASL, Val DR, Diniz JL, Azevedo SGV**. Sexuality in old age: Knowledge/attitude of nurses of family health strategy. *Rev esc enferm USP* 2019;53:e03482. http://dx.doi.org/10.1590/s1980-220x2018018103482
49. **Souza Júnior EV, Silva Filho BF, Barros VS, Souza ÁR, Cordeiro JRJ, Siqueira LR, et al.** Sexuality is associated with the quality of life of the elderly! *Rev Bras Enferm*. 2021;74(2):e20201272. https://doi.org/10.1590/0034-7167-2020-1272
50. **Gatti MC, Pinto MJC.** Velhice ativa: a vivência afetivo-sexual da pessoa idosa. *Vínculo* 2019;16(2):133–59. http://pepsic.bvsalud.org/scielo.php?script=sci_arttext&pid=S1806-24902019000200008
51. **Araújo SL, Zazula R**. Sexualidade na terceira idade e terapia comportamental: revisão integrativa. *RBCEH* 2015;12(2):172–82. http://dx.doi.org/10.5335/rbceh.v12i2.5054
52. **Maria de Paula V, Rodrigues LR**. Sexualidade de idosas e contribuições da enfermagem. *Enferm Bras* 2020;19(4);345-54. 54 https://doi.org/10.33233/eb.v19i4.4281
53. **Rodrigues, DMMR, Labegalini CMG, Higarashi IH, Heidemann ITSB, Baldissera VDA**. The dialogic educational pathway as a strategy of care with elderly women in sexuality. *Esc Anna Nery* 2018, 22(3):e20170388. https://doi.org/10.1590/2177-9465-EAN-2017-0388
54. **Dantas DV, Batista Filho RC, Dantas RAN, Nascimento JCP, Nunes HMA, Rodriguez GCB**, et al. Sexualidade e qualidade de vida na terceira idade. *Rev Bras Pesq Saúde*. 2017;19(4):140–8. https://periodicos.ufes.br/rbps/article/view/19814
55. **Leandro DS, Silva SOP, Lima CB**. Sexualidade como suporte à qualidade de vida do idoso . *Temas em Saúde*. 2016;16(4):277–94. http://temasemsaude.com/wp-content/uploads/2017/01/16418.pdf