

ORIGINAL ARTICLE

EFFECTS OF SEXUALITY ON COMMON MENTAL DISORDERS AND QUALITY OF LIFE IN ELDERLY PEOPLE

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ABSTRACT

Objective: to analyze the effects of sexuality on common mental disorders and quality of life in elderly people. Method: cross-sectional study conducted with 721 elderly people from all regions of Brazil who answered four instruments: bio-sociodemographic, EVASI, SRQ-20 and WHOQOL-Old between July and October 2020. Data were analyzed using Mann-Whitney and Structural Equation Modeling tests adopting a 95% confidence interval. Results: sexuality exerted a strong, positive effect on quality of life (SC=0.778 [95%CI=0.680-0.862] p<0.001), while on common mental disorders, the effect was strong and negative (SC=-0.481 [95%CI=-0.540 - -0.421] p<0.001). Conclusion: because a strong effect on the variables was identified, the clinical relevance of sexuality being worked on more frequently in health services was verified. Thus, society benefits with the insertion of a little explored theme and with the weakening of existing prejudices, including among the elderly themselves.

DESCRIPTORS: Public Health; Health of the Elderly; Mental Health; Sexuality; Quality of Life.

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INTRODUCTION

The elderly population is more vulnerable to the development of mental disorders due to several reasons. One example is the greater propensity of this public to experience feelings of mourning and decline in socioeconomic status, which, in turn, reflects in social isolation, psychological suffering, dependence, and loneliness¹. Among mental disorders, the Common Mental Disorders (CMD) stand out, characterized by a set of somatic, anxious, and depressive manifestations². It is revealed that early diagnosis is essential to avoid physical and psychological consequences to the individual and reduce the burden on health services².

Worldwide estimates indicate the existence of approximately 450 million people with some type of mental or neurobiological disorder, ranking fourth among the leading causes of disability. In Brazil, it is estimated that the prevalence of CMD in the adult population is 20%³. In the elderly living in Brazilian urban and rural areas, this prevalence has reached 55.8%⁴.

Therefore, it is not enough to witness and experience aging. Quality must be added during this process⁵, and the active aging proposal ratifies the goal of improving the quality of life (QoL) of the elderly. The term "active aging" was adopted in the late 90's and covers the elderly in both individual and collective contexts, besides allowing the individual to recognize his/her potential for promoting physical, mental, and social well-being throughout life⁶.

The concept of QoL most used in the scientific environment is from the World Health Organization (WHO), which defines it as "an individual's perception of his position in life, in the context of the culture and value systems in which he lives and in relation to his goals, expectations, standards, and concerns"^{7:1405}. It is a broad, subjective, and multidimensional concept, considered an important health indicator, capable of stimulating and strengthening care practices aiming at its promotion⁸.

From this perspective, one of the strategies that can be an innovation in the health of the elderly is the encouragement of experiences of sexuality to promote and protect health, specially to improve QoL and reduce CMD. This is because there is scientific evidence that the healthy experiences of sexuality have positive impacts on self-knowledge, well-being, pleasure, and self-esteem⁹, being encouraged, even among people with dementia¹⁰ and in palliative care¹¹.

Sexuality is a complex and multidimensional expression that involves biological, psychological, and sociocultural factors^{12:7}. From this perspective, the term sexuality cannot be understood as a synonym for sexual act. Its definition involves several expressions of behavior, feelings, and cognition¹³. Thus, it is stated that expressions of love, affection, complicity, intimacy, touch, companionship, and other quantitative-qualitative manifestations are means of expressing sexuality, including the sexual act and eroticism¹⁴⁻¹⁵.

However, although its benefits are known, there are still prejudices^{13,16} on the subject, including among healthcare professionals¹⁷, which favors that the sexuality of the elderly is not often addressed during care practices. Therefore, it is inferred that the elderly may not be enjoying the benefits that sexuality can provide in the elderly.

Based on this evidence, the development of this study is justified, since it is believed that the full and healthy experience of sexuality is associated with lower prevalence of CMD and better QoL among the elderly population. If statistical significance is confirmed, this study may help and encourage the elderly to participate in addressing sexuality during health consultations based on scientific results. Therefore, the aim of this study was to analyze the effects of sexuality on the CMD and QoL of elderly people.

METHOD

Cross-sectional and analytical study developed with 721 Brazilian elderly people. The sample size was defined, a priori, considering an infinite population, $\alpha=0.05$ (5%), confidence interval of 95% ($z_{\alpha/2} = 1.96$) and conservative proportion of 50%, resulting in a minimum sample of 385 participants and increased by more than 80% ($n=336$) to compensate possible incompleteness of the answers, totaling 721 participants.

Participants were selected through non-probability consecutive sampling. The inclusion criteria were users aged ≥ 60 years; of both genders (male or female); married, in a stable union or with a steady partner because the instrument that assesses sexuality considers the experiences in relation to themselves and their spouses¹⁶; and having an active account on the Facebook social network and internet access.

All hospitalized participants with functional dependence and residents in long-stay institutions, screened through three dichotomous questions (yes/no) at the beginning of the survey page, were excluded from the study. Since the elderly had active interaction in social networks and were skilled in handling equipment that provides access to social networks (cell phone, laptop, tablet and/or computer), the application of an instrument to assess cognition was waived.

Data collection occurred exclusively online between the months of July and October 2020. The invitation to participate was published on a page created by the researchers in the Facebook Social Network, accompanied by a hyperlink that gave direct access to the questionnaire. This questionnaire was structured in four surveys on the Google Forms platform: bio-sociodemographic, sexuality, mental health, and QoL. It is noteworthy that, to avoid multiple filling out of the questionnaire by the same participant, each one was asked to include their e-mail address before starting the surveys section. Thus, during tabulation, the authors had greater control over the data to avoid this possible bias.

The bio-sociodemographic survey was built by the authors to know the profile of the participants, such as age, gender, marital status, religion, ethnicity, education, number of children, sexual orientation, sexuality orientation and geographic location.

The sexuality inquiry was evaluated by the Elderly Affective and Sexual Experiences Scale (EVASI)¹⁶, organized in 38 items distributed in three dimensions: sexual act, affective relations, and physical and social adversities. The values of physical and social adversity were inverted to standardize the direction of the scores during the analyses. The EVASI showed satisfactory reliability through Cronbach's alpha: sexual intercourse ($\alpha=0.96$); affective relationships ($\alpha=0.96$) and physical and social adversity ($\alpha=0.71$)¹⁶.

The mental health survey was represented by screening for CMD, assessed by the Self-Report Questionnaire (SRQ-20)¹⁸ composed of 20 questions. The cutoff point adopted for the presence of CMD was \geq five positive responses for both genders according to a previous study⁴. The reliability value of this instrument was satisfactory, obtaining a Cronbach's alpha of 0.86¹⁸.

The QoL survey was developed with the World Health Organization Quality of Life - Old (WHOQOL-Old)¹⁹. This instrument has 24 items distributed in six facets: sensory skills; autonomy; past, present, and future activities; social participation; and death and dying and intimacy²⁰.

Data were tabulated, stored, and analyzed using the Statistical Package for the Social Sciences (SPSS) statistical software, version 25.0. Qualitative variables were presented by descriptive analysis (absolute and relative frequencies). Quantitative variables were presented by median and interquartile range (IQR).

The Mann-Whitney U test was used to compare the experiences in sexuality between the participants with and without CMD. To analyze the effects of sexuality (independent variable) on CMD and QoL (dependent variables), Structural Equation Modeling (SEM) was used through the STATA software. This is an analysis method that, although the study is cross-sectional, allows the identification of direct and indirect effects of a variable on the other²¹.

In the proposed model, two latent variables were included with indicators with factor load greater than 0.50 and one observed variable. Thus, the latent QoL was formed by the domains autonomy (DOM2), past present and future activity (DOM3), social participation (DOM4), and intimacy (DOM6), while the latent sexuality was formed by the domains sexual act (EVASI1) and effective relationships (EVASI2). The observable variable was common mental disorders (CMD). The model results were presented by means of the standardized coefficients (SC) and their respective 95% confidence intervals (95%CI). The interpretation of these results was performed according to what was proposed by Kline²²: small effect (SC=0.10); medium effect (SC=0.30) and strong effect (SC>0.50).

The adequacy of the proposed model was verified using the following fit indices: the Comparative Fit Index (CFI) and the Tucker-Lewis index (TLI) with values closer to one indicating better fit²¹; the Standardized Root Mean Square Residual (SRMR) with a value less than 0.08 indicating a good fit and less than 0.10, an acceptable fit²²⁻²³; the Root-Mean-Square Error of Approximation (RMSEA) with its 90% confidence interval (CI90%), and the following interpretation: perfect fit (RMSEA=zero); good fit (RMSEA <0.05); moderate fit (RMSEA=0.05-0.08); mediocre fit (RMSEA=0.08-0.10) and inadequate fit (RMSEA>0.10)²⁴; and the absolute Adjusted Goodness-of-Fit Index (AGFI) ranging from zero to one, with values ≥ 0.90 indicating well-fit models²⁵.

This study was approved in 2020 by the Research Ethics Committee of the School of Nursing of Ribeirão Preto of the University of São Paulo (EERP/USP) under opinion no. 4.319.644.

RESULTS

Table 1 shows a higher prevalence of elderly males (n=429, 59.5%) aged between 60 and 64 years (n=355; 49.2%), with higher education (n=310, 43.0%), white (n=498, 69.1%) and who never received guidance on sexuality from health professionals (n=561, 77.8%). The prevalence of CMD found in this study was 30.8% with statistically significant greater involvement among females, the only bio-sociodemographic variable associated with CMD.

Table 1 - Bio-sociodemographic variables. Ribeirão Preto, SP, Brazil, 2020

VARIABLES	n	%	VARIABLES	n	%
Gender			Marital status		
Male	429	59.5	Married	467	64.8
Female	289	40.1	Stable Union	120	16.6
Other	3	0.4	With steady partner	134	18.6
Age (years)			Living Time		
60 - 64	355	49.2	≤ 5 years	119	16.5
65 - 69	232	32.2	Between 6 and 10 years old	61	8.5

70 – 74	105	14.6	Between 11 and 15 years old	39	5.4
75 – 79	27	3.7	Between 16 and 20 years old	43	6.0
≥ 80 years old	2	0.3	> 20 years old	459	63.7
Education			Lives with the children		
Primary	62	8.6	Yes	198	27.5
Elementary	92	12.8	No	485	67.3
Medium	256	35.5	I do not have children	38	5.3
Superior	310	43.0	Have you ever had orientation about sexuality		
No Education	1	0.1	Yes	160	22.2
Ethnicity			Never	561	77.8
White	498	69.1	Sexual orientation		
Yellow	13	1.8	Heterosexual	629	87.2
Black	35	4.9	Homosexual	14	1.9
Brown	163	22.6	Bisexual	13	1.8
Indigenous	6	0.8	Other	65	9.0
Doesn't know	6	0.8	Brazil Region		
Religion			North	33	4.6
Catholic	393	54.5	Northeast	127	17.6
Protestant	98	13.6	Center-West	57	7.9
Spiritualist	83	11.5	Southeast	322	44.7
Of African origins	14	1.9	South	182	25.2
Other	57	7.9			
No religion	76	10.5			

Source: Survey data.

Table 2 shows that, regardless of the presence or absence of CMD, the elderly experience their sexuality in affective relationships more satisfactorily because they have higher median scores. Moreover, it is noted that participants with CMD experience their sexuality less satisfactorily in all dimensions, evidenced by the lower scores. As far as QoL is concerned, all the elderly people with and without CMD showed a more significant perception of QoL in sensory abilities. It is also noteworthy that participants with CMD showed lower QoL in all facets when compared to those without CMD.

Table 2 - Sexuality and QL assessment of participants with and without suspicion of CMD. Ribeirão Preto, SP, Brazil, 2020

Variables	WITH CMD	WITHOUT CMD	U	p-value
	Median (IQR)	Median (IQR)		
Sexuality				
Sexual act	67.00 (54.00-77.00)	77.00 (69.00-81.00)	36296.50	<0.001*
Affective Relationships	69.00 (54.00-77.00)	78.00 (71.00-83.00)	34901.00	<0.001*
Physical and Social Adversities	6.00 (5.00-8.00)	8.00 (7.00-10.00)	36020.50	<0.001*
General sexuality	145.00 (118.00-162.50)	161.00 (147.00-169.00)	37837.00	<0.001*
Quality of Life				
Sensory Abilities	75.00 (56.25-87.50)	81.25 (75.00-93.75)	41629.00	<0.001*
Autonomy	56.25 (43.75-71.87)	75.00 (62.50-81.25)	38397.50	<0.001*
Past, present, and future activities	62.50 (43.75-68.75)	75.00 (62.50-81.25)	32466.50	<0.001*
Social participation	56.25 (43.75-68.75)	75.00 (62.50-81.25)	31925.50	<0.001*
Death and dying	62.50 (37.50-81.25)	75.00 (56.25-93.75)	42123.00	<0.001*
Intimacy	68.75 (50.00-75.00)	75.00 (75.00-87.50)	33293.00	<0.001*
General QoL	60.41 (52.08-68.75)	73.95 (67.70-82.29)	25500.50	<0.001*

* Statistical significance by Mann-Whitney U test ($p < 0.05$)

Source: Survey data.

In the measurement model, the latent QoL showed adequate factor loadings (>0.45) only for the domains Autonomy (DOM 2), Past, present, and future activities (DOM 3), Social participation (DOM 4) and Intimacy (DOM 6). The latent Sexuality (Sex), in turn, was adequately formed by the domains Sexual Act (EVASI1) and Affective Relationships (EVASI2). Together, these variables and the evaluation of the common mental disorder (CMD) composed the measurement model proposed here (Figure 1). It was possible to evidence the good fit of the model by evaluating the RMSEA (0.05 [95%CI 0.04-0.07]), TLI (0.956), CFI (0.982), and SRMR (0.04) adjustment indexes.

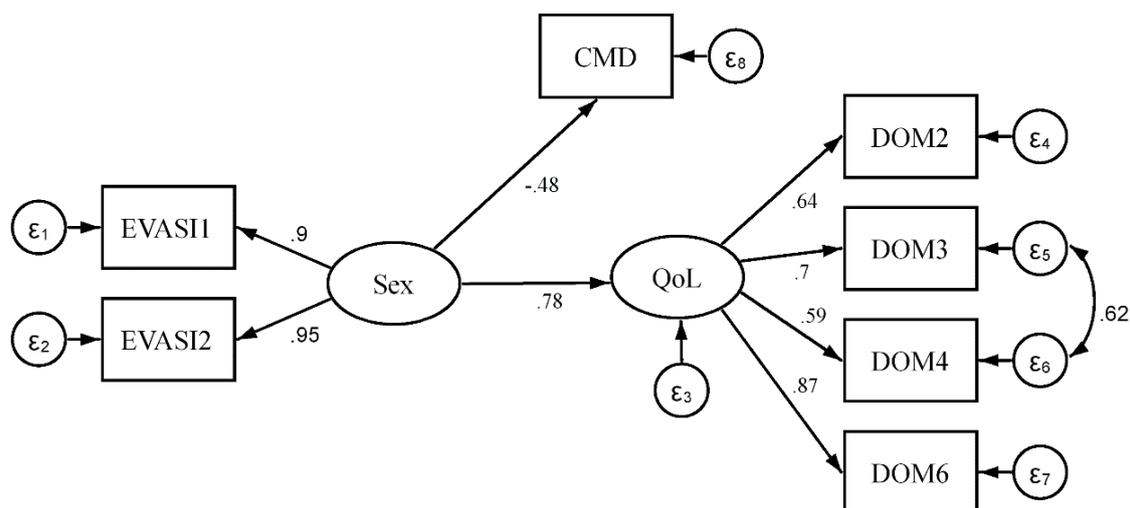


Figure 1 - Structural Equation Model for sexuality (Sex), quality of life (QoL) and common mental disorder (CMD). Ribeirão Preto, SP, Brazil, 2020

Source: Survey data

As for the effects evidenced, Table 3 shows that sexuality has a strong positive effect on QoL (SC=0.778 [95%CI=0.680-0.862] p<0.001), while the effect on common mental disorders is strong and negative (SC= -0.481 [95%CI= -0.540 - -0.421] p<0.001).

Table 3 - Standardized coefficients (SC) of structural equation modeling between sexuality, common mental disorders, and quality of life. Ribeirão Preto, SP, Brazil, 2020

	SC	CI95%	p
Measurement model			
DOM 2 ← QoL	0.636	0.583 – 0.689	<0.001
DOM 3 ← QoL	0.698	0.651 – 0.745	<0.001
DOM 4 ← QoL	0.590	0.534 – 0.645	<0.001
DOM 6 ← QoL	0.865	0.830 – 0.899	<0.001
EVASI 1 ← Sex	0.900	0.879 – 0.920	<0.001
EVASI 2 ← Sex	0.951	0.933 – 0.969	<0.001
Structural Model			
QoL ← Sex	0.778	0.680 – 0.862	<0.001
CMD ← Sex	-0.481	-0.540 – -0.421	<0.001

Source: Survey data.

DISCUSSION

The present study aimed at analyzing the effects of sexuality on the CMD and QoL of elderly people. It is noteworthy that the bio-sociodemographic characteristics of the participants draw attention to the divergence of most investigations developed with this public whose higher prevalence of participants is female^{4,15-16,19}, black/yellow and with low education⁴.

The prevalence of CMD was 30.8%, indicating a higher statistically significant proportion among females, the only bio-sociodemographic variable associated with CMD, which corroborates the literature^{4,26}. Moreover, it is noteworthy that this prevalence was higher than that found in a study developed in São Paulo (25.3%)²⁶, and lower than that of a study developed in Bahia (55.8%)⁴. This discrepancy can be justified, in part, by bio-sociodemographic differences, as well as variations in the cutoff point adopted for screening these disorders among the participants.

It was found that, regardless of the presence or absence of CMD, the elderly experienced more satisfactorily their sexuality in affective relationships in detriment of the sexual act as shown in Table 2. The affective relations dimension of the EVASI scale evaluates all the components which are inserted in the affective field of sexuality, such as friendship, love, pleasure in being with the spouse, companionship, complicity, affection, privacy, among others, which can indicate that the sexual act for the elderly is outside the main content of their experiences in sexuality¹⁶.

Therefore, based on a new perspective, it is inferred that sexuality is seen by the elderly not only to obtain pleasure, but also as a search for affection. Moreover, the intensity of sexual involvement may be replaced by an affective and emotional bond with the partner, including demonstrations of care, in which companionship assumes a prominent position in the relationship, and sexual life is placed in second place. However, it is worth pointing out that this evidence does not strengthen the stereotype of asexuality attributed to the elderly. The reduction of sexual frequency does not mean the finitude of sexual expression or desire. On the contrary, in the elderly there is a transformation of the sexual impulse that ceases to have a quantitative character and immerses itself in the qualitative aspects of involvement⁹.

This evidence corroborates an investigation¹⁵ developed with Cuban elderly people with stable sexual partnerships. In this study¹⁵, it was observed that 88.2% of the participants considered sexuality important in the elderly, 61.2% reported experiencing sexual activities one or more times a month and, in general, affirmed having desire and satisfaction during sexual relations. Finally, it is noteworthy that sexual inactivity in the elderly is often associated with the absence of a partner²⁷.

This is an important situation to consider during health consultations. This is because there is evidence that elderly people, especially women, tend not to engage in other relationships after widowhood and/or divorce. Thus, these people may not be enjoying the benefits of sexuality, especially for mental health, since the present study identified that sexuality had a strong negative effect on CMD as shown in Table 3.

This means that experiences in sexuality exerted effects on the reduction of CMD in the elderly. Therefore, sexuality can be considered one of the strategies for promoting the mental health of this population, corroborating what is recommended by the World Health Organization (WHO)¹, which highlights the need to improve the mental health of the elderly through active and healthy aging, as well as strategies that meet their needs. In this sense, among health professionals, nurses stand out for their care and educational actions, which can be carried out through nursing consultations, group activities, home visits, among other alternatives that promote the strengthening of bonds and mental health².

It is noteworthy that, in addition to mental health, the present study demonstrated that experiences in sexuality exerted effects that increased the QoL of the elderly. These results agree with an investigation²⁷ developed with Jewish elderly people, in which the frequency of sexual relations was established as a predictor variable of QoL. Another study²⁸ developed with English elderly people found that several dimensions used to evaluate sexual activity were statistically associated with well-being, especially the pleasure of living. Moreover, participants who reported having sexual intercourse in the year prior to the survey felt more pleasure in living when compared to those who were sexually inactive²⁸.

In this sense, another integrative review study¹⁰ identified that sexuality experiences have some health benefits for elderly people with dementia, such as a better perception of QoL and well-being. However, these results cannot be generalized due to the insufficient methodology of the studies selected for the review¹⁰. However, these results can be considered preliminary for further studies with greater methodological robustness.

Finally, it is ratified that the QoL and life satisfaction of the elderly also depend on affective and sexual experiences. However, society idealizes the right to sexuality only for young people, generating consequently the existing taboos around sexuality in the elderly²⁹ which, in turn, prevent the elderly from experiencing its benefits. Thus, it is informed that sexuality in the elderly should be considered a natural, pleasurable, and healthy experience that provides well-being to those involved. Therefore, one should advance knowledge on the subject, to face the stereotypes that are solidified in society⁹.

However, it is observed that the dialogue on sexuality between professionals and users of health services is insufficient, since 77.8% of participants in this study have never received guidance on sexuality from health professionals, as shown in Table 1. These results are like those found in other studies developed in Cuba¹⁵ and Israel²⁷, in which only 20% of Cuban respondents have received information about sexuality in the elderly¹⁵, and 88.2% of Israeli respondents do not ask health professionals about matters related to sexual life²⁷.

This reality may reflect feelings of shame and discomfort²⁷ that the subject still generates among people, especially among those who are not part of their social circle. Therefore, it is important that professionals strengthen the bonds with their users, so that moral barriers can be easily circumvented and, finally, sexuality can be effectively dialogued with interested elderly people.

It is noteworthy that older people with a high level of knowledge about sexuality have a better understanding of the physiological changes inherent to aging and face possible adversities that may arise on the subject with better efficiency, besides being more likely to seek help from health professionals. In this sense, one should think about educational programs aimed at elderly people and professionals, emphasizing the benefits of sexuality in the elderly, the current sexual behavior patterns, besides the biopsychosocial aspects involving the theme, always motivating them to seek help, should they need it²⁷.

Sexuality is intrinsic to the individual personality of human beings and changes every day, according to sexual experiences or not, configuring itself, therefore, as a natural and healthy process that is not limited to genitality or sexual component⁹. Therefore, health professionals can guide and encourage the elderly to experience sexuality in accordance with the proposal of active aging, which covers the theme in their care plans¹⁰, becoming a strategy that can be efficient in promoting QoL and mental health of the elderly.

It is noteworthy that this study presents some limitations. The first limitation to be considered is the non-probabilistic approach that opposes the generalization of the results. In addition, the authors recognize that, due to the recruitment of elderly people through the Internet and only in a single social network, the sample may have been limited. Finally, we mention the fact that only the Whoqol-Old was used to assess QL without considering a generic instrument such as the Whoqol-Bref or the Whoqol-100. However, it should be noted that there were logistical and methodological reasons for this choice.

CONCLUSION

Experiences in sexuality were found to have a strong positive effect on QoL, and a strong negative effect on CMD. This means that the quantitative and qualitative increase in sexuality experiences exerts strong effects on increasing QOL and reducing CMD in older persons. Furthermore, it was identified that better experiences in sexuality were associated with lower prevalence of CMD and better QoL among participants. Because a strong effect on the variables was identified, the clinical relevance of sexuality being worked on more frequently in health services was noted.

Professionals may develop and validate psychometric instruments on sexuality in the elderly that are feasible for application in primary health care regarding speed, reliability and practicality. This instrument may be incorporated as a standardized assessment of the elderly, to contemplate holistic care. It is then up to health managers to look at this issue as a factor in promoting mental health and QoL of the elderly, creating subsidies for the implementation of care protocols and ordering of the network to support the sexuality of this public.

Thus, society benefits from the insertion of a little explored theme in the care context. With this, there will be the weakening of existing prejudices, including among the elderly themselves who can freely enjoy the benefits that sexuality provides without prejudice and with greater access to information through trained health professionals. This approach will also reflect in a higher level of knowledge on the subject and, consequently, in greater adherence to preventive methods and reduction of sexually transmitted infections.

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