

Research Article





# Sexual dysfunction in postmenopausal women with depressive symptoms

#### **Abstract**

**Objective:** This study aimed to determine whether there is an association between the occurrence of sexual dysfunction in women in postmenopausal women with depressive symptoms.

**Method:** cross sectional study of 64 women aged 40 to 65 years old. To achieve the objective of the research we used a demographic questionnaire, the Beck Depression Inventory and the Sexual Function Index Female (FSFI).

**Results:** The median age of these women was 53 (50-58) years. Regarding education: 51.56% had primary education, 43.75% had high school and only 4.69% have higher education. Statistical analysis showed no significant association between sexual dysfunction and depressive symptoms (p=0.192); between depression and the item satisfaction FSFI showed statistically significant with p=0.021.

**Conclusion:** This study demonstrated that the sexual dysfunction of women after menopause is not significantly associated with depressive symptoms. In the association between depression and the FSFI domains of instrument, there was a significant association only for the item satisfaction.

**Keywords:** sexual dysfunction, depression, post-menopause, women's health

Volume 10 Issue 1 - 2019

#### Cristiano Santos de Caires, Melo Antonia Galdino Neta<sup>2</sup>

<sup>1</sup>Psychologist, Master in Public Health, Specialist in Management of Health and Traffic Psychology, ABC School of Medicine, Brazil <sup>2</sup>Clinical Psychologist and Specializing in Traffic Psychology, University Anhanguera, Brazil

Correspondence: Ms. Cristiano Santos de Caires, Psychologist, Master in Public Health, Specialist in Management of Health and Traffic Psychology, ABC School of Medicine, Brazil, João Ramalho Avenue, n° 12 - Vila Assunção - Santo André - São Paulo - Zip Code: 09030-320, Tel 55 11 951939110, Email cristiano caires@live.com

Received: January 15, 2019 | Published: February 13, 2019

#### Introduction

The Human Development Index (IDHM) of São Bernardo do Campo (SBC), released by the IBGE in 2010 showed that the population of women in the city exponentially increased from 1991 to 286 374 - corresponding to 50.51% of the total population in this year - to 395,837 women in 2010 - corresponding to 51.71% of the population. Within the municipality of São Bernardo do Campo found that in 2000 women between 40 and 64 years were 80 631 and increased to 105 401 in 2010, which shows the significant population growth every decade. <sup>1</sup>

This age period for women is marked by some biological, psychological and social changes, among which we can mention some climatic characteristics: hot flushes, joint pain, mood disturbance and sleep, irritability, fatigue, night sweats, vaginal dryness, generalized anxiety, depression, decreased libido and decline of manifestation in the sexual life. 1,2

Female sexual dysfunction can be classified as hypoactive sexual desire disorder, whose symptoms present themselves as the deficiency or absence of sexual fantasies and desire for sexual activity; sexual aversion disorder with aversion characteristics and active avoidance of genital sexual contact with a sexual partner; arousal disorder, which disables persistent or recurrent woman acquire or maintain adequate sexual arousal response lubrication-swelling until the end of sexual activity; orgasmic disorder in which there is the persistent or recurrent delay or absence of orgasm following a normal sexual excitement phase; dyspareunia - genital pain associated with sexual intercourse; and vaginismus, which occurs when there is involuntary, recurrent or persistent contraction, with regard to the prevalence of female sexual dysfunctions, estimated that 68% to 86.5% of women in the postmenopausal have some form of sexual difficulty.<sup>3</sup> evaluated

the sexual function in 370 perimenopausal women (Chile) and stressed that 57% of participants showed a high prevalence of sexual dysfunction correlated with age as a risk factor for sexual disorders.<sup>4</sup>

Evidence suggests that women after menopause who have no clinically significant depressive states, showed low sexual function. <sup>5</sup> Although the role of depressive symptoms in female sexual dysfunction, wherein the causality among these variables are difficult to be ascertained <sup>6</sup> because female sexuality tends to suffer psychosocial interference as stressful situations in people with fragile personality; sexual dysfunction can arise with the use of antidepressants and factors such as alcohol, tobacco and vascular diseases may be risk factors for both depression and for sexual dysfunction. This study aimed to determine whether there is an association between the occurrence of sexual dysfunction in women in postmenopausal women with depressive symptoms.

## **Method**

descriptive cross-sectional study of women in postmenopausal women with depressive symptoms and sexual complaints. 200 women were asked who performed routine examinations in the clinic of climacteric Center of Integral Attention to Women's Health of São Bernardo do Campo (CAISM-SBC) for the period from January to July 2014. The study was approved by ethics committee medical research of the Faculty of Medicine of ABC.

For inclusion in the study women should have the following characteristics: be postmenopausal (at least 12 months in amenorrhea), have age  $\geq$ 40 years and  $\leq$ 65 years, have sexual partner, agree and sign the consent form and clarified. They were excluded from the study women who do not properly filled out the questionnaires, illiterate women and widows without current sexual partner and divorced women.



#### **Procedures**

All patients were invited to participate in the study while awaiting medical care. Those who agreed to participate were then directed to a private room, which could answer the questionnaires, selfadministered, research. After the first screening to evaluate inclusion/ exclusion and subsequent questionnaires, the patients were divided into two groups: group of women with depressive symptoms and women without depressive symptoms. The criterion for the division of the group was from the Beck Depression Inventory score.7 It was used as cut ≤11 points in BDI<sup>7</sup> women without depression and ≥12 points women with mild symptoms, moderate and severe depression.

Patients included were submitted to the following instruments: demographic questionnaire, Beck Depression Inventory.7 and Sexual Function Index Female (FSFI).8 Both the inventory Beck and the FSFI is self administered, so the need for a minimum of reading ability. But the researcher was present in all data collection to answer questions. First it was completed the demographic questionnaire, followed by the Beck Depression Inventory, followed by questionnaire Sexual Function Index Female – FSFI9: The tests were performed on the average time of up to twenty minutes (20 minutes).

Demographic questionnaire Partner: date of birth, age, education, profession, current occupation, marital status and a question on self perceived health.

Beck Depression Inventory - BDI7 is composed of 21 items selfreport, with scales ranging from 0 to 3 according to the statements in each question. The higher the score, the higher the prevalence of depressive symptoms. The rating levels of symptoms following the following scores: min (0 to 11 points), mild (12 to 19 points) moderate (20 to 35 points) and severe (36 to 63 points).

Sexual function index female-FSFI8: Questionnaire consisting of 19 items to evaluate the female sexual funiconamento in six areas, which gives us an overall size of female sexual functioning. The domains follow the following characteristics: desire (2 items); excitation (items 4); Lubrication (items 4); orgasm (3 items); satisfaction (3 items); and pain (3 items). These items are diposta a Likert scale ranging from 1 to 5 in items 1, 2, and 15 3 16 0 to 5 in the other items. The score ranges from 2 to 36, with lower values correspond to a worst sexual performance while higher values correspond to better respontas of sexual functioning. For this study was considered as ≤26,5 points moderator presence or absence of sexual dysfunction according to previous publications. 4,8,10

### Statistical analysis

The variables in this FSFI and Beck (BDI)<sup>7</sup> of the sample were described by absolute and relative frequency and the quantitative variables as median and percentiles 25 and 75%, respectively. The chi-square test was used to analyze the association between sexual dysfunction and depressive features. Mann-Whitney test was used to analyze the association between depressive traits with the categories of FSFI; for variables were not normally distributed (Shapiro-Wilk test, p<0.05) and Studente t test for variables were normally distributed (Shapiro-Wilk test, p>0.05). The confidence level was 95%. We used Stata 11.0 software for statistical analysis.

#### Results

200 women were invited, and 71 agreed to participate. However, after assessing the criteria for inclusion/exclusion were eliminadas7

women: (n=3) women who did not inform the school (n=2) widows with no current partner (n=1) divorcee and (n=1) woman who filled the FSFI. They totaled 64 women for final analysis of this study (Table

Table I Sample characteristics: age, marital status, education and occupation

Variable	Median	-95%	
Age	53	(50-58)	
Marital status	Married	Stable union	
Absolute frequency	56	8	
Variables	n	%	
Education			
Illiterate	-	-	
Elementary School	33	51.56	
High school	28	43.75	
Higher education	3	4.69	
Total	64	100	
Occupation Professional	n	%	
Domestic professional	18	28.12	
Home	29	45.31	
Servant general	2	3.13	
Dental Assistant	1	1.56	
Nursing assistant	2	3.13	
Kitchen assistant	2	3.13	
Saleswoman	3	4.68	
Commercial attendant	2	3.13	
Hairdresser	1	1.56	
Manicure	1	1.56	
Lunch box	1	1.56	
Nanny	2	3.13	
Total	64	100	

\*95% CI, 95% confidence interval.

As can be seen in the table above, most of the women had a stable relationship (married) with absolute frequency of 56 married women and only 8 in a stable relationship. The median age of this group of women was 53 years. (CI 50-58).

There were no illiterate women in this study because the study was based on data from questionnaires that require reading and writing ability. Thus, 51.56% (n=33) of women had completed primary school; 43.75% (n = 28) and high school attended to only 4.69% (n=3) attended higher level.

Professionally it was found that 45% (n=29) of these women do not exercise remunerated activity, followed by 28% (n=18) of women working as domestic professional; Other 26.57% (n=17) of this group of women engaged in various activities, see Table 2.

Table 2 Association between sexual dysfunction and depressive traits

FSFI	Variables BDI		T- 4 - 1	<b>D</b> *
	No Depression	With Depression	— Total	Γ°
No Sexual Dysfunction	n = 9	n = 4	13	0.192
	69.23%	30.77%	100%	
With Sexual Dysfunction	n = 25	n = 26	51	
	49.02%	50.98%	100%	

<sup>\*</sup>Chi-square test

The data showed that there was no significant correlation between depression and sexual dysfunction of women in this group.

With the frequency analysis, it was found that 53.13% of this group of women showed no depressive features and 46.87% showed up eleven points in Beck Depression Inventory, characterizing them with mild or moderate depressive traits. With this division, it was created two groups enabling a comparison between women with depressive traits and women without depressive traits, as Table 3.

**Table 3** Association depression and being FSFI domains (n = 64)

FSFI domains	Depression	– P		
	C = 34 - No C = 30 - Yes		- F	
	Median (95% CI)			
Wish	3.3 (2.4 - 3.7)	2.1 (1.2 to 3.5)	0.206 *	
Excitement	3.6 (2.4 to 3.9)	2.4 (1.2 to 3.2)	0.095 *	
	Mean (95% CI)			
Lubrication	3.2 (2.6 to 3.8)	2.8 (2.3 to 3.3)	0.326 **	
Orgasm	3.2 (2.6 to 3.9)	2.6 (2.0 to 3.2)	0.155 **	
Satisfaction	3.8 (3.2 to 4.4)	2.8 (2.2 to 3.4)	0.021**	
Pain	3.7 (3.0 to 4.4)	3.2 (2.4 to 3.9)	0.266 **	

95% CI, 95% confidence interval.

The Man-Whitney analysis showed that there was no significant association between depressive features (BDI), and the desire and arousal variables (FSFI).<sup>8</sup> There was a significant correlation for the variable Depression Inventory (BDI) and the variable satisfaction (FSFI), according to the Student t test. However, there was no significant association for items lubrication, pain and orgasmic (FSFI), as shown in Table 3.

#### **Discussion**

This study aimed to evaluate the occurrence of sexual dysfunction may be associated with depressive symptoms. The data presented here demonstrate that depressive symptoms and sexual dysfunction in women after menopause are not significantly associated. The attempt to establish parameters and understandings of sexual functioning is growing theme in universities, the need for which has been highlighted even by the World Health Organization (WHO).<sup>11</sup> According to the WHO, it is necessary to face sexuality as one of the pillars that guide the person's quality of life.

In research conducted depression, 12 it is one of the symptoms present in the climacteric syndrome in which women experience in

middle age and also tends to be a risk factor for sexual dysfunction.<sup>6</sup> It is important to note that the intensity of symptoms is placed linked to living conditions which women are inserted, their entirety and socioeconomic environment they are in.<sup>12</sup>

The absolute frequency analysis indicated 46.87% (n=30) of women in this study had depressive symptoms, on the other hand, 53.13% of this group of women who had no depressive features. Although depressive symptoms is a common feature in women in middle age in the process of menopause, 6.13,14 a possible explanation of the data from this study may be related to the occupation factor and education. Whereas most of these women had to be in some kind of paid work out of their homes and nearly half of these women have over 9 years of study. What underscores how the socioeconomic and cultural factors may be associated in the series of depressive symptoms in women in middle age. 14

Although sexual dysfunction is not significantly associated with depressive conditions this small Brazilian sample to examine whether there was an association between depressive symptoms and the six domains of FSFI, the data showed a positive association only for the item satisfaction. In the literature, is the study<sup>15</sup>we evaluated the impact of menopause process in relational satisfaction and sexual self-image, concluding in a sample that there were no significant differences between vasomotor symptoms, and menopausal status, as well as nonthere were differences in terms of relational satisfaction, and sexual self-image of women. But as to the severity of the sexual symptoms are associated with sexual satisfaction, relational and self-image, as corroborated by the findings in this study as sexual satisfaction according to the FSFI instrument. One possible explanation for the data relating to desire, arousal, orgasm, lubrication, and pain were not significant, given the sample size and heterogeneity of the data presented, which in larger sample, the data will be able to confirm or refute these hypotheses. Another recent study showed that there were no significant correlations of sexual dysfunction and depression, however, the data showed that low education so with personality characteristics as regards the emotional needs and organization were significant for desfecha of sexual dysfunction in women middle age. 16 lubrication, and pain were not significant, given the sample size and heterogeneity of the data presented, which in most sample, if data can confirm or refute these hypotheses. Another recent study showed that there were no significant correlations of sexual dysfunction and depression, however, the data showed that low education so with personality characteristics as regards the emotional needs and organization were significant for desfecha of sexual dysfunction in women middle age. 16 lubrication, and pain were not significant, given the sample size and heterogeneity of the data presented, which in most sample, if data can confirm or refute these hypotheses. Another recent study showed that there were no significant correlations of sexual dysfunction and depression, however, the data showed that low education so with personality characteristics as regards the emotional

<sup>\*</sup>Mann-Whitney test; \*\*Student's t test.

needs and organization were significant for desfecha of sexual dysfunction in women middle age. 16

The difficulty in collecting the data, whereas some women refused to participate, for a fear of losing financial benefits to the government, because it is related search sexuality, by the time the patient takes to fill all protocols research, as well as the amount of data to establish parameters that are associated with both sexual difficulties such as mental health of participants and size of the final sample can be considered as limiting to our study. These constraints on appear as suggestions for new studies related to sexuality and mental health of women after menopause.

#### Conclusion

The present study demonstrated that sexual dysfunction in women after menopause is not significantly associated with cases of depression. In the association between depression and the FSFI domains of instrument, there was a significant association only for the item satisfaction. We believe this study proves relevant, since it discusses important variables considered on the quality of life of postmenopausal women.

# **Acknowledgments**

None.

#### **Conflicts of interest**

The authors declare no conflicts of interest.

#### References

- 1. Brazilian Institute of Geography and Statistics (IBGE). 2016.
- Pepper F, I Leal, White J. Menopause, the intrinsic experience of a human inevitability: a literature review. *Psychological Review*. 2007;25(3):455– 466
- 3. Ambler DR, Bieber EJ, Diamond MP. Sexual function in elderly women: a review of current literature. *Rev Obstet Gynecol*. 2012;5(1):16–27.

- JR Figueroa, Jara AD Fuenzalida PA, Del Prado AM, et al. Prevalence of sexual dysfunction Women en weather. *Medical Journal of Chile*. 2009;137(3):345–350.
- Verit FF, Verit A, Billurcu N. Low sexual function and its associated risk factors in pre-and postmenopausal women without clinically significant depression. *Maturitas*. 2009;64(1):38–42.
- Lucena BB, CHN Abdo. Considerations on female sexual dysfunction and depression. Diagn treatment. 2012;17(2):82–85.
- Wedge JA. Portuguese version of the manual of Beck Scales. Sao Paulo. House of Psychologist; 2011.
- 8. Wiegel M, Meston C, Rosen A. The female sexual function index (FSFI): Cross-validation and development of clinical cutoff scores. *J Sex Marital Ther*. 2005;31(1):1–20.
- H Hentschel, Alberton DL, Goldim JR, et al. Validation of the Female Sexual Function Index (FSFI) for use in Portuguese. HCPA Rev. 2007;2 (1):10–14.
- Pereira AA G, Silva AI, P Freitas VAS. Psychometric Study of female sexual function index (FSFI). The Portal of Psychologists; 2009.
- 11. World Health Organization. The ICD-10 Classification of Mental and Behavior Disorders Geneva: World Health Organization. 1992.
- LC Veloso, Nery S, Celestino DSS. Biopsychosocial changes experienced by Women in Menopause: a reflection of the influence of gender. *Health magazine Focus, Teresina*. 2014;1(1):46–71.
- 13. Santos TR SVM Pereira, Santos LR. Intensity of climacteric symptoms in postmenopausal women. *Rene*. 2016;17(2):225–232.
- Lima GG, Batista MMG, Magellan E. Biopsychosocial aspects of middle age triggered by menopause. Psychology. The Portal of Psychologists; 2016
- Rodrigues PVM. Menopause process impact on relational satisfaction, and sexual self concept. Master's thesis in health psychology University Institute: psychological, social and life sciences (ISPA). 2015.
- CAIRES Cristiano Santos et al. Personality traits of postmenopausal women with sexual dysfunction. Rev Bras Gynecol Obstet. 2018;40(11):693–698.