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ORIGINAL PAPER

Severity of climacteric symptomatology related to depression and sexual function in women from a private clinic

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Abstract

Introduction: The climacteric is a natural transition stage in women, in which hormonal changes occur that affect the physical and psychological well-being. Therefore, the objective was to determine the relationship of the severity of climacteric symptomatology with depression and sexual function in women.

Materials and methods: It was a descriptive, cross-sectional study, with a sample of 60 women between 40 and 65 years old. The Female Sexual Function Questionnaire-2, the Menopause Rating Scale, and the Beck Depression Inventory were used.

Results: The mean age of the women was 49.1 ±5.6 years. 21.7% of the women had severe depression, 28.3% moderate, and 50% mild/minimal. Changes in sleep habits (1.73 ±0.88) and in appetite (1.63 ±0.73) were the most severe manifestations. Difficulty sleeping (1.05 ±0.99), physical and mental fatigue (1.48 ±0.98), and vaginal sequelae (1.45 ±1.26) were the most serious complaints in the somatic, psychological, and urogenital domains, respectively. 60% presented severe sexual dysfunction regarding genital pain and 55% in vaginal penetration. Communicating sexual preferences to the partner was common in 75% of women. 88.3% had frequent sexual activity, but 63.3% had zero or low sexual satisfaction.

Conclusions: Climacteric symptomatology is related to depression but not to women's sexual function.

Key words: menopause, depression, psychosexual dysfunction, sexual health, women's health.

Introduction

The climacteric is a period of adaptation and transition to a non-reproductive stage, which includes the years before and after menopause. During this period, psychological and social factors influence the appearance of signs and symptoms, as well as the hormonal changes characteristic of climacteric [1]. The psychological and physical impact is frequent but at different levels in each woman.

In this period, sexual function is one of the most affected factors [2]. The risk of suffering sexual dysfunction triples. Desire, as well as arousal, are usually the most compromised components of sexuality [3]. In addition, mental health care is highly undervalued, although mood deterioration represents one of the most frequent reasons for consultation [4]. These problems have repercussions in the full development of the women's well-being and, hence, on their quality of life [1].

The insufficient capacity to recognize or express the conflicts and discomforts increases the negative repercussions on the woman's health [5]. In addition to this problem, a negative attitude towards these changes affects their proper management, even the search for professional support for specialized advice with an integrative approach [6]. Different investigations conclude that in women with severe symptoms, the chance of deterioration of sexual well-being increases [7], and that the depressive state is related to their sexual function [8].

The women and people around them need to understand that the climacteric is a natural transition, not a disease, and it requires a preventive and educational approach due to the social, physical, and mental vulnerability present in these years. The positive and negative experiences that women go through during the climacteric mainly impact the role they play in their work, family, and community.

Considering that the well-being of climacteric women still represents a challenge for public health, and so this study will be developed to determine the relationship between the severity of climacteric symptoms with depression and sexual function in women from a private clinic.

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Material and methods

The descriptive and cross-sectional study was carried out at the "Monteluz" clinic in the district of Carabayllo November–December 2021. The research was carried out after obtaining the approval of the institutional research Ethics Committee of the Sergio E. Bernales National Hospital (No. 21-0055) and the institutional authorization of the clinic.

Women between 40 and 65 years old, who had sexual relations with their partner, and who decided to participate voluntarily, were selected for this study. Meanwhile, those with chronic diseases, mental health problems (psychological or psychiatric), hormonal treatment in the last 6 months, and incomplete information were excluded from the research.

For the execution of the study, the women who agreed to participate signed an informed consent form. Confidentially, 3 instruments were used. The first was the female sexual function questionnaire 2 (FSM-2), made by Sánchez-Sánchez *et al*. [9], presenting 11 items with scores ranging of 1–4, and divided into 2 domains: evaluators of the sexual response and descriptive of sexual activity. This instrument was validated by experts to have good reliability (α = 0.919). The total score was obtained by adding the points of the items of the domain of evaluators of sexual response. A higher score reflects greater sexual dysfunction.

The second instrument applied was the menopause rating scale, which was developed by Heinemann [10] and currently has versions in different languages [11], with good validity and reliability in all countries [12]. This scale has 11 items distributed in 3 domains: somatic, psychological, and urogenital, with scores ranging of 0–4.

The total score was obtained by adding up the points of all the items. The higher the score, the more severe the symptomatology.

The last instrument was the Beck Depression Inventory adapted to Spanish by Sanz *et al*. [13], which has shown high general reliability (α = 0.091), as well as for the cognitive-affective (α = 0.086) and somatic-motivational (α = 0.081) domains [14]. It has 21 items that have a score of 0–3. They are distributed in the domains that were mentioned before. The total score was obtained by adding the points of all the items. A high score reflects a more severe depressive state.

Statistical analysis

The data were processed using the SPSS version 26 program. The mean and standard deviation were estimated for the numerical variables; the frequency and the percentage for the categorical ones. Data distribution was evaluated using the Kolmogorov-Smirnov test. The Pearson and Spearman correlation test was used, with a significance level of less than 0.05.

Results

The mean age of the women was 49.1 ±5.6 years. Most were cohabiting (85%) and housewives (71.6%). 21.7% of the women had severe depression, 28.3% moderate, and 50% mild/medium. Sleeping alteration (1.73 ±0.88) and loss of appetite (1.63 ±0.73), as well as crying (1.42 ±1.10), were the most severe manifestations of depression. While suicidal thoughts (0.40 ±0.71), punishment (0.57 ±0.89), and the perception of inutility (0.40 ±0.71) were the least severe (Table 1).

Fifty percent of the women presented moderate symptoms, 48.2% mild, and 1.7% severe. Sleep problems (1.05 ±0.99), physical and mental exhaustion (1.48 ±0.98), and vaginal dryness (1.45 ±1.26) were the most severe problems in the somatic, psychological, and urogenital domains, respectively. The symptoms with the highest proportion of women who did not report problems were those related to the heart (51.7%), hot flushes (38.3%), anxiety (33.3%), and depressive mood (28.3%) (Table 2).

Most women presented severe sexual dysfunction regarding genital pain (60%) and vaginal penetration (55%). In 58.3% and 48.3% sexual desire and arousal were not affected, respectively. There was a high frequency of sexual activity (88.3%), although there was no or very low sexual satisfaction (63.3%). Confidence to communicate preferences to the partner was usual in 75% of the women (Table 3).

Depression had a significant relationship with climacteric symptomatology (r = 0.755; $p \leq 0.001$) and its domains. Meanwhile, the cognitive-affective domain was not associated with somatic symptomatology (rho = 0.245; $p > 0.05$). The urogenital domain had a positive relationship with depression (rho = 0.577; $p \leq 0.001$) and a negative one with sexual function (rho = –0.385; $p \leq 0.05$) (Table 4).

Discussion

The climacteric is a critical stage for women. They experience hormonal changes with different intensities, which affect their physical and emotional well-being. Although this is a natural process, it is a problem that requires a comprehensive, differentiated, and sustained approach, given the community impact it generates.

In the current study, mild/minimal depression (50%) was the most frequent. In comparison, Yanikkerem *et al*. [8] showed that 32% presented minimal symptoms. In addition, Duzgun *et al*. [15] showed that mild symptoms were the most frequent. On the other hand, this study shows that around 90% of women reported some level of severity in sleeping alteration, contrary to what was found by Humeniuk *et al*. [16], who indicated that 46% had no problems sleeping.

The reduction in the concentration of oestrogens and progesterone, high levels of testosterone [17],

Table 1. Indicators of depression in climacteric women

Parameters	Severity scale				$\bar{X}$ ±SD
	0	1	2	3	
Sadness	27 (45.0)	20 (33.3)	11 (18.3)	2 (3.3)	0.80 ±0.86
Pessimism	25 (41.7)	19 (31.7)	16 (26.7)	–	0.85 ±0.82
Failures from the past	29 (48.3)	9 (15.0)	20 (33.3)	2 (3.3)	0.92 ±0.97
Anhedonia	12 (20.0)	31 (51.7)	14 (23.3)	3 (5)	1.13 ±0.79
Guilt	24 (40.0)	27 (45.0)	7 (11.7)	2 (3.3)	0.78 ± 0.78
Punishment	38 (63.3)	14 (23.3)	4 (6.7)	4 (6.7)	0.57 ±0.89
Self-esteem	34 (56.7)	15 (25.0)	9 (15.0)	2 (3.3)	0.65 ±0.86
Self-criticism	27 (45.0)	17 (28.3)	13 (21.7)	3 (5.0)	0.87 ±0.92
Suicidal thoughts	42 (70.0)	14 (23.3)	2 (3.3)	2 (3.3)	0.40 ±0.71
Crying	17 (28.3)	13 (21.7)	18 (30.0)	12 (20)	1.42 ±1.10
Agitation	20 (33.3)	20 (33.3)	12 (20.0)	8 (13.3)	1.13 ±1.03
Loss of interest in activities	24 (40.0)	24 (40.0)	11 (18.3)	1 (1.7)	0.82 ±0.79
Indecision	24 (40.0)	17 (28.3)	16 (26.7)	3 (5.0)	0.97 ±0.93
Inutility	35 (58.3)	13 (21.7)	11 (18.3)	1 (1.7)	0.63 ±0.84
Loss of energy	16 (26.7)	30 (50.0)	11 (18.3)	3 (5.0)	1.02 ±0.81
Sleeping alteration	5 (8.3)	18 (30.0)	25 (41.7)	12 (20.0)	1.73 ±0.88
Irritability	26 (43.3)	17 (28.3)	13 (21.7)	4 (6.7)	0.92 ±0.96
Loss of appetite	2 (3.3)	25 (41.7)	26 (43.3)	7 (11.7)	1.63 ±0.73
Loss of concentration	26 (43.3)	13 (21.7)	19 (31.7)	2 (3.3)	0.95 ±0.94
Tiredness and fatigue	14 (23.3)	26 (43.3)	16 (26.7)	4 (6.7)	1.17 ±0.86
Loss of sexual interest	23 (38.3)	16 (26.7)	18 (30.0)	3 (5.0)	1.02 ±0.94

$\bar{X}$ – mean, SD – standard deviation

Table 2. Severity of climacteric symptomatology according to domains

Parameters	None discomfort	Mild discomfort	Moderate discomfort	Severe discomfort	Very severe discomfort	$\bar{X}$ ±SD
Somatic						
Hot flushes, sweating	23 (38.3)	26 (43.3)	9 (15.0)	2 (3.3)	–	0.83 ±0.80
Heart discomfort	31 (51.7)	26 (43.3)	3 (5.0)	–	–	0.53 ±0.59
Sleep problems	21 (35.0)	20 (33.3)	16 (26.7)	1 (1.7)	2 (3.3)	1.05 ±0.99
Joint and muscular discomfort	12 (20.0)	37 (61.7)	9 (15.0)	2 (3.3)	–	1.02 ±0.70
Psychological						
Depressive mood	17 (28.3)	27 (45.0)	11 (18.3)	4 (6.7)	1 (1.7)	1.08 ±0.94
Irritability	9 (15.0)	40 (66.7)	9 (15.0)	2 (3.3)		1.07 ±0.66
Anxiety	20 (33.3)	26 (43.3)	9 (15.0)	4 (6.7)	–	1.00 ±0.95
Physical and mental exhaustion	6 (10.0)	32 (53.3)	11 (18.3)	9 (15)	2 (3.3)	1.48 ±0.98
Urogenital						
Sexual problems	18 (30.0)	27 (45.0)	9 (15.0)	3 (5.0)	3 (5.0)	1.10 ±1.05
Bladder problems	14 (23.3)	29 (48.3)	11 (18.3)	3 (5.0)	3 (5.0)	1.20 ±1.02
Vaginal dryness	13 (21.7)	26 (43.3)	10 (16.7)	3 (5.0)	8 (13.3)	1.45 ±1.26

$\bar{X}$ – mean, SD – standard deviation

and changes in body composition [18, 19] are related to climacteric symptoms that variably affect women. The present study shows that half of the women suffered from moderate affectation, and a minimum proportion suffered from severe affectation. Studies such as those by Jonusiene *et al*. [20] and Cruz *et al*. [21] reported different findings because they reported that moderate and severe symptoms occurred in 21.6% and 36.5% of the women studied, respectively.

In addition to the hormonal changes presented at this stage of a woman's life, the passing of the years generates sexual problems of various magnitudes [22].

Table 3. Frequency of indicators of female sexual function according to domains

Sexual response evaluators	Severe sexual dysfunction *n* (%)	Moderate sexual dysfunction *n* (%)	No sexual dysfunction *n* (%)
Desire	13 (21.7)	12 (20.0)	35 (58.3)
Arousal	19 (31.7)	12 (20.0)	29 (48.3)
Lubrication	25 (41.7)	22 (36.7)	13 (21.7)
Pain	36 (60.0)	20 (33.3)	4 (6.7)
Vaginal penetration	33 (55.0)	23 (38.3)	4 (6.7)
Orgasm	16 (26.7)	21 (35.0)	23 (38.3)
	Low *n* (%)	**Medium** *n* (%)	**High** *n* (%)
Frequency of sexual activity	3 (5.0)	4 (6.7)	53 (88.3)
	No/very low *n* (%)	**Low** *n* (%)	**Normal/high** *n* (%)
Sexual satisfaction	38 (63.3)	16 (26.7)	6 (10.0)
Descriptive of sexual activity	**Lack** *n* (%)	**Occasional** *n* (%)	**Habitual** *n* (%)
Anticipatory anxiety	36 (60.0)	13 (21.7)	11 (18.3)
Initiative	37 (61.7)	19 (31.7)	4 (6.7)
Confidence to communicate preferences to the partner	10 (16.7)	5 (8.3)	45 (75.0)

Table 4. Correlation of climacteric symptomatology with depression and sexual function

Parameters	Climacteric symptomatology			
	Global	Somatic	Psychological	Urogenital
Depression	0.755†**	0.313‡*	0.698‡**	0.577‡**
Cognitive-affective	0.688†**	0.245‡	0.695‡**	0.492‡**
Somatic-motivational	0.720†**	0.404‡**	0.574‡**	0.619‡**
Sexual function	–0.227†	0.053‡	–0.064‡	0.385‡*

† Pearson correlation coefficient
‡ Spearman's correlation coefficient
* p-value ≤ 0.05
** p-value ≤ 0.001

Similarly to our results, Dąbrowska-Galas *et al*. [23] reported that dyspareunia and lubrication were some of the most affected domains. On the other hand, sexual desire and orgasm were the ones that presented the least impact during the climacteric, contrary to what was reported by Trento *et al*. [24].

If the climacteric symptoms are not fully managed, they can affect different areas of the woman's development and even her closest environment. For Tsai *et al*. [25], somatic symptoms represented a risk factor for depressive syndrome in women. In this sense, the results of this study show that depression was directly related to the severity of climacteric symptoms, contrary to a study conducted in Turkey, which showed an indirect relation [15]. On the other hand, several studies showed that sexual function and climacteric symptoms were related [20, 26–28], contrary to our research. Furthermore, similar information was found in the study by Eftekhar *et al*. [29] In their research, the urogenital and somatic symptoms were associated with sexual dysfunction.

There are certain limitations to the research. It was a non-random sample, so the results were not generalized to the entire population. In addition, due to the methodological design, there was no causal relationship between the variables.

Conclusions

In conclusion, climacteric symptomatology was related to depression. It was also linked to the somatic-motivational and cognitive-affective domains. In the latter case, somatic symptomatology did not show a significant relationship. In addition, urogenital symptomatology was correlated to sexual function. It is necessary to provide health services that address this stage of natural transition with a comprehensive and interdisciplinary approach.

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Disclosure

The authors report no conflict of interest.

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