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CLIMACTERIC: INTENSITY OF SYMPTOMS AND SEXUAL PERFORMANCE [1]

Estela Rodrigues Paiva Alves[2], Aurélio Molina da Costa[3], Simone Maria Muniz da Silva Bezerra[4], Ana Marcia Spano Nakano[5], Ana Márcia Tenório de Souza Cavalcanti[6], Maria Djair Dias[7]

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[2] Doctoral student of PPGEnf/UFPB. João Pessoa, Paraíba, Brazil E-mail: rodrigues.estela@gmail.com
[3] Physician. Ph.D. in Family Planning. Professor of the Faculty of Life Sciences of UPE and of PPGEnf/UPE/UEPB. Recife, Pernambuco, Brazil. E-mail: aumolina55@gmail.com
[4] Post-doctorate at the Ribeirão Preto College of Nursing. Professor of the PPGEnf/UPE/UEPB. Recife, Pernambuco, Brazil. E-mail: simonemunizm2@gmail.com
[5] Ph.D. in Nursing. Professor of the Public Health Nursing Graduate Program. Ribeirão Preto, São Paulo, Brazil. E-mail: nakano@eerp.usp.br
[6] Nurse. Professor of the PPGEnf/UFPE Recife, Pernambuco, Brazil. E-mail: anapopita@gmail.com
[7] Ph.D. in Nursing. Professor of the PPGEnf/UFPB João Pessoa, Paraíba, Brazil. E-mail: mariadjair@yahoo.com.br

ABSTRACT: This paper had the aim to checking the association between the intensity of climacteric symptoms and the pattern of sexual performance of women in this period of the life cycle. A transversal study conducted from July to September 2011 involving 260 climateric women of a physical exercise program. The women were evaluated using the Kupperman Menopausal Index and of the Sexual Quotient. For statistical analysis, there were used: average, standard deviation, percentages and Fisher Exact Test. The women with sexual performance standard good/excellent, mostly, reported mild symptoms in Menopausal Index, and those who had a bad pattern/unfavorable, had high percentages of moderate and severe manifestations. Symptoms of mild intensity were associated with a higher standard of sexual performance, showing that changes in this pattern have strong relationship with the intensity of symptoms.

DESCRIPTORS: Climacteric. Sexuality. Motor activity. Health promotion. Nursing.

CLIMATÉRIO: A INTENSIDADE DOS SINTOMAS E O DESEMPENHO SEXUAL

RESUMO: O presente estudo objetivou verificar a associação entre a intensidade dos sintomas no climatério e o padrão de desempenho sexual de mulheres neste período do ciclo vital. Estudo transversal, realizado de julho a setembro de 2011, envolvendo 260 mulheres no climatério de um programa de atividade física. As mulheres foram avaliadas por meio do Índice Menopausal de Kupperman e do Quociente Sexual. Para análise estatística utilizou-se: média, desvio-padrão, porcentagens e Teste Exato de Fisher. As mulheres com padrão de desempenho sexual bom/excelente, em sua maioria, referiram apresentar sintomas leves na escala menopausal, e as que apresentaram um padrão ruim/desfavorável, tinham altos percentuais de manifestações moderadas e intensas. Os sintomas de intensidade leve estiveram associados a um melhor padrão de desempenho sexual, presumindo-se que alterações neste padrão tem forte relação com a intensidade dos sintomas.

DESCRITORES: Climatério. Sexualidade. Atividade motora. Promoção da saúde. Enfermagem.

CLIMATERIO: LA GRAVEDAD DE LOS SÍNTOMAS Y EL DESEMPEÑO SEXUAL

RESUMEN: El presente estudio tuvo como objetivo investigar la asociación entre la intensidad de los síntomas del climaterio y el patrón de la actividad sexual de mujeres durante este período del ciclo vital. Estudio transversal realizado entre julio y septiembre de 2011 con la participación 260 mujeres de un programa de actividad física que se encontraban en el climaterio. Se evaluaron las mujeres con el índice menopáusico Kupperman y Cociente Sexual. Para el análisis estadístico se utilizó: el promedio, la desviación estándar, los porcentajes y la Prueba Exacta de Fisher. Las mujeres con estándar de desempeño sexual bueno/excelente, mayoritariamente, reportaron síntomas leves en el índice menopáusico, y las que tenían un patrón malo/desfavorable tuvieron tasas altas de manifestaciones moderadas y graves. Los síntomas de intensidad leve se asociaron con un mejor patrón de rendimiento sexual, demostrando que los cambios en este índice tienen fuerte relación con la intensidad de los síntomas.

DESCRIPTORES: Climaterio. Sexualidad. Actividad motora. Promoción de la salud. Enfermería.

INTRODUCTION

The climacteric period is a biological phase of women's life cycle, which usually starts around the age of 40 and can be extended to the age of 65. It is characterized by the decrease in the production of estrogen and progesterone hormones by the ovaries.[1]

Climacteric is not always associated with common physical and emotional changes that occur during this period, but when they appear, they are called the climacteric syndrome. Climacteric symptoms are influenced by many biological factors (related to the decrease of estrogen levels or as a result of senility), by psychological aspects (which involve women's self-perception, that is, how they face this moment in life) and by social aspects (those related to the interaction of women with relatives, friends and the community). Community has a strong relationship with sociocultural aspects, such as myths, beliefs and prejudices that society creates, disseminates and experiences at every age.[1-3]

Climacteric women who have some of the characteristic symptoms of the syndrome, such as hot flashes, insomnia, irritability, depression, high blood pressure, urgency of urination, as well as those who have no partner and have a bad self-perception of their general state tend to present changes in their sexuality.[2]

The physiological changes that occur with climacteric women, although with symptoms of different intensity, may affect their general well-being.[4] These changes will not necessarily reduce sexual pleasure, but may directly affect sexual response, making it longer and less enjoyable, thus resulting in sexual dissatisfaction. Dyspareunia (painful sexual intercourse) resulting from vaginal dryness, which is in turn due to estrogen deficiency, is one of the main causes for sexual discomfort that may cause changes in women's sexual life.[1]

It is known that care of climacteric women, including their sexuality, is one of the priorities of Public Health Policies[5] aimed at women, even though some professionals still focus on diagnoses and treatment of clinical complaints, resulting in medication rather than in the assessment of subjective complaints such as sexual dissatisfaction, concern with the lack of sexual desire, sense of guilt for changes in the family environment, in their bodies and in the relationship with their partner.[1,6]

Sexuality appears as an important aspect of quality of life in climacteric, as hormonal changes have an influence on women's libido. In addition, sexuality has historically gathered a lot of myths, taboos and beliefs over time and within different societies, which makes it evident that it requires special attention from health professionals, so as to deliver good quality services to women, with the aim to provide a comprehensive care service.[7]

It is known that women have been increasingly concerned with changes in their bodies, including the pleasant aspect of sex rather than its reproductive function, in order to have a better quality of life, which also means to be free of climacteric symptoms that hamper their general well-being; therefore the need for attention regarding this particular aspect is evident.[8]

Comprehensive care must be provided to climacteric women. However, in practice, these actions have not been developed yet. It is worth mentioning the lack of studies on the topic, which highlights the importance of focusing on matters related to climacteric, as it is necessary to identify problems experienced during this period in order to reduce them.[9]

Therefore, in view of the difficulties experienced by health professionals in approaching climacteric women, regarding sexuality aspects, and due to the lack of information about the topic, we sought to give more visibility to climacteric symptoms and their effects on women's sexual life.

Based on the above considerations, we questioned whether women with more intense symptoms of climacteric had a lower pattern of sexual response, with the objective to assess the association between the intensity of climacteric symptoms and the sexual performance standards of women who were at this stage of the life cycle.

METHOD

This is a cross-sectional study with 260 climacteric women. The study was conducted at the City Health Club Program of Recife (PAC, as per its acronym in Portuguese), implemented by

the Health Secretariat of Recife in 2002 as a health promotion policy of the Unified Health System (SUS), which consisted of providing physical and leisure activities, as well as information on healthy eating habits in order to improve the quality of life of the local population.[10]

Over the period of study, the PAC was composed of 21 hubs located in different neighborhoods of Recife, and of six Sanitary Districts (SD): I, II, III, IV, V and VI. We chose to select 10 hubs randomly, due to the absence of a record system of users, which was a limitation of this study in the definition of the sample size. In this sense, the hubs drawn were: Coque, Ilha do Leite and Praça 13 de Maio (DS-I); Ilha do Joaneiro and Praça do Hipódromo (DS-II); Sítio Trindade (DS-III); Engenho do Meio and Praça do Poeta (DS-IV); San Martin (DS-V); and 2º Jardim de Boa Viagem (DS-VI). All women who attended the drawn hubs between July and September 2011 were questioned, as long as the inclusion criteria were met.

The established inclusion criteria were: being aged between 40 and 65 years old, being in climacteric,[1] being a PAC user and doing physical exercise at least three times a week for a month, and having had sexual intercourse in the last six months prior to the interview; this last criterion was pre-established by one of the instruments used in this investigation.[11] Exclusion criteria were applied to: women who made use of oral contraception pills, those who were under a hormone replacement therapy or who were using phytoestrogens, since these substances interfere in the climacteric symptomatology.[11-12]

For data collection, the instruments used were: a semi-structured questionnaire containing socioeconomic and demographic data such as age, race, marital status, education, profession and per capita income; the Blatt-Kupperman menopausal index (BKMI); and the Sexual Quotient - female version (SQ-F).[13-14]

The BKMI is an instrument that has been already validated in Brazil and it is used to specify and classify climacteric symptoms. It includes 11 symptoms/complaints (vasomotor symptoms, paresthesia, melancholy, vertigo, fatigue, arthralgia/myalgia, headache, palpitations and tingling). A score was given for each symptom that ranged from mild (result lower or equal to 19); moderate (between 20 and 25) and intense (over 35); for the latter, a score over 35 suggests menopause, which is characterized by the absence of menstruation for 12 consecutive months. In order to obtain the total score, the scores were added and the higher the score obtained, the more intense the symptoms were.[13]

Standards of sexual performance were classified by means of the Female Sexual Quotient (SQ-F), which is also valid in Brazil. The results of sexual performance standards were obtained using the following formula: 2x (Q1 + Q2 + Q3 + Q4 + Q5 + Q6 + [5-Q7] + Q8 + Q9 + Q10), where Q=question and [5-Q7] = question number 7 requires this previous subtraction and the result must be included in the equation. Women who obtained scores between 0 and 20 have zero or a poor sexual performance standard; between 22 and 44, poor or insufficient; between 42 and 60, insufficient or fair; between 62 and 80, fair or good; between 82 and 100, good or excellent.[15]

Data were gathered and analyzed with the statistics software SPSS (Statistical Package for the Social Sciences) version 15. For the analysis, descriptive statistics techniques were used (absolute, univariate and bivariate percentage distributions, mean and standard deviation), as well as inferential statistics by means of Fisher's Exact Test. This test was used because the study sample was too small, which did not allow for the use of the Chi-square Test. Significance was set at 5%.

The study was submitted to the appreciation of the Research Ethics Committee of the University of Pernambuco and met the requirements of Resolution 196/96 of the Health Council of Brazil,[16] being approved under protocol number no. 059/11. Data were only collected after the approval of the project by the Research Ethics Committee and the signing of a Free and Informed Consent Form by the participants.

RESULTS

The mean age of the interviewees (n=260) was 51 years. The profile of the interviewed women was non-white (66.2%), in a stable relationship (82.3%), Catholic (72.7%) with eight or more years of schooling. Regarding profession/occupation, 63.5% had a paid work and the others were housewives, 44.2% had a monthly per capita income over the minimum wage, as

shown in table 1.

Table 1 - Distribution of women aged between 40 and 65, according to socioeconomic and demographic data. Recife, Pernambuco, July-September 2011 (n=260)

Variable	n	%
Age group		
40 to 49	124	47.7
50 to 59	91	35.0
60 to 65	45	17.3
Mean (SD)	51.0	7.22
Race		
White	88	33.8
Non-white	172	66.2
Marital status		
Single (divorced/widowed)	46	17.7
Married (stable relationship)	214	82.3
Religion		
Catholic	189	72.7
Evangelical	42	16.2
Spiritist	20	7.7
Others	9	3.5
Education (years of study)		
Did not attend school	9	3.5
1 – 7	99	38.1
≥ 8	152	58.5
Profession		
Paid work	165	63.5
Unpaid work	95	36.5
Per capita income (x times the minimum wage)*		
Up to ½	97	37.3
Between ½ and 1	46	17.7
Over 1	115	44.2
Not provided/not able to inform	2	0.8
Total	**260**	**100.0**

* The values were calculated based on the 2011 minimum wage (540.00 Brazilian reais).

Regarding the intensity of symptoms, 47.7% of women had mild manifestations and about one sixth reported intense symptoms (Figure 1).

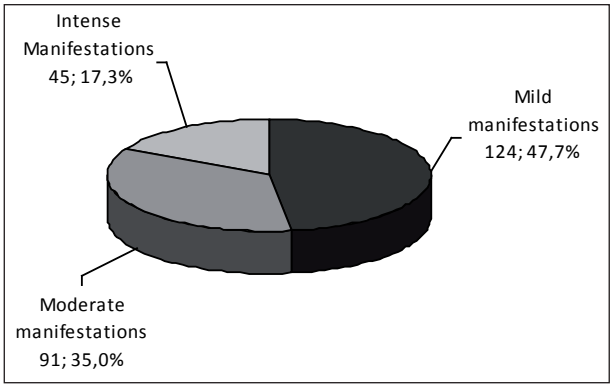

Figure 1 - Distribution of women aged between 40 and 65, according to the intensity of symptoms, based on the BKMI classification. Recife, Pernambuco, July-September 2011 (n=260)

Table 2 shows that 46.2% of the women in this study had a standard of sexual performance considered as good, and 3.8% considered as excellent.

Table 2 - Distribution of women aged between 40 and 65, according to their standard of sexual performance. City Health Club, Recife, Pernambuco, July-September 2011 (n=260)

Variable	n	%
Standard of sexual performance		
Poor	25	9.6
Insufficient	25	9.6
Fair	80	30.8
Good	120	46.2
Excellent	10	3.8
Total	**260**	**100.0**

In order to better interpret the related data, four of the five variables of the SQ-F (poor, insufficient, good, excellent) were merged as poor/insufficient and good/excellent, respectively.

In table 3, it is possible to observe that women with good/excellent standards of sexual performance mostly reported mild symptoms of the menopausal scale, and among those who had a poor/insufficient standard, high percentages of moderate or intense symptoms were found. The association between the two scales was significant ($p<0.001$).

Table 3 - Correlation between the standard of sexual performance and the intensity of climacteric symptoms of women aged between 40 and 65 years old. Recife, Pernambuco, July-September 2011 (n=260)

Standard of sexual performance	Blatt & Kupperman Index								p value
	Mild		Moderate		Intense		Total		
	n	%	n	%	n	%	n	%	
Poor/Insufficient	27	54.0	13	26.0	10	20.0	50	100.0	p(*) < 0.001†
Fair	61	76.3	19	23.8	-	-	80	100.0	
Good/excellent	108	83.1	20	15.4	2	1.5	130	100.0	
Total Group	**196**	**75.4**	**52**	**20.0**	**12**	**4.6**	**260**	**100.0**	

* Fisher's Exact Test/ † Significant difference at 5.0%.

DISCUSSION

The studied women practiced physical exercise at least three times a week for a month, and based on the BKMI, only a minority reported intense symptoms. A study showed that climacteric symptoms appear less frequently (p<0.01) in women who practice physical exercise.[17]

Another population-based study, conducted in Natal, state of Rio Grande do Norte, with 365 women aged between 35 and 65 years also found a lower percentage of intense climacteric symptoms (8.0%) in physically active women.[18] A case control study showed that 63.6% of sedentary women had moderate to intense climacteric symptoms and better scores of quality of life were found among women who practiced physical exercise on a regular basis.[19] That is why the climacteric period deserves special attention, as advice on healthy life habits (physical activity on a regular basis and adequate diet) may result in a significant decrease in the intensity of symptoms, thus providing women with a better quality of life.

From a psychological point of view, when experiencing climacteric, women have to deal with internal alterations resulting from hormonal changes, as well as with the loss of their reproductive potential and aging. Socially speaking, it is also possible to observe social issues during this period, such as children leaving home, illnesses, loss of loved ones, and sometimes stress and misunderstandings in the marital relationship.[20] These changes may affect women's well-being and self-esteem to a great extent, making them vulnerable to the emergence of climacteric and to changes in sexuality.

Climacteric has transient and permanent symptoms and its incidence varies greatly, since it is directly influenced by factors related to the environment and each woman's singularities.

As for sexual performance, an association between the standard of sexual performance (SQ-F) and the intensity of symptoms (BKMI) was observed. Therefore, a high standard of sexual performance may be associated with low intensity climacteric symptoms.

A qualitative study on reasons that favored changes in sexual intercourse during climacteric, conducted in a health center of Jequié, state of Bahia, with 16 women aged between 45 and 59 years, showed that symptoms such as headache, nausea, hot flashes, menorrhagia, physiological changes in sexual intercourse, lack of sexual desire, decrease of pleasure and psychological changes affect sexual life and may interfere in women's sexual response. However, the same study found that some women had no changes at all in the quality of their sexual activities, both because of the absence of symptoms and the fact that they felt more comfortable with their sexuality, as a result of the cessation of the menstrual cycle and the possibility of pregnancy.[21]

These findings allude to studies that assess the complexity of sexual performance going beyond organic alterations, as it is the case for climacteric, since it is known that sexuality includes more than just physiological processes triggered by genital stimuli and is something more complex that involves different factors of emotional and affective nature, good communication with the partner, fantasies and sensory stimuli, which all contribute to awaken desire, pleasure and sexual satisfaction.

Therefore, the standard of sexual performance can also be reduced in climacteric women,

as a result of the presence of psychological disorders (depression, anxiety), altered mood (irritability, nervousness), the use of medicine that inhibit the libido (antidepressants) and the quality of the relationship with the partner.[22]

It is important to highlight that, based on the mean age of the women who participated in this study (51 years), we observed that they were close to the transition period to menopause (as it occurs around the age of 50) and other studies have reported a decrease in the standards of sexual performance/satisfaction of women as age advances.[1,23]

The results presented in our study allow to raise the hypothesis that physical exercise can be associated with a lower intensity of climacteric symptoms and higher standards of sexual performance, ranging from fair to good/excellent. Thus, recommending the practice of physical exercise on a regular basis has been an efficient strategy in the prevention and reduction of climacteric symptoms.[24]

A very important factor to be mentioned is hypoestrogenism in climacteric, a condition in which vaginal lubrication makes sexual arousal response longer and less intense, thus being a determining factor for dyspareunia, which has altered orgasmic response as a consequence. This explains the fact that, when women begin to practice physical exercise, their bodies develop a greater ability to contract the musculoskeletal system, improving muscle flexibility and tone, oxygenating the pelvic organs responsible for vaginal lubrication, and contributing to better sexual performance and satisfaction.[1]

Women's sexuality in climacteric is still the object of preconceived ideas and taboos, and society has believed that women who are not in the reproductive period are asexual or incapable of practicing their sexuality.[1] In this study, we observed that most women are sexually active.

Considering that the biological and psychosocial aspects of women's lives have a great effect on climacteric, the more information is given on symptoms, the easier it is to face this stage positively.[1]

It is imperative that climacteric women be treated adequately by trained health professionals in order to meet the needs of this group of people and advise women on changes that occur at this stage of their lives.[25] In addition, among the different forms of action of nurses, the educating practice has been emerging as the main strategy for health promotion.[25-27]

CONCLUSION

Climacteric symptoms classified as mild were associated with a higher standard of sexual performance considered as good/excellent, as we assumed that changes in the standard of sexual performance of climacteric women have a strong relationship with the intensity of these symptoms.

These findings suggest that the intensity of climacteric symptoms may affect sexuality, sexual response or the standard of sexual performance during that period. Moreover, this study also raises the hypothesis that practicing physical exercise may be associated with a lower intensity of climacteric symptoms and better sexual performance.

It is recommended that planning of health care services provided to climacteric women include health promotion by encouraging the practice of physical exercise on a regular basis.

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Correspondence: Estela Rodrigues Paiva Alves
Rua Edvaldo Bezerra Cavalcanti Pinho, 320, ap. 203
58045-270 − Cabo Branco. João Pessoa, PB, Brasil
E-mail: rodrigues.estela@gmail.com

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