

QUALITY OF LIFE OF WOMEN WITH PREMENSTRUAL SYNDROME FROM THE SCALE WHOQOL-BREF

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ABSTRACT

The objective of this study was to evaluate the quality of life of women with premenstrual Tension (PMT). This is a transversal and descriptive study, conducted with 139 women enrolled in a health center of the periphery of São Luís (MA). The data collected in the period from August 2010 to May 2011 through the application of a questionnaire adapted by researcher and WHOQOL-Bref scale, with descriptive analysis using the WHOQOL-Bref/program Microsoft Excel. The prevalence of premenstrual Tension was 72.66%. Among women participating in the study, it observed a predominance of symptoms irritability, breast tenderness, pelvic pain, headaches, anxiety, decreased interest in usual activities and low self-esteem. In the self-evaluation of the quality of life found to average satisfaction of 51.63% in women with premenstrual Tension. With respect to the selected facets of domains: physical, psychological, social and Environmental Affairs, the average responses was, respectively, activity of everyday life (57.61%), Esteem (46.01%), personal relationships (44.57%) and health care (40.94%). It concluded that the subject requires greater attention on the part of health professionals in conjunction with society, aiming at the elaboration of strategies for improving the quality of life of women with PMS.

Keywords: Pre Menstrual Syndrome. Quality of life. Health.

INTRODUCTION

The premenstrual syndrome (PMS) affects thousands of women all over the world, being singled out as the most common dysfunction among women in reproductive age, however, few studies reveal about the prevalence estimates of the impact of symptoms on quality of life⁽¹⁾.

PMS is a complex disease, due to repercussions that bring in social, family, and professional life of women with these symptoms. In Gynecology, is the condition of highest importance, as it brings martyrdom periodically interfering in the performance of usual functions^(2, 3).

Symptoms vary according to the intensity, since a symptom to a most severe symptom. The considered are that light little perceptible by women: moderates, those who cause annoyances without causing losses in daily activities, and serious intensity, causing losses to daily activities^(4, 5).

As the etiology of premenstrual syndrome and premenstrual dysphoric disorder is not well understood, the goal of treatment is relief of symptoms, which involves a variety of strategies, ranging from lifestyle modifications (diet, exercise) and cognitive-behavioral therapy, the use of medicines, such as Serotonergic Antidepressants⁽⁶⁾.

The epidemiological data indicate that approximately 86% of women of reproductive age experience some of the symptoms of PMS, and, of these, around 3% to 8% will experience an extreme change of mood, interfering with your lifestyle. The symptoms resemble the psychic disorders, particularly depression, interfering significantly in functionality and quality of life⁽⁷⁾.

The search for quality of life has been a constant concern of the human being, from the beginning of its existence, as it is a personal commitment and continuum of healthy living, developed in light of a well-being inseparable way of living conditions, including leisure, freedom, and self-esteem. Thus, conceptualizing

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quality of life, as well as measure it becomes difficult due to subjective character involved in this process⁽⁸⁾.

The World Health Organization (who) defines health not only as the absence of disease or infirmity, but also the presence of physical, mental and social well-being. Recently, it has been reinforced the use of quality of life as a necessary concept in practice and research in health care, contributing in the development of measures for improvement of the population⁽⁹⁾.

The concept of quality of life embraces the multidimensionality, involving the development of perception and evaluation of individuals about their personal condition, State of health and other aspects of your life context, including environmental issues, social, cultural and emotional⁽¹⁰⁾.

Productivity at work seems to be an important area of life of women adversely affected by premenstrual Tension, manifested both by the increase in the rate of absence at work and the reduction of productivity⁽²⁾.

Thereby, the TPM can affect directly the social conviviality and have negative impact on health-related quality of life and loss in productivity of work. Believing that some endocrine and psychological factors associated with environmental factors, can affect the quality of life of women, justified the need for investigation. The survey aims to assess the quality of life of women with premenstrual Tension, identify the symptoms and the intensity of the TPM, and assess the affected facets of the domains physical, psychological, social, and environmental relationships of scale World Health Organization Quality of Life-Bref (WHOQOL-Bref).

MATERIALS AND METHODS

Is a descriptive cross-sectional study, developed in a health center of the periphery of São Luís-MA, during the period of August 2010 to May 2011.

The sample consisted of 139 women, randomly selected, respecting the inclusion criteria pre-set, composed the sample: women registered and monitored in the health service, with autonomy to respond to verbal interview and accept voluntarily participate in the research. Excluded from the study

under 18 years old, older than 49 years and women with amenorrhea.

The sample was defined considering the population of women met in the health service of the unit, being calculated using a confidence interval of 95% ($Z_{\alpha} = 1.96$) and a sampling error of 5% ($E = 0.05$). The sample selection process characterized as random stratified type probabilistic, divided into three mutually exclusive groups, according to the number of teams of the family health Strategy (FHS), called strata, and samples taken the following equivalent (random) of each stratum⁽¹¹⁾. The number selected considered the percentage of each of the tracking teams of ESF.

For definition of the presence or absence of premenstrual Tension, were considered diagnostic criteria by the *American Psychiatric Association*, which requires the presence of five symptoms, showing at least one of the symptoms considered essential (depression, anxiety, emotional lability, irritability, decreased interest in usual activities and difficulty concentrating), since these were present during the last week of the menstrual cycle and absent in the period post menstruation with interference of somatic symptoms (breast tenderness, bloating, headache, and swelling) at work and social activities⁽¹²⁾.

Two instruments used to carry out this research, by consecutive participants or applied by researchers when requested. The first was a questionnaire adapted by researcher with open and closed questions regarding study consequences of premenstrual Tension syndrome in a woman's life⁽¹³⁾, containing demographic information and issues involving the frequency of symptoms presented before menstruation, period of duration and intensity, irritability with herself, with family, friends and at work, in addition to symptoms of greater impact on daily activities.

The second was the WHOQOL-Bref, a short version of WHOQOL-100, an instrument developed by the Group of the World Health Organization (who), conservative and comprehensive character of the original instrument. Consisting of 26 questions about how the person feels about their quality of life and level of satisfaction in different areas, graded with 1 to 5

scores, adjusted for each domain, being two General questions about the self-assessment of quality of life and the other representing each one of the 24 facets that make up the original

instrument (WHOQOL-100), which are represented in four domains: physical, psychological, social and environment relationships⁽¹⁴⁾.

Tableau 1 - Domains and facets of the Abbreviated Instrument for assessing the quality of life of the World Health Organization (WHOQOL-Bref).

Domains	Facets
1-physical domain	Pain and discomfort Energy and fatigue Sleep and rest Mobility Activities of everyday life Dependence on medication or treatments Ability to work
2-psychological domain	Positive feelings Think, learn, memory and concentration Self-esteem Body image and appearance Negative feelings Spirituality/religion/personal beliefs
3-domain social relationships	Personal relationships Support (support) social Sexual activity
4-domain environment	Physical security and protection In the home environment Financial resources Health and social care: availability and quality Opportunities to acquire new information and skills Participation in recreation/leisure opportunities Physical environment (pollution/noise/traffic/weather) Transport

The data entered and analyzed in the program Microsoft Excel/WHOQOL-Bref, originally constituted tool by the World Health Organization for the syntax of the WHOQOL-Bref. The results of the variables studied presented in the form of charts and graphs, properly analyzed and discussed based on relevant literature.

The women were invited to participate in the study on gynecological consultation, were explained the objectives and importance of research, being guaranteed the secrecy of IDs and privacy. To agree to participate, informed about the entitlements established for research with Human Beings, resolution No. 196/96 of the National Health Council. Subsequently, FICS-signed an informed consent. The Research Ethics Committee, Protocol, approved the research: 005701/2010-10.

RESULTS AND DISCUSSION

In table one socio-demographic, data submitted, containing six fundamental characteristics that showed the profile of women in this study.

It observed higher proportion of women aged between 18 and 25 years in the total sample and in the group with TPM (32.4%; 32.7%) and less frequently with age between 42 and 49 years (21.6%; 23.8%). Most were single (50.4%; 47.5%), followed by married (36.7%; 41.6%). As for the level of education, was found higher proportion of women with complete secondary education both in the total sample (66.9%), as in the group with TPM (66.4%), and a small portion had incomplete higher education.

Referring to the profession, it was observed that there was a predominance of women who

exercised informal work, accounting for 38.1 percent of the total and 35.6% of the group with

TPM, followed of which exercised the role of housewife, with 25.9% and 29.7%, respectively.

Table 1 - Distribution of sociodemographic characteristics of women of childbearing age and with premenstrual tension of a health center. São Luís, MA, 2011.

FEATURES	Total sample		Women with PMS	
	(F)	%	(F)	%
Age (years)				
18 I---I 25	45	32.4	33	32.7
26 I---I 33	31	22.3	19	18.8
34 I---I 41	33	23.7	25	24.7
42 I---I 49	30	21.6	24	23.8
Marital Status				
Married	51	36.7	42	41.6
Single	70	50.4	48	47.5
Divorced	03	2.1	03	3
Stable Union	13	9.4	08	7.9
Other (widowed, separated, etc.)	02	1.4	-	-
Schooling				
EFI	11	7.9	07	6.9
OBE	13	9.4	10	9.9
EMI	11	7.9	8	7.9
EMC	93	66.9	67	66.4
ESI	05	3.6	04	4
ESC	06	4.3	05	4.9
Profession				
Housewife	36	25.9	30	29.7
Student	24	17.3	16	15.9
Unattended	07	5.0	02	2
Domestic	08	5.8	08	7.9
Nursing technique	06	4.3	06	5.9
Teacher	05	3.6	03	3
Other (informal).	53	38.1	36	35.6
Number of children				
I-0-I 1	68	48.9	43	42.6
2 I---I 3	62	44.6	53	52.5
4 I---I 5	09	6.5	05	4.9
Family income (minimum wage)				
-0-2	111	79.9	85	84.2
-2-4	23	16.5	12	11.9
-4-6	05	3.6	04	3.9
Total	139	100.0	101	100.0

The demographic profile of the women interviewed in this study showed that the data relating to age and marital status were similar to other studies conducted in Brazil, in which it observed that the majority was single and in fertile period^(7, 15).

In relation to the number of children, 48.9% of total women had of 0 to 1 child, and only 6.5% had more than four children, while

among women with PMS prevailed of 2 to 3 children (52.5%). As for household income, 79.9% of the total and 84.2% of women with PMS had income between 0 and 2 minimum wages; only 3.6% and 3.9% were above 4 minimum wages.

The prevalence of premenstrual Tension in the Group of women participating in the survey was 72.66%.

For the identification of women with premenstrual Tension have been used diagnostic criteria suggested by the *American Psychiatric Association*. According to the literature, the prevalence of premenstrual Tension varies according to criteria used for the identification of PMS. The prevalence found in this study was similar to a Brazilian study⁽¹⁶⁾ and higher than the other⁽²⁾. A possible explanation for these results can attributed to differences in the

populations studied, the strictness of the criteria used, and lack of consensus in the literature.

As for the symptoms of PMS evaluated, according to the *American Psychiatric Association*, the women presented as most frequent characteristic symptoms: irritability (95.7%), breast tenderness (84.1%), pelvic pain (71.0%), headache (63.8%), anxiety (59.4%), decreased interest in usual activities (44.9%) and low self-esteem (42.0%), as shown in Figure 1.

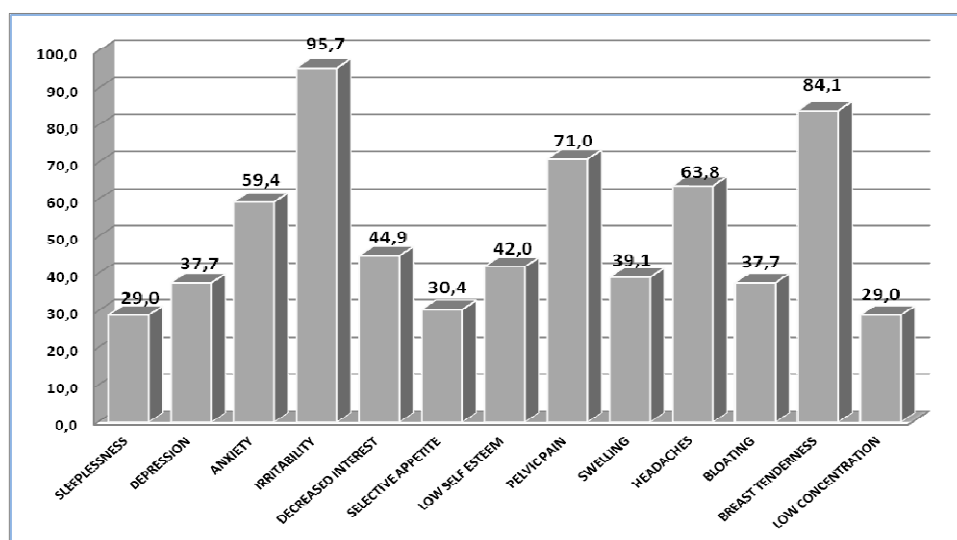


Figure 1 - Symptoms of premenstrual Tension in women in childbearing age of a health center. São Luís, MA, 2011.

Among the symptoms of most frequently referred to by women, have identified irritability, breast tenderness, pelvic pain, headaches and anxiety; corroborating with the existing literature^(7, 17). Irritability, most prevalent symptom in this study (95.7%), proved to be higher when compared to other studies^(13, 16).

In other research, authors grouped symptoms of premenstrual syndrome in five dimensions: affectivity, anxiety, behavior, tits/swelling, and pain, and identified that all the symptoms found they had significant effects on the activities of daily life of women⁽¹²⁾.

As regards the classification of the symptoms of PMS, considered the presence of symptoms with interference in the lives of women in serious, moderate, and light intensity⁽⁴⁾. The results of this research pointed to increased frequency of severe symptoms, with approximate values to other studies in Brazil⁽⁵⁾.

As regards frequency of irritation of women have PMS in family and social relationships, 66.7% responded that they irritated themselves,

52.2% get irritated with children and husband, 30.4% and 29% with friends. As to the variation of the intensity of symptoms, 62% classified as serious and 38% as moderate.

Studies report that symptoms Pre Menstrual interfere directly in interpersonal relations (family and social) and intrapersonal relations⁽¹³⁾, showing similar to that found in the present study, showing significant interference in the lives of women affected by the TPM.

Research conducted with detainees, at the women's prison of Maceió, reports that among women who comply penalty for attempted murder and theft followed by murder, some said to have been influenced by premenstrual Tension⁽⁵⁾.

With respect to the answers of the questions concerning the self-evaluation of the quality of life of the WHOQOL-Bref questionnaire, on a scale from 0 to 100, found average satisfaction of 51.63% in women with premenstrual Tension, standard deviation (SD) of 2.37 and coefficient of variation (CV) of 16.3. In women without

premenstrual Tension, the median was 57.74%, standard deviation of 2.32 and coefficient of variation of 17.68.

In both groups the frequencies of the averages of the self-assessment, score obtained 3 (neither satisfied nor dissatisfied). However, the self-assessment of quality of life of women without TPM presented a better frequency towards women with PMS.

The influence of symptoms on quality of life of women with PMS was similar to other studies^(2, 4). This influence interferes in routine activities and mainly in family relationships and professionals. Of these women, around 3% to 8% will experience extreme changes in your lifestyle⁽⁷⁾. Therefore, these women have received the attention of the public and medicine in particular.

The quality of life presupposes a certain degree of satisfaction of the most basic needs of human life, such as food, access to clean drinking water, housing, work, education, health, and recreation. Thus, the concept of quality of life encompasses a multiple causes for the understanding of well-being for every woman⁽⁸⁾.

The woman considered a fundamental element in society and plays roles related to work, family, sexuality, and reproductive function. The double workday associated with premenstrual Tension leads to a physical and emotional wear and tear, with direct interference in the quality of life⁽⁸⁾.

Regarding the domains of quality of life of women with PMS, the criterion for choosing the selected facets was through the value of the standard deviation, which best attested the reliability of the response average.

Each facet integrates a domain of the WHOQOL-Bref questionnaire, respectively: physical, psychological, social, and environmental relations. The activity of everyday life scored average responses of 57.61% (SD = 1.0; CV = 26.08), Self-esteem 46.01% (SD = 0.73; CV = 17.26), personal relationships 44.57% (SD = 1.08; CV = 29.09) and healthcare 40.94% (SD = 1.12; CV = 40.35).

The values obtained between the four domains of this study are values that interfere significantly in the quality of life of women in the reproductive phase, due to interference that causes in the affective and professional activities

thereof. The dimension of everyday life Activity showed the highest frequency of dissatisfaction regarding the physical domain of the WHOQOL-Bref scale, corroborating other studies in Brazil^(4, 15), which indicate that the daily life activities in women with premenstrual Tension are affected, occurring decrease in quality of life.

The facet Self-esteem, characterized in the psychological domain of women with premenstrual Tension, presented low satisfaction index, with influence of symptoms: irritability, anxiety, depression, insomnia and low concentration, leading to a decline in quality of life. These data were repeated with the account of the symptom of low self-esteem, prevalent in 42% of women have PMS.

Repeated hormonal fluctuation and its interaction with the central nervous system may constitute a destabilizing factor in women with premenstrual Tension. Most women with premenstrual Tension develop symptoms of depression that interfere seriously in its functionality and interpersonal relations⁽³⁾.

In the dimension of personal relationships, social relationships domain, it observed that most considered intermediate satisfaction level (neither satisfied nor dissatisfied). This is because, probably, there was no understanding about the interference of symptoms in personal relationships, at work, at home, to give attention to her husband, to friends and children. Women with premenstrual Tension have reported a variety of symptoms, with irritability referred to as symptom of greater incidence; interfering in relation to themselves, husband, son, work and friends, similar data to other studies carried out in Brazil with women in reproductive phase^(5, 13).

Healthcare facet was that obtained greater significance within the domain environment (40.94%), and presented the lowest rate of satisfaction among domains. These results indicate the women's dissatisfaction with the availability and quality of health services offered.

The quality of health services covers ensuring access, orientation of the customers about the problems and possible solutions, meeting the needs and expectations of customers, which involves the adequacy of professionals, availability, and appropriate use of technological

resources, in order to change positively the State of health of people. The principles and guidelines of the national policy of Integral care to women's health point out that:

"The humanization and the quality of health care are essential conditions for health actions are translated in problem-solving identified, in satisfaction of the users, in strengthening the capacity of women to identify their demands, in recognizing and claiming their rights and in promoting self-care" (18:59).

Highlights that these women did not possess enough knowledge about the symptoms and treatment of the syndrome, even though they received gynecological care in health unit where they are registered. This reflects the importance of considering the user as an integral subject on your needs and desires, and to enable the empowerment of people as a way of promoting the control of variables determinants of health-disease process, aiming at contributing to the improvement of their quality of life.

The survey results have shown that the syndrome interferes significantly on the quality of life of women suffering from PMS. Authors point out that both biological and behavioral issues, as well as socio-demographic and cultural aspects determine the quality of life⁽¹⁹⁾.

In this sense, becomes relevant the adoption of follow-up strategies and multidimensional treatment of women affected by PMS. One of the treatment options available, one can cite changes in lifestyle, calcium supplement, vitamin B12 intake, the GnRH agonists, use of oral contraceptives combined with ethinyl estradiol and drospirenone, selective serotonin reuptake inhibitors, as well as alternative therapies, like homeopathy, relaxation, and reflexology⁽²⁰⁾.

It considered important that governmental authorities are investing in public policies, focused on women's health, focused on completeness and fairness of actions with global

approach at all stages of their life cycle. However, it is necessary to use intervention strategies aimed at improving the quality of life of women, through changes in the variables that can influence them.

CONCLUSIONS

The study addressed the quality of life of women with premenstrual Tension from the use of a standardized instrument by the world health (WHOQOL-Bref), which enabled a broad knowledge of factors that interfere with your quality of life.

Premenstrual tension is a syndrome that involves the demonstration of physical and behavioral symptoms, causing interference in the quality of life, and family, social relations and in the development of daily activities.

One of the facets of each domain that compose the WHOQOL-Bref, stood out Activity of everyday life, Self-esteem, personal relationships and healthcare, interfering significantly on the quality of life of women with PMS.

As for the self-evaluation of the quality of life, it found that the quality of life of women suffering from premenstrual Tension proved to be lower than the quality of life of women without a TPM. Therefore, this theme requires greater attention on the part of health professionals in conjunction with society, aiming at the elaboration of strategies for improving the quality of life, developing preventive actions and educational lectures aimed at the clarification of the syndrome, the treatments, and the interference of the same.

A limiting factor of our study was the existence of a few studies that measure the quality of life of women with premenstrual Tension, and therefore required new studies on the impact of symptoms on quality of life of the same.

QUALIDADE DE VIDA DE MULHERES COM TENSÃO PRÉ-MENSTRUAL A PARTIR DA ESCALA WHOQOL-BREF

RESUMO

O objetivo do estudo foi avaliar a qualidade de vida de mulheres com Tensão Pré-Menstrual (TPM). Trata-se de um estudo transversal e descritivo, realizado com 139 mulheres cadastradas em um Centro de Saúde da periferia de São Luís-MA. Os dados foram coletados no período de agosto de 2010 a maio de 2011 por meio da aplicação de questionário adaptado pelo pesquisador e a escala WHOQOL-Bref, com análise descritiva mediante

utilização do programa WHOQOL-Bref/Microsoft Excel. A prevalência da Tensão Pré-Menstrual foi de 72,66%. Entre as mulheres participantes do estudo, observou-se predomínio dos sintomas irritabilidade, mastalgia, dor pélvica, cefaleia, ansiedade, diminuição do interesse em atividades habituais e baixa autoestima. Na autoavaliação da qualidade de vida foi encontrada média de satisfação de 51,63% em mulheres com Tensão Pré-Menstrual. Com relação às facetas selecionadas dos domínios: físico, psicológico, relações sociais e meio ambiente, a média de respostas foi, respectivamente, Atividade de Vida Cotidiana (57,61%), Autoestima (46,01%), Relações Pessoais (44,57%) e Cuidado de Saúde (40,94%). Conclui-se que o tema requer maior atenção por parte dos profissionais de saúde em conjunto com a sociedade, visando à elaboração de estratégias para melhoria da qualidade de vida de mulheres com TPM.

Palavras-chave: Síndrome Pré-Menstrual. Qualidade de Vida. Saúde.

CALIDAD DE VIDA DE MUJERES CON SÍNDROME PREMENSTRUAL MEDIANTE ESCALA WHOQOL-BREF

RESUMEN

El objetivo del estudio fue evaluar la calidad de vida de mujeres con Tensión Premenstrual (TPM). Se trata de un estudio transversal y descriptivo, realizado con 139 mujeres catastradas en un Centro de Salud de la periferia de São Luís-MA. Los datos fueron recolectados en el período de agosto de 2010 a mayo de 2011 por medio de la aplicación de cuestionario adaptado por el investigador y la escala WHOQOL-Bref, con análisis descriptivo a partir de la utilización del programa WHOQOL-Bref/Microsoft Excel. La prevalencia de la Tensión Premenstrual fue de 72,66%. Entre las mujeres participantes del estudio se observó predominio de los síntomas irritabilidad, mastalgia, dolor pélvico, cefalea, ansiedad, disminución del interés en actividades habituales y baja autoestima. En la autoevaluación de la calidad de vida fue encontrada media de satisfacción de 51,63% en mujeres con Tensión Premenstrual. Con relación a las facetas seleccionadas de los dominios: físico, psicológico, relaciones sociales y medio ambiente, la media de respuestas fue, respectivamente, Actividad de Vida Cotidiana (57,61%), Autoestima (46,01%), Relaciones Personales (44,57%) y Cuidado de Salud (40,94%). Se concluye que el tema requiere mayor atención por parte de los profesionales de salud en conjunto con la sociedad, pretendiendo la elaboración de estrategias para la mejoría de la calidad de vida de mujeres con TPM.

Palabras clave: Síndrome Premenstrual. Calidad de Vida. Salud.

REFERENCES

1. Gaion PA. Estudo da Associação entre Síndrome Pré Menstrual, Personalidade e desempenho esportivo [dissertação]. Paraná: Universidade Estadual de Maringá; 2008. 158 p.
2. Gaion PA, Vieira LF, Silva CML. Síndrome pré-menstrual e percepção de impacto no desempenho esportivo de atletas brasileiras de futsal. Rev Bras Cineantropom Desemp Hum. 2009 jan/mar.; 11(1): 73-80.
3. Veras AB, Nardi AE. Hormônios Sexuais Femininos e Transtornos do Humor. J Bras Psiquiatr. 2005 jan/mar.; 54(1): 57-68.
4. Silva CML, Gigante DP, Carret MLV, Fassa, ACG. Estudo Populacional de Síndrome Pré-Menstrual. Rev Saúde Pub. 2006 jan/fev.; 40(1): 47-56.
5. Rodrigues CFS, Gusmão LCB, Pereira GO, Bárbara GHS, Bezerra Jr DL, Jesus SRR. Prevalência de gravidade de sintomas Pré-Menstrual em reeducandas Condenadas por Crimes Violentos. J Bras Psiquiatr. 2006 jan.; 55(1): 58-61.
6. Biggs WS, Demuth RH. Premenstrual syndrome and premenstrual dysphoric disorder. American family physician. 2011 Oct; 84(8): 918-24.
7. Carvalho VCP, Cantilino A, Gonçalves CRK, Moura RT, Sougey EB. Prevalência da síndrome de Tensão Pré-Menstrual e do Transtorno Disfórico Pré-Menstrual entre Estudantes Universitárias. Neurobiol. 2010 jan/mar.; 73(1): 41-53.
8. Redivo LB, Werlang BSG, Muller MC. Qualidade de vida em Mulheres que Procuram Atendimento Ginecológico. Psiqu. Saúde e Doença. 2008 jan/jun.; 9(1): 113-29.
9. Santos CB, Scandelari L, Carvalho DR, Vaz MSMG, Santos MGP. Aquisição de conhecimento implícito de indicadores de qualidade de vida. Rev Bras Qualidade de Vida. 2009 jan/jun.; 1(1): 35-57.
10. Camponogara S, Kirchhof ALC, Ramos FRS. Perspectivas para a qualidade de vida e a promoção da saúde no contexto da sociedade de risco. Cienc Cuid Saude. 2008 out/dez; 7(4): 551-7.
11. Rea LM, Parker RA. Metodologia de Pesquisa: do planejamento à execução. São Paulo: Pioneira; 2000.
12. Dennerstein L, Lehert P, Bäckström TC, Heinemann K. The effect of premenstrual symptoms on activities of daily life. Fertility and Sterility. 2010 Aug; 94(3): 1059-64.
13. Muramatsu CH, Vieira OCS, Simões CC, Katayama DA, Nakagawa FH. Consequências da Síndrome da Tensão Pré-Menstrual na vida da Mulher. Rev Esc Enferm USP. 2001 set.; 35(3): 205-13.
14. Santos CB, Pedroso B, Scandelari L, Pilatti LA. Interpretação da Sintaxe do SPSS para Análise de Dados do WHOQOL-100 e Relação de Dependência entre Dados e Resultados. Rev Bras Qualidade de Vida. 2010 jan/jun.; 2(1): 1-11.
15. Carvalho VCP, Cantilino A, Carreiro NMP, Sá LF, Sougey EB. Repercussões do transtorno disfórico pré-menstrual entre universitárias. Rev Bras Psiquiatria. 2009 maio/ago.; 31(2): 105-11.

16. David AM, Di Bellas ZJ, Berenstein E, Lopes AC, Vaisberg M. Incidência da Síndrome pré-menstrual na prática de esportes. *Rev Bras Medicina Esporte*. 2009 set/out.;15(5): 1-7.
17. Petta CA, Osis MJD, de Padua, KS, Bahamondes L, Makuch MY. Premenstrual syndrome as reported by Brazilian women. *International Journal of Gynecology & Obstetrics*. 2010 Jan; 108(1):40-3.
18. Brasil. Ministério da Saúde. Política Nacional da Atenção Integral à Saúde da Mulher: princípios e diretrizes. Brasília: Ministério da Saúde; 2004.
19. Aguiar FIM, Farias DR, Pinheiro ML, Chaves ES, Rolim ILTP, Almeida PC. Qualidade de vida de paciente submetido ao transplante cardíaco: aplicação da escala Whoqol-Bref. *Arq Bras Cardiol*. 2011 jan.; 96(1): 60-7.
20. Brilhante AVM, Bilhar APM, Carvalho CB, Karbage SAL, Pequeno Filho EP, Rocha ES. Síndrome pré-menstrual e síndrome disfórica pré-menstrual: aspectos atuais. *Femina*. 2010 jul.; 38(7): 373-78.

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