

Assessment of sexual satisfaction in fibromyalgia patients

Avaliação da satisfação sexual em pacientes portadoras de fibromialgia

Evelin Diana Goldenberg Meirelles Mariano da Costa¹, Maximiliano Cassilha Kneubil², Wanderson Correa Leão²
Karol Bezerra Thé²

ABSTRACT

Objective: To evaluate sexual experience and satisfaction in women with fibromyalgia. **Methods:** Twenty women with fibromyalgia were compared to 20 normal women using Beck depression inventory and another questionnaire on sexual experience and satisfaction. The following aspects were addressed: age, past medical and surgical history, obstetric events, schooling, use of medication, religion, marital status, and drug use. Statistical analyses were performed using chi-squared test or Fisher's test, whenever appropriate, and Student's *t* test. **Results:** The mean age of women with fibromyalgia was lower than that of the control group. There were more married women in the fibromyalgia group. These patients showed greater modification in sexual activities ($p = 0.01$); greater difficulty in having orgasm ($p = 0.01$) and were more likely to masturbate ($p = 0.053$). **Conclusions:** Fibromyalgia probably interferes in sexual function of women with this condition. Further studies are necessary to evaluate this issue.

Keywords: Fibromyalgia; Sexual dysfunction; Muscle diseases; Rheumatologic diseases

RESUMO

Objetivo: Avaliar a experiência e a satisfação sexual em pacientes portadoras de fibromialgia. **Métodos:** Foram avaliadas 20 pacientes do sexo feminino, portadoras de fibromialgia e comparadas a 20 controles não portadoras de fibromialgia, por meio do inventário de depressão de Beck e um questionário sobre experiência e satisfação sexual. Foram questionadas quanto a idade, antecedentes pessoais, passado obstétrico e mórbido, escolaridade, ingestão de medicamentos, religião, estado civil e uso de drogas. A análise estatística foi feita por meio dos testes do qui quadrado e exato de Fisher, quando pertinente, e do teste *t* de Student. **Resultados:** A média de idade das pacientes com

fibromialgia foi significativamente inferior à dos controles e no grupo de portadoras de fibromialgia houve maior número de mulheres casadas. Essas pacientes mostraram modificação da atividade sexual em maior número que as do grupo controle ($p = 0,01$), maior dificuldade em atingir o orgasmo ($p = 0,044$), tendência maior à necessidade de masturbação ($p = 0,053$). **Conclusões:** A fibromialgia provavelmente interfere na função sexual de mulheres portadoras da afecção. Sugerem-se novas pesquisas para estudo do assunto.

Descritores: Fibromialgia; Disfunção sexual; Doenças musculares; Doenças reumatológicas

INTRODUCTION

Any problem that interferes in human sexual response to erotic stimuli, be them psychological, biological or social, is called sexual dysfunction.

The term female sexual dysfunction comprises female orgasmic disorder, female sexual arousal disorder and hypoactive sexual desire disorder. However, even for the purpose of definition, all these would be a "disease" if there were any suffering. We often observe a "relative disease", if this term may be used. It refers to women whose sexual performance is beyond what her partner expects, but there is no suffering for her.

According to the National Health and Social Life Survey⁽¹⁾, one third of women reports lack of sexual interest, and approximately one fourth of women have no orgasms. Slightly less than 20% of them present impaired lubrication and over 20% finds sex unpleasant.

¹ Physician of Hospital Israelita Albert Einstein and of the Discipline of Internal Medicine, Medical School, Universidade Federal de São Paulo (SP).

² Resident of the Discipline of Internal Medicine, Medical School, Universidade Federal de São Paulo (SP).

Corresponding author: Evelin Diana Goldberg Meirelles Mariano da Costa - Av. Nove de Julho, 4303 - Jardim Paulista - São Paulo - SP.

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The sum of these figures shows a major prevalence of female sexual complaints.

Population studies demonstrated that sexual dysfunction is more prevalent in women (43%) than in men (31%) and it is associated with psychosocial factors, such as race, schooling, use of medication and negative sexual experiences⁽²⁻³⁾. Community studies showed that 33-39% of women reported reduced libido⁽⁴⁾, and that was the major problem found in sexual therapy clinics⁽⁵⁻⁶⁾.

Another study concluded that 50% of men and 77% of women reported sexual difficulties that were not dysfunctional (such as lack of interest or inability to relax). Reported lack of sexual satisfaction correlated more strongly with the number of difficulties than with any other dysfunction⁽⁷⁾.

Among the muscle and skeletal diseases, fibromyalgia (FM) has stood out due to the high prevalence in general practitioner and rheumatologist offices – 2.1% in private clinics⁽⁸⁾, 5.7% in outpatients units in private clinics⁽⁹⁾, 5-8% in general hospitals⁽¹⁰⁾ and 14-20% in rheumatologic clinics⁽¹¹⁻¹²⁾. Fibromyalgia is a chronic, non-inflammatory, painful syndrome characterized by diffuse muscle and skeletal pain and multiple tender points at palpation⁽¹³⁻¹⁴⁾.

More recent studies performed in the United States showed that 2% of population has fibromyalgia⁽¹⁵⁾; in that, 80 to 90% are females, aged 30-60 years. A Brazilian study carried out in 2004 demonstrated the prevalence of fibromyalgia was 2.5% in the population of the city of Montes Claros⁽¹⁶⁾.

Its etiology is very complex, and comprises alterations of neurotransmitters involved in pain modulation, thalamic perfusion disorders, alterations in the hypothalamus-hypophysis-adrenal axis, as well as sleep disorders⁽¹⁷⁾. Apart from persistent pain, 90% of patients complained of chronic fatigue⁽¹⁸⁾, 25% of patients presented major depression at diagnosis and 50% had a past history of depression⁽¹⁹⁾.

It is known that fibromyalgia patients have a poorer quality of life, which is considered inferior to that of patients with other rheumatologic diseases, insulin-dependent diabetes or chronic obstructive pulmonary diseases⁽²⁰⁾. Preliminary data of a study demonstrated that sexual satisfaction is significantly decreased in FM as compared with normal individuals⁽²¹⁾. In FM, the use of antidepressants, as well as some psychological factors, such as anxiety, depression, sleep disorders and fatigue, may contribute to reduce the quality of sexual life of these patients⁽²¹⁾.

Although sexual satisfaction is an important determinant in quality of life, there are few studies assessing this aspect in fibromyalgia patients. This fact motivated us to carry out the present investigation.

OBJECTIVE

To evaluate sexual experience and satisfaction in women with fibromyalgia as compared with a control group.

METHODS

The study was carried out in the outpatients clinic of the Discipline of Internal Medicine of the Medical School - Universidade Federal de São Paulo.

Twenty female patients who met the criteria for fibromyalgia established by the American Rheumatology College⁽²²⁾ and 20 women without fibromyalgia, aged 18-45 years were assessed. The patients and the controls were asked about their age, medical and surgical history, obstetric events, schooling, use of medication, religion, marital status, and drug use.

The exclusion criteria were:

1. use of antidepressants and methyldopa;
2. menopause;
3. inflammatory rheumatologic diseases;
4. neurological, psychiatric, heart, pulmonary or gynecologic diseases;
5. pregnancy;
6. women not sexually active;
7. moderate/severe depression;
8. alcoholism;
9. smokers;
10. schooling up to incomplete Junior School.

The Beck depression inventory⁽²³⁻²⁴⁾ was applied to rule out cases of moderate to severe depression, as well as a questionnaire about sexual experience and satisfaction, which was prepared based on the following already validated questionnaires: Changes in Sexual Functioning Questionnaire⁽²⁵⁾, Arizona Sexual Experiences Scale⁽²⁶⁾, Psychotropic-related Sexual Dysfunction Questionnaire⁽²⁷⁾.

All women signed an informed consent in order to participate in the study.

The study was approved by the Research Ethics Committee of the institution.

STATISTICAL ANALYSIS

In order to assess whether the explanatory variables (marital status, schooling, etc.) were independent from the groups (control and fibromyalgia), the chi-squared test was used for 2x2 tables (+).

When the expected frequency in some cases was smaller than 5, the Fisher's exact test was used (++).

The significance level adopted was 0.05.

The same procedure was used to assess if the result in each question (with two categories) was independent from the groups (control and fibromyalgia).

The Student's *t* test was applied to assess if the variables age and total score were, in average, the same for both groups (control and fibromyalgia).

RESULTS

Table 1 shows the characteristics of the population studied, their differences and significance level.

Table 1. Mean age and standard deviation in control group and fibromyalgia group. Number of women and respective percentages with or without husband in control group and fibromyalgia group. Schooling in control group and fibromyalgia group. Religion in control group and fibromyalgia group

Characteristics	Control	Fibromyalgia	p level
Age - mean and standard deviation	28.5±10.3	34.9±6.6	0.03
Marital status			
Married	13 (65%)	5 (25%)	0.011+
Unmarried	7 (35%)		15 (75%)
Schooling			
Up to High School	9 (45%)	5 (25%)	0.185+
Higher education	11 (55%)	15 (75%)	
Religion			
Catholic	15 (75%)	15 (75%)	1+
Others	5 (25%)	5 (25%)	

The mean age of patients in the fibromyalgia group was 34.9 years and, in control group, 28.5 years, and this difference was statistically significant ($p = 0.03$)

As to marital status, the majority of fibromyalgia patients were married as compared with the control group, and this data was statistically significant ($p = 0.011$).

Both groups were homogeneous regarding schooling and religion.

Concerning sexual satisfaction level, partner's satisfaction level, pain during intercourse, need to use fetishes, report of premature orgasm, need for peculiar positions or activities, feeling of blame, there were no statistically significant differences between the two groups (tables 2 and 3).

Table 2. Mean total score based on questionnaire about sexual experience and satisfaction in fibromyalgia and control groups

	Control	Fibromyalgia	p level	
Total score	Mean and standard deviation	33.1±8.3	36.1±9.7	0.30

Table 3. Sexual satisfaction level, partner's satisfaction level, pain during intercourse, need to use objects, images and fetishes, report of premature orgasm, need for peculiar positions or activities during intercourse and feeling of blame in control group and fibromyalgia group

		Control	Fibromyalgia	p level
Sexual satisfaction level	Slightly intense	1 (5%)	0	1++
	Very intense	19 (95%)	20 (100%)	
Partner's satisfaction level	Slightly intense	1 (5%)	3 (15%)	0.605++
	Very intense	19 (95%)	17 (85%)	
Pain	No	19 (95%)	18 (90%)	1++
	Yes	1 (5%)	2 (10%)	
Fetishes	No	17 (85%)	19 (95%)	0.605++
	Yes	3 (15%)	1 (5%)	
Premature orgasm	No	20 (100%)	19 (95%)	1++
	Yes	0	1 (5%)	
Peculiar activities	No	16 (80%)	18 (90%)	0.661++
	Yes	4 (20%)	2 (10%)	
Feeling of blame	No	19 (95%)	17 (89.5%)	0.605++
	Yes	1 (5%)	2 (10.5%)	

Regarding need to masturbate, the fibromyalgia group tended to masturbate more often than the control group ($p = 0.053$) (table 4).

Table 4. Need to masturbate in control group and fibromyalgia group

		Control	Fibromyalgia	p level
Masturbation	No	15 (75%)	9 (45%)	0.053+
	Yes	5 (25%)	11 (55%)	

Fibromyalgia patients reported changes in sexual activities (interest, arousal, orgasm) when compared with the control group ($p = 0.01$) (table 5).

Table 5. Changes in sexual activity in control group and fibromyalgia group

		Control	Fibromyalgia	p level
Changes in sexual activities	No	19 (95%)	9 (45%)	0.01+
	Yes	4 (20%)	11 (55%)	

Based on questions 1 to 14 of Beck's inventory⁽²³⁾, which were answered by fibromyalgia patients and the control group, the following parameters were also assessed: intensity of sexual desire, ability to be aroused, ability to reach an orgasm, orgasm satisfaction level, comfort with their sexual performance, frequency of sexual activity, frequency of sexual thoughts, beginning of sexual activities, vaginal lubrication, frequency of arousal during sexual activities, frequency of orgasm, level of pleasure during sexual activities, ability to achieve orgasm, and frequency of painful penetration or painful orgasms (table 6).

Considering these parameters, it was observed that fibromyalgia patients presented lower ability to achieve orgasm than the control group ($p = 0.044$) (table 7). In the remaining items, there were no significant differences among fibromyalgia patients and controls.

Table 6. Parameters assessed according to Beck's inventory

Questions		Control	Fibromyalgia	p level
Q1	1-3 (strong)	15 (75%)	12 (60%)	0.311 +
	4-6 (weak)	5 (25%)	8 (40%)	
Q2	1-3 (easy)	18 (90%)	14 (70%)	0.235 + +
	4-6 (difficult)	2 (10%)	6 (30%)	
Q3	1-3 (easy)	16 (80%)	13 (65%)	0.288 +
	4-6 (difficult)	4 (20%)	7 (35%)	
Q4	1-3 (much)	19 (95%)	17 (85%)	0.605 + +
	4-6 (little)	1 (5%)	3 (1%)	
Q5	1-3 (much)	17 (85%)	15 (75%)	0.695 + +
	4-6 (little)	3 (15%)	5 (25%)	
Q6	1-3 (high)	16 (80%)	16 (80%)	1 + +
	4-6 (low)	4 (20%)	4 (20%)	
Q7	1-3 (high)	18 (90%)	15 (75%)	0.407 + +
	4-6 (low)	2 (10%)	5 (25%)	
Q8	1-3 (spontaneous)	20 (100%)	17 (85%)	0.231 + +
	4-6 (forced)	0	5 (15%)	
Q9	1-3 (easy)	19 (95%)	18 (90%)	1 + +
	4-6 (difficult)	1 (5%)	2 (10%)	
Q10	1-3 (high)	19 (95%)	19 (95%)	1 + +
	4-6 (low)	1 (5%)	1 (5%)	
Q11	1-3 (high)	17 (85%)	14 (70%)	0.451 + +
	4-6 (low)	3 (15%)	7 (30%)	
Q12	1-3 (much)	20 (100%)	19 (95%)	1 + +
	4-6 (little)	0	1 (5%)	
Q14	1-3 (high)	20 (100%)	19 (95%)	1 + +
	4-6 (low)	0	1 (5%)	

Legend. Intensity of sexual desire (Q1), ability to be aroused (Q2), ability to reach an orgasm 3), orgasm satisfaction level (Q4), comfort with their sexual performance (Q5), frequency of sexual activity (Q6), frequency of sexual thoughts (Q7), beginning of sexual activities (Q8), vaginal lubrication level (Q9), frequency of arousal during sexual activities (Q10), frequency of orgasm (Q11), level of pleasure (Q12), and frequency of painful penetration or orgasms (Q14) in control group and fibromyalgia group.

Table 7. Ability to achieve orgasm in control group and fibromyalgia group

Q13	Control	Fibromyalgia	p level
1-3 (much)	19 (95%)	13 (65%)	0.044 + +
4-6 (little)	1 (5%)	7 (65%)	

DISCUSSION

Fibromyalgia is characterized by generalized pain in the body, and it may be accompanied by fatigue, sleep disorders, irritability and depression. The patients present important worsening in quality of life, and they are compared with patients suffering from chronic obstructive pulmonary diseases⁽²⁰⁾.

This investigation might be considered a preliminary study and its objective was to assess sexual satisfaction in fibromyalgia patients as compared to women with no fibromyalgia; all women were not in menopause, so that hormone variations would not interfere. The Beck inventory⁽²³⁻²⁴⁾ was used, as well as another questionnaire related to sexual experience and satisfaction⁽²⁵⁻²⁷⁾.

Taking into account that the mean age of fibromyalgia female patients is 43.2 years⁽¹⁶⁾ in Brazil, in this study the mean age found in both groups was lower. Although there was a significant difference as to age in both groups, there was a concern about selecting women who were effectively not at

menopausal age; however, this finding was not valued when interpreting the results.

On the other hand, the factor religion, which could influence in sexual behavior of patients⁽²⁸⁾, was not different between the two groups.

As to marital status, there was a statistically significant difference between the groups in that most fibromyalgia patients were married and the controls that had partners were unmarried. Despite probable emotional stability of marriage, these patients presented higher non-satisfaction levels, as well as changes in sexual activity as compared with the control group. These might be due to pain, fatigue, irritability, sleep disorders or even dissatisfaction with the partner, as provided in the literature⁽²¹⁾.

The fibromyalgia patients showed a tendency to need foreplay/masturbation, as compared with controls, which was close to statistical significance. Since they presented changes in sexual activity, they might demand more foreplay/masturbation.

Regarding sexual desire, in the control group a minority reported less intense desire, whereas in fibromyalgia group, more subjects reported less desire. This number did not show statistical significance, maybe due to small sample of patients interviewed.

As to arousal level, fibromyalgia patients tended to have more difficulties than the control group. Concerning orgasm, it was more difficult for fibromyalgia patients to reach orgasm, and they were not able to reach whenever they wished, which was statistically significant. One may speculate this fact could be related to pain, fatigue or irritability.

Thus, we suggest other studies to address this issue, comprising a larger sample in order to establish definitive findings.

CONCLUSIONS

Fibromyalgia probably interferes with sexual satisfaction level of female patients, since there were changes in sexual activities regarding interest, arousal and orgasm criteria, greater tendency to need masturbation and less ability to reach an orgasm, when compared with the control group of women with no fibromyalgia.

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