ABSTRACT
Objective: to identify the relationship between health-related quality of life and sexuality in women with fibromyalgia. Methods: this is a cross-sectional, quantitative study of 30 women with fibromyalgia, conducted at a teaching hospital in João Pessoa-PB. Data were obtained from the following instruments: Medical Outcome Study Short-Form 36 Health Survey (SF-36) and Sexual Quotient - Female Version (QS-F). Next, data were analyzed by chi-square test. The level of statistical significance was set at 0.05. Analyses were performed by the software R, version 2.15.1. The study project was approved by the Ethics Research Committee, CAAE: 13157413.9.0000.5183. Results: We found that women with less physical pain and better social and emotional functioning, physical appearance and general health showed higher satisfaction during sexual foreplay, more relaxation during sexual intercourse and less pain during vaginal penetration, with statistically significant results. Conclusion: Sexual aspects should be given more attention, because they reflect on behavioral factors relating to quality of life of women with fibromyalgia. Descriptors: Fibromyalgia; Sexuality; Health-relate Quality of Life.

RESUMO
Objetivo: verificar a relação entre qualidade de vida e sexualidade em mulheres fibromiálgicas. Métodos: estudo transversal, quantitativo, realizado com 30 usuárias fibromiálgicas em um hospital de ensino em João Pessoa-PB. Os dados foram obtidos a partir dos instrumentos: Medical Outcome Study Short-Form 36 Health Survey (SF-36) e Quociente Sexual - Versão Feminina (QS-F) respectivamente. Em seguida, os dados foram analisados pelo teste Qui-quadrado. O nível de significância estatística foi estabelecido em 0,05. As análises foram executadas pelo software R versão 2.15.1. O projeto de pesquisa foi aprovado pelo Comitê de Ética em Pesquisa, CAAE: 13157413.9.0000.5183. Resultados: Observou-se que mulheres com melhor capacidade funcional, aspecto físico, social e emocional, menor dor física e melhor estado geral de saúde apresentaram melhor satisfação nas preliminares sexuais, maior relaxamento para a prática sexual e menor dor na penetração vaginal, com resultados estaticisticamente significativos. Conclusão: há necessidade de melhor atenção aos aspectos da sexualidade, pois estes refletirão no comportamento referente à qualidade de vida de mulheres fibromiálgicas. Descriptores: Fibromialgia; Sexualidade; Qualidade de Vida.

RESUMEN
Objetivo: Investigar la relación entre calidad de vida y sexualidad en mujeres con fibromialgia. Métodos: estudio transversal, cuantitativo realizado con una muestra de 30 mujeres con fibromialgia en un hospital universitario en João Pessoa-PB. Para la obtención de los datos se utilizaron los siguientes instrumentos: Medical Outcome Study Short-Form 36 Health Survey (SF-36) y Cociente Sexual - Versión Femenina (QS-F). A continuación, los datos se analizaron mediante el test de chi-cuadrado. El nivel de significación estadística se estableció en 0,05. El análisis se llevó a cabo mediante el software R, versión 2.15.1. El proyecto de investigación fue aprobado por el Comité de Ética en Investigación, CAAE: 13157413.9.0000.5183. Resultados: Se observó que las mujeres con un mejor capacidad funcional, funcionamiento físico, social y emocional, menos dolor físico y mejor salud general mostraron una mayor satisfacción durante los juegos sexuales previos, más relajación para la práctica sexual y menos dolor en la penetración vaginal, con resultados estadísticamente significativos. Conclusión: Se debería dar más atención a aspectos sexuales, porque reflejan en factores de comportamiento relacionados con la calidad de vida de mujeres con fibromialgia. Descriptores: Fibromialgia; Sexualidad; Calidad de Vida.
INTRODUCTION

Rheumatic diseases cause considerable impact on patient’s physical, psychological and social well-being. Thus, the use of multidimensional assessment measures is relevant in their assessment.1 Fibromyalgia Syndrome (FMS) is the second most frequent condition among rheumatic diseases, surpassed only by degenerative osteoarthritis.1 In many industrialized countries, the prevalence of FMS in the general population ranges from 1% to 4%.2

Fibromyalgia syndrome is a disease of unknown etiology. It has a chronic and non-articular character, and is typically characterized by diffuse pain and the presence of specific tender points3. Some conditions are associated with FMS, such as irritable bowel syndrome, thyroid dysfunction, endometriosis and psychological problems like depression and anxiety.4

The clinical presentation of patients with FMS can vary from mild symptoms to cases in which the pain, fatigue and depression are so severe that they impede professional and social functioning. Functional disability of patients with FM is reflected adversely on occupational performance, making it difficult for them to conduct a series of motor and cognitive tasks. FMS symptoms cause great impact on daily life and contribute to the disruption of routines. Their consequences are usually maintained over time due to the chronicity of the disease. Social impacts destabilize family relationships, restrict social contact and interfere with the habits and routines of patients, forcing them to perform continuous efforts to adapt to new reality.5 As a result of such factors, patients with fibromyalgia may exhibit deficits in functional capacities and quality of life. FMS patients have worse quality of life than patients with other chronic diseases, such as rheumatoid arthritis, cancer, chronic obstructive pulmonary disease and systemic lupus erythematosus.6,7

Fibromyalgia affects predominantly women. Specifically in this group, FM can also lead to female sexual dysfunction (FSD). FSD is best defined as the difficulty or inability of a woman to find satisfaction in sexual expression.8 FSD is characterized by disturbances in the processes of the sexual response cycle or by pain associated with sexual intercourse, affecting one or more phases of this cycle (desire, arousal and/or orgasm) or even blocking them at any given moment of its unfolding.9

Given the importance of fibromyalgia as a disease that affects the health-related quality of life and possibly the sex drive of women, this study aimed to:

- Identify the relationship between health-related quality of life and sexuality in women with fibromyalgia.

METHODS

This is a probabilistic, cross-sectional, quantitative analytical study10 conducted at the University Hospital Lauro Wanderley (HULW), a teaching hospital of the Federal University of Paraíba/UFPB, João Pessoa/PB.

The HULW provides care in the areas of anesthesiology, internal medicine, general surgery, obstetrics and gynecology, pediatrics, ophthalmology, intensive therapy, infectious and rheumatic diseases. Moreover, it offers field practice in Medicine, Nursing, Physical Therapy, Nutrition, Pharmacy, Dentistry, Social Work, Psychology, Physical Education, Social Communication, among others.

A non-probability convenience sampling of 48 female patients was carried out from April through June 2013. Exclusion criteria were: no fibromyalgia; no active sex life; no steady partner; under eighteen years of age; and illiterate. Eighteen users met the exclusion criteria for this study. Thus, the final sample was composed of 30 female users.

Data were collected by professionals of the multidisciplinary integrated residency in hospital health. Data were collected in the time before or after consultations at the outpatient clinic of the HULW, through the administration of a self-completion, semi-structured questionnaire. Data were obtained from the following instruments: Medical Outcome Study Short-Form 36 Health Survey (SF-36), to assess the health-related quality of life, and the Sexual Quotient-Female Version (SQ-F), to assess sexuality in women with fibromyalgia.

The administration of the instruments was also carried out in the time before or after consultations, in order to avoid any risks to the participants. This procedure had an average duration of 20 minutes.

- Short Form 36 (SF-36) health survey questionnaire

The SF-36 (Medical Outcomes Study 36-item Short-Form Health Survey) is a generic, multidimensional instrument for assessing health-related quality of life. The SF-36 has eight scales. Each component ranges from zero to one hundred, with zero being the worst score and one hundred, the best.11
The eight scales of the questionnaire were categorized in this study as: functional capacity (FC), physical functioning (PF), bodily pain (PAIN), general health (GH), vitality (Vit.), social functioning (SF), role-emotional (RE) and mental health (MH).

This instrument was validated and translated into Brazilian Portuguese, and is easy and quick to administer. The SF-36 has been used as a general measure for assessing health-related quality of life in conditions such as rheumatoid arthritis and osteoarthritis, as well as fibromyalgia11.

Sexual Quotient - Female Version (SQ-F)

The Sexual Quotient - Female Version (QS-F) was developed and validated in 2009 in the Program of Studies in Sexuality (ProSex), Institute of Psychiatry, Hospital das Clínicas, School of Medicine, University of São Paulo. The instrument consists of 10 questions. Each question must be answered on a scale from 0 to 5. There is a total score ranging from 0 to 100. The seventh question should be treated differently, i.e., the value of the response (0-5) must be subtracted from 5 in order to provide the final score of the question8.

Higher values indicate better performance/sexual satisfaction, namely: 82-100 points: good to excellent; 62-80 points: fair to good; 42-60 points: unfavorable to fair; 22-40 points: bad to unfavorable; 0-20 points: null to bad.

Next we present the ten questions and the form of categorization used in the assessment: Question 1 - "Do you ever think spontaneously in sex, have sexual thoughts or imagine yourself having sex?" (THINKING); Question 2 - "Are you interested enough in sex to be willing to participate in sexual intercourse?" (INTEREST); Question 3 - "Does foreplay (caresses, kisses, hugs, cuddles, etc.) stimulate you to have sexual intercourse?" (FOREPLAY); Question 4 - "Do you usually become lubricated (wet) during intercourse?" (LUBRICATION); Question 5 - "During sexual intercourse, as your partner's arousal increases, do you also feel more aroused to sex?" (AROUSAL); Question 6 - "Can you reach orgasm (sensation of climax) in sexual intercourse?" (ORGASMS); Question 10 - "Does the amount of satisfaction you get from intercourse makes you want to have sex again, on other days?" (SATISFACTION).

Data were then analyzed by the software R, version 2.15.1., and by chi-square test. The level of statistical significance was set at 0.05.

This study followed the requirements of Resolution 196/96 of the National Health Council, Ministry of Health, following the ethical guidelines in research with human subjects. In addition, the study project was submitted to and approved by the Research Ethics Committee of the University Hospital Lauro Wanderley (HULW), Federal University of Paraíba, CAAE: 13157413.9.0000.5183. All participants signed an informed consent form, which recognizes participants' autonomy, ensures their anonymity and the reveals the expected benefits of the study.

Table 1. Relationship between sexuality and health-related quality of life in women with fibromyalgia - João Pessoa - PB, 2013 (n=30)

<table>
<thead>
<tr>
<th>Question</th>
<th>SF-36</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>FC</td>
</tr>
<tr>
<td>Thinking</td>
<td>0.382</td>
</tr>
<tr>
<td>Sexual Interest</td>
<td>0.083</td>
</tr>
<tr>
<td>Foreplay</td>
<td>0.026**</td>
</tr>
<tr>
<td>Lubrication</td>
<td>0.965</td>
</tr>
<tr>
<td>Arousal</td>
<td>0.097</td>
</tr>
<tr>
<td>Relaxation</td>
<td>0.114</td>
</tr>
<tr>
<td>Pain</td>
<td>0.020**</td>
</tr>
<tr>
<td>Involvement</td>
<td>0.556</td>
</tr>
<tr>
<td>Orgasms</td>
<td>0.072</td>
</tr>
<tr>
<td>Sexual Satisfaction</td>
<td>0.887</td>
</tr>
</tbody>
</table>

* Significant at p <0.01; ** Significant at p <0.05.

Note: FC = Functional Capacity; PF = Physical Functioning; PAIN = bodily pain; GH = General Health; Vit = Vitality; SF = Social Functioning; RE = Role-Emotional; and MH = Mental Health.
The mean age of the study population was 46.4 years, ranging from 26 to 63 years. As shown in Table 1, there was a statistical significance when comparing the scores of the SF-36 FC and PF scales and the SQ-F FOREPLAY domain, i.e., women with fibromyalgia who had better functional capacity and physical appearance showed better satisfaction in relation to sexual foreplay (cuddling, kissing, hugging, etc.). According to this table, women with fibromyalgia who better SF-36 physical functioning (PF), less bodily pain (PAIN), better social functioning (SF) and better role-emotional (RE), felt more relaxed to have sexual intercourse in a statistically significant manner.

We also found statistical significance between the SF-36 FC scale and the SQ-F PAIN domain, i.e., women with fibromyalgia who had better functional capacity had less pain during intercourse (dyspareunia/vaginismus).

The data presented in Table 1 show that women with fibromyalgia who had a better general health (SF-36 GH), had significantly better sexual satisfaction (SQ-F SATISFACTION).

**DISCUSSION**

The assessment of health-related quality of life is perhaps the greatest challenge faced by professionals who dedicate themselves to the improvement of human health. However, quality of life is highly subjective. Rheumatic diseases cause considerable impact on patient’s physical, psychological and social well-being. Thus, the use of multidimensional assessment measures is relevant in the assessment of their quality of life.

Fibromyalgia syndrome (FMS) is a condition of chronic widespread pain. It is difficult to treat and has significant prevalence in the general population. FMS is more than a state of chronic musculoskeletal pain, however, because most FM patients also experience fatigue, sleep disturbances, visceral pain, exercise intolerance and neurological symptoms. This syndrome is more characterized by symptoms, suffering and disability than by visible structural organic changes, being part of the group of functional syndromes.

Fibromyalgia directly affects the quality of life (QoL) of carriers of the disease. Thus, understanding QoL as the quest for well-being and sexuality as a fundamental part of biopsychosocial interactions, potential interferences in quality of life caused by the disease could also generate impacts to female sexual response.

The data from the aforementioned study, which assessed quality of life in women with fibromyalgia, corroborate the findings of this study. With regard to physical functioning and functional capacity, most patients showed impairment in work and regular daily activities. This could result in dissatisfaction regarding the onset of sexual intercourse.

Rheumatic diseases can have an impact in all areas of sexual activity. Chronic widespread pain is the most common and characteristic symptom of patients with fibromyalgia. This is considered as an important contribution to reduced sexual function, as was shown in this study. We found that women with fibromyalgia who reported feeling less bodily pain, were more willing to have sexual intercourse.

In a study, women with fibromyalgia reported that, before the appearance of symptoms, most of them had intimate relations “without further problems”. After the onset of symptoms, some form of impact on sexuality was evidenced, resulting in marital difficulties. These findings are corroborated by our study, in what regards bodily pain and sexual practice.

This chronic illness affects a couple’s intimate relationship. This study evidenced changes in the intimate and sexual relationships of women with fibromyalgia due to symptoms such as pain, fatigue and inability to move, generating a tension between the couple.

Women’s health is believed to be a very important topic considering female quality of life. Thus, a positive relationship between sexuality and psychological factors results in an improvement in women's well-being in relation to physical and emotional aspects.

A study of 70 patients diagnosed with fibromyalgia assessed the prevalence of depression and its relationship with the quality of life in patients with FMS. It was observed that most patients showed deficits in the relationship with others and with oneself, as well as in the performance of daily activities. Psychosocial factors play a significant role in the etiology and progression of fibromyalgia syndrome.

Psychological state plays a very important role in normal sexual function. Patients with fibromyalgia often experience various forms of depression, anxiety, low self-esteem or emotional stress, which makes it difficult for them to communicate with their partners. These findings corroborate this study, which revealed that women with fibromyalgia who have better role-emotional were more relaxed to have sex.
A study assessed the impact of fibromyalgia on health-related quality of life in 32 patients with fibromyalgia and 28 healthy women using the Medical Outcomes Survey 36-Item Short Form Study. They found that the fibromyalgia group showed the worst results in relation to the role-emotional scale. This evidences helplessness and a sexual life compromised by pain.2

The term dyspareunia is used to describe pain on penetration, but it can also occur during genital stimulation and may result from the association of sexual activity with pain and fear.21

A study conducted in England showed that physical, emotional and social symptoms influence one another. The authors state that women with dyspareunia have more emotional problems, increased anxiety and depression, and worsened interpersonal relationships. As a consequence, they also have decreased functional capacity and worse quality of life.23

Chronic pain can lead to depression and, consequently, to low libido. The couple's relationship undergoes changes and pressures as a result of the lack of mutual perception. This is caused by the limits imposed by pain and ends up influencing the couple's sexual relationship, which becomes limited due to fibromyalgia.18

The interrelationship between health conditions, quality of life and sexuality is already proven in the literature. Thus, decreased sexuality is interrelated with decreased quality of life, especially regarding to emotional, physical and functional aspects.16

CONCLUSION

There is a relationship between quality of life and sexuality in women fibromyalgia, specifically with regard to: functional capacity; physical functioning; bodily pain; social functioning; role-emotional and general health. These scales showed interference in areas related to sexual activity (sexual foreplay, relaxation, pain, and sexual satisfaction). Therefore, the relationship between quality of life and sexuality in women fibromyalgia is a pertinent research question. Health services and health professionals need to be aware of these aspects, and promote actions that address the entire biopsychosocial context of these women.

Further studies on this subject need to be conducted with a larger sample and the eventual use of new tools. This would make it possible to provide substantiated evidence that a reduced quality of life negatively affects the sexuality of women with fibromyalgia, as shown in this study.

REFERENCES


English/Portuguese
J Nurs UFPE on line., Recife, 8(Suppl. 2): 3587-93, Oct., 2014
3592
Melo FABP de, Veloso JAP, Silva EA et al.

Relationship between health-related quality...