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SEXUAL DYSFUNCTION: INCIDENCE IN WOMEN WITH FIBROMYALGIA AT THE PHYSIOTHERAPY SCHOOL CLINIC IN GURUPI-TO

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ABSTRACT

Summary: Female sexual dysfunctions (FSD) interfere both in the quality of life of women and in the relationship with their partners. Fibromyalgic women because they present chronic pain are not only inphysical and mental health, with a predisposition to changes in the field of sexual health. **Objective**: To identify cases of SFD in patients with fibromyalgia in the group of patients of the Physiotherapy School Clinic (CEF) in the city of Gurupi - Tocantins. This method is an exploratory and descriptive research, with a quantitative approach. We approached 10 women who presented diagnoicfibromyalgiaram who attendedthe Gurupi School Clinic. The collection was started in April, and ended in May 2022. The instrument used to evaluate the DSF was the Female Sexual Function Index (FSFI). It verified the incidence of DSF in patients with CSF diagnosed with fibromyalgia in women aged 30 to 60 years. **Results:** Andoverall score of the patients was the average 14.1 points, demonstrating that these women presented a impairment in relation to their sexual satisfaction, arousal disorder, more than half of these women did not present pain during or after sexual intercourse. From theoverall score of each participant, 14% had a score <27.5 and were indicative of sexual dysfunction.

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INTRODUCTION

Fibromyalgia (FM) is a painful syndrome of complex and unclarified multifactorial etiology, characterized by musculoskeletal pain, increased sensitivity, fatigue and cognitive impairment. One of the main characteristics of this syndrome is that the severity of symptoms can vary for short periods and in an unpredictable way, with increased suffering and difficulty in rehabilitation (SCHERTZINGER *et al*., 2018). Sexual dysfunctions interfere both in the quality of life of women and in the relationship with their partners. It is able to influence physical and mental health and can be affected by organic, emotional and social factors. The disorder of any of the phases of sexual response (desire, arousal, orgasm and resolution) can lead to the emergence of sexual dysfunctions (CENTURION, 2017). In Brazil, approximately 30 million women are between 35 and 65 years old, that is, 32% of the female population is in the climacteric phase, in which there is a large hormonal decline, interfering in their quality of life. About 51% of women report some type of sexual dysfunction, calling the attention of health professionals to the detailed care in such individuals. The vulnerability that the fibromyalgia woman's organism presents due to chronic pain, fatigue and muscle tension predisposes changes in their sexual health, causing the physical therapy approach to also focus on the treatment of possible sexual dysfunctions, through Pelvic Floor Muscle Training (MapT) and Body Awareness (SCHLEMMER; PEREIRA, BRAZ, 2020). Sexual dysfunction is a total or partial "blockage" of the physiological response. This dysfunctional behavior is learned, except when there is an exclusively organic cause; and complements by saying that every human being would be potentially capable of a complete physiological sexual response (CAVALCANTI, 2012). Sexual problems in women are highly prevalent and are often associated with personal discomfort and worsening in quality of life. The exact incidence of female sexual dysfunction (SFD) is still unknown. The physiological processes involved in the phenomenon of sexual arousal can be disturbed by vascular changes, which lead to blood flow of the vagina and clitoris and consequently, decreased vaginal and neurological lubrication, for example, deficits secondary to diabetes or multiple sclerosis (THIEL *et al*., 2008). Fibromyalgia is a predominantly female rheumatologic syndrome characterized by the

occurrence of diffuse, chronic, non-inflammatory musculoskeletal pain and usually accompanied by changes in memory, attention and sleep, in addition to fatigue, depression, anxiety and headache (CLAUW, 2014). The lack of continuing sexual education in medical education and other health areas is one of the factors related to this resistance of professionals. With regard to women, the lack of information about sexual dysfunctions and the few treatment options available makes it difficult to identify the problem and seek help to solve it, leading to late diagnoses (SANTOS; OLIVEIRA, 2015). Although prevalent, SFDs are often neglected in clinical practice, either due to deficiencies in the training of professionals or because of the difficulty of diagnosis due to the complexity of the available instruments (THIEL *et al*., 2008). In this scenario, the present study aims to identify the cases of FSD in patients with fibromyalgia in the group of patients of the Physiotherapy School Clinic (CEF) in the city of Gurupi - Tocantins. Seeking to identify the cases and understand the relationship between fibromyalgia and DSF.

METHODOLOGY

Research approved by the Research Ethics Committee of UNIRG University under CAE 56733322.1.0000.5518 Opinion No. 5,355,516aims to identify cases of DSF in women between 30 and 60 years of age with fibromyalgia in CEF. This is an exploratory and descriptive research, with a quantitative approach. Data were collected with 10 participants diagnosed with fibromyalgin and sexually active, answered the Female Sexual Function Index (FSFI) questionnaire that assesses the level of female sexual function of daily life. The participantswere approached and receivedexplanations about the objective and procedures of the research, signed the term and free and informed consent and then answered the Female Sexual Function Index (FSFI) questionnaires without any kind of help and individually. The FSFI is a questionnaire developed to be self-applied, and it is proposed to evaluate the female sexual response in the domains (phases or components of sexual response): sexual desire, sexual arousal, vaginal lubrication, orgasm, sexual satisfaction and pain (Rosen RC.*et al*., 2002).

For this, nineteen questions that assess sexual function in the last four weeks and present scores in each component are presented. For each question there is an answer pattern. The answer options are consistently scored between 0 and 5 in relation to the presence of the questioned function. Only in pain questions is the score is defined in an inverted way. It should be noted that if the score of some domain is equal to zero, this means that it has not been reported by the interviewee sexual intercourse in the last four weeks. At the end, a total score is presented, resulting from the sum of the scores of each domain multiplied by a factor that homogenizes the influence of each domain on the total score. For the domain points, the points of each item were summed and multiplied by the corresponding factor. The total score of the scale was obtained by the sum of each domain evaluated. Final values can range from 2 to 36 in which higher values indicate a better degree of sexual function (ROSEN *et al*., 2000). The total FSFI score is due to the sum of all scores of all dimensions, the values range from 0 to 6/1.2 to 6 the total value of this questionnaire is 2-36, where the lower the score the worse sexual satisfaction is and can be correlated with some sexual dysfunction.With the published basis and analysis, it was proposed that the cut-off point for good sexual function is >27.5 (TRINDADE DA SILVA E DAMASCENO, 2019).

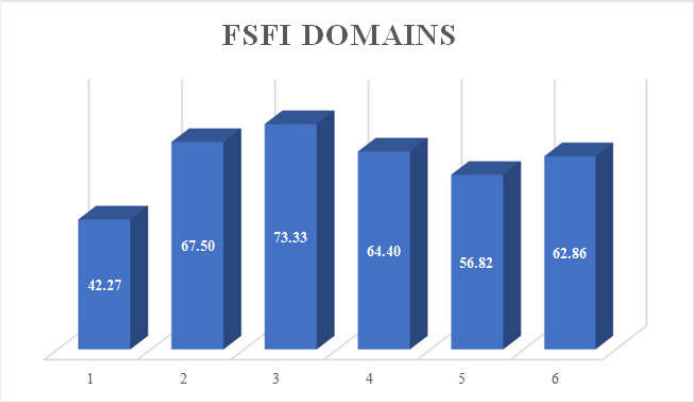
RESULTS AND DISCUSSION

Regarding sexual domains, in the domain of desire,42.27% said they had felt almost or never sexual desire. Regarding the domain of exitation, 67.50% felt rarely successful during sexual activity. As for lubrication 73.33% said that almost or always have lubrication in the sexual act. Regarding the domain of orgasm, 64.40% said that the degree of difficulty of reaching orgasm was extremely difficult, in relation to satisfaction 56.82% said very dissatisfied. Regarding the item that composes the pain domain, 62.86% said it was very low or absolutely no degree of discomfort/pain during or after the sexual act. Domain desire is averaging 42.27 ± 2.2, 0 represent bad and 90 great. The arousal domain has an average of 67.50 ± 2, 0 represents bad and 95 optimal. In the average lubrication 73.33 ± 2.4, 5 represents bad and 100 optimal. Orgasm measured 64.40 ± 2.5, 0 represents bad and 100 great. In satisfaction 56.82 ± 2.2, 5 represents bad and 100 optimal. Pain domain measured 62.86±2.8, 0 represents bad and 100 is excellent (Table 1). It was observed that the overall score of the patients was the average 14.1 points, which means that theydo not have good sexual satisfaction.

Tabela 1. ***Female Sexual Function*** **Index avaliation** ***scores***

Domain	Issues	Score variation	Multiplication factor	Minimum score	Score Maximum	Average	Detour pattern	Coefficient of variation(%)
1-Desire	1 to 5	1-5	0,6	0,6	4	2,2	0,93	42,27
2-Excitement	3, 4, 5, 6	0-5	0,3	0	4	2	1,35	67,50
3-Lubrication	7, 8, 9, 10	0-5	0,3	0	5	2,4	1,76	73,33
4-Orgasm	11, 12,13	0-5	0,4	0	5	2,5	1,61	64,40
5-Satisfaction	14, 15, 16	0-5	0,4	0	4	2,2	1,25	56,82
6-Pain	17, 18, 19	0-5	0.4	0	5	2,8	1,76	62,86
Total score				0,6	27	14,1		

*Variation for item 14 = 0-5: variation for items 15 and 16 = 1-5.



Although the value is low, the overall score in total was 27, when it is considered that in the question the valoes range from2 to 36 points. However, the participants presented a higher score of 2.8 did not present pain during or after sexual intercourse. Itwas observed that they have difficulties in the arousal domains, presenting lower overall score 2.0 (table 2). In the overall score score, 14% had a <27.5 and

indicative of sexual dysfunction (table 3). Sexuality is a complex phenomenon that involves physical and psychological factors, so it directly impacts on quality of life. Thus, a healthy sexual function depends on the activity with transition by phase of desire, excitement and relaxation associated with pleasure and satisfaction (BESIROGLU AND DURSUN, 2019). Porting rheumatic diseases can interfere with sexual function by factors related to the disease itself or treatment. Pain, morning stiffness, joint edema, and fatigue can both lead to decreased sexual interest and hinder sexual intercourse (Ferreira et al., 2013).

Tabela 2. Analysis of the female *sexual function index score*

FSFI	I wish	Excitement	Lubrication	Orgasm	Satisfaction	Pain	Overall score
Average	2.2	2,0	2,4	2.5	2,2	2,8	14,1
Minimum Point	0,6	0	0	0	0	0	0,6
Maximum Point	4	4	5	5	4	5	27
DP	0,93	1,35	1,76	1,61	1,25	1.75	8,66

Note: SD= Standard Deviation

Table 3. Analysis of the overall score per participant of the *Female Sexual Function Index* (FSFI) questionnaire

Rating FSFI	< 27.5		> 27.5	
Participants	N	%	N	%
10	3	14	7	7

Sexual function is understood as one of the pillars of the quality of life of human beings, it is divided between body and mind, and in women it is a slightly more complex process. The systems of the human body act together to produce this sexual response, which consists of four phases: desire, arousal, orgasm and resolution (Piassarolli VR et.al, 2010). Arousal is the second phase of sexual response, it is triggered by desire, at this stage we find bodily changes such as an emotional reaction in the man and vaginal lubrication in the woman, both occur due to increased vascular flow and muscle contractions. The last phase is resolution, consists of muscle relaxation that occurs right after orgasm. Any persistent disorder or difficulty in any of the phases of sexual response is called sexual dysfunction (Baracho E. 2012). DSF is a public health problem that affects between 20-50% of the general population, with increasing prevalence with age being associated with physical, psychological and sociocultural components characterized by lack of sexual desires, sexual aversion, orgasm disorder, vaginismus and dyspareunia. In addition, the association of other symptoms such as pain depression, anxiety and negative self-image may have harmful effects on sexual function (YILMAZ et al., 2012; KAYHAN et al 2015, 2016; OSTENSEN, 2017).

In Brazil, according to the Brazilian Sexual Life Study (EVSB), 51% of women have some type of sexual dysfunction. The cause of this dysfunction in women may involve physical, psychological, religious, social aspects. Therefore, female sexual dysfunction (SFD) causes important personal suffering and an even more significant impact on quality of life and interpersonal relationships (Piassarolli VR et.al, 2010). In epidemiological studies, 30.0 to 50.0 of women with FM may be affected by SD and the association of these disorders in these patients is related to several aspects, such as pain, fatigue, stiffness, functional disorders, sexual abuse and drug therapy (KALICHMAN, 2009; KAYHAN et al., 2015, 2016). However, SD received little attention compared to other characteristics of FM and has been somewhat reported and treated in studies involving the disease, presenting a significant negative effect on quality of life. In this context, some studies and recent studies directly investigate this aspect in women diagnosed with FM, demonstrating that sexual impairment in these patients seems to affect all domains of sexual function, although the mechanisms involved are few understood (BESIROGLU AND DURSUN, 2019; KAYHAN et al., 2015, 2016; YILMAZ et al., 2012; GRATACÓS et al., 2009). Most of these patients still experience a significant degree of psychological distress and sleep disorder, factors that also negatively affect sexual function. Therefore, women with FM may present with more painful symptoms, arousal problems and satisfaction associated with sexual intercourse. Thus, studies suggest a routine practical evaluation of SD and its associated negative effects in women diagnosed with FM, in an attempt to clarify the causal association and the mechanism of correlation (BESIROGLU And DURSUN, 2019; YILMAZ et al., 2019). On the instruments for assessing sexual function, accordingto some authors such as Rosen et al., the most appropriate instruments to assess female sexual function, considering the subjective characteristic of female sexual response would be self-administered questionnaires, which evaluate various domains in the field of sexuality and have a high degree of reliability and validity. Among the most studied currently are the Brief Sexual Function Index for Women and the Female Sexual Function Index. Theseinstruments would also be sensitive to evaluate interventions (Pacagnella et tol 2008). Rosen et al. (2000) comparing vaginal plethysmography, event recording and fsfi concluded that the latter was the only instrument capable of predicting improvement after treatment. Therefore, the FSFI assesses the level of female sexual function of daily life in six domains: sexual desire, sexual arousal, vaginal lubrication, orgasm, sexual satisfaction and pain.

Final Considerations

Research on women's health and sexuality is still scarce, with this study aiming to evaluate the intention ofsexual dysfunction in women with fibromyalgia through the Female Sexual Function Index (FSFI) questionnaire. In this study, it was observed that among the 10participants, only 3 had a score lower than 27.5 presenting sexual dysfunction, among them the most affected dysfunction was related to arousal. However, the 7 participants had a score higher than 27.5. Despite a small sample (n=10) it showed the importance of evaluation and identification of sexual dysfunction in these women. It is of paramount importance to conduct new studies aimed at the sexual function of these women. However, it is necessary to produce more research to compare The DSF in women with fibromyalgia, encompassing a larger number of women, in different regions of the country, so that it can conclude the knowledge about the influence on female sexual function.

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