


A sensitive practice framework for treating genitopelvic pain in women with sexual trauma

Proposta de prática sensível para o tratamento da dor genitopélvica em mulheres com história de trauma sexual

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Abstract

Introduction: Sexual trauma and sexual dysfunction are cause-effect related. Treatment includes specialized physical therapy to manage trauma triggers. Nevertheless, few studies have examined physical therapy approaches in women after sexual trauma. **Objective:** To propose approaches for genito-pelvic pain in women with sexual trauma. **Methods:** Twenty-four women were evaluated. Dyspareunia was assessed before and after the treatment of sexual pain by comparing anxiety score, level of distraction during sex, and touch aversion. A detailed protocol of sensitive practice for approach and treatment was developed to deal with the signs and symptoms of trauma. A structured framework of approach for the treatment of women with a history of sexual abuse history was presented. **Results:** Women treated with our sensitive care approach showed high baseline levels of anxiety and cognitive distraction during sex ($n = 8$; 33.3%; Cronbach's $\alpha = 0.8$ for 'sexual abuse thoughts' and 0.75 for 'partner's lack of affection'). However, anxiety (1.7 ± 2.1 vs. 0.1 ± 0.5), sexual pain intensity (6.0 ± 3.2 vs. 0.7 ± 0.8) and pain during physical therapy assessment (4.6 ± 1.9 vs. 0.3 ± 0.5) were all significantly reduced after treatment ($p < 0.05$). The total number of sessions until therapy discharge was $7.4 (\pm 4.1)$. **Conclusion:** Our study provides a framework for physical therapists of how to deal with women with dyspareunia after sexual trauma. However, a prospective study with a control group should be encouraged to test the effects of sensitive approaches on the treatment outcomes.

Keywords: Sexual violence. Physical therapy. Pelvic floor disorder. Dyspareunia.

Resumo

Introdução: Trauma sexual e disfunção sexual estão relacionados entre si. A fisioterapia pode auxiliar no manejo do trauma e na reabilitação da função sexual. No entanto, poucos estudos investigaram essa forma de intervenção. **Objetivo:** Propor abordagens para dor gênito-pélvica em mulheres com trauma sexual. **Métodos:** Foram avaliadas 24 mulheres com queixa de dispareunia antes e após o tratamento da dor sexual, analisando o escore de ansiedade, a distração durante o sexo e a aversão ao toque. Um protocolo detalhado da prática sensível baseada no trauma foi desenvolvido para lidar com os sinais e sintomas do trauma. Uma estrutura de abordagem para o tratamento de mulheres com histórico de abuso sexual foi apresentada.

Resultados: Mulheres tratadas com nossa abordagem de cuidado sensível apresentaram altos níveis basais de ansiedade e distração cognitiva durante o sexo ($n = 8$; 33,3%; α de Cronbach = 0,8 para "pensamentos de abuso sexual" e 0,75 para "falta de afeto do parceiro"). No entanto, ansiedade ($1,7 \pm 2,1$ vs. $0,1 \pm 0,5$), intensidade da dor sexual ($6,0 \pm 3,2$ vs. $0,7 \pm 0,8$) e dor durante a avaliação fisioterapêutica ($4,6 \pm 1,9$ vs. $0,3 \pm 0,5$) foram significativamente reduzidas após o tratamento ($p < 0,05$). O número total de sessões até a alta da terapia foi de $7,4 (\pm 4,1)$. **Conclusão:** Este relato oferece uma estrutura para fisioterapeutas no manejo da dispareunia após trauma sexual, mas recomenda-se a realização de estudos prospectivos controlados para avaliar os efeitos das abordagens sensíveis.

Palavras-chave: Violência sexual. Fisioterapia. Distúrbio do assoalho pélvico. Dispareunia.

Introduction

Women with a history of sexual trauma encounter a range of physical and psychological challenges stemming from the sexual violence they experienced.¹ Statistics show that 30% of women worldwide are victims of physical or sexual violence.² Sexual trauma is followed by interpersonal trauma that can be profound and last a lifetime. Without positive experiences with touch, the ability to relax and engage in relationships involving trust can become jeopardized. Therefore, the general health, quality of life, psychological wellness and sexuality of victims of sexual assault can all be harmed.³

It is known that sexual trauma may lead to sexual dysfunction. Women with a history of sexual trauma have

a 1.7-fold greater chance of presenting with vaginismus, desire and orgasm disorders.⁴ Low sexual intercourse frequency, low sexual satisfaction and increased distraction during sex, dyspareunia and emotional overloading are also reported as increased among women after sexual trauma.⁵

Dyspareunia could be caused by increased pelvic floor muscle (PFM) tone.⁶ For instance, PFM contraction can be triggered as a protective response after trauma, conditioned by hypervigilance behaviour (tonic immobility, difficulty speaking, mental confusion, aspects related to feelings of fear) and dissociation. However, such PFM contraction, when maintained for a long period of time, can lead to increased PFM tone, causing or perpetuating dyspareunia.⁷

Pelvic floor physical therapy is a first-line treatment widely used for sexual pain management. Among the many resources, vaginal dilators, finger insertion into the vagina, perineal massage and exercises are frequently used to reduce PFM tone, desensitize vaginal pain and reduce anxiety and fear associated with penetration.⁸ However, these techniques may also evoke embarrassment, anxiety, fear/anticipation of pain and traumatic memories of the sexual violence experienced.⁹

To succeed in turning the clinical environment into a more appropriate space with less trauma-triggering components, a variety of cautionary measures should be considered, such as adjustment of the physical environment, careful verbal command and oral communication from the healthcare professional (HCP) to the patient, HCP attitude and positioning, HCP sharpness in recognizing trauma-triggering signs and symptoms, among others. Therefore, the objective of our study was to describe a framework proposal for sensitive practice in pelvic floor physical therapy treatment of women with a history of sexual trauma.

Methods

This study is an experience report that describes a detailed, sensitive physical therapy approach and management, as well as differences in psychosocial aspects and PFM evaluation before and after the treatment of women with dyspareunia after sexual trauma. We assessed the patient records of women aged ≥ 18 years, who self-reported a history of sexual violence and were undergoing physical therapy treatment for

dyspareunia between January 2021 and May 2023 at a women's health outpatient clinic in Curitiba, Paraná, Brazil. The study was approved by the Ethics Committee of the University of Campinas (Number 6.438.201). All the women signed an informed consent form. Women with communication problems or substance use disorder were excluded.

The women with dyspareunia underwent a sensitive physical therapy treatment approach¹⁰ by a trained physical therapist, who delivered the framework we propose in our study. There were three phases of treatment: (i) baseline assessment of psychosocial distress and distraction during sex and PFM evaluation; (ii) once-a-week session with a trained physical therapist, who delivered the present study framework proposal for sensitive pelvic floor physical therapy treatment of dyspareunia, along with home-assigned treatment exercises; and (iii) post-treatment assessment of psychosocial distress and distraction during sex and PFM evaluation. The total treatment time was individualized according to each case.

Assessments of psychosocial distress were made using Buron and Curtis's anxiety scale, applying scores of 1-5 according to how calm or anxious the patient was: 1 = no anxiety (calm); 2 = mild, with one or a few signs of anxiety; 3 = moderate, with perceived signs of stress, irritability or nervousness (sudoresis); 4 = high, with increased anxiety and possible loss of control of their behaviour; 5 = highest, with possible aggressiveness and inability to listen, interact or obey commands.¹¹

Distraction during sex was evaluated by a psychologist using the Sexual Modes Questionnaire (SMQ), specifically focusing on the Automatic Thought (AT) subscale.¹² The SMQ evaluates verbal thoughts and mental images that arise during sexual activity and the AT subscale presents 33 items assessing the following dimensions: sexual abuse thoughts; failures and disengagement thoughts; partner's lack of affection; sexual passivity and control; erotic thoughts; and low self-body thoughts. This questionnaire was chosen to contribute to the identification of common distressing triggers and responses that can also arise during pelvic floor physical therapy. Cronbach's α scores of > 0.7 are used to evaluate the presence of negative thoughts. Psychometric studies of the Brazilian validation of the SMQ showed high internal consistency, which was also seen in the validity and reliability retests.¹³ Aversion to touch was found to be positive when the patient agreed with

statements such as: "I don't feel safe when people hug me" and "I don't feel comfortable when receiving sexual stimulus through touch".

Participants also answered a structured interview with data on age at time of treatment, age at time of sexual trauma experience, sexual pain intensity, pain during physical therapy assessment and self-reported pain during sexual intercourse. They were asked to evaluate the pain intensity during sexual intercourse based on the experiences of the four last sexual penetrative acts according to the Numerical Rating Scale (NRS): from 0 (no pain) to 10 (worst possible pain). Differences in the quantitative variables were assessed by t-test if the distribution of variables was normal, or by Wilcoxon's test otherwise. Significance was established at $p < 0.05$.

We have developed a framework that synthesizes the findings from our study, tailored for physiotherapists specializing in women's health. This framework incorporates elements from the Sensitive Practice approach,¹⁰ which was designed to support women with a history of sexual violence in the context of care provided by generalist physiotherapists.

Results

Twenty-four women were included in the study. One participant self-described as bisexual and the rest were heterosexual; all cisgender women with sexual trauma presenting with dyspareunia and treated with PFM physical therapy were evaluated. Sexual trauma was self-reported as follows: 16 women reported being assaulted as an adult ($n = 8$) and 16 reported childhood abuse (including 8 who were assaulted in both age ranges). Mean age at time of physical therapy treatment for dyspareunia was $34.2 (\pm 10.7)$ years and mean number of sessions until therapy discharge was $7.4 (\pm 4.1)$.

Cognitive distraction during sex was frequently reported ($n = 8$; 33.3%), with a mean Cronbach's α score of 0.8 for 'sexual abuse thoughts' (such as "he is abusing me" or "he is violating me") and 0.75 for 'partner's lack of affection' ("he only wants to satisfy himself during sex").

Aversion to touch and high levels of anxiety were reported by six women, all of whom discontinued treatment within the first two sessions. Two women reported feeling faint while stretching their own PFM following the physical therapist's home exercise instructions, and anxiety score increased in all women when a pain

threshold was greater than 3 (NRS). Details of how some of these distress symptoms (hypervigilance, decreased tone maneuvers) were noticed by the physical therapist and the subsequent coping strategies are described in Table 1. We strongly suggest this framework proposal should be used as a guide to direct physical therapist approach in treatment of women with sexual abuse history. Vaginal dilators were resources included in the physical therapy treatment of 7% of the women.

However, four women reported being afraid and anxious when looking at this tool, and one declined its use even after receiving sensitive practice instructions.

Women who scored ≥ 3 on Buron and Curtis's anxiety scale had a longer treatment duration, with a mean of $15.8 (\pm 8.6)$ sessions. Anxiety scores ($p = 0.01$), self-reported pain during sexual intercourse ($p = 0.000$) and pain during physical therapy assessment ($p = 0.000$) decreased after treatment (Table 2).

Table 1 - Sensitive practice: framework proposal for genitopelvic pain management

Intervention	
Environment	<p>Aim: To enable a safer sensation during treatment, ensuring an appropriate environment.</p> <p>Tools: Local ambience.</p> <p>Orientation: It is important that the place where the sensitive practice will be carried out resembles a safe,¹⁰ calm place. Providing a calming ambience, silent or with relaxing songs, can help your patient to calm down or feel protected. Avoid places where sound from other people or rooms can be heard, or where your patient feels no privacy. Mind your moves and dispersive talking, as slower movements from the health professional might help to reduce anxiety whereas faster and excessive movements may trigger the patient's anxiety. Both excessive talking and silence can feel uncomfortable to your patient. Although there is no clear rule, try to read the physical signs and adjust accordingly. Look at your patient's eyes whenever possible. If possible, keep the backrest of the examining table high so the patient can see you.</p>
Rapport	<p>Aim: To enable a safer sensation and trust during treatment.</p> <p>Tools: Confidentiality, empathy, active listening and paying attention.</p> <p>Orientation: Rapport is essential to facilitate feelings of safety. This process requires time and patience. Women described confidentiality, sensitivity and respect as decisive components when choosing to initiate the treatment.^{10,19} Examples include affirmative response as <i>I believe you</i>; <i>It's not your fault</i> or non-verbal communication as eye contact.</p>
Sexual trauma education	<p>Aim: To validate symptoms reported by the patient and reduce muscular tension.</p> <p>Tools: Instructions on body control, breathing exercises and vaginal penetration.</p> <p>Orientation: Information on prevalence along with effects of sexual violence on mind and body might be discussed after the patient's report of sexual trauma history.</p> <p>You may propose to patients to notice their own body. Exercises for perception of each part of the body in sequence are well suited. With the purpose of leading patients to self-consciousness, you might ask: <i>Do you think you frequently hold your breath, or make rapid and shallow breathing? Can you perceive your vaginal muscle contracting 'on its own' during the day?</i></p> <p>Diaphragmatic breathing exercises can be taught. This is an important resource to reduce anxiety and deal with hypervigilance, by enabling the autonomous nervous system to reduce the fight and flight reaction. At this point, a non-relaxing pelvic floor muscle (PFM) is usually perceived during the physical exam. This is a frequent sign of hypervigilance,⁷ and it is important that the patient knows this to progressively increase their awareness of the PFM and improve its control. Along with self-report of perceived PFM tension, you might instruct the patient as follows: <i>Every time that you find yourself... [Complete with a daily activity that she might have reported, noticing her PFM tension], take a deep breath and try to sooth your vaginal muscles, looking for a downward and 'melting' sensation.</i></p> <p>If the patient tells you that even though they try, they are not aware whether their PFM is relaxing, you might propose that they hold a strong maximum voluntary contraction for 10 seconds and then let it go. This is based on the physiological law of maximum contraction leading to maximum relaxation. However, it is interesting to enable your patient to relax their PFM with other means that do not always contract first. When tolerated, self-touching of PFM tension through vaginal assessment is useful to enable self-consciousness of PFM tension and improve its control. Cessation of vaginal penetration activities other than therapeutic exercises should be encouraged. This is because a vicious cycle of fear-PFM tension-pain should be interrupted, with the aim of establishing a new experience when the woman is ready for sexual penetration. It is important that a new experience of painless vaginal penetration occurs after treatment sessions.</p>
Distraction during sex	<p>Aim: To increase grounding and reduce dispersive thoughts.</p> <p>Tools: Instructions on concentration and fantasy training.</p> <p>Orientation: Distraction during sex is usually reported in women with a sexual abuse history. This usually jeopardizes sexual desire and arousal. Leading the patient to focus on the moment and concentrate on pleasure can improve sexual dysfunction and reduce distraction. Exercises that help the patient to concentrate can be suggested. If sexual activity is still a negative task to be developed by the patient, it can be suggested to start with progressive sex exercises on their own and then with the sexual partner. While concentrating on slow deep breathing, the patient can be encouraged to choose one of the five basic human senses to explore sexually. If the patient reports a negative flashback, instruct them to open their eyes if closed or focus on the present scene. You may instruct the patient as follows: <i>Perceive if the person with you is the same person you are afraid of and if the location is where the violence took place.</i> This can help the patient to self-regulate and break the trauma-triggering response.</p> <p>Fantasy training can help the patient to engage in the sexual response cycle. A suggested exercise is described as follows: <i>Describe a context, environment and feelings of a sexual encounter, choose the partner you want, the talking, the touch you want and allow yourself to imagine it. Research visual resources (including photographs, film, videos) from sexually stimulating situations in order to find out what sexually excites you.</i></p>

Table 1 - Sensitive practice: framework proposal for genitopelvic pain management (continued)

Intervention	
Dealing with abuse-triggering signs	<p>Aim: To enable the health professional to identify the patient's anxiety level and avoid further suffering or triggering trauma.</p> <p>Tools: The Buron and Curtis five-point scale¹¹ is used to measure the anxiety score as an objective behaviour support tool.</p> <p>Orientation: Before assessing the patient physically, it is relevant to establish whether the treatment should proceed even though signs of fear and anxiety are perceived by the health professional. You may instruct your patient to self-evaluate their anxiety level by showing them a figure of 1 to 5 (progressively increasing)¹¹ and evaluating it before and then repeatedly during pelvic floor management. At this point, if using the suggested scale, one can agree to reach a score of 2 on the 1-5 anxiety level. Be aware if your patient presents sudoresis, tightening of the fists or aggressive gesturing. These are common signs of the flight and fight response to the sexual abuse history and might be an indication to stop and use distraction manoeuvres. On the other hand, it is usual to find a static reaction, namely tonic immobility,¹⁸ when the patient seems to be highly passive to any verbal command or physical management from the health professional. If paralysation or quietness is perceived it is an indication to cease management or slow down while proceeding to distraction manoeuvres to lead the patient to different behaviour.</p> <p>Distraction manoeuvres: When noticing that your patient seems to be reaching a high level of anxiety, it is important to stop it progressing in order to reduce session discomfort and prevent triggering trauma symptoms. You may introduce a short talk on matters of the patient's interest to refocus their mind. Diaphragm or deep breathing exercises may be guided, along with mindfulness techniques.</p>
Aversion to touch, fear of clinical assessment and pain	<p>Aim: To increase the patient's tolerance to touch and safety sensation.</p> <p>Tools: A mirror and pelvic floor self-exam instructions for self-awareness of maximum tolerated discomfort.</p> <p>Orientation: It is important that the patient knows what to expect each time they are going to be touched by the health professional. Start explaining what and why, and if possible, show, using a model, what you are willing to do in the session. Ask your patient which parts of their body should be avoided when managing their pelvic floor (e.g. inner thighs). Show respect and rule boundaries that can be limited. Even after explaining what you will do when managing them, always ask permission to touch or change the touch location.</p> <p>In order to increase tolerance to touch, exposure to the location of aversion can be managed with respect and by being mindful of the fear and trauma-triggering signs suggested above. For example: If the patient cannot look at or touch their own vulva, a mirror can be used so that they can look near the vulva, or an exercise can be suggested to touch places nearby, while the health professional guides them to control anxiety to a score of 2 (0-5) or mind their reactions. It is indispensable to understand whether the patient herself prefers to touch the location of aversion or would rather someone else to do it. If instructing the patient to face her own body is a more feasible way to start the exercise, the health professional can suggest a self-exam using a mirror, guiding the patient to touch places around the avoided location, and proceed to touch the location using devices such as a vaginal dilator, swab or pelvic wand.</p> <p>If hypervigilance or distress signs are perceived when the tolerance to touch exercise is proposed, distraction manoeuvres must be used so that anxiety decreases and there is better concentration of the patient to the proposed exercise. The aim is to reach the patient's emotional skills to face or tolerate touch to the location of aversion.</p> <p>In order to deal with pain during physical management, the patient must be instructed to give verbal commands to the health professional, such as "please stop", "give me a minute" or "that's the maximum I can tolerate now", whenever they feel the need. Patients should be constantly encouraged to bring their manifestations of discomfort to verbalization rather than to their body. However, when dealing with patients with poor communication skills, it can be agreed to reach level 3-4 of the 0-10 numerical rating scale of pain. When reaching maximum tolerated discomfort, the procedure is adjusted to reduce or not increase discomfort.</p> <p>Attention: The sensation of pain can cause many emotional triggers and should be managed with caution during the therapeutic approach, with awareness of patients who tend to show passive behaviour and omit reporting discomfort. Painful treatments dealt without a sensitive approach may cause higher rates of treatment abandonment and reinforce trust issues in patients with a history of sexual abuse.</p>
Pelvic floor muscle stretching in the clinic once/week and at home from three times/week	<p>Aim: To normalize PFM tone, enable painless vaginal penetrative intercourse and provide vaginal desensitization.⁸</p> <p>Tools: Manual therapy provided by the patient and by the physiotherapist.</p> <p>Orientation: PFM stretching is recommended for women who report experience of painful penetrative sex. This study protocol suggested that the patient stretch their PFM from three times a week to once a day until achieving painless vaginal touch or insertion of the last vaginal dilator (if applicable).</p> <p>The patient was instructed to introduce her thumb downwards, using her dominant hand, and apply the maximum pressure she could endure until achieving her maximum discomfort level or minimal pain threshold (3 on the numerical rating scale of 0-10). Each vaginal wall (at 4-5, 6 and 7-8 h of vaginal clock) should be stretched for 1 minute.²¹ The patient also had her PFM stretched once a week by the physiotherapist, who used her index and middle fingers. Breathing exercises were instructed whenever the physiotherapist noticed patient distress. In addition, the patient was encouraged to notice vaginal pain and follow her body sensation, modifying the exercise over time.</p>
Dilators	<p>Aim: To enable autonomy to the patient to maintain PFM stretching and gain self-efficacy.⁸</p> <p>Tools: Vaginal dilators.</p> <p>Orientation: Women who presented increased PFM tone of > 3 according to Newman's scale, even after one week of self-stretching, were instructed to include vaginal dilators in their treatment protocol.</p> <p>Vaginal dilators were first tested after PFM stretching at the office, from the smallest to the largest possible that provided discomfort. The two largest sizes were then instructed to be used at home, always immediately after the stretching exercises, for 3 and 5 minutes, respectively. The patient should proceed to a larger size and drop the use of the smaller size in the next session with physiotherapy assistance, until achieving the largest possible size (or the one agreed to be compatible with the aimed penetrative sex). In the following sequence, desensitization with massage and vaginal dilator use was suggested until the patient was able to return to penetrative intercourse.</p>

Table 1 - Sensitive practice: framework proposal for genitopelvic pain management (continued)

Intervention	
Verbal commands	<p>Aim: To avoid sexual-trauma-triggering and enable a safer sensation during dyspareunia treatment.</p> <p>Tools: Verbal commands.</p> <p>Orientation: Many words used during gynecological consultations can trigger sexual abuse emotions in the woman with a sexual abuse history.¹⁰ This may occur because the victim, who is usually fearful or defenseless, can associate some commands with the ones that might have occurred during the abuse. Also, trusting another can be an issue and having someone asking for it can be unhelpful.</p> <p>Some commands to avoid that can trigger abuse trauma sensations, along with their suggested replacements, are provided below.</p> <p>Avoid: "trust me"; "open your legs"; "this won't hurt"; "relax"; "you have a pretty vulva" (or any other physical-related compliments).</p> <p>Replace by: "Let's make a deal: you must tell me when to stop whenever you feel uncomfortable"; Now I will place my index finger at your vaginal introitus"; "Is it ok if I move it to your left?"; "Do you think it is possible to take a deep breath until the discomfort/pain you are feeling during this stretching gets better?". Explain each step of the procedure in detail, ask permission to touch and to change location and share the control of the treatment approach with your patient.</p>

Table 2 - Mean (standard deviation) values of clinical symptoms for all patients before and after physical therapy

Clinical symptoms	Baseline	Post-treatment	p-value
Anxiety (n = 12)*	1.7 (2.1)	0.1 (0.5)	0.010
Self-reported pain during sexual intercourse (n = 22)*	6.0 (3.2)	0.7 (0.8)	0.000
Pain during physical therapy assessment (n = 11)	4.6 (1.9)	0.3 (0.5)	0.000

Note: Significant differences assessed by t-test. *Two dependent samples assessed using Wilcoxon's non-parametric paired test.

Discussion

Our study proposed a framework model for sensitive practice in the treatment of women with dyspareunia after sexual violence. We described a step-by-step approach for the main objectives during treatment sessions in order to help the clinical practice of the HCPs who deal with this population. The sensitive approach described in our study was mainly developed with the intention of decreasing the negative reactions of patients with a history of sexual violence, which may easily be triggered by many possibilities, from verbal commands to PFM management during treatment.

These negative reactions occur because of a frequent characteristic found in this population, namely hypervigilance, described as a high state of constantly assessing potential threats, often as a result of trauma. People who have survived sexual abuse or have post-traumatic stress can also exhibit hypervigilance. It was suggested that hypervigilance could be an adaptive response that reduces perceived vulnerability in sexual-victimized women.¹⁰

Furthermore, it was described that PFM massage is effective in the treatment of dyspareunia caused by tenderness of the PFM, with long-term pain relief.¹⁴ In a systematic review, it was reported that physical therapy techniques are effective at improving pain and quality of life in patients with dyspareunia.¹⁵ However, dealing with a patient who seems to be constantly reacting to potential threats is a frequent challenge faced by the specialized physical therapist when managing dyspareunia. One of the major barriers when delivering PFM massage is the aversion to touch presented by women with a history of sexual trauma, seen in the patient's resistance to touch their own vagina or resistance to having their partner or anyone else touch them. In our framework, it is proposed that when the physical therapist or HCP perceives the patient's aversion to touch, the next step is to investigate the touch - how to touch, using which material and the closest (aimed at therapy management) part of the body allowed - that can be tolerated at that moment. Following that, slow movements of the tolerated touch can be progressively applied until reliability is increased, whilst the physical

reactions are reduced as hypervigilance and trustiness are dealt with. PFM massage and the use of vaginal dilators, despite being therapeutic choices due to their high effectiveness at reducing pain in the treatment of dyspareunia,¹⁵ are tools that are disliked by patients. For this reason, preparation of the patient regarding the material that will be used in the treatment, how it works, why to use it and other matters, such as discretion when dealing with it, respect and limits, should be aligned before proceeding to physical management.

A total of eight women were assessed under cognitive distraction during sex, which reduces sexual arousal, and the main causes are concerns about appearance, fear of failure, thoughts of sexual violence, lack of partner affection, and control.^{12,16} Regulation of sexual desire was stimulated through the technique of mindfulness, with instructions of non-judgment and focus on all five senses of the body.¹⁷

To deliver such effective physical therapy techniques, HCPs should be encouraged to assess patient's trustiness, working on HCP-patient bonding while always highlighting the qualities of respect and reliability. Avoiding potentially triggering acts during treatment can be useful not only to improve these abilities but also to reduce treatment duration and improve effectiveness during technique delivery. For instance, touching a woman after sexual abuse may trigger memories of trauma and cause physiological hyper-excitation, with fight and flight responses.² Sensitive practices aim to avoid such a reaction occurring and, if it does, for the HCP to be prepared to easily notice this, as well as how to administer verbal commands and practical management during signs of increased anxiety in the patient.

Moreover, our results showed that anxiety reduced as the woman underwent further treatment sessions. These findings were also reported elsewhere¹⁸⁻²⁰ and can be explained by the fact that woman under physical therapy treatment knows what to expect after a few sessions, whilst the bond with the HCP is also strengthening.

Our study has some limitations. Aversion to touch (along with other studied variables) was evaluated very quickly and further studies should look at this important and frequent characteristic of women with a history of sexual violence by using robust and validated questionnaires. Furthermore, the women participating in this study were of medium to high economic status, small sample size which may negate generalization. However, the strength of this study is that it helps physical

therapists and other HCPs to refine their abilities and ensure sensitive practices for humane treatment of patients with dyspareunia who have been abused.

Conclusion

Our findings highlight the importance of integrated care for women's health, with the aim of increasing respect during treatment and making it possible to reach the expected outcomes. The current literature reveals significant gaps, and experience reports are not optimal sources for the development of theoretical frameworks. Further studies investigating sensitive versus common approaches should be encouraged to better understand the impact on aversion to touch and hypervigilance, as well as dyspareunia improvement, for women with a sexual abuse history.

Authors' contributions

MWO and BMG completed the assessment of patients included in the research. MWO, BMG and TBL provided insights to the development of the study and contributed with the sequence work and analysis. All authors approved the final version.

Data availability statement

Research data is not available.

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