CLINICAL PAPER

A phenomenological study of women who presented to a physiotherapy-led continence service with dyspareunia and were treated with trigger point massage

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Abstract

This study explores the experiences of female subjects with dyspareunia who underwent trigger point massage (TPM) as part of their physiotherapy treatment for this condition. The author used a phenomenological approach to investigate the perceptions of women with dyspareunia to TPM of their pelvic floor muscles (PFMs). All patients who received TPM during the study period were invited for interview. The data were collected by in-depth, face-to-face interviews, which were tape-recorded. The interviews were then transcribed and subjected to Colaizzi's data analysis framework in order to determine themes and meanings from the interview data. Three themes emerged: the women's agony; their feeling of breaking through a wall; and finally, their impression of getting better and better after their treatment. Dyspareunia had a much wider impact on the subjects' quality of life than painful sexual intercourse alone: it impacted on their ability to sit, and affected their work and leisure. All of the women in this study felt that their symptoms improved after they received physiotherapy that included TPM for their PFMs.

Keywords: dyspareunia, pelvic floor muscles, phenomenology, physiotherapy, trigger point massage.

Introduction

Although dyspareunia and vaginismus were once believed to be separate conditions, these are now considered to be closely related and overlapping complaints (Porst & Buvat 2006). The embarrassing nature of dyspareunia and the difficulty many health professionals have in questioning patients about their sexual health is thought to account for the variation in reports of its prevalence (Shultz *et al.* 2005; Porst & Buvat 2006), with estimates ranging from 15% of women (Schultz *et al.* 2005; Goldstein & Burrows 2008) to 45% of post-menopausal women (Porst & Buvat 2006, p. 343). The true incidence of dyspareunia can only be guessed at because there is no way to identify the number of

Correspondence: Nicky Mackenzie, Musculoskeletal Therapy Team, Physiotherapy Department, Lewisham Street, West Bromwich B71 4HJ, UK (e-mail: nicky.mackenzie@nhs.net). women who may suffer from this condition in silence.

A sexual history is an important part of the initial physiotherapy assessment of a patient presenting with symptoms of incontinence. Individuals experiencing difficulties with their sexual function often seize the opportunity to ask for help when they are consulting a healthcare professional for another intimate problem, such as incontinence.

The present author has worked in this area for almost 10 years, and her experience has allowed her to develop many practical skills in the treatment of pelvic floor muscle (PFM) dysfunction, including the relief of muscle spasms in the pelvic floor. Patients often report that respite from these muscle spasms improves their symptoms of dyspareunia.

The treatment techniques used include myofascial release of trigger points and trigger point

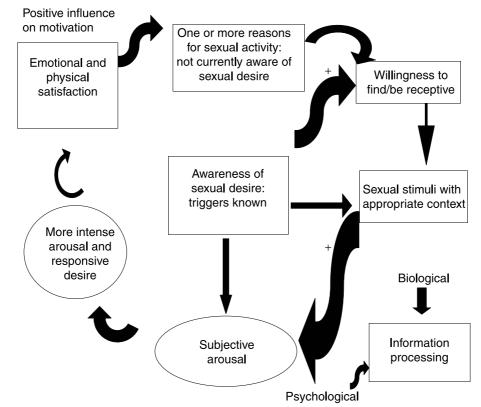


Figure 1. Women's sexual response cycle (Basson et al. 2003).

massage (TPM), a procedure widely used for muscle spasm in other areas of the body, but the research evidence to support the application of such techniques for dyspareunia is very limited (Rosenbaum 2005; Goldstein & Burrows 2008). The location of the PFMs makes their manual treatment an option that is often overlooked by physiotherapists.

A phenomenological approach (Ploeg 1999; Cresswell 2003) was used to enable the potentially small sample of subjects who would have experienced the phenomenon to be able to describe their thoughts and feelings about it.

Female sexual response and dyspareunia

Knowledge of normal function is required prior to consideration of any pathology (Whipple & Owens 2007).

The female sexual response was considered by Masters & Johnson (1966) to be linear, and therefore, analogous to that of the male. This view has now been superseded by the Basson *et al.* (2003) female sexual response cycle (Fig. 1), which may begin at any point, with penetration sometimes preceding arousal, since female physiological arousal is not necessary for intercourse to proceed.

The predominant male sexual problem of erectile dysfunction was originally thought to be

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a psychological issue until a medical approach was pioneered (McMahon *et al.* 2006). Nevertheless, medical treatment alone does not necessarily produce the required effects, and therefore, an integrated approach that considers the psychological as well as the physical aspects of male sexual dysfunction (Althof *et al.* 2006) is now advised.

Graziottin (2006a) suggested that there has long been a gender difference in research concerning sexual problems, and that the female sexual response is still only understood at a basic level. The International Society of Sexual medicine acknowledges the lack of research into female sexual problems and has suggested that further research is needed (Porst & Buvat 2006).

There is little evidence to show that patients with dyspareunia benefit from treatment methods that are designed to reduce hypertonic muscle spasm by soft-tissue release (Becka *et al.* 2000; Wurn *et al.* 2004; Fisher 2007). Trigger point massage is a treatment technique that was introduced by Janet Travell in the 1940s (Travell & Simons 1992). Despite musculoskeletal physiotherapists' widespread use of TPM to treat muscle spasm in other areas of the body, there has been a surprising lack of research into the benefits of using this technique on the pelvic floor muscles (PFMs), although a few authors

have suggested that TPM might be useful in the treatment of dyspareunia (Becka *et al.* 2000; Wurn *et al.* 2004). Goldstein & Burrows (2008) acknowledged that PFM spasm was a probable cause of dyspareunia and proposed that it might be treated with physiotherapy techniques including TPM, but they also encouraged further studies. Although there is only weak evidence to support physiotherapy treatment of dyspareunia, the implications are that it is beneficial (Becka *et al.* 2000; Bø *et al.* 2000; Wurn *et al.* 2000; Bø *et al.* 2007).

There are a limited number of treatment options for dyspareunia. Physiotherapy treatment is non-invasive, and therefore, unlike the surgical options, no harmful outcomes are likely.

Subjects and methods

Research design

The aim of the present study was to explore the experiences of patients who had undergone physiotherapy treatment involving TPM. A naturalistic design was selected as the research approach (Polit et al. 2001; Bell 2005; Bowling & Ebrahim 2005) because there is very little literature to support or refute TPM as a treatment for dyspareunia. Phenomenology was chosen for the design. This is a philosophical tradition that was devised in the early 1900s by Edmund Husserl and his followers (Smith 2008), whose area of enquiry at the time was the experiences of individuals within their life-world (Polit et al. 2001; Bowling & Ebrahim 2005). The phenomenological perspective used in the present study is that of Colaizzi (1978), who advocated a descriptive approach in order 'to gain a description of the meaning of an experience from the participant's point of view' (Magnussen et al. 2008, p. 126). Each person has an understanding of the world that is based upon their own experiences, and therefore, one way to ascertain the perceptions of subjects about their experiences of the treatment that they have received is by interviewing them about these.

Data collection method

The present study utilized women who had undergone TPM as part of their physiotherapy treatment for the symptoms of dyspareunia. Individual, in-depth, semi-structured interviews were used to allow subjects to develop their own ideas and follow their own thoughts (Kvale 1996; Cresswell 2003) in relation to TPM. The interview began by the researcher using a 'grand tour question' (Polit *et al.* 2001, p. 265), and the participants were then encouraged to speak freely about their thoughts and feelings about the experience of their physiotherapy treatment.

Sample

Phenomenological sampling (Polit et al. 2001) was used in the present study. The inclusion criteria were that the subjects should be: literate in English; 18 years of age or more; and women who had received TPM as part of their physiotherapy treatment. Patients were excluded if they had any mental impairment affecting cognitive ability, if they were unable to give informed consent, and if they were previously known to or had been treated by the researcher. All women who received TPM for dyspareunia as part of their pelvic floor physiotherapy during the period of the study were invited to participate by the treating physiotherapist. The subjects were recruited and interviewed between April and November 2008, and had all been directed to the physiotherapy continence service by their general practitioners or a hospital consultant as a result of their symptoms of urinary incontinence. The sample size was expected to be small because of the complexity of data collection and its time-consuming nature (Denscombe 2003, p. 26); it ultimately included five women.

Once the same stories, themes, issues and topics emerged from the interviews with the study subjects, the sample size was deemed sufficient since the data collection and analysis process revealed saturation of data (Bowling 2002).

Rigour

By its nature, a phenomenological study is associated with description and not analysis (Denscombe 2003). Verbatim quotes are utilized in reports of the findings to further enhance credibility (Sandelowski 1994). Bowling (2002, p. 188) explained that 'results are not generalizable to the wider population of interest unless random sampling of that population has been employed (although this is rarely possible)'. According to Polit *et al.* (2001), this all-inclusive method of subject selection should reduce bias because subjects are included as a result of their experience, not for any personal agenda that may influence their participation.

Since the topic of the present study was personal descriptions of an unusual experience, the subjects needed to be invited to participate (Kvale 1996). It is acknowledged that this

Box 1. Colaizzi's (1978) phenomenological method of data analysis

- 1. Transcribe audiotapes verbatim immediately after the interview and read/listen to the interview in its entirety to gain a sense of the whole.
- 2. Extract significant statements from each transcript.
- 3. Formulate meanings as they emerge from the significant statements using significant insight.
- 4. Organize formulated meanings into clusters of themes. Validate the clusters of themes by referring back to the original transcript to ensure no data has been ignored or added to.
- 5. Integrate the results into an exhaustive description of the topic being studied.
- 6. Formulate the essential structure of the phenomenon.
- 7. Validate the descriptive results by returning back to the participants to confirm if this analysis describes their experience. (If any data is deleted or added to, this new data is incorporated into the final product.)

reduces the trustworthiness of the results since the inclusion criteria had to be wide to ensure an adequate number of participants. To minimize bias, subjects were only invited to participate if they had had no prior contact with the researcher. The research proposal acknowledged that, being very personal, the nature of the topic under investigation could result in difficulty attaining sufficient data.

Data management

Colaizzi's (1978) seven procedural steps, derived from the Duquesne school, which follows the Husserl tradition (Holloway & Wheeler 1996), were used to analyse the data. These steps are outlined in Box 1.

Stage 1: Transcription of the tape-recorded interviews

All interviews were tape-recorded and then manually transcribed verbatim as soon as possible after the event (Sandelowski 1994) to ensure that the data available for analysis were an accurate record of the subjects' words. Codes were allocated to subjects (e.g. S1, S2 and S3), the researcher (R) and the therapist (T) in each transcript.

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Stage 2: Extract significant statements from each transcript

The transcripts were read and reread to extract words and sentences relating to the phenomenon of TPM. A highlighter pen was used to identify significant words and phrases (Bowling & Ebrahim 2005, p. 524). When each transcript had been prepared in this way, segments of text were then given the descriptive label of 'significant statement'. A total of 28 significant statements were identified, as shown in Table 1.

Stage 3: Formulate meanings as these emerge from the significant statements

The highlighted significant statements were then physically cut and sorted into groups of similar ideas that were pasted together to begin to formulate meanings (Colaizzi 1978). Twentyfour formulated meanings were identified, as shown in Box 2.

Stage 4: Organize formulated meanings into clusters of themes

At stage 4, Colaizzi's method of data analysis was used to gather the 24 formulated meanings into clusters of themes and then to extract the 'essential structure of the phenomena' (Colaizzi 1978). After this process, three themes emerged concerning thoughts and feelings relating to different stages in the phenomenon of TPM. Box 3 shows the themes and the formulated meanings.

Stage 5: Integrate the results into an exhaustive description of the topic being studied

Using significant insight (Colaizzi 1978), immersion in the data revealed that the themes were comprised of formulated meanings relating to both psychological experiences and physical experiences. Table 2 divides the themes into psychological and physical categories, and formulated meanings are attributed to the appropriate subcategory.

Stage 6: Formulate the essential structure of the phenomenon

The exhaustive description was then reduced to an essential structure. This was made up of three themes: the reason for having TPM; the feelings associated with TPM itself; and the outcomes of the treatment. The researcher again referred back to the transcripts to find words that the women had used during their descriptions which would best fit the three themes. Figures 2–4 were produced to represent the three

	Interview reference				
Significant statement	<u>S1</u>	S2	S 3	S4	S5
Pain	Yes	Yes	_	Yes	Yes
Dyspareunia	_	No	Yes	Yes	Yes
Physical effects	_	Yes	_	Yes	No
Frustration	_	_	_	_	Yes
Relationship affect	_	_	_	Yes	Yes
Getting worse	_	_	Yes	_	Yes
Anxious	_	Yes	_	_	_
Wanting improvement	Yes	Yes	-	-	Yes
Low self-esteem	_	_	_	Yes	Yes
Urinary symptoms	Yes	-	Yes	-	No
Long duration of symptoms	_	_	_	Yes	Yes
Fear of sinister cause	-	Yes	-	-	_
Rejecting drugs, wanting to help self	-	Yes	-	Yes	_
Embarrassment	_	Yes	Yes	_	Yes
Comfortable with therapist	-	Yes	Yes	-	_
Each treatment easier	Yes	_	Yes	Yes	Yes
Unexpected	Yes	_	Yes	Yes	=
Pressure	_	Yes	_	_	Yes, then release
Relief	-	-	-	-	Yes
Tender	-	Yes	-	-	_
Acceptable	Yes	Yes	Yes	_	Yes
Improved self-esteem	_	_	_	Yes	_
Satisfied with improvement	Yes	Yes	Yes	-	Yes
Wants more improvement	-	-	-	Yes	_
After pain	_	_	_	Yes	Yes
After tenderness	_	_	_	_	For 24 h
Soreness of treatment	Yes	_	_	_	_
Comfortable after	Yes	Yes	Yes	Yes	Yes

Table 1. Significant statements

themes that make up the essential structure of the phenomenon.

Stage 7: Validate the descriptive results by returning back to the participants to confirm if this analysis describes their experience

Because of time constraints and sensitive nature of the inquiry, the subjects were not invited to further interviews. The present author acknowledges that this omission reduces the rigour of the study (Holloway & Wheeler 1996, p. 125).

Permission

Since the present study was part of a Master's degree programme, permission was initially sought from and granted by the Ethics Committee of the School of Health, University of Wolverhampton, Wolverhampton, UK. An application was then submitted to and approved by the Central Office for Research Ethics Committees, as per the research governance framework (DH 2001). Finally, approval was sought from and granted by the research and development unit at the present author's place of work.

Box 2. Twenty-four meanings formulated as a result of Stage 3

- 1. Pressure
- 2. Long duration of symptoms
- 3. Frustration
- 4. Wanting improvement
- 5. Anxious
- 6. Impact on relationship
- 7. Worsening symptoms
- 8. Dyspareunia
- 9. Urinary symptoms
- 10. Improved self-esteem
- 11. Fear of sinister aetiology
- 12. Relief with treatment
- 13. Apprehensive
- 14. Affecting function
- 15. Acceptable
- 16. Low self-esteem
- 17. Pain
- 18. Tender/pain after
- 19. Tender, not pain of treatment soreness
- 20. Embarrassment
- 21. Comfortable after
- 22. Satisfied with improvement
- 23. Soreness after
- 24. Each treatment easier

Box 3. Clustering of formulated meanings into themes

1. Symptoms
Affecting function
Wanting improvement
Impact on relationship
Embarrassment
Urinary symptoms
Dyspareunia
Worsening symptoms
Anxious
Pain
Frustration
Fear
Duration of symptoms
Low self-esteem
2. Treatment
Pressure
Apprehensive
Acceptable
Sore
Tender, not pain
Relief
Each treatment easier
3. Outcome
Tender pain after soreness
Comfortable
Satisfied with improvement
Improved self-esteem

Confidentiality and anonymity

Anonymity and confidentiality were preserved by numbering each tape-recorded interview and attaching the number to the corresponding transcripts. Confidentiality was maintained in the present study by not divulging information to any personnel apart from the research supervisor, who would have been unable to link the data to participants otherwise because the data were anonymized in the transcription process (Kvale 1996). The code given to the transcripts could not relate to the consent forms, which were the only places where any identifying marks were located. Any quotes used in the research were anonymized.

Results

The research findings are presented as these emerged during analysis of the interviews. Immersion in the data revealed similarities

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between the women. The results are the words used by the subjects relating to their lived experiences of TPM as part of their physiotherapy treatment. The analysis revealed that three main themes related to the stages they underwent emerged from the stories told by the women as they recalled their experiences: 'severe agony'; 'passing the wall'; and 'better and better'.

These findings are reported with relevant quotes to support them. Within each theme, psychological and physical attributes were identified. The narrative provides the essential structure of TPM for the selected women with dyspareunia.

Severe agony

The words used by the women in the present study expressed the intensity of their dyspareunia, and two of the women felt that their whole lives were affected by this condition. All of the subjects were keen to express how they had felt before receiving TPM. 'Severe agony' were the words used by one woman to describe how her dyspareunia was affecting her before she began physiotherapy treatment:

'I had severe agony because of my everyday life with work.' (S2)

The reasons that women gave for why they had reported their dyspareunia to the physiotherapist showed remarkable similarities. The effects impacted on their whole life-world and the extent of this effect on their lives is evident from their words. The above subject explained:

'I just couldn't explain the pain I had.' (S2)

Another remarked:

'I was so un-comfor-table [word emphasized by speaking it slowly and loudly], painful [spoken loudly]...' (S4)

Pain limited what the women could do. This subject described how she could not sit comfort-ably:

'When I sit for any extent of time, it's just excruciating – pain is not comfortable place to rest. . .' (S4)

Later in the interview, she expanded on her difficulty in sitting:

[...]A]nd I'm sitting erect, that's fine, but if I should keep my back to the chair, I could feel it way up into your anus, way down here that discomfort...' (S4)

Themes	Sub-themes	Formulated meanings
Symptoms	Psychological	Fear Embarrassment Impact on relationship Wanting improvement Worsening symptoms Anxious Frustration Duration of symptoms Low self-esteem
	Physical	Pain Affecting function Dyspareunia Urinary symptoms
Trigger point massage	Psychological	Each treatment easier Apprehensive Relief Acceptable
	Physical	Pressure Sore Tender, not pain
Outcome	Psychological	Satisfied with improvement Improved self-esteem
	Physical	Comfortable Tender after

 Table 2. Themes, sub-themes and formulated meanings

She explained:

'I couldn't sit in the seat, I was practically on my hands holding. . .' (S4)

Difficulty in sitting affected another subject's working life:

"...[B]ecause that sort of pain, you know, for everyday work and moving around, um..." (S2)

Another woman found it difficult to travel:

'I haven't travelled, nothing like travelling from Birmingham to London, that's a nightmare. That's a nightmare unless I don't have a comfortable seat going down there. Oh no, it's too painful. I tell you, I was in the car driving for a friend, and if I could've get out of the car and tell them, "You know what? Keep going without me. I get something and go back home."' (S4)

Her fear of pain on the return journey caused her anxiety when she did travel:

'It's just uncomfortable, and then you think that, going down, you think to yourself, *You've got to make the journey back up again*, you know? That's how awful it was, that's how awful it was.' (S4) From these words, it can be seen how dyspareunia affected the subjects' ability to sit, restricting their ability to work and travel.

The women spoke of the psychological effects of the condition as well as their physical difficulties. One subject explained the fear that was associated with not knowing why she had pain:

'I thought there was something worse, you know?' (S2)

Another woman described wanting to know why she had the pain:

'[A]nd next thing, you know, I can't take tablets for all of my life, what I can't tell you ... For me, just taking tablets, it's a waste of time if it's just for the pain, taking the tablets. I want to know what's causing this pain, you know? I need to know more than just taking ... I said to the doctor, "I don't want to just be taking tablets for pain. I don't wanna do that. I don't take medication..." [B]ut he said, you know... I don't want to take this all the time, all my life, so, you know, they, they recommend, um, the physio.' (S4)

Generally, fear was related to past experiences and the expectation of pain, as explained by the

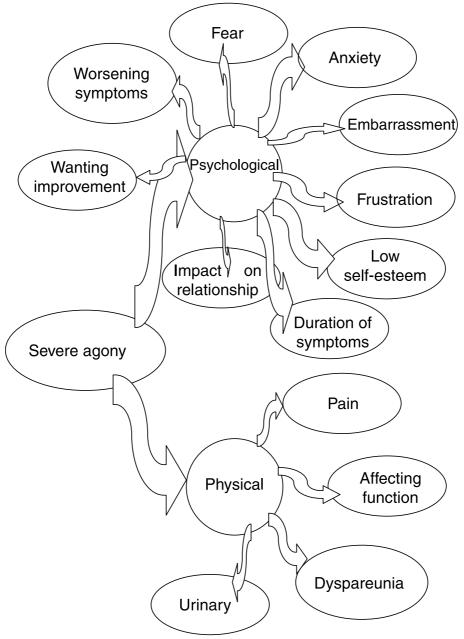


Figure 2. Reasons for seeking help: severe agony.

following subject, who had had several vaginal examinations for various medical problems:

'Obviously every time I was going for things it was hurting me just as much as the last time and I was thinking, *Oh no, I'm gonna start developing a phobia here, like every time someone comes near me, I'm gonna get angry and associate sex with pain.* And that's what I kept thinking.' (S5)

For this woman, there were no other symptoms than pain when her vulva was touched:

'Still, if I sat down for a while, it's like an achy feeling, but other than that, no, I don't notice it, no.' (S5)

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The effect of the dyspareunia on relationships was another common theme. This subject explained how she felt about not being able to have sex with her husband and the effect that this could have on her partner:

'I'm worried that because I've let my partner down.' (S5)

Another woman explained the severity of the pain and the impact upon her relationship with her husband, and described why they abstained from intercourse:

'We just couldn't even bother. I was just too uncomfortable.' (S4)

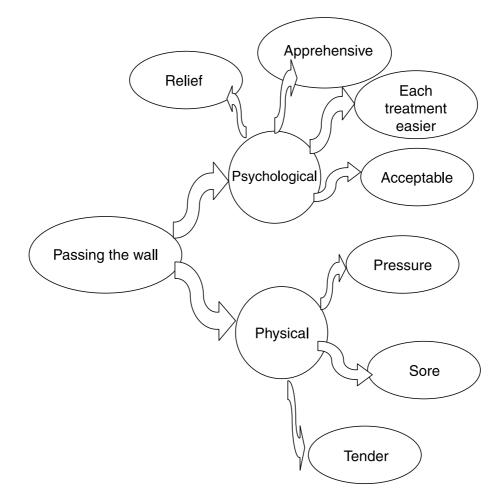


Figure 3. How the treatment felt: passing the wall.

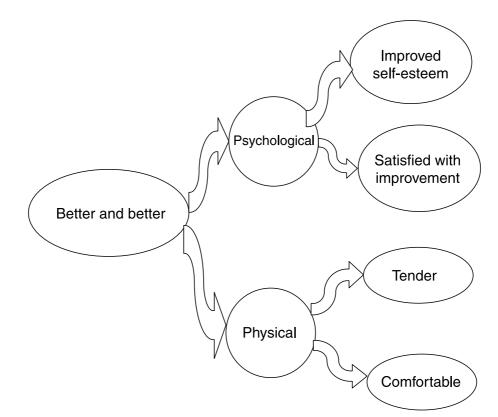


Figure 4. Effects of the treatment: better and better.

Treating dyspareunia with trigger point massage

This subject's graphic description of her difficulties with intercourse allows one to understand the impact of dyspareunia:

'Before now, though, don't bother to, let's not even bother go there, it's too much, it's too ... so tight that it's like it's like a wall and you have to pass that wall, and you understand that you have to break the bricks before you get behind there [The subject held her hands in front of her, as if in a prayer, pointing forward to illustrate breaking through the wall by separating her hands], so it's like that that sort of discomfort, like something has blocked you off completely, yeah...' (S4)

Another woman also referred to feeling as if it was a wall:

'It was like a brick wall trying to get through, it was just no-go, so. . .' (S5)

This subject was talking about how she had hoped to be able to resume intercourse after having her baby, but had experienced such pain that she could not, something she found especially difficult:

'It was just frustrating 'cause everyone else I knew seemed to be like hopping back into it and I was like...' (S5)

She went on to explain how her partner was very understanding, but she was disappointed that things were not as she had hoped:

'...[B]ut it's just me that gets frustrated, 'cause...' (S5)

For some subjects, the continence problem was their biggest concern and the dyspareunia was not a major issue:

'Main was like I was going to toilet regular. It was because of my urine prob-problem and things like that.' (S1)

'Um, well, when I laughed, um, urine came, and when I sneezed and when I coughed.' (S3)

Two women described their embarrassment about their symptoms:

'Um, it just got a bit embarrassing really.' (S3) 'You know, down, down below, you know? Uncomfortable and then embarrassed and stuff...' (S2)

Several subjects reported that they had experienced dyspareunia for a prolonged length of time and that it was not improving:

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'...[A]nd to begin with, it wasn't too bad, but I found it get a bit more...' (S3)

Another woman explained that she had delayed seeking help because she hoped that she would get better:

"...[J]ust things prolonging more and more, and it's more painful so, um, with that in mind, I thought, well, it was time to go to the doctor, so that was probably around maybe about 4 months or 5 months after...' (S4)

The treating physiotherapist would have explained the treatment to the women before asking for their consent. Three women explained why they had consented to a treatment that was expected to be painful:

'I wanted it to get better. . . [Pause]'(S1)

'I had severe pain near the groin, that area, part, and to be frank with you, I was prepared for anything.' (S2)

'...[H]elp me to [get] relief from these excruciating pains. Why not? [Giggle]' (S4)

Passing the wall

Two subjects used the simile of a wall to describe the effect that their dyspareunia had upon their ability to accept a vaginal examination or to have sex. Trigger point massage is known to be painful on any skeletal muscle. After treatment, all the women in the study reported feeling an improvement, and hence, the words 'passing the wall' have been used to depict releasing the muscle spasms associated with dyspareunia. Having been prepared by the physiotherapist, three of the subjects described their apprehension in advance of treatment:

"...[B]ut I did feel apprehensive, you know? What it was going to be like, um, you know? Will it really work? Would it help?" (S2)

'No, I don't know what to expect. I really did not know what to expect or anything. . .' (S4) 'I don't think I'd ever thought about having physiotherapy down there, but. . . Um, no, I didn't know what to expect. [Giggle]' (S3)

After the first treatment session, these feelings of apprehension eased:

'It felt funny at first, but it was alright afterwards 'cause the second time, you know...' (S3)

One woman did not seem anxious when recalling how she felt before her treatment:

'Well, I didn't know. She did explain how it would feel so, um, oh, because, you know, I've had IUCDs [intrauterine contraceptive devices] done and smears, so I wasn't that sort of alarmed because she explained, you know, how you'd feel.' (S2)

All of the subjects struggled to find words to describe their experiences of TPM:

'It was a bit, felt a bit funny, a bit weird, um, you know?' (S3)

'I've never had anything done like this, what she's ... anything ... what she... No ... is doing something completely different ...' (S4)

The following woman managed to describe her feelings more coherently and described the relief that she felt during the treatment as the muscle relaxed under the therapist's finger:

'Um, obviously it did feel as though someone was right inside so, when they were pushing down on it, obviously, it hurt. But, after, like, I think it was her thumb or her finger that had been there for ages, it would release off and then you couldn't feel anything.' (S5)

This subject described the feeling of the TPM:

'Um, when she ... it felt kind of, you know, while, while ... talks to you, you know, when ... talks to you, tender plus sort of not painful, I'd say, but you know, there's something there, you know, like one or two pushing sort of thing. That's what it feels like.' (S2)

Another woman described the pain she felt whilst undergoing TPM:

"...[B]ecause it was too painful, still. Very uncomfortable... As a matter of fact, when I had the treatment [it] was just a short span 'cause I tell her it was very uncomfortable.' (S4)

The soreness or pain involved in the actual treatment was described by this subject:

'Then, second time I had it done, it was making me sore, but now, since I started doing it, it feels sore, it feels sore today, yeah. . .' (S1)

Another woman told the researcher that she felt soreness after TPM that persisted for over a day:

S5: To be honest, I didn't really know what it would feel like, but to be honest, I thought it would be really painful. That's because I associate everything's going to be painful since the birth. It didn't really hurt. It just felt funny afterwards, it's a bit tender.

R: Straight after?

S5: Um. . . No, like the next day. Like you can just feel a little bit tender.

R: OK, how long does that last?

S5: Only for probably that day and then it's, like, it's gone. You can't feel it.

Several of the subjects found the treatment easier each time they underwent it:

"...[G]etting, getting more, even easier for her to, to manoeuvre the treatment with me..." (S4)

'[Laugh; pause] It was all right really.' (S1)

One woman described feeling at ease with the physiotherapist:

"...[A]nd I'm comfortable with her." (S2)

Better and better

All of the subjects reported that their condition had improved after the treatment, and thus, the words 'better and better' were taken from one woman to describe the third stage of the phenomenon:

 $(\ldots [U]m$, but it really has helped me and \ldots (S2)

'...It feels loads better now. I've only been, like, three, about three or four times, but it just feels loads different already.' (S5)

'Um, it's been beneficial. . .' (S3)

"...[A]nd I think it's improving. It's certainly helped. I can only watch it now and hope, as the days go by, that it gets better and better, better and better." (S4)

The subjects spoke about their physical improvement and one described the improvement in her sitting:

"...[Y]eah, 'cause even now [when] I'm sitting, it's not uncomfortable. It's good, I could sit here for another half an hour if I had the time.' (S4)

They also spoke about their sense of psychological relief. The following woman explained how she felt when her pain eased and she realized that there was nothing sinister to worry about:

"...[A]lso, I feel kind of, um, pleased and relieved in the sense that I thought there was something worse, you know? And I really never would have thought that just that sort of trigger point what you've said would help, you know, those muscles. . .' (S2)

Some subjects felt nervous about resuming their sexual relationships:

'I'm not too worried about it now 'cause, um, the physiotherapist has said to get my finger, to use my finger there to massage it, so I get used to something, someone, you know, being there...' (S3)

One woman who had resumed intercourse with her husband described how it felt:

"...[F]eeling very handsome about yourself, not to be in pain and uncomfortable... No, that's what I said. Now it's completely different now, you know? Relaxing, that's supposed to be a really relaxing time, a good time. I'm feeling very handsome about yourself, not to be in pain and uncomfortable... But it's far better than when I started... But now, you know, as the treatment goes on, it's like an opening, like the opening, that was whatever was closed up, it's now, it's like an opening again. It might... Yeah.' (S4)

Urinary symptoms were also noted to have improved:

'... [A]nd stopped the stress incontinence, so its been beneficial...' (S3)

Discussion

Three significant findings are reported in the present study. These are considered separately in order to relate each to the aims of the research and the appropriate literature.

Severe agony

The subjects' descriptions of their dyspareunia revealed the severity and extent of the pain associated with the condition, as well as its effects on their entire lives. The pain had restricted the women's function by affecting their ability to sit, and restricting work and leisure pursuits. McCaffery & Pasero (1999) recognized that, being a subjective experience, the true impact of pain can only be known by the person who experiences it. The Working Group on a New View of Women's Sexual Problems (WGN-VWSP) considered dyspareunia to be a sexual problem caused by psychological factors (WGN-VWSP 2000), although Schultz et al. (2005) later mentioned the involvement of physiotherapy in the treatment of women with the condition. Although women are psychologically affected by

the problems associated with dyspareunia, it seems that its physical aspects are only just beginning to be understood.

Medical professionals find it difficult to discuss sexual problems with patients. Furthermore, mention of any of the additional symptoms identified by the present study could easily lead a physiotherapist to try other techniques that might not address the PFMs, and therefore, not produce benefit. The finding that dyspareunia may present with pain on sitting suggests that professionals, especially musculoskeletal physiotherapists, should enquire about sexual problems when assessing such patients since these could highlight dyspareunia, which might require physical treatment.

Knowledge about dyspareunia in women has increased recently. It was originally considered to be a psychological problem (WGNVWSP 2000), but the recognition that vaginismus and dyspareunia were related (Graziotin 2006b) suggested that there was a physical component to the condition. The finding that women experience many symptoms that have an impact on their entire lives is supported by studies by Sheppard *et al.* (2008) and Goldstein & Burrows (2008), but this is a fairly recent advancement since dyspareunia was previously thought to have only sexual effects.

The realization that dyspareunia may have physical as well as psychological effects should influence those who are trying to treat women with the problem. Unless both aspects are addressed, positive outcomes may be less likely.

The present subjects' descriptions of the pain associated with medical examinations are supported by the literature. Graziottin (2006b) reported that this can result in 'refusal of gynaecological examination' in the most severe cases. Nevertheless, even in the above author's classification, the use of the word 'refusal' implies that dyspareunia has a mainly psychological rather than physical cause.

The present study found that embarrassment was associated with dyspareunia, as was a fear of an unknown aetiology. Reinforcing this finding, a qualitative study by Sheppard *et al.* (2008) reported that emotional distress was associated with dyspareunia. The women who mentioned embarrassment also had symptoms of urinary incontinence, which is known to be embarrassing (Laycock *et al.* 2001). It is not possible to know whether the women who felt embarrassed were troubled by their dyspareunia or their incontinence.

The subjects in the present study had suffered from many symptoms that had an impact on their daily lives, but had not found any respite until they had finally been referred for physiotherapy and received TPM as part of the treatment for their urinary incontinence. The dyspareunia was revealed during the subjective physiotherapy history when the women were specifically questioned about any pain associated with intercourse. This corresponds with the current lack of evidence regarding the actual incidence and extent of dyspareunia in women. The present sample of subjects who had previously undiagnosed symptoms of dyspareunia reinforces the suggestion made by Porst & Buvat (2006) that the true incidence of the condition may be much higher than currently estimated.

Passing the wall

The present subjects experienced anticipatory anxiety about their TPM treatment. The finding that dyspareunia has a strong psychological component is supported by the literature (WGNVWSP 2000; Graziottin 2006b; Sheppard et al. 2008). Despite their anxiety, the present subjects accepted the treatment in the hope of resolving their condition. Graziottin (2006b) and the WGNVWSP (2000) reported that some women will tolerate medical examination despite their discomfort. Among their many skills, physiotherapists are adept at the tactful questioning of patients and calming them down with reassuring words. Laycock et al. (2001) and Haslam (1995) encouraged physiotherapists to enquire about dyspareunia, and a knowledge of anticipatory anxiety should allow specialist physiotherapists to take extra efforts to reassure and prepare a patient before a vaginal examination.

The present study found that TPM may feel odd and unexpected, and produce a sensation of pressure, soreness or tenderness, especially the first time it is applied. Any soreness resolves and discomfort caused by the treatment usually eases with subsequent treatments. Subsequent TPM sessions are likely to feel more comfortable, and since the woman now knows what to expect, anxiety about the procedure should lessen.

Anticipatory anxiety may be a result of the individual never having experienced anything like this treatment before. Even though the present author identified no studies of TPM of the PFMs in the literature, Travell & Simons (1992) found that trigger points are tender to palpation, and thus, the assertion that TPM of the PFMs may be felt as discomfort or pain is reasonable. The words used by the women to describe their experiences with TPM may be worth noting by physiotherapists when discussing the treatment technique with a potential patient.

The present subjects found the treatment embarrassing because the area being massaged is very personal, and although this issue not directly addressed by the literature reviewed by the author, physiotherapy professional guidelines (Haslam 1995; Laycock *et al.* 2001; SIGN 2004; NICE 2006) for vaginal PFM assessment advocate care and consideration with regard to the delicate nature of the examination. Since all the present subjects also had incontinence, which is well known to cause embarrassment, the relevance of this finding is unclear.

Better and better

All of the women interviewed in the present study reported benefits after their treatment. These varied from a reduction in pain to resolved dyspareunia and urinary symptoms, improved self-esteem and personal relationships, and a reduced fear of pain. Sitting became more comfortable, with consequent improvements in their ability to work and travel. These findings imply an improvement in quality of life. The literature review revealed very little knowledge about treatments for dyspareunia involving physiotherapy, although there is weak evidence from small studies to suggest that physiotherapy may be useful in the treatment of this condition (Becka et al. 2000; Beji et al. 2003; Wurn et al. 2004; Fisher 2007).

The finding that women who had experienced TPM felt that it had helped them is supported by Goldstein & Burrows (2008), who acknowledged that PFM spasm is a contributory factor in dyspareunia. Improvements that made life more comfortable were described by several of the present subjects, who described being able to sit for longer periods at work or while travelling. One woman in particular reported an improvement in her personal relationship because she was now able to have intercourse without discomfort. The scarcity of effective treatments for dyspareunia limits any comparison of the results of the present study; however, since the literature describing dyspareunia (WGNVWSP 2000; Graziottin 2006b; Sheppard et al. 2008) describes the opposite of adverse effects, it would seem reasonable to suppose that an improvement in dyspareunia might reduce these issues. The extent or duration of the benefit was not established by the present study.

Any psychological counselling that the physiotherapist may have provided or any outside influences that might have affected the outcomes cannot be known. However, physiotherapists have considerable skills in terms of explaining things to patients in words that they can understand, and therefore, some psychological aspects may have been addressed by the treating physiotherapist. The present study reinforces the evidence suggesting that a physical approach may benefit women with dyspareunia (Becka *et al.* 2000; Beji *et al.* 2003; Wurn *et al.* 2004; Fisher 2007), but the results also reveal a psychological component of dyspareunia, possibly indicating that a multidisciplinary approach is required.

The finding that one woman, who had worried that her symptoms might have a sinister origin, was relieved that TPM produced benefit correlates to a study by Sheppard *et al.* (2008), which found that women with dyspareunia felt 'uncared for by the medical profession' (p. 222) when treatments had not proved useful. Touch is recognized as making one feel cared for; for example, hugs are often given to friends who are distressed. The hands-on nature of physiotherapy, especially the manual technique of TPM, may have impacted upon the subjects' feelings of being 'cared for'; this could have impacted upon the outcome of the present study.

Conclusions and recommendations

Three main themes were revealed by the present research: 'severe agony'; 'passing through the wall'; and 'better and better'. This study found that women who present with dyspareunia have often experienced considerable pain that may have impacted upon many aspects of their lives, including their relationships, and their work and leisure activities. Sitting was specifically affected. This knowledge should encourage medical professionals to enquire about any sexual problems when assessing patients who present with pain on sitting, particularly musculoskeletal physiotherapists to whom patients with pain on sitting may well be referred.

When TPM is suggested as a treatment technique, women may experience anticipatory anxiety prior to their first treatment. This knowledge might encourage physiotherapists who are speaking to patients to take additional care to ensure that these woman are as relaxed as possible prior to performing vaginal examinations. Words used by the present subjects to describe the phenomenon included: 'odd'; 'unexpected'; 'like a massage'; 'sore'; 'painful'; 'uncomfortable'; 'pushing'; and 'tender but not painful'. It might help physiotherapists to note these terms for use when speaking to patients about TPM. The finding that the present subjects felt that they benefited from the treatment may also offer physiotherapists some evidence to enable them to outline possible improvements to their patients. These descriptions of the phenomenon will provide physiotherapists with a better understanding of what dyspareunia and TPM mean to women.

The present study has provided evidence about physiotherapy treatment for dyspareunia from a purposive sample of five women who all received TPM. Knowledge about dyspareunia has increased recently. The WGNVWSP (2000) considered it to be a psychological problem, but Schultz et al. (2005) and Graziotti (2006b) later acknowledged that there is a physical component. Goldstein & Burrows (2008) suggested that dyspareunia could be caused by muscle spasms in the PFMs and that it might be helped by myofascial release techniques such as TPM. For the purposive sample in the present study, the symptoms of dyspareunia had a physical element that appears to have benefited from direct treatment methods. This study also revealed the psychological aspects of the condition. When managing women with dyspareunia, consideration of both the physical and psychological characteristics is likely to produce the best outcomes.

The present study specifically investigated TPM for dyspareunia. However, it is unlikely that these findings are entirely attributable to the technique. Physiotherapy is a holistic treatment and no individual treatment approach is delivered unilaterally. Advice will have been given by the treating physiotherapist that may have influenced the outcomes. Any other influences apart from the physiotherapy treatments that may have affected the outcomes cannot be known. The subjects spoke of their relationship with the therapist who had delivered the treatment, acknowledging their trust in her and describing how she made them feel at ease. When considering dyspareunia, it must be recognized that there are many aspects of physiotherapy treatment that could have had an effect.

The existing research base on specific physiotherapy treatments that are designed to reduce hyper-contracted muscle spasm in the pelvic floor is very small. There are two case studies by

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Becka *et al.* (2000), another by Fisher (2007) and a report by Wurn *et al.* (2004) that involved several treatment methods.

The existing literature does not supply any information about patients' experiences of their treatments, and therefore, the present study contributes new knowledge to this field. The use of phenomenology to gather specific data associated with subjects' feelings about the use of TPM for dyspareunia enhances the evidence available to patients and professionals who are faced with this problem. Of course, the present study employed a very small sample of patients and, therefore, there is no suggestion that these findings should be generalized to a wider population, but these findings are presented openly so that others may draw their own conclusions about whether the information is useful.

The five women who participated in the present study reported improvements in their dyspareunia after physiotherapy treatment for incontinence that included TPM for their PFMs. Their experiences fall into three stages: having dyspareunia ('severe agony'); physiotherapy including TPM ('passing the wall'); and after physiotherapy ('better and better').

Details concerning the phenomenon of TPM of the PFMs should enable physiotherapists who are discussing this treatment option with patients to provide better information about the experience, thereby enhancing the consent process (DH 2001). The present study describes women's experiences of TPM for dyspareunia in considerable details, a topic that has not been previously reported in the literature.

Physiotherapists who are trained in performing vaginal examinations should consider TPM as a possibility when patients report dyspareunia. This conservative treatment method can produce an improvement in symptoms when it is delivered by experienced professionals and is unlikely to cause any harm.

Further studies are required to determine the extent of both the benefit that may be achieved by employing TPM and the population with dyspareunia who might benefit from TPM. The published research on physiotherapy treatment for dyspareunia is so scant that few medical professionals, including physiotherapists, are familiar with the technique as a treatment option. It is hoped that the publication of the present study will enhance the treatment options that are available for the many patients who are thought to suffer from dyspareunia (Schultz *et al.* 2005).

The delicate subject of pain during intercourse should not deter professionals from questioning patients specifically about such problems, which they may never have discussed with a professional. The present study is intended to increase physiotherapists' awareness of their potential role in the treatment of women with sexual problems.

This study also adds to the existing research (Becka *et al.* 2000; Wurn *et al.* 2004; Fisher 2007) suggesting that physiotherapy techniques have a part to play in treating dyspareunia, and further enhances the growing awareness that there is a physical component to the condition that might benefit from specific manual techniques. With this knowledge, anyone treating women with dyspareunia would be advised to consider including a specialist physiotherapist in their multidisciplinary treatment team.

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