

## CME

### Managing Pregnancy and Delivery in Women with Sexual Pain Disorders

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#### ABSTRACT

**Introduction.** Vaginismus and dyspareunia most commonly affect women in their childbearing years, yet sexual function, and not childbirth, has been the focus of most research.

**Aim.** The aim of this study is to discuss pregnancy and birth outcomes in women with sexual pain disorders (SPDs) and address practical concerns of patients and practitioners regarding management during pregnancy, pelvic examination, labor, and delivery.

**Methods.** Review of the relevant literature and recommendations based on clinical expertise of the authors.

**Results.** A review of SPD, conception, and birth outcomes is provided as well as clinical recommendations for prenatal, labor, and delivery management of women with SPD.

**Conclusions.** Practitioners involved in obstetrical care should be knowledgeable about SPD and provide appropriate modifications and interventions. **Rosenbaum TY and Padoa A. Managing pregnancy and delivery in women with sexual pain disorders. J Sex Med 2012;9:1726–1735.**

**Key Words.** Vaginismus; Vulvodynia; Pregnancy; Sexual Pain; Penetration Anxiety; Labor and Delivery; Dyspareunia; Pelvic Floor

#### Introduction

Sexual pain disorders (SPDs), including vaginismus and dyspareunia, are prevalent in women in their childbearing years [1]. Preventing or facilitating pregnancy are major concerns for premenopausal sexually active women, yet, research on vaginismus and provoked vestibulodynia (PVD), the most common cause of dyspareunia in this age group, has focused mainly on sexual function. There is a paucity of literature related to pregnancy and birth concerns in this population.

The proposal to replace the two Diagnostic and Statistical Manual of Mental Disorders IV (DSM-IV) sexual dysfunction categories of vaginismus and dyspareunia with “genito-pelvic pain/penetration disorder” [2,3] reflects a conceptual shift away from

considering these conditions only within their sexual context and toward recognizing them as pain disorders with nonsexual sequelae as well [4]. This is of particular significance to practitioners who may be consulted regarding contraceptive advice, pelvic examination, the appropriateness of fertility intervention in couples without organic infertility, or a preferred mode of delivery.

The practical concerns of patients with SPD who wish to prevent pregnancy include determining the necessity for birth control when no penetrative sex occurs and the appropriate type of birth control to use when oral contraceptives are discouraged [5], when barrier methods are painful and when physicians are hesitant to insert an intrauterine device because of nulliparous status. The practical concerns of patients who desire a pregnancy are far more extensive. These concerns

include the facilitation of pregnancy without intercourse, the need for lubrication or topical anesthetics that may potentially harm sperm, the safety of conceiving while being managed with oral and topical agents including antidepressants, anxiolytics, myorelaxants, and gamma-aminobutyric acid (GABA) analogues as well as their safety throughout pregnancy. Additional concerns include the safety of physical therapy (PT) during pregnancy including the use of dilators, biofeedback, manual therapy, and other interventions. Women with SPD contemplating pregnancy or already pregnant may be particularly concerned about the need for pelvic examinations and internal ultrasounds. In the clinical setting, women express concern about the effect that pregnancy and birth will have on their pain symptoms, the preferred mode of delivery, pain management during labor and delivery (L&D), the need for internal examination prior to delivery and whether they are at higher risk for birth intervention. While physicians may anticipate that vaginal birth improves SPD symptoms due to the stretching effect on pelvic floor (PF), there is to date insufficient evidence to support this claim.

Alternately, as sexual history taking is not a standard component of prenatal, L&D or ultrasound technician's intakes and pregnant patients with SPD may be embarrassed about revealing that they have not undergone an exam or had intercourse, these women may be particularly vulnerable to a potentially traumatic experience. It is, therefore, important that practitioners screen women for this possibility and reveal knowledge, understanding, and cooperation with these situations.

The purposes of this Continuing Medical Education (CME) activity are to present a review of the literature related to pregnancy and birth outcomes in women with SPD, briefly address the aforementioned practical concerns of patients, discuss L&D techniques directed toward avoiding perineal trauma and introduce practitioners to a mindfulness-based approach to addressing pelvic exams, labor, and childbirth anxiety.

## **SPDs and Conception**

Vaginismus and PVD are common conditions affecting about 5% and 12% of women, respectively [6,7]; nevertheless, little is known about their impact on fertility, pregnancy, and childbirth.

Despite the focus on the patient's subjective experience of sexuality, failure to conceive may be a primary concern for women suffering from SPD.

There are little data regarding the incidence of couples presenting for fertility treatment who may not have organic infertility but who do not engage in sexual intercourse. In 1988, Drenth reported on four women who considered vaginismus to be primarily a fertility problem. Self-insemination with semen from their partner proved to be a simple and effective solution, resulting in three pregnancies [8]. In a larger series published 8 years later, the author reported that desire for a pregnancy might have been a significant motivating factor in successfully achieving intercourse in the 74% of 57 vaginismus patients who conceived naturally. Nine patients reported having conceived through self-insemination leading the authors to conclude that self-insemination is a good solution for SPD patients who seek fertility as a first priority [9].

In a study published in 2009, Jindal and Jindal reported that of 5,341 infertile couples seen over an 8-year period, 76 (1.4%) had primary vaginismus. Sixty-three patients were treated with the use of a simplified sensate focus technique. There was complete symptomatic resolution of vaginismus in 60 women, and 52% conceived spontaneously. Although the authors do not specify how long it took to achieve those pregnancies, the treatment protocol was completed in 6 weeks [10].

## **Conception Concerns**

Women with SPD often require the use of lubricants and/or topical anesthetics in order to allow intercourse and may express concern that they impair sperm motility. Anderson et al. found baby oil to have no negative effect on sperm motility [11]. The extent to which other commonly used oils such as olive, almond, or wheat germ may impair sperm mobility is unknown, yet appear to be a better choice than chemical lubricants for patients wishing to conceive. Recently, a lubricant was designed and marketed which, according to a recent study by Agarwal et al., does not cause a decrease in sperm motility and chromatin integrity in comparison with other common lubricants [12]. No data were found regarding whether the use of lidocaine may impair sperm motility. Many women with SPD are treated with topical or intravaginal agents that include gabapentin, baclofen, diazepam, and amitriptyline. Patients wishing to conceive should avoid these agents.

No literature was found on the legitimacy and ethics of providing more advanced reproductive techniques when SPD severely interferes with intercourse. Bypassing the need for penetrative sex in women with SPD who wish to become pregnant, whether due to advanced age, failure with treatment, or simply autonomous choice should be considered by physicians as a human and sensible approach to this problem.

## Birth Outcomes and SPD

There are little data regarding labor and birth characteristics and risk factors for women with SPD. Preliminary epidemiological data by Nguyen and Harlow suggest that cesarean sections may be more common among women with vulvodynia ( $P = 0.07$ ) and that there are no differences in pregnancy outcome (56% of women with vulvodynia had a full-term live-born infant vs. 62% in controls) [13]. A population-based study in Israel investigated all deliveries that occurred between 1988 and 2007 at the Soroka University Medical Center. During the study period, there were 192,954 deliveries, of which 118 (0.06%) occurred in patients with known and diagnosed vaginismus. Patients with vaginismus had higher rates of labor induction (37.3% vs. 27.4%), vacuum extraction (9.3% vs. 2.8%), and cesarean delivery (39.0% vs. 14.5%) when compared with the comparison group [14]. No statistically significant difference was found with Apgar scores and perinatal mortality. Most cesarean deliveries were performed because of factors associated with vaginismus, i.e., an inability to assess the obstetric status with a pelvic exam, patient's requests, or an inability to induce labor because of vaginismus. The authors concluded that vaginismus is an independent risk factor for cesarean delivery.

Drenth et al. obtained information on obstetrical outcomes of 26 deliveries from 28 patients previously treated for vaginismus. Data were obtained from self-administered questionnaires, which were mailed to the patients. The rate of assisted delivery (instrumental delivery or cesarean section) was 42.9% in women who conceived by coitus and 41.7% in women who conceived through self-insemination. The authors commented that these rates were higher than general population data in their institution at the time of the study (30.3% assisted delivery rate) [9].

We could find only one publication on outcomes of parturition in women with PVD. Burrows et al. contacted 111 patients who had undergone vestibulectomy in their institution, and 109 women agreed to provide information. Forty-four patients had undergone at least one term pregnancy and delivery. Of the 44 deliveries, 23 (52%) were vaginal and 21 (48%) were cesarean. Of the vaginal deliveries, 11 (48%) were over an intact perineum and eight (35%) were over first-degree lacerations. Three (13%) women had a midline episiotomy, none of which extended into third or fourth degree lacerations, and one woman (4.4%) sustained a spontaneous fourth-degree perineal laceration. Of the 21 cesarean deliveries, nine (43%) were performed because the patient had a prior vulvar vestibulectomy. The authors concluded that the psychosexual trauma of vestibulodynia might predispose women to cesarean delivery out of fear of vulvovaginal trauma. According to their data, vaginal delivery after vestibulectomy appears safe, with no increased perineal morbidity [15].

Women with PF dysfunction may be at additional risk for postpartum pain. Nguyen's data suggest that that woman with prior vulvodynia were more likely to have vulvar pain after delivery, 37% vs. 11% ( $P$  value  $\leq 0.01$ ).

Perineal and vaginal trauma, including third- and fourth-degree tears may be more common in women with SPD because of inability to adequately relax the PF and allow perineal softening and stretching during the delivery. There are no data to support this hypothesis; nevertheless, a connection between SPD and an increased risk for obstetric PF damage has been previously suggested [16].

## Obstetrical Management of Patients with SPD

Once pregnant, patients seeking obstetrical care may or may not volunteer information regarding their condition. Sexual history taking may not be a standard component of the prenatal intake, yet practitioners should not assume that the presentation of a pregnant woman implies experience with either pelvic examinations or sexual intercourse and should ask patients as a matter of course if they have any specific concerns regarding prenatal care and procedures. All obstetricians, midwives, and ultrasound technicians should have some working knowledge and familiarity with these conditions.

**Table 1** Description of medications and risk

Class	Generic (Trade) name	Pregnancy risk category	Concerns (animal or human studies)
Benzodiazepines	Diazepam (Valium, Roche Pharmaceuticals, Roche Laboratories Inc, Nutley, NJ, USA)	D	Oral clefts, neonatal toxicity, and withdrawal syndromes
	Alprazolam (Xanax, Pharmacia and Upjohn Co, Division of Pfizer Inc, New York, NY, USA)	D	
	Clonazepam (Klonopin, Genetech USA, Inc, San Francisco, CA, USA)	D	
	Lorazepam (Ativan, Wyeth Pharmaceuticals Inc, Philadelphia, PA, USA)	D	
SSRI	Fluoxetine (Prozac, Eli Lilly and Company, Indianapolis, IN, USA)	C	Early pregnancy: cardiac malformations, anencephaly, craniosynostosis, omphalocele Late pregnancy: neonatal complications-jitteriness, mild respiratory distress, transient tachypnea, weak cry, poor tone
	Paroxetine (Paxil, GlaxoSmithKline Research Triangle Park, NC, USA)	D	
	Citalopram (Celexa, Forest Pharmaceuticals, Inc, St. Louis, MO, USA)	C	
SNRI	Duloxetine (Cymbalta, Eli Lilly and Company Indianapolis, IN, USA)	C	Fetal death, decreased body weight, skeletal malformations
	Milnacipran (Savella, Forest Pharmaceuticals, Inc.)	C	
TCA	Amitriptyline (Elavil, AstraZeneca Pharmaceuticals, Wilmington, DE, USA)	C	Limb anomalies
	Clomipramine (Anafranil, Mallinckrodt Inc., Hazelwood, MO, USA)	C	
	Pregabalin (Lyrica, Pfizer, Inc., New York, NY, USA)	C	
Myorelaxants	Cyclobenzaprine (Flexeril, Merck & Co. Inc., West Point, PA, USA)	B	Fetal structural abnormalities, lethality, growth retardation, and nervous and reproduction system impairment Increased gestation duration, pup loss, and developmental retardation
	Metaxalone (Skelaxin, King Pharmaceuticals, Inc., Bristol, TN, USA)	NC	
	Tizanidine (Zanaflex, Acorda Therapeutics, Inc., Hawthorne, NY, USA)	C	

SSRI = selective serotonin reuptake inhibitor; SNRI = serotonin–norepinephrine reuptake inhibitor; TCA = tricyclic antidepressants

### Medication Safety during Pregnancy

Oral and topical agents including anxiolytics, selective serotonin reuptake inhibitors (SSRIs) and serotonin–norepinephrine reuptake inhibitors (SNRIs), tricyclics, myorelaxants, and GABA analogues are commonly used in women with SPD. A listing of these medications, their Federal Drug Administration (FDA) risk categories and safety concerns are listed in Table 1, and a description of FDA risk categories is listed in Table 2.

In 2008, the American College of Obstetrics and Gynecology (ACOG) issued a practice bulletin on the use of psychiatric medications during pregnancy and lactation. Psychiatric medications most relevant to SPD are benzodiazepines and antidepressants.

Benzodiazepines are used as oral [17], topical, or intravaginal agents [18] and do not appear to carry a significant risk of teratogenesis. Nevertheless, most agents have been assigned pregnancy class D by the FDA. Early studies suggesting an increased risk of oral clefts after exposure to diaz-

epam have not been confirmed by more recent research. If discontinuation of a benzodiazepine is considered during pregnancy, this should not be done abruptly.

An association has been found between SSRI use (particularly paroxetine) during early pregnancy and several congenital malformations. While most SSRIs are classified as pregnancy category C, paroxetine has been assigned category D. A Scandinavian population-based cohort study recently found exposure to SSRIs in late pregnancy to be associated with an increased risk of persistent pulmonary hypertension in the newborn [19]. The absolute risks associated with SSRI use identified are small, and the ACOG concludes that treatment should be individualized.

There are no controlled data in human pregnancy regarding SNRIs (duloxetine, Cymbalta [Eli Lilly and Company Indianapolis, IN, USA], milnacipran, Savella [Forest Pharmaceuticals, Inc., New York, NY, USA]), therefore the FDA has assigned these medications to pregnancy category



**Table 2** FDA drug pregnancy risk categories

Category	Description
A	Controlled studies show no risk—Adequate, well-controlled studies in pregnant women have failed to demonstrate a risk to the fetus in any trimester of pregnancy.
B	No evidence of risk in humans—Adequate, well-controlled studies in pregnant women have not shown increased risk of fetal abnormalities despite adverse findings in animals, Or In the absence of adequate human studies, animal studies show no fetal risk. The chance of fetal harm is remote but remains a possibility.
C	Risk cannot be ruled out—Adequate, well-controlled human studies are lacking, and animal studies have shown a risk to the fetus or are lacking as well. There is a chance of fetal harm if the drug is administered during pregnancy; but the potential benefits may outweigh the potential risk.
D	Positive evidence of risk—Studies in humans, or investigational or postmarketing data, have demonstrated fetal risk. Nevertheless, potential benefits from the use of the drug may outweigh the potential risk. For example, the drug may be acceptable if needed in a life-threatening situation or serious disease for which safer drugs cannot be used or are ineffective.
X	Contraindicated in pregnancy—Studies in animals or humans, or investigational or post-marketing reports, have demonstrated positive evidence of fetal abnormalities or risk that clearly outweighs any possible benefit to the patient.

FDA = Federal Drug Administration

C. Animal studies on duloxetine show evidence of adverse effects on fetal and postnatal development. Regarding milnacipran, animal studies showed evidence of an increased incidence of fetal mortality in utero, decreased fetal body weight, and increased incidence of skeletal malformations [20]. Milnacipran and duloxetine should be continued during pregnancy only if potential benefits outweigh potential risks to the fetus.

Tricyclic antidepressants (TCAs) are commonly used, in small doses, to treat pain related to vulvodynia. Results from initial studies, which suggested that TCA exposure might be associated with limb anomalies, have not been subsequently confirmed. Neonatal neurobehavioral effects from fetal exposure have not been reported [21].

Regarding myorelaxants, cyclobenzaprine has been assigned to pregnancy category B [22], while metaxalone has not been assigned to a pregnancy category [23]. Animal studies revealed no evidence of impaired fertility or harm to the fetus, with no controlled data in human pregnancy. Tizanidine [24] has been assigned to pregnancy category C. Animal studies have shown evidence of increased gestation duration, pup loss, and developmental retardation. There are no controlled data in human pregnancy. The above myorelaxants should only be given during pregnancy when benefits outweigh risks.

Pregabalin (Lyrica, Pfizer Pharmaceuticals LLC, Vega Baja, Puerto Rico) has been assigned to pregnancy category C by the FDA. Animal studies have revealed increased incidences of fetal struc-

tural abnormalities, lethality, growth retardation, and nervous and reproduction system impairment. Pregabalin should only be given if the potential benefits outweigh the potential risks [25].

### Safety of PT

PT is a common intervention for women with PVD [26,27] and has been reported to address anxiety in women with vaginismus as well [28]. While several studies have addressed the efficacy of PF muscle training and biofeedback in pregnancy for treating or preventing PF weakness [29,30], no clinical studies have been published that explore the safety of PT interventions, including manual therapy, biofeedback, and dilator use, during pregnancy. While electrical stimulation is agreed to be a contraindicated intervention, the extent to which physical therapists avoid internal procedures apparently varies. It is generally agreed that in low-risk pregnancies where sexual intercourse is permitted, dilator or probe insertion is safe.

### Pelvic Examinations

Women with SPD may be unwilling, unable, or extremely anxious about undergoing internal pelvic examinations and internal ultrasounds. Physical and emotional discomfort with pelvic examination is common in women and has been correlated with a negatively perceived first pelvic examination [31], past history of sexual abuse [32], and posttraumatic stress disorder [33,34].

Studies of women's perceptions of pelvic examination have cited physician gender, informed communication, positioning, nakedness, and physician abruptness as factors influencing feelings of control and comfort [35,36]. Pelvic examination can provoke many negative feelings such as fear of illness, pain, embarrassment, and awkwardness [37]. There is little literature on perceptions of the pelvic examination specifically in women with SPD [38] though difficulty with or inability to undergo an examination are defining features of vaginismus and dyspareunia. Factors believed to decrease patients' anxiety during examination include trust in and ability to communicate with the examining practitioner [37].

Pelvic pain and PF dysfunction have been correlated with a history of sexual abuse [39]. Shame, lack of perception of safety, repression of painful memories, and the inability to connect between present medical conditions and the abuse often prevent women from disclosing sexual abuse, especially if not specifically queried [40]. Perinatal caregivers should inquire about trauma and abuse and know how to cope with posttraumatic exacerbations typical of pregnancy such as somatization, dissociative reactions, hypervigilance, and abuse flashbacks. In patients with SPD and in sexual abuse survivors in particular, vaginal examinations should be performed only when indicated. Practitioners should discuss options with their patients and prepare in advance when an exam will be needed. Patients should be allowed maximum control over the examination and the option of self-inserting the ultrasound transducer, if an internal ultrasound is necessary. The pelvic exam should always be stopped if the patient requests it [41].

### **Managing Pregnancy and Childbirth-Related Anxiety**

Anxiety has been demonstrated to be more common in women with vaginismus than in controls [42] and has recently been identified as a risk factor for vulvodynia [43]. Regardless of SPD history, anxiety disorders are frequently encountered in pregnant women. A cohort study revealed that anxiety occurred in 30% of women during the second trimester and in 16% in the postpartum period [44], and there is a paucity of literature on the treatment of perinatal generalized anxiety disorder [45]. Given the high prevalence of anxiety symptoms in pregnant women in general, and spe-

cifically in women with SPD, it is critical for practitioners caring for pregnant women with SPD patients to have a specific and tailored approach to managing anxiety in these patients. A recently published Cochrane review has addressed the need for non-medical interventions for anxiety in pregnancy and reviewed studies on autogenic training, biofeedback, hypnotherapy, imagery, meditation, prayer, autosuggestion, tai-chi, and yoga, as treatment therapies. The authors concluded that there is some evidence for the effectiveness of such mind-body interventions for the management of anxiety during pregnancy [46].

The Rosenbaum Protocol, a multistep mindfulness-based protocol for addressing patient anxiety with examination and treatment, has been developed and published that allows clients to prepare for, and feel safe and contained during the pelvic examination and other anxiety inducing interventions (Figure 1) [47]. Additional suggested tools include gradual positioning and exposure, providing the client with the permission and ability to stop the exam at any time, maintaining eye contact with the client to prevent dissociation, and providing thorough explanation of every step that is to take place.

### **Labor and Delivery Interventions**

Minimizing physical trauma to the perineum and PF is a concern to every woman undergoing childbirth, although for women with SPD, birth complications such as episiotomy or spontaneous tear may be perceived as more painful and deleterious. Physiological birthing techniques may be helpful in minimizing genital and PF trauma. These include perineal preparation, positioning, breathing, and alternatives to directed Valsalva pushing. These techniques are intended to avoid expulsive and uncontrolled birth that is likely to result in trauma to the perineum and promote a slower process allowing for stretching of the perineum and gentle release of the PF during delivery.

### **Perineal Massage and Stretching**

Active childbirth preparation should include instruction in perineal and introital stretching, and this is of particular value in women who do not regularly engage in sexual intercourse. In a comprehensive review of the literature, Kalichman concluded that perineal massage reduces the likelihood of perineal trauma and ongoing perineal pain [48]. Perineal massage appears to be more

**Step 1:**

Lie on the bed, fully dressed, covered with a sheet. Rate your level of anxiety from low to high (0-5). Do what you need to reach the number 0-1. These needs may include lying on your side in a more protected posture, or deep breathing. The exercise is repeated until you are able to lie on back with knees flexed and together, at anxiety level 0-1.

**Step 2:**

Lying on the bed, fully dressed (with pants) and covered with a sheet, bend knees and separate legs. If you feel anxious with knees apart, do what you need to relieve your anxiety, by bringing knees together or deep breathing. This exercise is repeated until you are able to rate your anxiety level with legs apart at 0-1.

**Step 3:**

As above but remove sheet. Returning the sheet is now one of the lowering anxiety options available to you

**Step 4:**

As above but wearing shorts instead of long pants, first with and then without the sheet.

**Step 5:**

As above but with underwear only, with and without the sheet.

**Step 6:**

As above without underwear, with and without the sheet.

**Figure 1** Rosenbaum mindfulness protocol.

effective when performed daily for 6 weeks prior to delivery. Labrecque et al. randomly assigned 1,034 nullipara and 493 multipara to either perineal massage or usual care for the last 6 weeks of pregnancy. Perineal massage done daily for 10 minutes resulted in a 9% reduction in sutured trauma in first-time mothers in the massage group [49]. Women with SPD may be particularly anxious and averse to perineal massage. However, encouraging women to manually stretch the perineum several weeks prior to delivery, in addition to performing active PF exercises that include

relaxation, may be helpful in promoting increased genital awareness and control during delivery.

**Positioning**

A 2002 Cochrane review combined data from 20 clinical trials that included 6,135 women. Compared with women who gave birth in supine or lithotomy positions, women who were upright or side lying reported greater comfort, had fewer episiotomies, and had a slightly shorter second stage [50]. Upright, lateral, or hands and knees positions for birth are more comfortable and may increase

the woman's sense of control and facilitate her ability to work with her clinician to control the expulsion of her infant and prevent trauma to the PF and perineum [51]. Women should be encouraged to allow freedom in position and movement throughout labor and childbirth and be encouraged to use nonsupine positions including: side lying, squatting, hands and knees, semi-sitting, and sitting. Asymmetrical postures and supported "hanging," which encourage trunk lengthening, are recommended as well.

### *Avoiding Directed and Valsalva Pushing*

In a study of 39 primiparous women, women who used spontaneous pushing were more likely to have an intact perineum postpartum and less likely to have episiotomies and second or third degree lacerations [52]. Directed pushing may be associated with increased PF and perineal damage including PF prolapse. Women with SPD, particularly with associated PF hyperactivity, should be encouraged prior to delivery to learn techniques to relax the PF and gently release the perineum while contracting the transverse abdominal muscles. This maneuver, performed during expulsive uterine contractions, is likely to prevent descent of the uterus together with the fetus by avoiding significant increase of intra-abdominal pressure. Women should be instructed in pushing only when they feel the urge, and with exhalation, as opposed to breath holding.

### **The Role of Mindfulness in Childbirth**

Mindfulness in the treatment of sexual dysfunction has been addressed in the literature [53] and has an important role in the treatment of chronic pain [54] and anxiety [55]. Mindfulness-based pregnancy and birth has been described as well as investigated by Duncan and Bardacke and found to be beneficial for emotional well-being and for promoting a sense of calm [56]. The mindfulness approach encourages women to stay in the present moment, processing and acknowledging that each moment will pass and be replaced by the experience of the next moment throughout pregnancy and childbirth. Childbirth anxiety reduction includes preparing for L&D with education, positioning, breathing, and pain management techniques. Pre-exposure to the labor and delivery environment and hospital staff, and having doula support may be helpful. Yet, applying mindfulness also includes preparing the client that the

L&D variables, including need for epidural, episiotomy, and even the mode of delivery cannot always be anticipated. Rather than attempt to control every step of the labor and delivery process, women approaching childbirth should be encouraged to avoid judging themselves and the way in which the L&D progresses. Clients should be discouraged away from setting goals and expectations and towards mindful self-acceptance and full emotional and physical presence in the childbirth experience.

### **Conclusion**

Women with SPD, who are contemplating pregnancy or are already pregnant, represent an obstetric population with unique concerns and special needs. Patients may be anxious about pelvic examinations and other potentially painful procedures and may require more attention, explanation, and empathy. When physicians or other practitioners appear rigid about protocols, pathologize, or appear unfamiliar with the presenting condition, the patient's anxiety is likely to increase. Being knowledgeable about SPD and engaging with the client cooperatively in reaching decisions regarding how best to manage the pregnancy and childbirth may be helpful in reducing anxiety and facilitating feelings of autonomy and control.

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### **Statement of Authorship**

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## Category 3

### (a) Final Approval of the Completed Article

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