



# Different faces of anxiety in sexual dysfunction: key features, effective interventions, and critical implications for health care professionals—ESSM position statements

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## Abstract

**Introduction:** In the field of sexual health research, anxiety stands out as a pivotal element recognized by both researchers and clinicians for its potential to disrupt multiple phases of the sexual response cycle. While research on anxiety and sexual dysfunctions has typically focused on studying various manifestations of anxiety separately, clinical practice often reveals a different reality, with patients frequently experiencing multiple types of anxiety simultaneously.

**Aims:** The objectives of this paper are to provide a comprehensive understanding of the diverse manifestations of sex-related anxiety and their clinical implications, and to identify and highlight existing scientific gaps that require further investigation.

**Methods:** This statement paper is an expert opinion-based proposal developed under the auspices of the European Society for Sexual Medicine (ESSM). A group of experts designed a conceptual framework on anxiety related to sexual dysfunctions and reviewed the literature from 2005 to 2023 across various databases focusing on five anxiety domains, sexual performance anxiety, sexual phobia, sexual distress, attachment anxiety, and somatic symptom disorder, leading to consensus on position statements. The process included revisions approved by the ESSM Executive Committee and affiliate societies.

**Results:** Eighteen statements on anxiety in individuals with sexual dysfunctions were developed, including three general statements on anxiety, three on sexual performance anxiety, three on sexual phobias, three on sexual distress, three on attachment anxiety, and three on somatic symptom disorder. Each type of anxiety was further described in terms of its prevalence, assessment, covariates and consequences, intervention strategies, and future directions for research.

**Conclusion:** Clinicians addressing sexual dysfunctions should screen for signs of various types of anxiety and assess their interference with sexual situations, overall sexual life, and broader life functioning. The literature suggests specific treatment approaches for different anxiety manifestations, emphasizing the need for tailored interventions. Treatments should be carefully selected based on the type of anxiety identified.

**Keywords:** sexual dysfunctions; anxiety; distress; sexual performance anxiety; sexual phobia; attachment.

## Introduction

In the field of sexual health research, anxiety stands out as a pivotal element recognized by both researchers and clinicians for its potential to disrupt multiple phases of the sexual response cycle. The physiological sensations, feelings, thoughts, and behaviors associated with anxiety are often considered influential factors in precipitating, initiating, perpetuating, and exacerbating sexual dysfunctions in people/individuals independently of their sex, gender, and sexual orientation. However, the nature of anxiety itself poses challenges, as its definitions are often ambiguous, leaving uncertainties about the specific symptoms experienced and the degree to which it impacts sexual life. Moreover, despite the acknowledged significance of anxiety in this context,<sup>1,2</sup> there remains a

notable gap in the existing literature—a lack of a comprehensive conceptual framework that synthesizes various types of anxiety.

The literature contains several descriptions and definitions of sexual fear and anxiety, focusing on various aspects of sexual anxiety, including fear of the possible negative consequences of sexual behavior,<sup>3,4</sup> anxiety connected to being a member of a sexual minority,<sup>5</sup> and anxious apprehension linked to body image issues.<sup>6</sup> Anxiety in the context of sexuality, moreover, can be related to other types of psychopathology,<sup>7,8</sup> including trait anxiety,<sup>9</sup> internalizing disorder,<sup>10</sup> social anxiety,<sup>11</sup> specific phobias,<sup>12</sup> aversion disorders,<sup>13</sup> generalized anxiety disorder,<sup>14</sup> anxiety sensitivity,<sup>15,16</sup> and obsessive-compulsive disorder.<sup>13,17</sup>

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Anxiety in general can serve as an adaptive emotional response to situations involving uncertainty, potential threat, and/or other significant negative consequences. Anxiety energizes the individual to respond to the situation, prompting and guiding a set of behaviors and actions aimed at removing the self from the threatening situation and thereby increasing self-protection.<sup>18</sup> On the other hand—and this is the focus of this paper—anxiety may become a maladaptive emotion, no longer serving a useful purpose, but leading to dysfunctional or ineffective coping strategies regarding the issue at hand, and inducing self-intensifying negative self-schemas and expectations of failure.<sup>19</sup> Sexual anxiety, for example, may result in various negative outcomes, including impairment of sexual functioning,<sup>20</sup> avoidance of sexual intimacy, and loss of sexual pleasure.<sup>21</sup> Furthermore, it is typically associated with substantial distress.<sup>22</sup>

This paper aims to offer a comprehensive understanding of the diverse manifestations of sex-related anxiety as a maladaptive response to a variety of sexual contexts, along with their corresponding clinical implications. Additionally, it will underscore scientific gaps that warrant further attention. Although sexual anxiety appears to be related to a wide range of proximal factors, in this paper, we have focused our discussion on a selected set of anxiety manifestations related to sexual dysfunctions that are more typically encountered in clinical practice.

## Methodology

This statement paper is an expert opinion-based proposal developed under the auspices of the European Society for Sexual Medicine (ESSM). A group of experts defined the methodology and developed a conceptual framework on anxiety related to sexual dysfunctions. Subsequently, they conducted a literature search of publications after 2005 (up to 2023) on PubMed, Web of Science, MEDLINE, and Cochrane including the following words: sexual anxiety, sexual phobia, sexual distress, sexual performance anxiety, attachment anxiety, somatic symptom disorder AND sexual function and dysfunctions, with elaborations on these keywords. The committee reviewed the literature and focused on five anxiety domains: (1) sexual performance anxiety, (2) sexual phobia, (3) sexual distress, (4) attachment anxiety, and (5) somatic symptom disorder. Subsequently, the committee discussed and agreed on the position statements. Because much of the information in this review is based on well-established principles drawing from the anxiety literature over many decades, we do not assign levels of evidence to the position statements, as doing so would be both arbitrary and injudicious. Following this process, a panel of sexual medicine experts reviewed the first draft of the manuscript, which was then revised for approval by the ESSM Executive Committee and by each of the ESSM affiliate societies.

### Conceptual framework of anxiety by level of interference in sexual dysfunction

**Statement 1.** Anxiety can manifest in diverse ways, causing different levels of interference in the individual's life.

**Statement 2.** Clinicians working with sexual dysfunctions should routinely look for cues suggestive of multiple types of anxiety and assess their potential impact on three levels: (a)



**Figure 1.** A Conceptual framework of anxiety by level of interference in sexual dysfunction (ALI-SD).

specific sexual situations, (b) the client's overall sexual life, and (c) their broader life functioning.

**Statement 3.** Interventions targeting the reduction of anxiety linked to sexual dysfunctions may be selected for and tailored to the specific type of anxiety present.

We propose the anxiety by level of interference in sexual dysfunction (ALI-SD) conceptual framework to address anxiety in individuals by examining the levels of interference it causes in their lives (see Figure 1). Anxiety can interfere with human sexual functioning on multiple levels, being conceptualized as a transdiagnostic dimension that permeates the individual's functioning in both sexual and other life domains.<sup>10</sup> Whether generalized anxiety or specific to sexual activities, anxiety is highly common among individuals with sexual dysfunctions.<sup>23</sup> The anxiety may precede the sexual dysfunction or emerge as a consequence and while it commonly co-occurs with these sexual dysfunctions, it does not always do so. Furthermore, the intensity and specific manifestations of anxiety may vary significantly across affected individuals.<sup>23</sup>

In clinical practice, anxiety linked to the sexual problem often serves as a cogent motivator for treatment-seeking behavior. What type of anxiety has been triggered by a sexual dysfunction, and to what extent it interferes with one's life, are key questions that clinicians usually need to address before formulating a treatment plan. Herein, we propose a framework for understanding anxiety's impact on various aspects of one's life. By considering anxiety's influence at three levels—specific sexual situations, sexuality more broadly, and life in general—this framework can offer a more holistic understanding of how anxiety might affect individuals presenting with sexual dysfunctions.

### **Level I. Anxiety interferes with a specific sexual situation**

This level addresses anxiety specifically tied to discrete sexual situations, triggered by identifiable stimuli. The intensity is usually acute, with individuals perceiving these specific situations as threatening, often exceeding their coping capacities. Examples include, among others, sexual performance anxiety and sexual phobia. Resolution typically occurs with the removal or modification of the specific situation. For example, a person with sexual performance anxiety may experience a sense of threat only when approaching a situation of partnered sexual activity.

### **Level II. Anxiety interferes with one's sexual life**

Level II involves anxiety that disrupts various aspects of sexual and interpersonal life. It extends beyond specific situations to impact multiple facets of sexual expression and relationships. Examples include sexual distress linked to dysfunction, and attachment insecurity. For instance, a patient with sexual dysfunction feels sexual distress and thus avoids showing sexual attraction and pursuing a relationship.<sup>24</sup> Another example is a person experiencing attachment insecurity who pursues sexual activity to alleviate fear of abandonment rather than to experience sexual play.<sup>25</sup> In these cases, anxiety interferes with one's sexual expression. Unlike Level I, where anxiety is limited to specific situations, here, anxiety's influence is broader, affecting overall sexual expression and sexual life.

### **Level III. Anxiety interferes with one's life**

This level represents anxiety triggered by a sexual problem but extending beyond explicit sexual scenarios to disrupt daily functioning across multiple domains of life. For instance, sex-related somatic symptom disorder or obsessive sexual worries might interfere with sleep or work.<sup>26</sup> Unlike the previous levels, the interference here extends beyond explicit sexual situations, significantly impacting various aspects of one's life.

This framework offers a structured way to assess and address anxiety's impact on individuals presenting with sexual dysfunctions. By considering anxiety across these three levels, clinicians can develop more comprehensive treatment plans tailored to the needs of each individual.

## **Sexual performance anxiety**

**Statement 4.** Sexual performance anxiety includes elements of performance expectation, performance evaluation, and performance consequences, and refers to an individual's sense of unease and apprehension that they will not measure up to some preconceived expectation in a future sexual interaction.

**Statement 5.** Treatment may target the anxiety directly, and/or may address predisposing and/or situational risk factors such as low self-efficacy and negative thought patterns that sustain or exacerbate the situation.

**Statement 6.** Treatments may focus on reinforcing an automatic/reflexive mode of processing information in conjunction with the deliberate mode of processing information.

### **Evidence**

#### *What is sexual performance anxiety*

Performance anxiety is not unique to sexual situations, but rather impinges on a variety of situations that typically presume a high level of performance, such as athletic

competitions and stage performances. Common to all types of performance anxiety is the expectation or goal of a high level of performance, coupled with the perceived evaluation of the performance and the potential for negative consequences resulting from under-performance relative to some preset or perceived standard. Negative consequences include not only shame and embarrassment, but also in some situations, loss of income, status, respect, and future opportunity.

#### *How often is sexual performance anxiety experienced in relation to sexual dysfunctions?*

*Sex-related* performance anxiety was first introduced as a clinical issue by Masters and Johnson (1970) in their classic work, *Human Sexual Inadequacy*.<sup>27</sup> Contemporary data on the prevalence of sexual performance anxiety are not available, but several older studies<sup>28-31</sup> suggest that about 5%-25% of people report anxiety surrounding sex—with the prevalence being slightly higher in men and in younger age groups. Such rates may represent underestimates, given the stigma attached to the condition and the fact that many individuals resolve the problem on their own without seeking treatment. Furthermore, the estimated prevalence for some sexual problems (eg, erectile dysfunction) varies widely according to the type of sexual activity, age group, the specific problem (eg, getting vs keeping an erection), and relationship duration. What can be stated with reasonable confidence is that sexual performance-related anxiety and subsequent dysfunctional response occur in a significant portion of people at some point in their lives.<sup>32,33</sup>

#### *How is sexual performance anxiety assessed?*

Although instruments are available to assess general anxiety—and these may be useful in tapping the overall level of anxiety associated with a sexual problem—a specific instrument for assessing “generic” sexual performance anxiety is not available. However, a validated instrument for assessing *erectile* performance anxiety—developed by Telch and Pujols<sup>34</sup> and labeled the Erectile Performance Anxiety Index (EPAI)—might, with some adaptation, be used to assess performance anxiety related to other male and female sexual dysfunctions. However, because the assessment of performance anxiety and its effects on the client, partner, and relationship functioning are essential parts of a psychosexual intake procedure, the use of a standardized instrument may be considered optional.

#### *Factors associated with sex-related anxiety and disrupted sexual performance*

Both situational and dispositional factors have been associated with the etiology and consequences of sexual performance anxiety.<sup>19</sup> For example, situations involving a new or challenging sexual encounter (eg, where demand characteristics are particularly high) may induce anxiety regarding adequate performance and ability to please one's partner. Individual dispositions associated with disrupted performance might include a strong self-focus during partnered sex (eg, “spectatoring” or self-monitoring) that “distracts” from the natural erotic cues from the partner and situation<sup>27,35</sup>; tendencies toward high (often unreasonable) performance expectations and an overly self-critical assessment<sup>36</sup>; and feelings of diminished self-efficacy accompanied by negative scripts (eg, viewing sex not as an opportunity for intimacy and pleasure but as an occasion for failure, shame, and embarrassment).<sup>37,38</sup>

Other dispositional factors linked to sexual performance anxiety include socially and culturally derived sexual beliefs/myths (eg, macho beliefs, submission beliefs); maladaptive sexual schemas (eg, “I’m helpless” or “I’m not good at this”); and negative automatic thoughts (or self-talk) during sexual activity (eg, “I’m not achieving an erection” or “I don’t think I’ll make it to orgasm,” or “what is my partner thinking about me?” etc.). Such beliefs and thought patterns are derived from stereotypes and past sexual experiences, which then manifest in current sexual experiences and guide future sexual expectations and behaviors.<sup>39,40</sup> At a broader level, several personality traits such as a high level of negative affectivity and/or introversion may compound an already difficult situation for those who manifest the above characteristics.<sup>41,42</sup>

### Consequences of sexual performance anxiety

As with any performance anxiety, sexual performance anxiety can have both immediate and longer-term consequences.<sup>19</sup> Anxiety states are characterized by autonomic sympathetic dominance, which can affect both striate (voluntary) and smooth (involuntary) muscle motor response. Specifically, sympathetic activation prepares the body for a flight/fight response, shunting blood flow toward large muscle groups for whole body activation and away from smaller muscle groups involved in fine motor control. Concomitantly, sympathetically activated vasoconstrictive response in the genital and pelvic region counters the vasodilative response necessary for erectile response and vaginal lubrication.<sup>43,44</sup> Thus, sexual performance anxiety can inhibit or dampen genital sexual response.

As a longer-term consequence, failed or impaired sexual response is typically accompanied by negative emotions such as guilt, embarrassment, and shame, consequences that fall under the categorization of “Sexual Distress,” a distinct anxiety-related condition occurring in response to performance issues and discussed in a subsequent section. In addition, the “worry” that arises regarding future situations involving partnered sex—as well as the negative self-talk associated with such worry—is likely to exacerbate and perpetuate the problem,<sup>3,37</sup> sometimes leading to the avoidance of intimacy and sex altogether.

Finally, sexual performance anxiety is integrally linked to relationship dynamics, with a number of studies indicating substantial association between higher performance anxiety and lower sexual and relationship satisfaction in both men and women.<sup>40,45-47</sup> What remains less clear is the directionality of this association, presumably a reciprocating relationship that has the potential to become self-intensifying.

### Conceptualization and modeling of performance anxiety

As a variable having substantial impact on sexual response, performance anxiety has been incorporated into several general models of sexual response. For example, models that focus on the opposing effects of excitatory and inhibitory factors on sexual response (aptly called inhibition-excitation models) typically include sexual performance anxiety as one of the more salient *inhibitory* factors.<sup>3,48</sup> In these models, such factors may be individual, relational, or contextual, and they may include both neurobiological and psycho-socio-cultural factors. As an example, excitatory factors might include the desire and attraction to one’s partner and the value of sexual intimacy and a satisfying relationship. Inhibitory factors—ones that interfere with the sexual response—might

include sexual relationship conflict, sexual performance anxiety, and/or assessment of risk factors related to the context (eg, risk of disease, consequences related to inappropriate [eg, illegal] objects of desire, and so on).

More directly focused on erectile-based performance anxiety, Barlow<sup>36</sup> proposed a *cognitive-affective model* that distinguished sexually functional men from dysfunctional men by way of their cognitive feedback loops. In sexually functional individuals, anxiety-related arousal may heighten attention to sexual cues and potentially increase arousal. In contrast, dysfunctional men progress through similar stages, yet due to low expectancies, diminished self-efficacy, perception of lack of control, and attention on consequences of failure rather than on erotic cues, these stages lead to autonomic arousal/anxiety, dysfunctional performance, and avoidance in future situations. In Barlow’s updated Cognitive-Affective Model of Sexual Dysfunction, decreased positive and increased negative affect are critical to low sexual arousal, while worry is identified as a maladaptive coping strategy used by individuals to avoid the emotional experience linked with sexual stimuli.<sup>49</sup> This avoidance promotes a lack of attention toward the feared stimuli and, at the same time, increases cognitive distraction. Although Barlow’s model focused primarily on erection problems in men, its applicability to other male problems as well as various female sexual problems is apparent.

More general models of performance anxiety (ie, not restricted to sexual situations) have also been advanced. A long-standing model of the relationship between anxiety, arousal, and performance, published in 1908 and later known as the Yerkes–Dodson Law,<sup>50</sup> postulated that, as stimulus strength increases (eg, arousal or anxiety), performance improves, but only up to a certain maximum, when it then begins to decline as stimulus strength continues to increase, thus generating an inverted U-shaped function. The implication is that low-to-moderate levels of anxiety are associated with increasing sexual performance, but that as anxiety/arousal continues to increase beyond moderate levels, performance deteriorates.

A more recent model regarding anxiety’s impact on performance in high-demand situations is the dual information-processing Reflexive-Reflective model.<sup>19,51</sup> This model proposes two different, independent modes of cognitive processing. The phylogenetically older *reflexive* system operates *automatically* (sometimes subconsciously) as the result of extensive experience and, as such, *requires minimal cognitive resources*. The other mode is the *reflective* system which involves *abstract* (often language-based) and *deliberate/intentional* processing, and because it requires greater cognitive resources including working memory, this system is capable of handling only much smaller amounts of information at any given moment.<sup>52</sup> A common example of dual processing is experienced car driving, where the driver effortlessly maneuvers the car (reflexively) while simultaneously immersed in a conversation with a passenger (reflectively). However, when an event signals possible traffic danger, the driver interrupts the ongoing conversation (reflective mode) to refocus attention to respond to the traffic situation. That is, the reflective system interrupts or overrides the reflexive (car-driving) processing. Relevant to *any* type of performance anxiety, the automatic processing of information in any high-demand situation—typically developed through extensive practice and experience—can be disrupted by any sudden, changed, and/or concerning information/feedback regarding performance (eg,

multiple misses of a target in sport, botching lines in a stage presentation, failing to get an erection or move toward orgasm during sex). The perceived threat (and associated anxiety) from such feedback shifts information-processing away from automatic processing mode toward the reflective (deliberate/intentional) mode, as the person attempts to manage the situation and/or rectify the problem. In so doing (in the context of partnered sex), attention becomes focused on the problem (eg, monitoring erectile response) at the cost of losing focus on (and reflexive responding to) relevant erotic stimulation arising from the partner and situation.<sup>53,54</sup> A detailed construction of the model of sexual performance anxiety (SPA)—including its antecedents, causes, and consequences—is described in Rowland and Kirana, where points of and strategies for intervention are identified and explained.<sup>19</sup>

### *Interventions targeting performance anxiety*

Any number of remediation approaches may be useful for addressing performance anxiety, including cognitive restructuring (CBT), emotion-focused therapy, mindfulness training, behavioral techniques, couples therapy, and pharmacotherapy.<sup>53,55,56</sup> Such strategies may address specific situational variables (eg, reframing the “threatening” stimuli into positive stimuli) and/or dispositional factors (eg, countering feelings of low self-efficacy), each with the intention of diminishing an anxiety response. Alternatively, remediation may address the anxiety directly, using exercises and strategies that generate response states incompatible with anxiety (eg, relaxation through sensate focus). Remediation might also attempt to diminish or eliminate the evaluative dimension within the situation, thus removing or mitigating the person’s shame/blame (eg, as is done in couples therapy). In some instances, medications may assist in reducing anxiety (see Pike 2020<sup>55</sup>). Recently, based on the SPA theoretical model noted above, a multidimensional and step-by-step approach for remediating anxiety surrounding sexual performance—referred to as the SPA-R model—has been developed. This provides both therapists and patients/clients with an understanding of its causes and consequences, and suggests strategies for its mitigation and management within the context of partnered sexual interactions.<sup>19</sup>

All in all, the above strategies aim to remove the heavy burden of anxiety as an inhibiting influence on sexual response (consistent with inhibition-excitation models), and/or to prevent the stepwise progression to dysfunctional response by altering perceptions and cognitive interpretations (consistent with Barlow’s cognitive-behavioral model). In terms of more general models, ensuring that anxiety does not exceed moderate levels would ensure optimal performance (consistent with the Yerkes–Dodson model). And prevention, reduction, or elimination of anxiety and/or its causes may ensure the dominance of reflexive over reflective processing in any performance-demand situation (consistent with the dual information-processing model).

### *Specific remarks and future directions*

Although the precise effect of performance anxiety on sexual response is difficult to disentangle, a significant portion of men and women nevertheless often worry, show concern, or are otherwise anxious about the “adequacy” of their sexual response, and as this worry increases, it (ironically) increases the probability of failure.<sup>3</sup> And, if one failure follows another, the level of anticipatory performance anxiety is likely to

increase, which then further interferes with sexual response. In a typical fashion, the individual attempts to “pursue” the response (eg, erection in men, orgasm in women) rather than to allow it to “ensue” in response to sexual stimulation. Such compounding failures impart both emotional and cognitive effects—the individual may become obsessed with negative thoughts related to failure, embarrassment, and shame—even precipitating obsessive-compulsive-related anxiety as discussed in a subsequent section of this paper.<sup>37,57,58</sup> The above perpetuating cycle intensifies the person’s frustration, sense of low self-efficacy, and anxiety, with resultant behaviors becoming increasingly directed more toward reducing the anxiety (eg, attempting successful penetration before fully becoming erect) than toward the positive feelings that usually accompany sexual intimacy.

Although sexual performance anxiety was a faddish research topic throughout the last two decades of the previous century, the advent of biomedical approaches for the remediation of sexual problems tended to overshadow interest in the nature, role, and mechanisms of performance anxiety on sexual response. Indeed, these pharmacological approaches were often touted as effective management tools, no matter the etiology of the sexual problem. As a result, much less is known about sexual performance anxiety than might be assumed—in fact, the emphasis regarding theorizing and research on performance anxiety has shifted to fields such as sports and stage performance, not only where the stakes are high, but also where medical solutions are not as likely because they interfere with performance rather than enhance it (as is the case for sexual response).

Nevertheless, ongoing research has consistently demonstrated that anxiety tends to be a fairly predictable response among persons suffering from sexual dysfunctions, no matter the perceived or actual etiology of the problem. As interest in sexual anxiety, and more specifically sexual *performance* anxiety, comes back into focus as a significant issue in men’s and women’s sexual problems, the topic is ripe for new and renewed conceptualization and research, including greater attention to the assessment and study of performance anxiety, both in general and particularly in women, where its etiologies and consequences have been less well delineated.<sup>40</sup> Herein, we list examples of lines of research that could benefit the management and treatment of sexual problems that include issues of performance anxiety.

- What are the more common triggers (situational) and major risk factors (particularly dispositional) for performance anxiety, including such factors as anxiety sensitivity,<sup>16</sup> new medical or health conditions, general life distress/anxiety, etc.?
- What is the relationship between sexual performance anxiety and sexual distress? For example, is sexual distress more broadly conceptualized than performance anxiety, and are the two highly correlated or concordant? One recent analysis suggests that the higher the sexual performance anxiety, the higher the sexual distress.<sup>40</sup>
- What is the role of attribution in performance anxiety (eg, internal vs external) and how might these attribution styles be related to the manifestation of the sexual problem?<sup>59</sup>
- Are specific sexual dysfunctions likely to be more or less associated with performance anxiety, for example, premature ejaculation versus erectile dysfunction in men, or low sexual desire versus orgasmic difficulty in women?

- What are men's and women's reactive and intuitive (eg, home-grown) strategies for managing performance anxiety and are they ever effective?
- Might "clinical trials" demonstrate the role of psychosexual therapeutic procedures in the treatment of sexual performance anxiety, including procedures that are used as the sole treatment versus ones that are used as an adjunct to medical/medication treatments.

## Sexual phobia

**Statement 7.** Sexual phobia refers to overwhelming fear toward one or more aspects of sexual activity and experience, including—among others—sexual penetration.

**Statement 8.** The assessment of sexual phobia relies on clinical interviewing. Sufficient attention should be given to the relevant emotional (fear) and behavioral (avoidance) aspects.

**Statement 9.** Treatment may target the invalidating fear at the core of the phobia directly by promoting (prolonged) exposure to the feared sexual stimuli, while cognitive restructuring can be used to challenge and modify negative thoughts and beliefs.

## Evidence

### *What is sexual phobia?*

Sexual phobia is one of the so-called *specific phobias*; anxiety disorders characterized by excessive fear toward specific objects or circumstances. Examples of specific phobias are spider and snake phobias (see<sup>60</sup>). Sexual phobia involves overwhelming fear toward one or more aspects of sexual activity and experience including—among others—nudity, the physical sensations of sexual arousal and orgasm, the exchange of bodily fluids, and sexual penetration. Key features are physiological arousal upon approaching the feared object or situation, negative appraisal of the stimulus, and a strong tendency to avoid the feared stimuli. In addition to feelings of fear, the feared stimulus may elicit feelings of disgust that play a role as an eliciting or maintaining factor in specific phobias.<sup>61</sup>

Vaginismus and sexual pain problems (dyspareunia, vulvar vestibulitis) were both subsumed under the classification of the Genito-pelvic pain/penetration disorder (GPPPD) in the DSM-5. The ICD-11 includes a separate diagnosis for vaginismus. This forms, along with dyspareunia, the Sexual Pain-Penetration Disorder category for persistent difficulty with vaginal penetration or intercourse due to pain or muscle spasms. Lifelong vaginismus is further defined here as "having a history of never having been able to experience penile entry of the vagina".<sup>62</sup> In this section, we discuss sexual penetration phobia as an example of sexual phobias.<sup>63</sup> We focus on lifelong vaginismus in particular because this subtype of vaginismus has received more attention in research than the secondary subtype. Little research attention has been paid to sexual phobias related to other sexual objects and situations, as well as to the effects of such sexual phobias on sexual desire, arousal, orgasm, and sexual pleasure and satisfaction.

### *How often are sexual penetration phobias experienced?*

Although comprehensive epidemiological research is lacking, published anecdotal reports indicate prevalence numbers of

lifelong vaginismus that vary widely. This variation is probably due to the different definitions of vaginismus used in these studies and the cultural differences between the recruitment areas of the studies. For example, prevalence numbers have ranged from 6% in general populations in Morocco<sup>64</sup> and Sweden<sup>65</sup> to 68% in Ghana.<sup>66</sup> Of women with a sexual dysfunction in Turkey, 42% reported vaginismus as their main complaint.<sup>67</sup>

### *How is sexual penetration phobia assessed?*

The presence of sexual penetration phobia is mostly assessed during the clinical interview. Because lifelong vaginismus and genital pain symptoms (dyspareunia) both involve problems with being able to have vaginal intercourse, it is important to properly distinguish the two conditions, as each requires a different therapeutic approach.

Excessive fear of pain is typical for many women with lifelong vaginismus and it distinguishes them from women with dyspareunia and vulvar vestibulitis.<sup>68</sup> Note that it is not the experience of pain as such, but rather the *fear of pain* that distinguishes these groups. Patients with lifelong vaginismus may express disconcerting thoughts that their partner's penis is too large and that they will never be able to allow it into their vagina.

Painful sensations on touching the vaginal vestibulum with a cotton swab are reported by most women with lifelong vaginismus, as well as by most women with dyspareunia who are able to have vaginal intercourse.<sup>62,68</sup> In addition, vaginal muscle tension as a fear response to sexual stimuli may be high in women with sexual penetration phobia, compared to women with dyspareunia and women without sexual pain.<sup>68</sup> Furthermore, women seeking help for lifelong vaginismus commonly report the lifetime impossibility of vaginal penetration with a penis, finger, or other object,<sup>69</sup> whereas women with dyspareunia may allow penetration despite the pain involved. The impossibility of vaginal penetration seems to be the only consistent difference between women with lifelong vaginismus and dyspareunia.

The problem with not allowing penetration may be the result of avoidance behaviors, such as the irresistible tendency to push their partner away. Avoidance during sexual interactions increases as the moment of penetration approaches, whereas women with dyspareunia tend to persist in penetration behavior even when in pain.<sup>70,71</sup>

No psychometric instruments are available for the reliable and valid assessment of sexual penetration phobia. The severity of the phobia, which is relevant for establishing a formal disorder classification of specific phobia, can be measured using the 10-item Severity Measure for Specific Phobia which has excellent psychometric properties across different specific phobia types.<sup>7,72</sup> Distress related to sexual penetration phobia can be assessed as with other sexual problems. It may be relevant to assess catastrophic cognitions related to penetration in the clinical assessment of women with sexual penetration phobia. For this purpose, the Vaginal Penetration Cognition Questionnaire,<sup>73</sup> a 40-item questionnaire assessing cognitions in response to vaginal penetration or attempted penetration, has been psychometrically validated.

### *Factors associated with sexual penetration phobia*

Anxiety sensitivity, a stable trait that refers to a strong fear of one's own anxiety-related physical sensations,<sup>74</sup> almost fully accounts for fear of pain in a heterogenous chronic

pain population that did not include participants with sexual penetration phobia,<sup>75</sup> and may also be an important factor in explaining sexual penetration phobia.<sup>76</sup>

In 140 women in Turkey diagnosed with vaginismus, a high comorbidity of other psychopathological conditions was found, particularly of other anxiety disorders and depression.<sup>77</sup> At least one comorbid mental disorder was found in almost 80% of participants, particularly other specific phobias (64%) and major depression (35%). The presence of comorbid anxiety disorders and other mental disorders may complicate and exacerbate sexual penetration phobia and should be taken into account in any treatment plan.

Women with vaginismus demonstrated higher levels of sexual self-consciousness compared with healthy control women.<sup>78</sup> The tendency to focus much attention on non-erotic stimuli, including the self, may contribute to the negative impact of elevated anxiety levels on sexual arousal.<sup>36,79</sup> These women also reported higher levels of alexithymia,<sup>80</sup> a condition characterized by difficulty with awareness of, identifying, and discriminating one's own as well as other's feelings, as well as *expressing* one's own feelings.<sup>81</sup> This condition may explain why women with vaginismus sometimes have difficulty naming their fear of pain.

### *Consequences of sexual penetration phobia*

Sexual penetration phobia can directly interfere with sexual functioning, resulting in sexual dysfunction, low sexual pleasure and sexual satisfaction, and in some instances relationship breakup. The direct negative effects on sexual function may arise through several pathways, including behavioral avoidance<sup>82</sup> and attentional distraction and bias,<sup>79,83</sup> and these effects may be mediated by parasympathetic and sympathetic central neural mechanisms.<sup>43,84,85</sup> Fear has been demonstrated to impair genital sexual arousal in women with dyspareunia<sup>86</sup> and might have the same effect in women with sexual penetration phobia.

Regarding long-term consequences, the impossibility of sexual intercourse can take a toll on the partner relationship, especially in cultural contexts where the consummation of marriage through intercourse is paramount.<sup>87</sup> But even in cultural contexts where this is not essential, the inability to have intercourse may be an important motivator for seeking help because it interferes with the woman's wish to conceive in a natural way. In some couples, sexual penetration phobia may lead to complete avoidance of intimacy and sex.

### *Conceptualization and modeling of sexual penetration phobia*

Several theoretical models have attempted to explain sexual penetration phobia. Vaginal muscle tensing, a defensive physical response to sexual stimuli, has been found higher in women with vaginismus compared to women with dyspareunia and women without sexual pain.<sup>68</sup> Until the Diagnostic and Statistical Manual of Mental Disorders, Fourth Edition, Text Revision (DSM-IV-TR),<sup>88</sup> vaginismus was conceptualized as a pelvic floor disorder, and the definition included muscle spasms as a crucial characteristic. Empirical research, however, has not substantiated muscle spasms as a diagnostic criterion.<sup>89</sup> Instead, women with vaginismus were found not to differ from healthy controls in the voluntary control of the pelvic floor muscles,<sup>90</sup> nor in the involuntary pelvic floor muscle contractions under threatening conditions.<sup>91</sup> These findings have thus ruled out disturbed pelvic floor muscle

function as a possible explanation for vaginismus, and the model has since been abandoned.

Fear of pain and avoidance are considered pivotal in the more recent fear-avoidance model of lifelong vaginismus.<sup>92,93</sup> When fear impedes genital arousal, the resulting vaginal dryness could cause pain due to mechanical friction between the penis and the vagina. Although not investigated in women with lifelong vaginismus, pain-related fear has been found to impede genital arousal both in women with dyspareunia and in sexually functional women.<sup>86</sup> However, anxiety can both facilitate and inhibit sexual arousal, and at other times it may have no effect, depending on the circumstances.<sup>94</sup> Similar to sexual performance anxiety, a nonlinear relationship might exist between anxiety/fear and sexual functioning (the Yerkes-Dodson effect, see supra).<sup>50</sup> Low to moderate anxiety could be associated with increasing sexual arousal while high levels, on the other hand, would decrease arousal.

Avoidance serves to perpetuate the sexual penetration phobia because it effectively prevents the fear from being extinguished during confrontation with the triggering stimulus. Avoidance behavior also prevents existing catastrophic cognitions about the impossibility of penetration from being disconfirmed by the experience. Empirical support for the fear-avoidance model has been demonstrated in several intervention studies in which women with lifelong vaginismus were treated with anxiety-reducing interventions, including self- and therapist-guided exposure exercises.<sup>95,96</sup> The key role of fear of pain and avoidance has been demonstrated in research on exposure treatment for lifelong vaginismus.<sup>92,97,98</sup>

### *Interventions targeting sexual penetration phobia*

Interventions used in other anxiety disorders have proven effective in the treatment of sexual penetration phobia, particularly exposure-based interventions that directly target the fear experience at the heart of phobic disorders. In this scenario, patients are exposed, either at an imaginary level ("in vitro") or directly ("in vivo"), to the feared stimuli, usually in a gradual or stepwise manner ("systematic desensitization"). The purpose of the exposure experience is to extinguish the fear response and to reduce the avoidance behavior. Before beginning the exposure intervention, psychoeducation is provided to inform the patient about sexual anatomy and muscle physiology, about the fear-avoidance mechanism underlying her condition, and on which the intervention will focus. Exposure exercises can be performed by the patient herself,<sup>96</sup> with or without help of the partner,<sup>99</sup> or in the presence of a therapist with extensive experience in exposure treatment.<sup>95,100</sup> Most of these treatments are directly and exclusively aimed at achieving penetration. However, successfully treated women may require additional treatment aimed at developing pleasurable aspects of sex.

The cognitive elements of cognitive behavior therapy have also been somewhat successful in treating penetration phobia, both when administered by cognitive therapists in a group treatment format<sup>96</sup> and in self-guided form, either as bibliotherapy<sup>96</sup> or as internet-based therapy.<sup>101</sup> However, the effects were limited in terms of the proportion of patients who were able to eventually have intercourse.

In a chart review and interview study,<sup>102</sup> pelvic floor physical therapy was found to bring symptom relief for women with lifelong vaginismus, although it did not result in full remission of the clinical diagnosis and some symptoms such as pain, anxiety and fear, and pelvic floor tension level remained elevated. Pelvic physical therapy might thus be considered

as an elective treatment. The interventions in pelvic physical therapy aimed at improving muscle control may be somewhat effective because they also involve exposure to the feared stimuli associated with penetration.

### Specific remarks and future directions

Although the sexual phobia concept involving intense fear of pain is most clearly associated with lifelong vaginismus, it may also apply to other manifestations of sexual dysfunction, especially those involving the experience of pain upon genital touching or pain ensuing from sexual activity. Examples might be deep dyspareunia caused by somatic conditions such as endometriosis, cancer-related and cancer treatment-related pelvic pain, and genital, pelvic, and general pain associated with orgasm.<sup>103-105</sup> It is unknown whether the treatment approach to sexual penetration phobia involving direct exposure to the feared stimulus might also provide effective treatment for these conditions. Such knowledge gaps might be included in a future research agenda. Furthermore, although exposure treatment for penetration phobia offers an effective therapeutic approach, the phobic fear in women suffering from vaginismus may also have resulted in problems in other aspects of sexual functioning. Specifically, although such women may find sexual penetration acceptable, they may nevertheless not find it either pleasurable or satisfying. Research addressing recovery or reinstatement of such positive aspects of sexuality in women with sexual penetration phobia warrants greater attention in future studies on this topic.

### Sexual distress

**Statement 10.** Sexual distress refers to different negative emotional responses, such as worry, anxiety, frustration, being upset, or feeling guilt and inadequacy that people experience associated with their sexuality and their sexual function.

**Statement 11.** Both personal and interpersonal dimensions of sexual distress should be addressed to comprehensively understand and manage sexual dysfunctions.

**Statement 12.** Treatments should integrate strategies to address broader aspects of one's sexual life and internalization of responsibility, while also encouraging a self-compassionate perspective.

### Evidence

#### *What is sexual distress*

Notably, the literature lacks a comprehensive conceptual and operational definition for sexual distress although it is a significant criterion for diagnosing sexual dysfunction according to the DMS-V.<sup>106,107</sup> Despite this gap, the term usually refers to various negative emotional responses, such as worry, anxiety, frustration, being upset, or feeling guilt and inadequacy associated with a person's sexuality and, more typically, a sex-related problem.<sup>108,109</sup> The term "bother" has often been used interchangeably with "distress".<sup>106</sup> Consistent with this overall framework, Pascoal and colleagues view sexual distress as being antithetical to sexual pleasure and characterized by repetitive or ruminative negative thinking.<sup>110</sup>

#### *How often is sexual distress experienced in relation to sexual dysfunctions?*

Individuals are often, though not always, distressed by sexual difficulties. Studies assessing sexual distress due to sexual

difficulties have estimated that between 25% and 73% of men and 29% and 58% of women report distress due to a sexual difficulty.<sup>111</sup> The role of dysfunction-related distress may vary not only across individuals, but also across genders and types of dysfunction. For example, one study on premature ejaculation found that distress failed to differentiate between functional and dysfunctional men.<sup>107</sup> Yet, another study reported that distress contributed 25% of the variance in the diagnosis of delayed ejaculation.<sup>112</sup> In some instances, sexual distress may only weakly correlate with sexual functional status. For example, only one in three women classified as dysfunctional (according to the FSFI) experience sexual distress, yet one in eight women classified as *functional* also experience sexual distress.<sup>113</sup> Such findings underscore the "fuzzy" and inconsistent relationship between sexual dysfunction and sexual distress.

#### *How is sexual distress assessed?*

A systematic review aiming to identify validated measures of sexual distress found 17 different assessment instruments. Four were stand-alone questionnaires and 13 were subscales included in instruments assessing broader constructs<sup>114</sup> although at least one additional instrument has been published since then.<sup>115</sup> However, the extent to which sexual medicine specialists actually assess bother/distress as part of a clinical diagnosis is unclear. That is, do clinicians and researchers routinely assess bother/distress as part of a diagnosis, or merely assume that presentation at the clinic for sexual help is evidence of distress? If they do assess it, do they include it as part of a clinical interview? Through the use of standardized instruments as noted above? Through some combination of these? Or through other means?<sup>116</sup>

#### *Factors associated with sexual distress*

Age appears to be linked to the level of sexual distress, with several studies suggesting lower distress related to sexual difficulties among older adults compared to younger counterparts.<sup>45,117,118</sup> Other studies, however, have found no trends in sexual distress across different age groups.<sup>24,119</sup> In addition, the perceived cause of the sexual problem has been associated with distress in both women and men with sexual dysfunctions. An internalized attribution is typically associated with higher levels of sexual distress.<sup>59,120</sup> For example, sexually dysfunctional men who attribute their problem to a medical condition experience less distress compared to those who attribute the problem to unknown or psychological factors. Specifically, it appears that men who attribute their problem to a physical/medical issue are better able to "externalize" it—needing to assume less responsibility for and/or control over it, thereby reducing their distress.<sup>59</sup> Partner-related factors also play a role, as evidenced in a study on dysfunctional men linking negative partner emotional responses and impaired partner sexual functioning to increased distress.<sup>121</sup> The influence of relationship satisfaction frequently emerges as a crucial factor moderating distress: individuals reporting less satisfaction with their relationship tend to experience higher levels of distress about a sexual problem.<sup>46,113,121,122</sup> One study showed that men's relationship satisfaction had an effect not only on their own but also on their partner's sexual distress.<sup>123</sup> Moreover, sexual distress appears to be intertwined with one's general psychological state. As examples, in a study examining factors associated with sexual distress, those suffering from a self-reported psychological condition had a twofold risk of

experiencing sexual distress.<sup>113</sup> And individuals scoring high on attachment anxiety reported higher distress than those having no attachment anxiety.<sup>46</sup> In line with the above, clinical sexologists view sexual distress, as seen in the clinical setting, to be closely linked to multiple factors, including individual, interpersonal, sociocultural, and situational factors.<sup>124</sup>

### *Related dimensions of sexual distress*

In partnered sex, a sexual dysfunction might also affect the sexual partner and the overall relationship. Several studies have found that people often experience not only “personal” sexual distress but also partner and relational distress due to the dysfunction.<sup>106,113</sup> In a study on couples, 35% to 66% of individuals reported several types/sources of sexual distress to co-occur (personal, perceived partner and relationship sexual distress). For both men and women, one’s level of self-distress was significantly correlated with perceived partner distress. Thus, individuals with a sexual problem not only bear the burden of their own distress but also that of their partners, independent of the actual distress that the partner might experience.<sup>125</sup>

### *Consequences of sexual distress*

Sexual distress as a consequence of a sexual dysfunction has the potential to exacerbate the dysfunction because it may further interfere with the person’s sexual response.<sup>125</sup> It may, for example, increase focus on one’s physical responsiveness (eg, through self-monitoring) and away from the erotic cues from the partner, thus further interfering with sexual response and placing the individual in a negative feedback loop. Sexual distress may also lead to behavioral consequences, including avoidance of physical intimacy and partnered sexual activity.<sup>24,126,127</sup> Sexual distress can, however, also serve a positive functional role, acting as a motivator for help-seeking behavior, although most individuals with distressing sexual difficulties appear not to seek help.<sup>127,128</sup>

### *Interventions targeting sexual distress*

Several studies have reported a decrease in distress following treatment for sexual dysfunctions, but few have identified the specific aspects of the treatment that alleviate the distress. Mindfulness, cognitive-behavioral therapy, and sex education have all been found to decrease sexual distress of individuals suffering from a sexual dysfunction. The combination of mindfulness-based cognitive-behavioral therapy (MBCT) plus sex education showed the largest effect in women having sexual arousal and interest disorder, larger than that reported in studies using flibanserin, a prescription medication used to treat low sexual desire in premenopausal women.<sup>129</sup> Similarly, in a study of men that had undergone surgery for prostate cancer, mindfulness-based CBT significantly decreased sexual distress related to dysfunctional responding.<sup>130</sup> Notably, levels of sexual distress decreased despite the lack of significant changes in sexual functioning in these men, that is, couples may experience benefits in sexual distress even when sexual function does not change (eg, erectile function, arousal, orgasm). This outcome may be particularly relevant for this population, where sexual dysfunction is a direct result of medical treatments, and it is unlikely that function, particularly erectile function, will be restored.<sup>130</sup> Another study offered virtual mindfulness interventions to midlife and older women with low libido and found that, compared with only

an education intervention, sexual distress was significantly alleviated.<sup>131</sup>

So, what are the components of the above interventions that could possibly explain the decrease in sexual distress? Modifications in depression, interoceptive awareness, compassionate self-awareness, self-criticism, and mindfulness have all emerged as mediators of distress.<sup>129</sup> Perhaps more generally, when people are self-compassionate about their sexual problems, they may be more resilient and less likely to experience maladaptive distress responses and, as a result, their distress may be less detrimental to their own and their partner’s sexual experience.<sup>132</sup> Other “targets” of interventions aiming to reduce sexual distress may include management of avoidance, distraction, and negative schemas.<sup>133</sup>

### **Specific remarks and future directions**

While most diagnostic classification systems incorporate sexual distress as a criterion for sexual dysfunction, it is noteworthy that there is no clear conceptual or operational definition of this construct. Despite challenges to the relevance of distress in *diagnosing* sexual dysfunctions,<sup>112,116,134</sup> clinicians and researchers widely acknowledge its crucial role in comprehending patient needs and designing effective treatments. However, the concept of “distress” in the context of sexual dysfunction raises several important areas for further exploration. It is necessary to define the scope of distress, particularly whether it is limited to emotional responses and, if so, to identify the specific emotions involved. Additionally, the cognitive dimensions of distress, such as rumination, worry, and ongoing concerns, must be considered. Another critical aspect is the way distress manifests behaviorally, including its impact on sexual activities and interpersonal relationships, such as avoidance behaviors. These research domains are crucial for a deeper understanding and require further empirical investigation.

Both the DSM-5 and ICD-11 include personal distress as a criterion for diagnosing sexual dysfunction but intentionally omit interpersonal distress to avoid misclassifying individuals based solely on a partner’s feelings. Despite this, both personal and interpersonal distress must be considered in patient assessment and therapeutic strategy. Understanding and addressing these dimensions is crucial for effective management of sexual dysfunction for both the patient and partner.

Examining factors contributing to sexual distress can enhance clinical practice. First, causal attributions play a key role; individuals who blame themselves for sexual dysfunction often experience heightened distress, especially those categorized as “psychogenic.” The belief that psychological issues can be easily resolved lacks empirical backing, emphasizing the need for clinical inquiry into these attributions. Second, self-compassion has proven effective in reducing distress, particularly in MBCT. Focusing on acceptance of one’s sexual response—rather than trying to change it—can relieve mental struggles and promote awareness without judgment. Third, avoidance behaviors often accompany sexual distress and can affect broader aspects of one’s sexual life. Couples may avoid intimacy or individuals may refrain from relationships due to dysfunctions. Therapeutic strategies generally involve educating patients about the anxiety–avoidance cycle and the benefits of exposure treatments. For instance, a single man avoiding relationships due to erectile dysfunction (ED) may benefit from psychoeducation to understand how anxiety

fuels his avoidance. Cognitive-behavioral techniques can assist him in challenging negative beliefs, while gradual exposure to sexual situations, guided by a therapist, may be crucial in his treatment. Although specific exposure strategies for individuals with sexual dysfunctions regarding new partners remain underexplored, these issues must be addressed clinically, regardless of underlying pathophysiology.

### Attachment anxiety

**Statement 13.** Relationship anxiety lies at the core of insecure attachment orientations, which are risk factors for developing sexual dysfunction.

**Statement 14.** Relationship experiences lead to the development of different attachment orientations, distinguishing between secure and insecure attachment.

**Statement 15.** Exploring one's attachment history and addressing insecure attachment schemas are important targets of intervention to increase emotional connection and potentially reduce the sexual problem and its burden.

### Evidence

#### *What is attachment anxiety*

Attachment theory assumes that experiences with primary caregivers and significant others throughout life are stored as cognitive schemas that influence our feelings and behavior in future relationships.<sup>135-137</sup> Initially rooted in parent-child relationships, attachment dynamics persist into adulthood, shaping romantic relationships and sexual behavior.<sup>136,137</sup> The attachment system is primarily directed toward alleviating distress when one or both partners experience anxiety and fear, which encourages them to seek proximity toward the attachment figure—often the partner—to regain a sense of security. Feeling secure with an available attachment figure fosters a positive perception about oneself as worthy of love and about others as being reliable and responsive, conditions that encourage exploration, caregiving, and sexual intimacy. However, when the attachment figure is perceived as unavailable, feelings of distress may persist, which give rise to negative perceptions about oneself and others.<sup>138</sup> Various relationship experiences thus lead to the development of different attachment orientations, distinguishing between positive experiences resulting in secure attachment and negative experiences resulting in anxious or avoidant attachment.<sup>135,139</sup> Anxiously attached individuals display a heightened sensitivity to perceived threats, often manifested in emotional reactivity, a strong desire for closeness, fear of abandonment, jealousy, low self-esteem, distrust, clinginess, and seeking (excessive) reassurance. Avoidantly attached individuals, on the other hand, cope with distress by minimizing attachment needs. They often prioritize independence and distance in relationships to avoid vulnerability, display discomfort with closeness, suppress emotions, dismiss relational problems, and show lower levels of empathy. So, while anxiety and avoidance use distinct strategies, both are characterized by a sense of insecurity and a fear of being hurt in relationships. Hence, relationship anxiety lies at the core of both types of insecure attachment orientations (for reviews, see<sup>138,140</sup>).

#### *Factors associated with and consequences of attachment insecurity*

Partnered sex may be regarded as a means of fulfilling attachment needs and establishing a connection with others.<sup>141</sup>

Secure attachment is generally characterized by a balance between intimacy and independence, which correlates with positive sexual experiences. This sense of security allows partners to openly communicate their needs and desires without fear of rejection, creating an environment where both partners are open to sexual exploration and shared sexual pleasure. Although secure attachment does not guarantee immunity to sexual problems, securely attached individuals are less likely to feel distressed and better able to navigate sexual challenges with resilience and problem-solving skills.

For anxiously attached individuals, partnered sex is primarily aimed at satisfying their attachment needs, possibly driven by a deep-seated fear of abandonment and rejection. Their feelings of inadequacy often translate into lower sexual assertiveness, body image concerns (during sex), and less openness to sexual exploration. They also worry excessively about their performance and their partner's "true" feelings for them, leading them to seek excessive reassurance or validation during sexual encounters. This behavior may pressure the partner to continually affirm their love and desire through sexual activity which, in turn, may lead the partner to emotionally withdraw, reinforcing the negative expectations the anxious person holds about sex and relationships. They may display controlling behaviors, including attempts to exert power and control over their partner's sexuality. However, they may also find themselves at a higher risk of becoming victims of sexually coercive behavior because they prioritize maintaining the relationship over personal boundaries or safety.

Although avoidantly attached individuals experience similar sexual issues as those with anxious attachment, their underlying motives seem fundamentally different, namely the fear of intimacy and a need for independence. Their preference for emotional and physical distance makes them uncomfortable with expressions of emotional or physical intimacy which thus limits the depth of connection experienced during sex. Furthermore, their preoccupation with autonomy can lead them to prioritize their own needs and desires over their partner's. These individuals also tend to exhibit a preoccupation with sexual performance, which stems from a desire to maintain a sense of control in their relationships, as well as a need to validate their self-worth through external measures, such as sexual prowess (for a review on attachment differences in sex and relationships, see Dewitte<sup>140</sup>).

#### *How is attachment insecurity implicated in sexual dysfunctions?*

The above overview makes it clear that insecure attachment is a risk factor for developing sexual dysfunction. Indeed, while the number of studies is limited, evidence suggests an association between insecure attachment and various types of dysfunctions in both men and women.<sup>142</sup> In men, for example, attachment avoidance predicts ED and attachment anxiety predicts premature ejaculation, although such associations are sometimes inconsistent.<sup>143,144</sup> In women, anxious attachment is associated with impairment of all aspects of sexual function, particularly arousal, orgasm, and genital pain. Anxiously attached individuals' tendency to ruminate can lead to heightened anxiety, which in turn can reduce arousal and contribute to pain during intercourse.<sup>25</sup> Moreover, they may feel pressure to engage in penetrative sex despite experiencing pain, as they perceive it as necessary for maintaining the relationship and fear rejection if they refuse. This persistence in having painful sexual activity reinforces the association between sex

and pain, further exacerbating the sexual dysfunction.<sup>145</sup> Furthermore, anxiously attached individuals may respond to sexual dysfunctions, whether their own or their partner's, with doubts about the relationship and interpret their partner's sexual difficulties or withdrawal as a personal rejection. Their tendency to use sex to meet basic attachment needs makes anxiously attached individuals less likely to avoid sex in response to sexual problems as they prioritize the emotional connection that sex provides. Avoidantly attached individuals, in contrast, are more likely to avoid sexual encounters when faced with sexual problems. Since they typically view sex as a source of physical pleasure rather than a means to fulfill emotional needs, diminished physical pleasure due to sexual problems may lead them to lose interest in sexual activity altogether.<sup>82</sup> Overall, individuals with either type of insecure attachment often respond to stressful situations in a more intense and prolonged manner compared to those with secure attachment. However, it is particularly the anxiously attached individuals who experience sexual dysfunctions as distressing due to the close interconnection between sex and love.<sup>46</sup>

Research on sex and attachment has been limited thus far by its narrow focus on sexual satisfaction and functioning, leaving other aspects of the sexual experience underexplored.<sup>142</sup> Recent years, however, have witnessed a surge in research on the link between attachment and sex in the context of new societal phenomena such as sexting or excessive internet use for sex. Such research suggests that anxiously attached individuals send sexy photos and messages as a strategy to please their partner and maintain feelings of closeness. In contrast, avoidantly attached individuals use sexting to satisfy their sexual needs while maintaining distance.<sup>146</sup> They also tend to use internet pornography and cybersex to minimize face-to-face interactions and avoid the risk of rejection. This strategy, however, may place them at risk for not developing the social skills needed in non-virtual sexual relationships.<sup>147,148</sup> Furthermore, relational stress and social isolation may drive individuals to seek comfort through hypersexual behavior, which can lead to relational problems and attachment trauma.<sup>141,149</sup> While insecure attachment is not a precondition for developing hypersexual behavior, it may increase the risk of relational problems,<sup>147,150</sup> making attachment and hypersexuality mutually reinforcing.

#### *How is attachment insecurity assessed?*

Attachment orientation is usually assessed with questionnaires, although specific strategies vary considerably. Some questionnaires categorize persons into secure, anxious, avoidant, and disorganized attachment styles or measure attachment as a general personality trait (across relationships in general).<sup>151</sup> Others view attachment as a dimensional and relationship-specific construct, providing continuous scores on attachment anxiety and avoidance dimensions.<sup>152</sup> The most commonly used assessment tool is the Experiences in Close Relationships Questionnaire,<sup>152</sup> which assesses fear of abandonment (ie, anxiety dimension) versus closeness and (in)dependence (ie, avoidance dimension). Research has shown that the relationship-specific and dimensionally measured attachment orientation has more predictive value than the generally measured attachment style, as the latter implies that individuals will generalize their attachment emotions and behaviors across different relationships, potentially leading to a higher chance of socially desirable responses.<sup>153,154</sup>

Attachment orientation is not a stable personality trait, but rather is dynamic, malleable, and relationship specific.<sup>155,156</sup> Over the course of their lifetime, individuals form multiple attachment relationships that may have either a corrective or harmful influence on early attachment schemas. Although these early schemas may never be completely overwritten, new schemas may develop and be activated in specific contexts and with specific individuals, suggesting that attachment orientation may vary within individuals both across relationships and within relationships as they undergo change.<sup>157</sup> Hence, a useful assessment tool needs to allow specification of the attachment figure to which the items refer. Given the malleable nature of relationships, it is not particularly surprising that the correlation between attachment as a child and attachment as an adult is weak, suggesting that early experiences do not determine, but rather only set the stage for optimal or suboptimal relational development.<sup>155,158,159</sup>

Finally, it is worth noting that a validated measure of attachment security that goes beyond assessing the absence of attachment anxiety and avoidance is currently lacking.<sup>160</sup> Characteristics related to *adaptive* attachment functioning—that is, how attachment operates during periods of optimal functioning—have generally been overlooked. Such assessment would not only provide insight into a fuller spectrum of attachment dynamics but could also offer guidance for developing effective interventions and treatments aimed at promoting healthy attachment relationships.

#### *Interventions targeting attachment anxiety/insecurity*

Exploring one's attachment history and addressing insecure attachment schemas are important targets of intervention to reduce (the burden of) sexual problems.<sup>161</sup> Based on the idea that attachment orientations are dynamic and malleable, it follows that therapeutic intervention and increased self-awareness may offer opportunities to alter a person's attachment orientation. Individuals with insecure attachment patterns can learn to develop a secure base and cultivate more fulfilling sexual relationships through therapy, communication skills training, and self-reflection. In fact, when sexual problems stem from underlying attachment dynamics, the priority should be on treating the underlying relationship anxiety and restoring secure attachment before tackling the sexual problem. An increasingly popular approach to altering relational dynamics is emotionally focused therapy (EFT), which is rooted in attachment theory and conceptualizes sexual (and relational) problems as manifestations of an underlying fear of losing connection with the partner.<sup>162,163</sup> Emotionally focused therapy focuses on fostering secure attachment by restructuring negative interaction patterns and improving partners' responsiveness to each other's emotional and sexual needs. Emphasizing the underlying fear of losing connection serves as a method to unify anxiously and avoidantly attached individuals, who often exhibit complementary attachment schemas in relationships. That is, both attachment orientations are rooted in a sense of insecurity and fear of rejection, but they use different strategies to manage their fear; fight versus flight. Notable is the finding that the anxious-avoidant attachment pairings—in addition to secure-secure pairings—are especially common in romantic relationships as such partners often reinforce each other's existing relationships schemas. While these combinations do not necessarily predict long-term stability, they tend to influence the level of perceived relationship satisfaction.<sup>157</sup> Nevertheless, despite

the potential for EFT treatment, empirical support is minimal, given that only one study on record has shown that EFT improves sexual function and satisfaction by reducing attachment avoidance.<sup>164</sup> Given EFT's strong emphasis on interdependence and emotional responsiveness (core issues of avoidant attachment), this therapy may be particularly suited for this attachment orientation.

Although secure attachment and sexual satisfaction usually co-occur, a secure attachment bond does not necessarily guarantee a satisfying sex life.<sup>165,166</sup> Schnarch,<sup>166</sup> for example, suggests that sexual issues may sometimes stem from difficulties in “differentiation,” where partners struggle to maintain their autonomy and sense of identity within the intimate context of a sexual relationship. Some evidence shows that people with lower self-differentiation are more likely to report sexual difficulties.<sup>167</sup> Evidence also shows that positive sexual experiences with a partner who respects autonomy can alleviate fears and strengthen the attachment bond.<sup>46,168</sup> The association between sex and attachment appears to be bidirectional: A secure attachment bond can compensate for sexual problems, and satisfying sex can compensate for relational issues, especially when uncertainty is high early in the relationship.<sup>169,170</sup>

Understanding situations where negative attachment experiences do *not* lead to sexual dysfunction is also important.<sup>171</sup> For example, while child sexual abuse is generally a risk factor for developing sexual and relational difficulties through its impact on attachment, it does not inevitably lead to sexual problems.<sup>172</sup> Sexual abuse represents a profound attachment trauma, disrupting core schemas about oneself and leading to a persistent state of perceived threat and vigilance.<sup>173</sup> In the case of trauma, the attachment system is chronically activated or deactivated, with sexual behavior being primarily motivated by the need for reassurance and protection, rather than sexual exploration and pleasure.<sup>173</sup> Sex acts as a trigger for survivors of childhood sexual abuse, often exacerbating symptoms of post-traumatic stress disorder (PTSD).<sup>174</sup> Symptoms such as intrusiveness, dissociation, hyperarousal, and avoidance may increase the likelihood of a sexual dysfunction and may be viewed as a protective coping mechanism to prevent reliving the trauma.<sup>174,175</sup> Unlike traditional sex therapy, which focuses on restoring sexual response, therapists must address trauma while also working to rebuild sexual function and experience. However, a history of sexual abuse does not always result in relational or sexual challenges; the underlying attachment orientation may determine whether PTSD symptoms manifest or not. What remains unclear is whether insecure attachment schemas develop as a result of the trauma or if trauma reinforces a pre-existing insecure schema.<sup>176</sup> Particularly compelling in this regard is the need to explore resilience and protective factors that may help some individuals maintain secure attachment patterns and healthy functioning despite early adverse experiences.

Finally, the therapeutic process unfolds within the therapist–client relationship, which itself serves as a significant attachment context.<sup>177</sup> As such, the attachment orientations of the therapist and client may contribute to therapeutic success or failure. Since the therapeutic relationship is key to promoting client change, the attachment dynamics of each player need to be recognized and accommodated. For example, the avoidant client may maintain distance from the therapist, while the anxious client may behave dependently and make strong demands. The therapist must recognize how the client's

attachment behavior interacts with their own attachment needs for appreciation and closeness, and to reconfigure this interaction to create a secure base for exploring and practicing new interaction patterns.<sup>178</sup>

### Specific remarks and future directions

The attachment framework holds appeal not only for researchers and clinicians, but also for the patients themselves. It illuminates how their past attachment experiences shape their current behaviors and feelings, offering them insight into their relational dynamics and emotional responses within sexual contexts. The framework resonates intuitively with patients, making it easier for them to understand their own experiences. Its emphasis on the innate human need for connection and the impact of early caregiving experiences on adult relationships often aligns well with patients' own observations and feelings. And it helps them recognize that anxious and avoidant attachment orientations represent distinct responses to the same underlying fear of losing each other. This shared fear can paradoxically draw partners together as they navigate their attachment dynamics and can foster empathy and understanding.<sup>140,179</sup>

Yet, more research is needed to understand the interplay between partners' different attachment orientations.<sup>180</sup> Specifically, sexual and relational problems may arise not so much from individual attachment orientations but from attachment emotions and behaviors that do not converge and complement one other. For example, partners with respective anxious and avoidant attachment schemas may ultimately reinforce each other's underlying fears and thus they become entangled in a destructive and self-reinforcing cycle of mistrust and conflict. The more the anxious partner demands closeness, the more the avoidant partner creates distance between them, triggering the anxious partner to demand even more. Such struggles may re-surface within the sexual domain, with partners rejecting intimacy or alternatively pressuring sex to compensate for underlying attachment fears.<sup>138,140,179</sup> The obsessive and dependent sexual style of anxiously attached individuals may diminish the sexual desire and arousal of the other partner, especially when this partner is more avoidantly oriented, thereby confirming the anxious partner's belief that the partner no longer cares for them.

On a final note, research on sexual anxieties in general tends to overlook the interpersonal dimension, particularly the interaction between partners' anxiety levels. Specifically, the anxiety levels of one partner may influence how that partner responds to their sexual response, which can then impact the manifestation and experience of the dysfunction and distress. In addition, most studies on attachment and sex focus on cross-sectional data, providing limited snapshots of individuals' experiences. Longitudinal studies tracking individuals over time—including through intervention processes—would offer additional insights into the development and malleability of relational anxiety and its impact on sexual function.

### Somatic symptom disorder (SSD) focused on sexual symptoms

**Statement 16.** Patients presenting with somatic symptom disorder focused on sexual symptoms experience excessive worry that interferes with their life, regardless of symptom severity.

**Statement 17.** The treatment of sexual symptoms may need to be combined with psychiatric management.

**Statement 18.** Treatment should focus on empathetic listening, a thorough bio-psychosocial assessment, education on anxiety and sexual symptoms, and referral to a psychiatrist, while avoiding repeated medical examinations as they are often counterproductive.

## Evidence

### *What is somatic symptom disorder?*

Classifying disorders associated with burdensome somatic concerns has been a challenging exercise in psychiatric nosology.<sup>181</sup> These conditions are represented in the DSM-5 by the Somatic symptom disorder (SSD) and in the ICD-11 by the Body distress disorder (BDD), both of which refer to the subjective perception of physical symptoms and their maladaptive interpretation.

Somatic symptom disorder is a recently established diagnosis in the fifth edition of the Diagnostic and Statistical Manual of Mental Disorders (DSM-5).<sup>182</sup> It is characterized by the “manifestation of one or more physical symptoms accompanied by excessive thoughts, emotion, and/or behavior related to the symptom, leading to significant distress and/or dysfunction.” The physical symptoms *may or may not* be explained by a medical condition. The DSM-5 emphasizes the importance of specific psycho-behavioral features for a valid SSD diagnosis. These involve an excessive investment of time, energy, emotion, and/or behavior related to the physical symptoms, resulting in significant distress and/or dysfunction. Notable changes from the DSM-IV criteria include the elimination of the requirement that somatic symptoms be organically unexplained, and therefore the diagnosis can now be made even if somatic symptoms are clinically explainable. Consequently, patients who previously did not meet criteria for the disorder now often meet the new SSD criteria.

In the ICD-11, this condition is classified as bodily distress disorder and is “characterized by the presence of bodily symptoms that are distressing to the individual and excessive attention directed toward the symptoms, which may be manifested by repeated contact with health care providers”.<sup>181</sup> If a medical condition is causing or contributing to the symptoms, the degree of attention is clearly excessive in relation to its nature and progression. Excessive attention is not alleviated by appropriate clinical examination and investigations and appropriate reassurance. Bodily symptoms and associated distress are persistent, being present on most days for at least several months, and are associated with significant impairment in personal, family, social, educational, occupational, or other important areas of functioning.

Both the ICD-11 and the DSM-5 approaches underscore the need for an interdisciplinary team in the presentation, evaluation, and management of SSD so as to provide comprehensive care for affected patients. The DSM-5 does not offer a specific definition of “somatic symptoms,” thereby allowing for the possibility of including symptoms related to one’s sexual function.

### *How often is SSD experienced with sexual dysfunctions?*

The prevalence of SSD is estimated at 5%-7% of the general population and can occur at any age, with a significantly higher female representation (10:1 female-to-male ratio).<sup>183,184</sup> The prevalence is likely higher among patients with functional disorders such as fibromyalgia, irritable bowel syndrome, and chronic fatigue syndrome.<sup>185</sup>

About 20% to 25% of patients with acute somatic symptoms may develop chronic somatic illness.<sup>186</sup>

The prevalence of SSD in populations with sexual dysfunctions is not well studied. A German study found that 0.5% of participants with sexual dysfunction also met SSD criteria, with no differences among sexual dysfunction types and symptom anxiety.<sup>187</sup> Fanni et al.<sup>26</sup> reported that higher somatic anxiety scores were linked to worse sexual health and a dysfunctional sexual response. In patients with subjective ED (ie, self-perceived, without true symptomology) and SSD, there was no association of somatic anxiety with objectively measured penile blood flow. Interestingly, subjects with higher somatic anxiety were overall healthier.<sup>26</sup>

### *How is somatic symptom disorder assessed?*

When a patient suffering from a sexual dysfunction is referred from a physician to a mental health provider because a differential diagnosis of SSD is suspected, the presence or absence of the relevant diagnostic criteria can be readily ascertained. The diagnosis of SSD is more difficult in the context of primary and specialist physical care (ie, gynecologist or urologist) where the common initial assumption of the patient and doctor is that an underlying organic cause explains bodily symptoms.

Questionnaires that have been used for screening and aiding a diagnosis of somatoform disorder are the Patient Health Questionnaire-15 (PHQ-15) for somatic symptom burden<sup>188</sup> and the Whiteley Index for Health Anxiety.<sup>189</sup> However, the recent changes introduced in the DSM-5 diagnostic criteria pose difficulties because they necessitate revision of the existing diagnostic instruments and symptom inventories. A possibly useful scale is a self-report questionnaire—the SSD-12—designed to assess the new psychological criteria (the “B criteria”) of DSM-5 for SSD.<sup>190</sup> The B criteria refer to excessive thoughts, feelings, or behaviors related to the somatic symptoms or associated health concerns as manifested by at least one of the following: (1) disproportionate and persistent thoughts about the seriousness of one’s symptoms; (2) persistently high levels of anxiety about health or symptoms; and (3) excessive time and energy devoted to these symptoms or health concerns. This 12-item scale has good psychometric properties and is moderately associated with anxiety disorder, indicating that the scale taps a construct that differs from, but is related to, anxiety. The association with anxiety is particularly interesting, indicating that the two entities are closely related but distinct and differentiable, as clinical experience would suggest. This scale is important because it is the only one available for assessing the B Criteria of SSD.<sup>190,191</sup> However, it needs to be studied for its performance in specific medical populations, including SSD patients with sexual dysfunctions.

### *Factors associated with SSD*

Somatic symptoms may result from a heightened awareness of certain bodily sensations, combined with a tendency to interpret these as indicative of a serious medical illness. The etiology of somatic symptom disorder is unclear. Genetic factors contribute to the predisposition to bodily distress, but only to a limited extent, explaining about 30% of the variance. Attachment patterns offer a link between childhood adversity and somatization, with maternal insensitivity at 18 months predicting somatization in children aged 5 years. In adults, attachment insecurity predicts somatization.<sup>192</sup> In

addition, somatic symptom disorder has been associated with personality disorders.

Extensive research has also focused on cognitive and behavioral factors associated with heightened health anxiety. Intolerance of uncertainty (IU) and anxiety sensitivity (AS) are two widely discussed factors linked to health anxiety.<sup>193</sup> Intolerance of uncertainty refers to an individual's difficulty in tolerating aversive responses triggered by the perceived absence of sufficient information and its consequence of uncertainty. These conditions may lead to distress in response to symptoms, triggering coping strategies such as excessive information seeking and/or avoiding medical appointments/tests. Anxiety sensitivity is characterized by aversive emotional reactions to anxiety symptoms, contributing to heightened vigilance toward bodily sensations and distress when such sensations do occur. Both IU and AS play established roles in the health-anxiety cycle.

### Differential diagnosis

Somatic symptom disorder with a focus on sexual symptoms may sometimes be mistaken for two other psychiatric conditions that share similarities yet are distinct. One such condition is obsessive-compulsive disorder (OCD) with emphasis on sexual obsessions and compulsions. Illness anxiety disorder (IAD) characterized by an overwhelming fear of having a severe sexual dysfunction may also resemble SSD. In both OCD and IAD, akin to SSD, patients often exhibit heightened anxiety concerning sexual symptoms or illnesses, which may not align with the actual severity of the symptoms or condition.

**Health condition OCD.** A person with OCD may experience health obsessions (ie, getting contaminated, having erectile dysfunction or anorgasmia) as well as somatic obsessions (ie, constant worry about physical sensations in the genital area). It is quite likely that this person will experience other categories of obsessions as well, for example, harm obsessions, ordering obsessions, or sexual obsessions (eg, questioning one's sexual orientation or gender identity, or having fears of being a pedophile). Rather characteristic of OCD are the persistent *ritualistic behaviors and compulsions* aimed at alleviating the distress.<sup>194</sup> For example, a woman with orgasmic difficulty might masturbate and engage in sexual activity compulsively to alleviate the distress occurring from the fear of being anorgasmic.

**Illness anxiety disorder.** Patients presenting with IAD typically only fear contracting a specific illness; they do not usually experience excessive worry surrounding other areas of concern, as does a person with OCD. A person with IAD will also not engage in as many ritualistic behaviors. The difference between IAD and SSD is that with IAD, the bodily symptoms are not the primary concern; concern is mostly focused on the possible illness that is indicated by somatic symptoms rather than on the somatic symptoms themselves.

Patients presenting with SSD present a different set of symptoms, as their main fears surround the *actual physical sensations* they are experiencing and their misinterpretation of them, rather than the actual illness itself or other obsessive worries. Thus, although the person with SSD may be concerned with a specific illness, the focus is only on the physical sensation (ie, desire level, erection quality) rather than the illness or condition itself. Additionally, this person will not experience other unrelated fears and rituals, as with OCD.

Sexual dysfunctions have been linked to various psychiatric symptoms such as generalized anxiety, panic attacks, PTSD, and social phobia.<sup>195</sup> However, the study by Fanni et al.,<sup>26</sup> which focused on the association between the severity of sexual complaints and somatic anxiety symptoms, revealed that even after adjusting for a myriad of confounding variables (such as psychiatric history, overall mental health, free-floating anxiety, phobic anxiety, obsessive-compulsive traits and symptoms, depressive symptoms, and histrionic/hysterical symptoms), the most pronounced effect on male sexual disturbances was induced by somatic anxiety symptoms.

At the same time, clinicians must also be vigilant regarding rare sexual medicine conditions, such as post-orgasmic illness syndrome, post-SSRI sexual dysfunction, post-finasteride syndrome, post-retinoid sexual dysfunction, and hard flaccid syndrome. These syndromes often involve altered physical sensations and, if left undiagnosed, can increase anxiety and despair. Therefore, physicians need to rule out these conditions when evaluating patients presenting with SSD to ensure comprehensive care.

### Consequences of SSD

The existing literature generally supports a heightened risk of suicidal ideation and attempts in individuals with SSD<sup>196</sup>; specifically, suicidal ideation ranges from 24% to 34% in current or recent cases of SSD, and 26%-39% over the lifetime. Studies also indicate increased rates of suicide attempts, ranging from 13% to 67%. Moreover, comorbid somatic symptoms and related disorders may increase suicide risk, particularly in individuals with underlying depression or anxiety. Potential reasons behind the heightened rates of suicidal ideation and attempts among individuals with SSD and related disorders might include amplified feelings of hopelessness, particularly among those having unexplained symptoms. As posited by Stone,<sup>197</sup> this hopelessness could originate from recurrent interactions with healthcare systems where patients perceive a lack of resolution to their issues. Such persistent frustration and hopelessness could transform into despair, potentially exacerbating suicidal tendencies. Despite the widespread discussion of hypotheses linking hopelessness to suicidality, the absence of concrete measures for assessing hopelessness necessitates direct testing of this prevalence theory.

### Interventions targeting SSD

Early psychiatric treatment is strongly recommended for SSD. Furthermore, studies have shown that cognitive-behavioral therapy results in significant improvement in patient-reported functioning and somatic symptoms, a decrease in health care costs,<sup>198</sup> and a reduction in depressive symptoms.<sup>199</sup> In addition, selective serotonin reuptake inhibitors (SSRIs) and serotonin-norepinephrine reuptake inhibitors effectively decrease SSD symptomology compared to placebo.<sup>200</sup>

Although studies on effective interventions for people with concomitant SSD and a sexual dysfunction have not been implemented, healthcare professionals would need to adjust their assessment and treatment strategies to incorporate elements of psychiatric referral and treatment. Because traditional/cultural distinctions between physical and mental phenomena may lead patients to choose one etiological explanation over the other—and thus possibly interfere with the development of the patient-therapist therapeutic alliance—patients should be educated about how psychosocial stressors

and somatic symptoms interact. Uninformed people with symptoms of SSD and a sexual dysfunction might otherwise find themselves in a negative feedback loop such that high symptom anxiety is triggered by a sexual symptom, and consequently, maladaptive emotions, cognitions, and behaviors about impaired sexual functioning generate anxiety that further exacerbates the sexual symptom, conditions that intensify the preoccupation of having a serious yet-undiagnosed illness.<sup>201</sup> In such a feedback loop, and concomitantly taking into account that sexual function relies highly on one's emotions and attentional focus, standard sexual medicine treatments, for example, phosphodiesterase type 5 inhibitors (PDE5i), might well be ineffective, thus further exacerbating the anxiety.

### *Specific remarks and future directions*

From a clinical standpoint, SSD with sexual symptomology is an expression of a complex condition encompassing organic, psychological, and sexual features.<sup>26</sup> Although SSD and sexual dysfunctions are two distinct conditions that may sometimes co-occur, clinicians may be poorly equipped to recognize these as distinct but interacting conditions.

Several features in a patient's clinical presentation may raise suspicion of SSD, including concern with one or more symptoms in the genital area or about sexual function that are attributed to a non-psychiatric disease.

- Excessive monitoring of these symptoms.
- Excessive anxiety about the concern that significantly disrupts daily life.
- Symptoms that may be perceived as signs of serious illness.
- Excessive energy regarding symptomatic concern, including undergoing extensive diagnostic testing or engaging in "doctor hopping."

Given the interplay between the SSD and sexual dysfunctions, with one fueling the other and thus causing significant mental health burden, such patients require clinical management that goes beyond the standard sexual medicine approach. While existing data guide the management approach for each condition separately, establishing an appropriate course of action when they co-occur has yet to be delineated.<sup>186,202,203</sup>

Clinicians may consider the following for patients displaying persistent worry and preoccupation with sexual symptoms, indicative of SSD<sup>201</sup>:

- I) Foster a strong therapeutic alliance by actively listening to the patient's symptom perception and demonstrating empathy. The goal is to ensure that the patient feels their concerns are being taken seriously.
- II) Conduct a comprehensive assessment, including medical, psychosocial, and sexual history. While it is crucial to rule out medical factors associated with sexual symptoms, it is equally important to avoid solely focusing on physical parameters. Address the patient's interpretations, preoccupations, emotional state, and any history of similar symptom anxiety or other mental health issues such as depression, anxiety, medication or alcohol misuse, or suicidal ideations.
- III) Base assessments and clinical examinations on the collected data, avoiding repetitive investigations for reassurance, as they do not alleviate patient anxiety.<sup>204</sup>

- IV) Educate patients about the interplay between anxiety and sexual symptoms, emphasizing their common co-occurrence. Clarify the brain/mind–body connection to help patients understand the potential psychological aspects of their symptoms.
- V) Refer to a psychiatrist for assessment, ensuring a smooth referral process and ongoing collaborations with the psychiatrist and the patient for follow-up visits.

Despite an increasing understanding of SSD with sexual symptoms over the past decade, this condition remains under-researched. Knowledge gaps relevant to clinical practice that would benefit from investigation include the following: The association of SSD with sexual dysfunctions could be further explored. For instance, it is unclear whether SSD typically arises as a consequence of sexual symptoms or if it predisposes individuals to develop them. Furthermore, existing data indicate that no specific sexual symptom is predominantly associated with SSD.<sup>187</sup> Further studies using interview-based assessments are needed for a comprehensive understanding of this issue. The relationships among sexual distress, sexual performance anxiety, and attachment anxiety in sexual dysfunction require exploration to determine if they are linked, distinct, or overlapping, and whether treating one can improve the others. Additionally, the impact of sexual treatments on sexual dysfunction symptoms, such as the efficacy of PDE5i for men with sexual dysfunction and erectile dysfunction, remains unassessed. The effects of early versus delayed psychological interventions, as well as the effectiveness of combined psychosexual and psychiatric treatments compared to individual modalities, also require further investigation.

## **Discussion**

Anxiety has been conceptualized as a transdiagnostic dimension, meaning it spans multiple psychological disorders and is not confined to a single diagnosis.<sup>10,205</sup> Other such transdiagnostic factors include low self-esteem,<sup>206</sup> anxiety sensitivity,<sup>16,207</sup> psychological trauma,<sup>208</sup> and insecure attachment orientation.<sup>209</sup> This transdiagnostic perspective suggests that anxiety influences an individual's functioning across multiple life domains, including ones related to sexual health and functioning. Tied to cognitive, emotional, physiological, and behavioral processes, anxiety may not only impact general sexual well-being and daily functioning, but also specific domains such as sexual functioning and satisfaction.<sup>2,94,210</sup> Recognizing how anxiety manifests across various aspects of a person's life enables a more comprehensive approach to the treatment of patients with sexual dysfunctions.

While research on anxiety and sexual dysfunctions has typically focused on studying various manifestations of anxiety separately, clinical practice often reveals a different reality, with patients frequently experiencing multiple types of anxiety simultaneously. Specifically, individuals with sexual dysfunctions can experience anxiety on multiple levels (Figure 1), ranging from anxiety in specific sexual situations to anxiety that disrupts broader aspects of their sexuality, such as their sexual relationships, and even extending to their overall mental well-being and daily functioning. For instance, some individuals may feel anxiety specifically about sexual penetration yet still engage in other types of sexual activity, maintaining satisfaction in their sexual relationships without significant disruption. Conversely, others might face

**Table 1.** Key features, clinical assessment, associated factors, and key interventions for each type of anxiety.

| Type of anxiety  | Key features   | Clinical assessment   | Associated factors  | Key therapeutic interventions   |
|--|--|---|---|---|
| Sexual performance anxiety                               | <ul style="list-style-type: none"> <li>• Unattainable or high performance expectation</li> <li>• Evaluation of performance by partner, self, or in reference to an external benchmark is expected</li> <li>• Worry, embarrassment, shame, and/or other negative consequences if performance expectation not met</li> </ul> | <ul style="list-style-type: none"> <li>• Clinical interview is the main assessment tool</li> <li>• EPAI (for ED and modified for other dysfunctions)</li> </ul> | Situational factors:<br>Eg, new or challenging sexual encounters with high performance demand characteristics<br>Dispositional factors:<br>Eg, strong self-focus, high performance expectations with self-critical assessments, diminished self-efficacy, high levels of negative affectivity, introversion | <ul style="list-style-type: none"> <li>• Cognitive restructuring (CBT)</li> <li>• Emotion-focused therapy</li> <li>• Mindfulness, behavioral techniques</li> <li>• Emphasis on automatic processing of sexual stimuli during partnered sex</li> </ul> |
| Sexual phobia  | Excessive fear toward specific aspects of sexual activity <ul style="list-style-type: none"> <li>• Physiological arousal upon approaching the feared object or situation</li> <li>• Negative appraisal of the stimulus related to sexual activity</li> <li>• Strong tendency to avoid the feared stimuli</li> </ul>        | <ul style="list-style-type: none"> <li>• Clinical interview</li> </ul>  | Anxiety sensitivity<br>Anxiety disorders and depressions<br>High self-focus<br>Alexithymia  | Exposure-based interventions that directly target the fear experience   |
| Sexual distress  | Negative emotional responses, such as worry, anxiety, frustration, upset, or feelings of guilt and inadequacy related to one's sexuality   | Four questionnaires are available<br>Clinical interview   | Internalized attribution<br>General psychological state<br>Negative partner reaction<br>Perceived partner distress<br>Low relationship satisfaction<br>Attachment anxiety<br>Relationship sexual distress   | Mindfulness-based cognitive-behavioral therapy plus sex education (MBCT)<br>Specifically address self-blame and internalization of responsibility with a self-compassionate perspective<br>Emotionally focused therapy (EFT)                          |
| Attachment insecurity                                    | Anxiously attached individuals:<br>Strong desire for closeness<br>Fear of abandonment<br>Seeking reassurance from partner<br>Avoidantly attached individuals<br>Prioritizing independence and distance in relationships<br>Discomfort with closeness and emotional detachment<br>Suppressing emotions                      | Questionnaires such as the Experiences in Close Relationships Questionnaire   | Past attachment experiences<br>Partner's attachment orientation and interplay with one's own attachment style   | Emotionally focused therapy (EFT)   |
| Somatic symptom disorder with a focus on sexual symptoms | Excessive thoughts, emotion, and/or behavior focused on a sexual symptom. Excessive attention is not alleviated by appropriate clinical examination and investigations and appropriate reassurance   | SSD-12  | Anxiety sensitivity<br>Intolerance to uncertainty   | Psychiatric management<br>Key are empathetic listening and education about the interplay between anxiety and sexual symptoms  |

high sexual distress, leading to avoidance of sexual activity altogether, or might experience attachment insecurity, with sexual anxiety permeating the nonsexual aspects of their relationship. In some instances, individuals may develop profound anxiety with symptoms that fall within the realm of psychiatric disorders, such as obsessive-compulsive disorder, illness anxiety disorder, somatic symptom disorder, or other related conditions. [Table 1](#) provides an overview of the cues and features of these various iterations of sexual anxiety.

Clinicians working with sexual dysfunctions should routinely screen for cues suggestive of multiple types of anxiety

and assess their potential impact on three levels of functioning: (a) specific sexual situations, (b) the client's overall sexual life, and (c) broader life functioning. As presented previously in the various subsections, the literature has suggested appropriate treatment approaches to address each type or manifestation of anxiety. At the same time, these varied presentations of anxiety reiterate the necessity for tailored treatment approaches, recognizing that not all sexual anxieties should be treated the same. Rather, interventions targeting the reduction of anxiety linked to sexual dysfunctions should be carefully selected according to the specific type of anxiety present, as suggested in [Table 1](#).

**Table 2.** ESSM statements on anxiety in individuals with sexual dysfunctions.

| <b>General statements on anxiety in individuals with sexual dysfunctions</b> |  |
|--|--|
| Statement 1  | Anxiety can manifest in diverse ways, causing different levels of interference in the individual's life.   |
| Statement 2  | Clinicians working with sexual dysfunctions should routinely look for cues suggestive of multiple types of anxiety and assess their potential impact on three levels: (a) specific sexual situations, (b) the client's overall sexual life, and (c) their broader life functioning.          |
| Statement 3  | Interventions targeting the reduction of anxiety linked to sexual dysfunctions may be selected for and tailored to the specific type of anxiety present.   |
| <b>Statements on sexual performance anxiety</b>                              |  |
| Statement 4  | Sexual performance anxiety includes elements of performance expectation, performance evaluation, and performance consequences, and refers to an individual's sense of unease and apprehension that they will not measure up to some preconceived expectation in a future sexual interaction. |
| Statement 5  | Treatment may target the anxiety directly, and/or may address predisposing and/or situational risk factors such as low self-efficacy and negative thought patterns that sustain or exacerbate the situation.   |
| Statement 6  | Treatments may focus on reinforcing an automatic/reflexive mode of processing information in conjunction with the deliberate mode of processing information.   |
| <b>Statements on sexual phobia</b>   |  |
| Statement 7  | Sexual phobia refers to overwhelming fear toward one or more aspects of sexual activity and experience, including—among others—sexual penetration.   |
| Statement 8  | The assessment of sexual phobia relies on clinical interviewing. Sufficient attention should be given to the relevant emotional (fear) and behavioral (avoidance) aspects.   |
| Statement 9  | Treatment may target the invalidating fear at the core of the phobia directly by promoting (prolonged) exposure to the feared sexual stimuli, while cognitive restructuring can be used to challenge and modify negative thoughts and beliefs.   |
| <b>Statements on sexual distress</b>   |  |
| Statement 10   | Sexual distress refers to different negative emotional responses, such as worry, anxiety, frustration, upset, or feelings of guilt and inadequacy that people experience associated with their sexuality and their sexual function.  |
| Statement 11   | Both personal and interpersonal dimensions of sexual distress should be addressed to comprehensively understand and manage sexual dysfunctions.  |
| Statement 12   | Treatments should integrate strategies to address broader aspects of one's sexual life and internalization of responsibility, while also encouraging a self-compassionate perspective.   |
| <b>Statements on attachment anxiety</b>                                      |  |
| Statement 13   | Relationship anxiety lies at the core of insecure attachment orientations, which are a risk factor for developing sexual dysfunction.  |
| Statement 14   | Relationship experiences lead to the development of different attachment orientations, distinguishing between secure attachment and insecure attachment.   |
| Statement 15   | Exploring one's attachment history and addressing insecure attachment schemas are important targets of intervention to increase emotional connection and potentially reduce the sexual problem and its burden.   |
| <b>Statements on somatic symptom disorder with focus on sexual symptoms</b>  |  |
| Statement 16   | Patients presenting with somatic symptom disorder focused on sexual symptoms experience excessive worry that interferes with their life, regardless of symptom severity.   |
| Statement 17   | The treatment of sexual symptoms may need to be combined with psychiatric management.  |
| Statement 18   | Treatment should focus on empathetic listening, a thorough bio-psychosocial assessment, education on anxiety and sexual symptoms, and referral to a psychiatrist, while avoiding repeated medical examinations as they are often counterproductive.  |

When the clinician has determined that a patient with sexual dysfunction has one or more types of sexual anxiety, the treatment plan should also cover the prioritization of treatment of the various problem elements. At this time, however, it is not possible to recommend a standardized approach based on scientific evidence; rather, it is important for the clinician to work with the client in a collaborative effort to achieve prioritization in the treatment plan. Once the clinician has gathered all the necessary information upon intake, this information can be discussed with the client, and together they can mutually agree on treatment plan priorities. Among the aspects considered in determining these priorities are as follows: the pervasiveness of each problem element relative to the other elements; the expected effects of solving each problem element on the other elements; the availability and accessibility of treatment facilities needed for the various problem elements; and the patient's preference to work on certain problem elements as a priority. At the same time, clinicians need to be cognizant of potential contraindications and/or the need for treatment modifications for specific cases, such as those involving a complex trauma or abuse history, clients who are highly defensive against emotional experiences and expression

(such as overly intellectualized or alexithymic patients), or clients with significant emotion regulation deficits (eg, traits of borderline personality disorder).

This paper raises critical questions regarding the understanding of sexual anxieties and their relationships to one another. Specifically, are these anxieties distinctly separate from each other or do they significantly overlap? What common risk factors do they share? Are individuals prone to one type of sexual anxiety more likely to experience other anxieties? For example, anxiety sensitivity and intolerance to uncertainty are known risk factors for several anxiety disorders—do these factors apply similarly to all types of sexual anxiety? And finally, do the underlying assumptions regarding the causes, interpretation, and consequences of sex-related anxiety (as presented in this paper) apply to ethnic and/or non-Western cultural groups, where values, gender roles and expectations, and assumptions regarding the mental and sexual health etiologies and “cures” may differ significantly?<sup>211-214</sup>

Finding answers to the above questions has critical relevance to treatment issues. For example, does treating one type of anxiety become less effective in the presence of another

type? If there is overlap between types of anxieties, does addressing one type potentially mitigate symptoms of the other types?

While this paper leaves many issues unresolved, it may serve as a first line primer for healthcare providers treating sexual dysfunctions and managing patient anxiety. It not only delineates five common types of anxiety seen in individuals with sexual dysfunction, but it also provides context for each sexual anxiety, summarizes cues and features, suggests treatment strategies, and offers a set of preliminary position statements (see Table 2) that orient the readership to salient features of each specific anxiety. Although the paper leaves other sexual anxiety types unexplored—including those related to minority stress in LGBTQI individuals, body image concerns, and generalized anxiety disorders (which require specific clinical attention)—we believe it offers a valuable starting point for further discussion and elaboration of different manifestations of anxiety in the context of sexual dysfunction.

In conclusion, we reiterate to researchers and clinicians alike that sex-related anxiety is not experienced uniformly but can manifest in diverse ways, affecting individuals' lives in various ways. Reasons why some individuals experience one type of anxiety while others experience other types remain poorly understood—the various situational and dispositional factors have yet to be clearly elaborated through systematic study. In the meantime, recognition of multiple sexual anxieties represents an initial step forward, calling attention to the pressing need to deepen our understanding of sexual anxiety within clinical practice, to tailoring treatments accordingly, and to advancing corresponding research efforts.

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## Author contributions

P-S.K.: Conceptualization, Literature review, Writing—review & editing. J.v.L.: Conceptualization, Literature review, Writing—review & editing. M.D.: Conceptualization, Literature review, Writing—review & editing. D.R.: Conceptualization, Literature review, Writing—review & editing.

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