Assessing, Diagnosing, and Treating SSRI-Induced Sexual Dysfunction

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Introduction

Selective serotonin re-uptake inhibitors (SSRIs) are common antidepressants prescribed for a broad spectrum of mental health concerns. SSRIs are known to be effective in treating symptoms of major depressive disorder, dysthymia, obsessive-compulsive disorder, panic disorder, social phobia, bulimia, weight reduction, alcoholism, behavioral disturbances associated with dementia, pre-menstrual dysphoric disorder, chronic fatigue syndrome, and schizophrenia (Lane, Baldwin, & Preskorn, 1995). While many benefits exist for taking SSRIs, negative side effects such as sexual dysfunction (SD) are a usual occurrence for individuals prescribed this class of antidepressants. SD is defined by a disturbance in the processes that characterizes the sexual response cycle (DSM-IV-TR, 2000). Side effects such as reduction in desire, arousal, and or release occur in 30% to 50% or more of individuals treated with SSRIs (Keltner, McAfee, & Taylor, 2002). Due to SSRI induced SD many patients become noncompliant with this form of pharmaceutical treatment. This paper will illustrate the assessment, formulation of diagnosis, and treatment planning process mental health practitioners should consider when working with an individual who presents SSRI induced SD. Some discussion will also be given to the treatment of SSRI induced SD among couples. Lastly, this paper will address implications and needs for future research. Specific attention to this topic is needed to better understand and treat this disabling side effect.

Assessment

Many questions must be asked when trying to assess for SSRI induced SD. The first question a clinician should inquire is in regard to the description of difficulty. “SSRIs may have an impact on any or all phases of the sexual cycle, causing decreased or no libido, impaired arousal, erectile dysfunction, and absent or delayed orgasm but most commonly associated with
delayed ejaculation, and absent or delayed orgasm” (Balon, 2006). After the issue of concern has been established, the clinician must assess multiple factors related to onset of difficulty. Although SD is a common pharmaceutical side effect, SD is also a symptom of many other possible variables. This makes the assessment process particularly difficult for mental health practitioners. For example, patients suffering from depression frequently complain about a lack or decrease in sexual desire. Depression is found to be associated with erectile dysfunction, impaired female arousal, delayed orgasm/ejaculation, and anorgasmia (Clayton & Balon, 2009). Similarly, the assessment of SD in clients with anxiety disorders should focus particular attention on factors such as baseline anxiety, performance anxiety, interpersonal anxiety, and the role of possible past sexual trauma which all impact SD (Clayton et al., 2009). Complicating assessment even more, the greater severity of symptoms from mental illness the more frequent and severe the SD can be (Clayton et al., 2009). This makes assessment of exact cause for SD to be particularly challenging. Being able to evaluating the patient’s sexual history prior to using SSRIs would be the best method for establishing SSRI effect on SD.

Preexisting SD due to a mental disorder is not the only factor that must be considered. There are many other reasons that can contribute to the onset of SD. Sexual desire can be affected by various psychological factors such as joy, sorrow, mutual affection, and disagreement (Balon, 2006). In addition, physical illnesses as well as recreational drugs and social stressors are all known to cause SD. Conditions such as adrenal disease, alcoholism, atherosclerosis, cardiac disease, central nervous system disease, diabetes, liver disease, peripheral nervous system disease, pituitary disease, and thyroid disease are all associated with SD (Keltner et al., 2002). Substance use including nicotine, alcohol, heroin, methadone, and marijuana must also be evaluated. Given that many individuals with mental illness use these
substances to self medicate, assessment of sexual functioning can become complicated (Clayton et al., 2009). Lastly, social stressors such as the effect of mental illness on relationships and behavior, present home life, capacity to experience pleasure, and development must be assessed. Human sexual behavior is subject to social and cultural influences that may vary with time, place, ethnic group, and social class (Balon, 2006). This is why a thorough sexual history must be gathered when assessing SSRI induced SD. The patient should be asked about the phases of sexual function, sexual fantasies, frequency of intercourse and or masturbation, and satisfaction with overall sexual functioning. Due to multiple factors having an effect on the onset of SD a baseline evaluation of sexual functioning is essential (Balon, 2006).

A part from gathering information on the onset of the SD, it is also important to collect information regarding the patient’s understanding of cause and maintenance of the difficulty. As previously discussed, mental illnesses can contribute greatly to the development of SD. Patients must consider the source of their sexual problems and be careful not to automatically blame medications as the root of their issue (Girodano, 2001). Having this patient understanding will play greatly into the treatment planning process, as proper psycho-education surrounding the diagnosis would be necessary. Past history of medical, psychological, and self-help treatment would also be needed in order to establish a person centered plan. Finally, asking the patient about their expectations for treatment is an essential aspect of the assessment process. Given the complexity of SSRI induced SD it is imperative that patients have both reasonable and clear expectations for treatment outcomes. This includes discussion surrounding the patient’s tolerability to the sexual side effect. “Tolerability is strongly determined by the severity of the side effect but is also influenced by the degree of therapeutic benefit that the patient has derived from the agent, as well as the suffering produced by the illness itself” (Rivas-Vazquez, Blais,
Roy, & Rivas-Vazquez, 2000). Knowing the patient’s level of tolerability will allow a determination for what intervention is necessary.

**Formulation of Diagnosis**

While SD is a common side effect for many individuals prescribed SSRIs for mental health concerns, discloser of this issue is rare. Studies show that men are more likely than women to report SD (Meston, 2004). Many women either feel too self-conscious to raise sexual issues with their doctors (Giordano, 2001) or they attribute their sexual side effects to interpersonal issues instead of their medication (Meston, 2004). In addition, women experience depression two times compared to the rate of men and in result are prescribed antidepressants more frequently. This lack of disclosure has many negative implications for SSRI users. “In a study of major depressive disorder evaluating reasons for missed dosage and antidepressant discontinuation, diminished libido and orgasmic dysfunction were among the top five reasons for noncompliance” (Clayton et al., 2009). Given these findings, clinicians must directly address the concerns of SD with their clients prescribed SSRIs. When SD contributes to noncompliance, this acts as an additional stressor and represents yet another loss to the depressed patient (Keltner et al., 2002). Many people especially women, will discontinue use of their medication and just try to accept and manage depression as a part of their life (Girodano, 2001). This is not an effective strategy for managing depression and should be a high level of concern for mental health professionals.

According to the American Psychiatric Association (DSM-IV-TR), SD associated with medications is characterized by disturbances in the sexual response cycle, determining marked distress, or interpersonal difficulties (2000). SSRI induced SD is known to cause difficulty in all stages of the sexual response cycle including desire, arousal, and orgasm. “Although the precise
mechanism of action by which antidepressants influence sexual function is unknown, central serotonergic and dopaminergic systems have been implicated most frequently” (Meston, 2004). This is because drugs that enhance serotonin or block dopamine tend to decrease sexual activity (Keltner et al., 2002). Dopamine influences sexual desire, sexual motivation, and sustained desire or cognitive arousal. Norepinephrine also plays a role in both cognitive and genital arousal (Clayton et al., 2009). This is theorized as to why delayed ejaculation/orgasm is considered the most specific sexual side effect of SSRIs. “Delayed ejaculation/orgasm associated with SSRIs and other strongly serotonergic antidepressants has been explained by the influence of these medications on the serotonin system” (Clayton et al., 2009). The influence of SSRIs on an individual’s ability to orgasm is speculated to then impact the other areas of sexual response.

When reported, men and women utilizing SSRIs are known to have a severely diminished or even eliminated ability to orgasm/ejaculate (Girordano, 2001). This issue is called orgasmic disorder and it is characterized by a persistent or recurrent delay in or absence of orgasm following a normal sexual excitement phase and causes marked distress or interpersonal difficulties (DSM-IV-TR, 2000). Orgasmic disorder is thought to then contribute to psychological factors that inhibit other areas of the sexual response cycle. For example, performance anxiety is the most common psychological disturbance in men with SD. This corresponds to a fear of sexual acts where anxiety regarding sexual activity becomes an overriding block of sexual feelings and thoughts (Corona, Ricca, Bandini, Mannucci, Lotti, Boddi, Rastrelli, Sforza, Faravelli, Forti, & Maggi, 2009). Emotional disturbances such as performance anxiety can have direct effect on the arousal phase. Negative emotional states determined by depressive, anxiety, or obsessive symptoms can primarily contribute to erectile dysfunction in men (Corona et al., 2009). In correlation to this occurrence, delayed desire can
occur. The onset of erectile dysfunction due to performance anxiety may then lead to an avoidance of sex, loss of self-esteem, and depressed mood (Corona et al., 2009). Although this perpetuation of SD throughout the sexual response cycle makes diagnosis difficult, there are clinical considerations to identify this issue.

In order to diagnose an individual as experiencing SSRI induced SD attention should be given to the chief complaint. Clinicians must be aware that delayed ejaculation and orgasm, which are symptoms most frequently associated with SSRIs, are not usually associated with depression itself, whereas decreased sexual desire is (Balon, 2006). With this understanding, practitioners will have better clinical judgment of assessing what role SSRIs or depressive symptoms are playing on sexual difficulty. According to a recent study by Hensley and Nurnburg, 50% of women subjects and 42% of male subjects reported decreased sexual interest prior to starting treatment for depression (2002). After starting treatment with SSRIs, women report significant improvements in sex drive and psychological arousal. In contrast, men show worsening of ability to ejaculate and orgasm satisfaction (Hensley et al., 2002). This difference in response could be the result of the marked performance anxiety found in men. It could also be the result of medication itself as research shows that 40–80% of sexual dysfunction is due to antidepressant treatment and not mental illness itself (Gregorian, Golden, Bahce, Goodman, Kwong, & Khan, 2002). In conclusion, focusing on the main concern of sexual difficulty can be a very telling sign. While SSRIs are known to be responsible for delayed ejaculation and orgasm, depression is found to be more responsible for decreased desire. Although SSRIs can result in SD throughout all phases of sexual response, evaluating depressive symptoms must be a major component of diagnosis.

**Treatment Planning**
Treatment for SSRI induced SD has primarily been focused on the management of SSRI medication. Doctors prescribing medication may sometimes ask clients to “wait and see” what happens for a 4 to 6 week period post to beginning a SSRI because satisfactory sexual functioning is sometimes known to return. This reversal is due to tolerance but is inconsistent among patients (Keltner et al., 2002). Due to the inconsistency of side effect reversal, clinicians must be skeptical of this technique and be aware of false hope that could be instilled in clients. The 4 to 6 week period of sexual side effects may also be deemed too unbearable for patients to wait out while tolerance is building. This increases the chances that medication non-compliance will occur. Instead, many doctors will suggest drug augmentation that targets the mechanisms that cause SD. Dopamine enhancers that stimulate dopamine release or act as dopamine antagonists can improve sexual performance while the client continues taking SSRIs as prescribed (Keltner et al., 2002). Other medication management strategies for treating SSRI induced SD include decreasing dosage, drug holidays, and changing antidepressants. Decreasing the dosage of SSRIs is sometimes a viable option because of something called a flat dose response curve. What this means is that if a person responds to a certain dose of SSRIs, they will not respond “more” to a larger dose but may actually respond just as well to a lower dose (Keltner et al., 2002). Although consideration must be given to how lowing dosage could affect antidepressants efficacy, it can also positively affect SD side effects. Another option for reversing SD side effects is for the client to take a “drug holiday”. Drug holidays are when a patient stops taking their medication for 1 to 3 days or longer, allowing the offending agent to decrease in their system and reducing the impact on sexual functioning (Keltner et al., 2002). Finally, many doctors may decide to change their patient’s antidepressant. Evidence supports that Paxil causes the highest level of sexual effects followed by Prozac, Celexa, Zoloft, and
Luvox (Keltner et al., 2002). While all of these options have been found to positively increase sexual functioning, many risks are posed to medication compliance. Attention must then be given to non-pharmaceutical means of treatment.

In a therapeutic setting, the interview itself is the first intervention of treatment. Therapists need to build an alliance with their client, normalize the problem, and validate the patient’s experience (McGloin, & Carey, 2006). This includes making the client feel that they are in a safe environment where they can discuss private sexual matters. Once a therapeutic alliance has been established, a treatment plan can be developed for addressing the sexual difficulties. The overall treatment plan should promote a healthy life style, recommending weight reduction, exercise, smoking cessation, and treatment for substance use problems (Balon, 2006). Having a healthy life style can help by enhancing sex image, sense of well being, overall health, and health of the physiological symptoms related to sexual response (Balon, 2006). In a recent study, men who were the most physically active had a lower risk of erectile dysfunction compared to those men doing less or no physical activity. In addition, men who watched television for more than 20 hours per week were significantly associated with erectile dysfunction (Larsen, Wagner & Heitmann, 2007). When pretreatment lifestyle related SD such as difficulties related to chronic use of substances are eliminated, this renders treatment for SSRI induced SD more manageable. Therapists need to provide their clients with psycho-education regarding the possible causes of their SD and assure patients that SSRI induced dysfunctions are reversible (Keltner et al., 2002). Other necessary education could include information about supplemental products such as lubrication. Women who experience diminished vaginal lubrication may find intercourse uncomfortable and irritating. This discomfort may instigate an additional resistance towards engaging in sex play with a partner, promoting other SD difficulties (Giordano, 2001).
After the client feels comfortable within the therapeutic setting and plans for treatment have been established, cognitive behavioral therapy (CBT) can be implemented to further target sexual difficulties. CBT is a well-regarded intervention modality for implementing behavior techniques to increase sexual functioning. “CBT focused on SD may help the patient cope with the dysfunction, reduce symptom severity, and help prevent symptoms from worsening due more to the presence of the SD than to the effect of the SSRI” (Balon, 2006). Treatment of SSRI induced SD should always take into consideration psychological factors and normal fluctuation of sexual functioning. CBT takes into consideration all bio-psycho-social aspects of an individual’s functioning and has the most positive outcome research (McGloin, & Carey, 2006). McGloin et al. explains CBT by writing:

The premise of CBT is that cognition influences feelings and behavior. The patient learns to recognize maladaptive thought patterns and to stop them in their tracks. Goals for CBT in sexual dysfunction include cognitive change, decreased anxiety, increased orgasm, and increased positive thoughts associated with sexual behavior. Treatment is usually short term, an average of 12 to 15 sessions consisting of visits with a therapist and behavioral exercises assigned between sessions. (2006)

Examples of CBT approaches include but are not limited to desire checklists, modifying sexual scripts, use of fantasy, self-help resources, thought stopping/thought substation, directed masturbation training, vibrators, body work, and sensate focused exercises.

Many CBT techniques can be effective in helping treat SSRI induced SD but sensate focused exercises are a top option when working with couples. “Sensate focus exercises are performed with a partner and involve various levels of sensual touching without intercourse or orgasm, thus decreasing performance anxiety” (McGloin et al., 2006). Given that performance
anxiety is known to be a contributing factor to the prevalence of erectile dysfunction among men prescribed SSRIs, this technique could help stop the influence of such difficulty. In addition, when working with couples it is important to emphasis that sexual intimacy manifests itself in a multitude of ways and should not be limited to activities solely involving intercourse and orgasm (Giordano, 2001). According to Fisher, Aron, Mashek, Li, and Brown, the attractive system is influenced by exhilaration and feelings of intrusive thinking about a partner, craving for emotional union (2001). Some evidence shows that this is associated with elevated levels of dopamine and norepinephrine (Fisher et al., 2002). Therefore, encouraging couples to do nonsexual activities that raise dopamine can help with the sexual system. These activities could include things that the couple did in the past but no longer do or it could involve new activities never tried before.

Directed masturbation is good CBT technique for both individuals and couples as it is often used in primary anorgasmia. Research shows that directed masturbation has success rates in excess of 80%, although lower in couples (McGloin et al., 2006). The importance of mutual masturbation is even more prevalent for anorganic women. Studies show that couples with an anorgasmic female partner reported more troubled sexual communication than sexually functional couples. This difference relates most strongly to communication regarding direct clitoral stimulation activities (Kelly, Strassberg, Turner, 2010). Improving communication with use of words between partners can play a big role in sexual responsiveness. In the case of female anorgasmia, the woman is commonly considered by both partners to be the “repository” of the problem. This is an important dynamic because the psychological, relational, and sexual patterns resulting may be relatively immutable (Kelly, Strassberg, Turner, 2010). While the primary
cause of sexual difficulty maybe the SSRI, communication between couples regarding stimulation may be a contributing factor.

Treating SSRI induced SD is a complex process that takes time, consideration, and patience for both the therapist and patient. Both behavior change and accommodation on behalf of the client is necessary for sexual difficulties to subside. The client must be accountable in treatment and take an active approach to meeting treatment goals. Motivation, flexibility, and resilience are all essential characteristics for an individual to be successful. Due to the lack of specific research on SSRI induced SD clinicians must use their best clinical judgment when implementing treatments for their client’s sexual concerns. Medication management, psycho-education, and CBT are all considered effective approaches to treat SSRI induced SD. Treatment must be customized to serve the client’s needs and take into consideration all biological, psychological, and social aspects of functioning. Clinicians must keep in mind that treatment can be a long challenging process. The pace of treatment must be determined by the presence of other problems such as chaotic family environment, alcoholism/substance abuse, mental health concerns, and trauma history. Therefore, integration of treatment modalities is an ongoing progression that will unfold over time as other factors related to treatment are addressed.

Implications and Needs for Future Research

Although SSRI SD is far from rare it is still highly unrecognized and under studied. One of the main contributing factors is the hesitation of clients to report sexual difficulties. Conversely, “when individuals are directly queried about such matters, there is a sharp increase in reports of sexual functioning” (Keltner et al., 2002). This exemplifies the importance for mental health practitioners to have an open and accepting outlook on addressing sexual health concerns. Clinicians should remember that even for patients suffering from mental illness
associated with SD, having a good sex life is an important issue (Clayton et al., 2009). To some patients, having a healthy sex life is just as important as having good mental health. In order to insure that patients have access to sexual health resources we must first inform clients that this help is available. “Despite the frequency of antidepressant induced SD noted by clinicians and researchers, this adverse effect is underreported in both the package inserts and in the literature” (Corona et al., 2009). Due to the lack of recognition that this issue exists, there is essentially no information regarding effects on culture, ethnicity, orientation, or other population groups. While assessment of these factors should always be considered, there is no empirical research that discusses how these factors could directly affect treatment.

Empirical research lacks in all areas of SSRI induced SD. Despite all the research that was used in the formulation of this paper, only pharmaceutical modalities of treatment were cited to directly treat SD side effects due to SSRIs. There is very little available research for specifically treating SSRI induced SD that involves a psychotherapeutic approach. This is problematic as many of the pharmaceutical methods of treatment promote medication non-compliance in patients. In addition, many clients may feel cautious to consider medication management strategies such as augmentation that requires the client to take additional medication to reduce sexual side effects. This method would also have considerable limitations when working with elderly clients as many older adults are taking a multitude of other prescription medication for health related concerns. Therefore, the need for future research addressing the effectiveness of psychotherapeutic approaches for treating SSRI induced sexual difficulties is essential for providing the best available treatment. Management strategies that coincide with patient preferences are likely to be most successful but because the evidence regarding management is scarce, it frequently remains a matter of trial and error (Clayton et al.,
2009). Although the modalities for treating primary SD may be effective, evidence based research is still needed. This must be subsequent however to further research on why SSRIs affect SD.

Not only do mental health practitioners have little information regarding effectiveness of psychotherapeutic treatment approaches for SSRI induced SD but they also have a modest understanding on the cause. Theories have been posed regarding the medications effect on the central serotonergic and dopaminergic systems that are thought to effect delayed ejaculation/orgasim but speculation lacks in how SSRIs effect the other phases of sexual response. As discussed, performance anxiety among men is hypothesized to be a mitigating factor in the development of erectile dysfunction. While this conjecture could easily apply to individuals taking SSRIs, there is no research that poses this possibility. Furthermore, there is even less information regarding how a woman’s sexual response cycle could be effected. Despite the understanding that SSRIs are known to effect all phases of sexual response, literature focuses mainly on anorgasmia. The tendency to ignore the other phases of sexual response that are being effected by SSRIs leaves practitioners even more in the dark on how to help their patients. Overall, there is an enormous need for future research to focus on why SSRIs affect sexual response throughout all phases. More research in this direction should also take form in psychological and social aspects of functioning. While the biological effects that SSRIs have on sexual functioning should be a primary concern of understanding, many other factors could be at play as well.

Having a mental illness in the United States carries a considerable amount of social stigma. The effect that this stigma has on an individual, in conjunction to facing the illness itself, has a great deal of effect on a person’s self-concept. The development of a self-concept is a
distinct social process and anything that interferes directly with this social interaction will interfere with the construction of the self-concept (Knudsen, Hansen, Traulsen, & Eskildsen, 2002). When an individual is prescribed SSRIs this directly interferes with the construction of a person’s identity. “As the development of self-concept is a process, the thoughts and feelings an individual have in relation to him or herself can change over time” (Knudsen et al., 2002). When a person is told that they have a mental illness and that they should take prescription medication, a lot about how they view themselves can quickly change. An empirical analysis on women revealed that SSRI users passed through several stages in their medication use that corresponded to the recognition and changes in how they thought and felt about themselves (Knudsen et al., 2002). This analysis of self-concept could have major implications on the direction of future research in correlation to SSRI induced SD.

The empirical analysis on female SSRI users’ self-concept found four stages related to the process of recognition and change in how the women saw themselves in terms of having emotional problems and taking SSRIs. The initial stage is characterized by distress and needing help as the women experienced a loss of self and felt they were unable to function in everyday life (Knudsen et al., 2002). A clinician could easily misinterpret these feeling of helplessness and inability to function as symptoms of depression. The next stage that informants experienced was in relation to the conflict about taking the medication. Knudsen explained that “accepting the medication implied that the woman had to view herself as a person with a biochemical disease that required treatment” (2002). After being treated for a while, the women felt they moved to a stage of improvement where they regained their sense of self and were able to function with the medication. Lastly, the fourth stage was marked by problems related to discontinuing the medication. Women wanted to quit due to “conflicts” related to taking the SSRIs but were torn
between their desire to quit and their fear of returning to the stage of distress (Knudsen et al., 2002). Although the exact “conflicts” that the women experienced were never discussed, sexual difficulties are highly probable.

During the first phase most of the informants reacted by withdrawing and isolating themselves. Many women felt that they were a failure in fulfilling expectations and were dissatisfied with their performances as a mother, wife, or workingwoman (Knudsen et al., 2002). Although sexual interest in this stage was not measured, there is a high likelihood that desire could have also been impacted. In the second stage, the women had to redefine their concept of themselves from being someone with emotional problems to being someone with an illness. The informants felt that by taking SSRIs they would be ascribed to a role that they did not find acceptable in society (Knudsen et al., 2002). Once the SSRIs started to work, women felt that they had a more optimistic view of life but they were still concerned about the medication impacting their identity. This then develops into the final stage where the informants struggled with discontinuation of the medication or dealing with their depressive symptoms (Knudsen et al., 2002). All four of these stages showcase a considerable amount of stress and difficulty with accepting the transition to taking SSRIs. Interestingly, the analysis disclosed that when the women’s emotional issues were described as being biochemical, some of the women mentioned that this explanation made the condition and taking medication more acceptable (Knudsen et al., 2002). The way that psychological and social factors impact an individual’s perception of taking SSRIs could have implications for both medication compliance and sexual functioning. This empirical study gives great precedence to future research on how self-identity and social stigma could affect SD in SSRI users.

**Conclusion**
SSRIs are known to be a safe and effective class of antidepressants but sexual difficulty is a common side effect that can drastically impact the quality of a user's life. Clinicians must be very conscious during the assessment phase and make sure to collect a thorough baseline assessment of functioning. This would ideally be done before the client begins taking SSRIs. During assessment the clinician would want to rule out any factors such as substance abuse, depressive symptoms, anxious symptoms, health concerns, and social issues that may impact sexual functioning. After a baseline has been determined clinicians can evaluate the factors that may be contributing to SD other than the SSRI and a proper diagnosis can be established. The treatment plan may involve an eclectic approach, incorporating multiple modalities to customize to the patient's needs. These approaches will most commonly include medication management, psycho-education, and CBT. In addition, the treatment approach must start with a strong therapeutic alliance between the patient and practitioner. While the concerns surrounding SSRI induced SD are a known problem, little research has been done to understand and treat these side effects. Until empirical based evidence can provide information regarding the best practices for SSRI SD, clinicians must continue to use their best judgment and decision-making skills for developing a person centered plan. Most importantly, open discussion surrounding sexual side effects is essential to this process. Regardless of mental illness, practitioners must remember that sex still matters.
References


