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Review Article

Orgasmic Dysfunction: The Often-Neglected Aspect of Diabetic Care and Its Implication to Nursing

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A R T I C L E I N F O

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A B S T R A C T

Orgasmic dysfunction is a common but often unnoticed complication of diabetes mellitus that has a big impact on the patient quality of life, mental health, and close relationships. Orgasmic dysfunction is the medical term for having trouble achieving an orgasm despite sexual excitement and stimulation.Orgasms are profoundly pleasant sensations of release and involuntary pelvic floor contractions that occur during the peak of arousal. Orgasmic dysfunction is commonly referred to as anorgasmia. It is underdiagnosed and inadequately managed in clinical practice despite being highly prevalent, particularly among patients with long-standing diabetes mellitus.This paper examines the multifaceted etiology of orgasmic dysfunction in both men and women with diabetes, focusing on vascular, neurological, hormonal, and psychologic components. It stresses the need for comprehensive management options that include glycemic control, drug therapies, psychosexual counseling, and lifestyle changes.The implications for nursing practice are significant. As primary care providers, nurses are uniquely positioned to address this often-overlooked aspect of diabetic care. Thus, routine screening, patient education, and interdisciplinary collaboration form vital aspects of nursing practices that increase sexual health and HRQol among people with diabetes. Therefore, sexual health needs to be included in diabetes care if nurses want to give their patients more holistic care, thereby driving toward an all-inclusive approach to managing diabetes that incorporates physical aspects as well as emotional ones.

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Introduction

Sexual health is an important facet of total well-being, yet it is sometimes missed in clinical settings, especially for people managing chronic diseases like diabetes mellitus (DM). Among the different types of sexual dysfunction, orgasmic dysfunction is the most agonizing, affecting both men and women with diabetes mellitus. This dysfunction, which is defined by the difficulty of an individual reaching orgasm or experiencing decreased orgasmic intensity, can have a substantial influence on a patient's quality of life, mental health, and intimate relationships with their spouse (Rubin &Peyrot, 1999). Despite its ubiquity, orgasmic dysfunction in patients with diabetes Mellitus is underreported and undertreated, owing to the stigma associated with sexual health talks and a lack of awareness among healthcare practitioners.

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Healthcare providers, especially nurses, encounter a diverse range of obstacles while engaging in discussions about sexual health with their patients (Pretorius et al., 2022). The problems that individuals may encounter encompass insufficient training and resources, limited time availability, and cultural or personal considerations. The scenario, as mentioned above, presents notable challenges in the identification and management of sexual health issues, resulting in unwarranted reductions in the well-being of individuals with diabetes mellitus (Bilen et al., 2023).

Prevalence and Impact of Orgasmic Dysfunction in Diabetes Mellitus
Orgasmic dysfunction is a common problem among people with diabetes, affecting both men and women. Studies have shown that sexual dysfunction is widespread in diabetic patients, the rates being 42% for women and 50% for men (Fedele et al., 2000). At the same time, there has been much research on erectile dysfunction (ED) being experienced by men, as well as reduced libido among women; very little attention has been paid to orgasmic dysfunctions.For men, this can either take the form of delayed ejaculation, anorgasmia, which means no climax, or retrograde ejaculation, where sperm flows into the bladder instead of out through the urethra.

On the other hand, females who have diabetes may be affected by loss of genital sensations, less lubrication, and absence of orgasmic experiences (Esposito et al., 2014). These might lead to severe emotional distress and cause multiple conflicts in relationships and a lack of self-worth.Diabetes-related orgasmic dysfunctions are not just about sex, but rather their impact is far-reaching, including mental health status as well as quality of life. Emotional well-being depends on sexual satisfaction; therefore, any problems in this regard can contribute to anxiety levels going up or depression cases and strained relationships (De Berardis et al., 2002). As such, addressing orgasmic dysfunction is a critical component of holistic diabetes care.

Mechanisms Underlying Orgasmic Dysfunction in Diabetes Mellitus

The mechanisms underlying orgasmic dysfunction in individuals with diabetes are complex and multifactorial, involving vascular, neurological, hormonal, and psychological factors. Understanding these mechanisms is key to developing effective management strategies.

Vascular Complications

Diabetes is a prominent source of vascular problems, such as endothelial dysfunction and atherosclerosis, which can reduce blood supply to the genital organs. In men, decreased penile blood flow can lead to erectile dysfunction, which is frequently accompanied by orgasmic difficulties. Without enough blood flow, getting and maintaining an erection is difficult, which can delay ejaculation or prevent orgasm entirely (Jackson et al., 2010). However, in women, reduced blood flow to the clitoris and vaginal tissues might reduce sexual excitement and orgasmic response. Reduced lubrication, which is frequently caused by poor vascular function, can result in painful intercourse, further limiting sexual satisfaction (Fedele et al., 2000). These vascular problems are aggravated by uncontrolled blood glucose levels, emphasizing the necessity of glycaemic management in addressing sexual dysfunction.

Neurological Complications

Diabetic neuropathy is another notable reason for orgasmic dysfunction. Neuropathy can impact both peripheral and autonomic nerves, causing reduced sensitivity in the vaginal area. This can appear as delayed ejaculation or anorgasmia in men, diminished clitoral sensitivity, and difficulty attaining orgasm in women (Esposito et al., 2014).Autonomic neuropathy, which impairs the nerves that control involuntary biological functions, can result in ejaculatory dysfunction in men. Retrograde ejaculation, in which semen travels backward into the bladder rather than being released through the urethra, is more likely in men with autonomic neuropathy (Fedele et al., 2000). Although this illness is not hazardous to general health, it can be upsetting for men who want to conceive and may necessitate medical treatment.

Hormonal Imbalances

Diabetes mellitus is associated with hormonal changes that could impair sexual function in both genders. Hypogonadism is a condition characterized by low testosterone levels in men who have type 2 diabetes mellitus. Sexual desire and function largely depend on testosterone. Hence, reduced levels may lead to decreased libido, erectile dysfunction, and anorgasmia (Kapoor et al., 2007). on the other hand, diabetes among women might disrupt the estrogen and progesterone balance, leading to sexual dysfunction. Reduced levels of estrogen might increase the possibility of dryness, vaginal weakening, pain during sex, and less likelihood of orgasm (Esposito et al., 2014). however, hormonal imbalances in both males as well as females have been frequently tied to insulin resistance – a critical trademark for type 2 diabetes. Therefore, addressing these imbalances may improve sexual function.

Psychological Factors

Diabetes has a significant psychological influence, which contributes to orgasmic dysfunction. The stress of managing a chronic illness, combined with concerns about body image, self-esteem, and fear of sexual failure, can have a substantial impact on sexual performance. For instance, depression and anxiety, which are more common in people with diabetes mellitus, have been closely linked to sexual dysfunction, including orgasmic difficulties (De Berardis et al., 2002). Furthermore, the psychological weight of diabetes mellitus can strain personal relationships, causing communication problems and decreased sexual satisfaction. And for many people with diabetes mellitus, sexual health challenges are exacerbated by emotions of shame, guilt, or humiliation, making it difficult to seek assistance from healthcare professionals to address the problem.

Management of Orgasmic Dysfunction in Diabetes

To properly manage orgasmic dysfunction in patients with diabetes mellitus, a holistic approach must be employed that addresses both the physiological and psychological aspects of the condition. Treatment should be individualized and may include a combination of medical, psychological, and lifestyle treatments.

1. Glycemic Control

To manage orgasmic dysfunction and other long-term complications of diabetes mellitus, maintaining optimal glycemic control is important. Hyperglycemia-induced microvascular injury may occur in blood vessels and nerves, resulting in sexual dysfunction. Therefore, lowering blood glucose levels can help mitigate some of the damage caused by diabetes mellitus and reduce or eliminate orgasmic dysfunction (Esposito et al., 2014). healthcare providers play a critical role in educating patients about the importance of glycemic control. Nurses can focus on encouraging the patient to achieve ideal glycemic control because good sexual function can only be maintained in an ideal blood glucose level. Nurses can provide individualized diabetic education for the patient that focuses on self-monitoring of blood glucose levels, disease recognition and treatment, and lifestyle guidance. This will reduce and prevent multiple complications that can lead to orgasmic dysfunction.

2. Pharmacological Interventions

Pharmacological treatments for orgasmic dysfunction in patients with diabetes mellitus may include medications that address underlying conditions such as erectile dysfunction, hormonal imbalances, and depression. The drug Phosphodiesterase type 5 inhibitors (e.g., sildenafil) are commonly prescribed to improve erectile function in men with diabetes mellitus. This drug enhances blood flow to the penis and consequently helps alleviate erectile dysfunction, which may, in turn, reduce orgasmic difficulties (Jackson et al., 2010). Hormonal imbalances, such as low testosterone in men or reduced estrogen levels in women, may be treated with hormone replacement therapy (HRT). Hormone Replacement Therapy (HRT) can help restore normal hormone levels, improving libido and sexual function (Kapoor et al., 2007). However, hormone therapy should be carefully considered on a case-by-case basis, as it may have potential risks and side effects. Furthermore, antidepressants can also be used to treat depression, which is a common comorbidity in individuals with diabetes mellitus, to improve sexual function. However, some antidepressants, particularly selective serotonin reuptake inhibitors (SSRIs), are associated with sexual side effects, including delayed ejaculation and anorgasmia (Rosen et al., 2000). Therefore, healthcare providers should weigh the benefits of treating depression with the potential impact on sexual function and consider alternative therapies if necessary.

3. Psychosexual Therapy

Psychosexual therapy is a significant component of the treatment for people suffering from orgasmic dysfunction, especially when psychological problems are involved. Cognitive-behavioral therapy (CBT) can assist patients in overcoming negative thought patterns, anxiety, and depression that contribute to sexual dysfunction (Rosen et al., 2000). Psychosexual therapy may also address communication and intimacy issues within relationships, assisting couples in overcoming sexual challenges together. Nurses can aid patients by encouraging them to seek help with their sexual health difficulties and referring them to skilled psychotherapists or sex therapists appropriately. Nurses can also help to normalize discussions about sexual health and reduce the stigma that sometimes hinders patients from confronting these issues.

4. Lifestyle Modifications

Lifestyle modification encompasses changing long-term behaviors, usually related to eating or physical activity, and adhering to the new behavior for months or years. Lifestyle changes are a vital component of managing both diabetes mellitus and orgasmic dysfunction. Regular physical activity, a nutritious diet, and weight management are lifestyle changes that can benefit cardiovascular health, lower the risk of diabetes complications, and improve sexual performance (Fedele et al., 2000). Exercise, in particular, has been demonstrated to enhance

blood flow, lower stress, and boost mood, all of which can benefit sexual health.Nurses are well-positioned to educate and support patients who want to make lifestyle changes. This could include working with patients to develop attainable objectives, giving resources for healthy food and physical activity, and assisting patients in overcoming barriers to lifestyle change. Furthermore, nurses should counsel patients to quit smoking and reduce their alcohol usage, as smoking and excessive alcohol consumption are associated with sexual dysfunction (Jackson et al., 2010).

5. Communication and Education

Open communication ensues in a team when its members are empowered to convey their thoughts without any fear of repercussions. Open communication between healthcare providers and patients with diabetes mellitus is vital for managing orgasmic dysfunction. Because of the sensitivity of the subject matter, patients may feel embarrassed or reluctant to discuss sexual issues, so healthcare providers need to create a supportive and non-judgmental atmosphere where patients feel comfortable sharing their worries and concerns. Nurses need to encourage patients to express their thoughts and feelings openly, which can help them engage more and increase their commitment. During communication, the need for regular screening for sexual dysfunction, including orgasmic difficulties, should be emphasized as a routine part of diabetes care (Rubin &Peyrot, 1999). Education is also key to managing orgasmic dysfunction. Patients should be health-educated about the potential impact of diabetes on their sexual health and the available treatment choices. Healthcare providers, especially nurses, should emphasize the significance of glycemic control, lifestyle changes, and psychological support in managing sexual dysfunction and improving the general well-being of a patient.

Implications for Nursing Practice

The management of orgasmic dysfunction in diabetes has important implications for nursing care. Nurses are most often the first point of contact for patients and have an important role in providing a patient-centered approach to care that addresses the physical and emotional aspects of a patient's health. Given the highly sensitive nature of sexual health issues, nurses must approach these conversations with empathy, professionalism, and a nonjudgmental attitude. There are several key areas where nursing practice can make a considerable impact on the management of orgasmic dysfunction in patients with diabetes mellitus.

Assessment and Screening

Nurses are often the first point of contact for patients and are well-positioned to assess sexual health as part of routine diabetes care. Universal screening is recommended, and a thorough medical history and physical examination are the foundations of evaluation and assessment. Laboratory tests and imaging are sometimes warranted, but referral to a sexual medicine expert is suggested if the practitioner is unfamiliar or uncomfortable with treatment (Parish & Pope, 2024). The assessment of sexual health as part of diabetes care will enable the nurse to recognize that sexual dysfunction is a common but often unaddressed issue among patients with diabetes. This may involve asking patients about their sexual health during routine check-ups, using validated screening tools for sexual dysfunction, and ensuring that any concerns are addressed promptly. Some of the commonly used scales which assess multiple domains of sexual dysfunction include the Arizona Sexual Experience Scale or the International Index of Erectile Dysfunction, Sexual Function Questionnaire (SFQ), developed to assess efficacy in female sexual dysfunction (FSD), Sexual Function Evaluation Questionnaire (SFEQ), Female Sexual Function Index (FSFI), Sexual Dysfunction Questionnaire (SDQ), and others.

2. Patient Education

Education is a fundamental aspect of nursing care, and nurses have a key role in educating patients about the relationship between diabetes and sexual health. This includes providing information on the potential impact of diabetes on sexual function, the importance of glycemic control, and the available treatment options for managing sexual dysfunction. Nurses should also educate patients about the role of lifestyle modifications in improving sexual health and overall well-being. While medications or therapies may be required to address certain sexual issues, simple lifestyle changes can greatly improve one's sexual health and intimacy. A holistic approach, which includes food and fitness as well as stress management and communication, can pave the way for a meaningful and intimate life. Regular exercise promotes cardiovascular health and sexual function. Physical activities such as brisk walking, swimming, and yoga boost blood flow throughout the body, including the genitals, which improves arousal and sexual responsiveness. For the best results, the patient can aim for at least 30 minutes of moderate exercise most days (Mohit et al., 2023).

Furthermore, what a person consumes can affect his or her sexual health. Consuming nutrient-dense foods, such as fruits, vegetables, whole grains, and lean meats, benefits overall health and can boost libido and sexual performance (Silva et al., 2019). Chronic stress can reduce testosterone levels, leading to decreased sex drive, libido, and even erectile dysfunction (impotence). Finding suitable stress-management measures, such as having a strong social support network, engaging in regular physical activity, and getting enough sleep each night, can help release tension and improve sexual health. Stress management requires prioritizing self-care and making time for relaxation (American Psychological Association, 2023).

Furthermore, sleep loss can lower sexual desire and arousal in women (Kalmbach et al., 2015). Insomnia, a common sleep disorder, may raise the risk of sexual dysfunction. Insufficient or interrupted sleep has been associated with a higher incidence of erectile dysfunction (Kohn et al., 2020). Numerous sleep disorders have been connected to sexual dysfunction. Obstructive sleep apnoea (OSA), which is defined by breathing pauses during sleep, has been associated with a considerably increased risk of erectile dysfunction (Chen et al., 2016). Studies have connected OSA to female sexual dysfunction (Petersen et al., 2013). Shift work or non-standard hours may disrupt a person's circadian rhythm and raise the risk of sexual problems (Pastuszak et al., 2017).

Poor sleep can also impair sex due to its impact on mental health. Sleep deprivation can increase the likelihood of a dispute with a partner (Wilson et al., 2017; Lastella et al., 2019), leading to increased stress, less closeness, and a less fulfilling sexual experience. Sleep deprivation can lead to impaired decision-making and hazardous sexual behaviour, perhaps resulting in sexually transmitted illnesses or unintended pregnancy. Getting 7-9 hours of uninterrupted sleep can improve one's sexual health and overall well-being. Excessive alcohol and tobacco use can impair sexual function and lower libido. Alcohol can impair arousal and performance, but smoking can reduce blood flow, potentially leading to erectile dysfunction. Virtually all aspects of the human sexual response are affected by alcohol, especially sexual desire and erection (Arackal&Benegal, 2007). Drinking alcohol in moderation and avoiding tobacco products can improve sexual health and intimacy.

A satisfying sexual connection requires effective communication. Sex is one of the most important matters for couples to discuss. Communication about sexuality is essential for the formation and maintenance of satisfying sexual relationships. However, given the sensitivity that comes with being open about sexual concerns, it is no surprise that many people struggle to speak with their partners about the sexual parts of their relationship. When exposing sensitive and intimate personal information in this area, one must be willing to accept the feeling of being at risk and vulnerable to rejection, embarrassment, or humiliation (Montesi et al., 2010).

Nonetheless, when couples are willing to risk rejection and discomfort in order to discuss sexual aspects of their relationship, there is a high possibility for reward. Better sexual communication is linked to increased sexual satisfaction in close partnerships. Talking about sex with a partner exposes previously hidden parts of one's sexuality, such as sexual urges, preferences, concerns, and fantasies. This is particularly crucial in personal relationships, as the revelation of such information is associated with increased sexual satisfaction (Montesi et al., 2010).

Making simple lifestyle adjustments can significantly improve sexual health and intimacy. Prioritizing physical activity, eating a good diet,

controlling stress, getting enough sleep, limiting alcohol and tobacco use, communicating freely with a partner, and seeking professional treatment can all improve sexual well-being and intimate relationships.

3. Multidisciplinary Collaboration

Managing orgasmic dysfunction in individuals with diabetes often requires a multidisciplinary approach, involving collaboration between nurses, endocrinologists, psychologists, and other healthcare providers. Multidisciplinary Teams (MDTs) has been suggested as an intervention to overcome some of the complexities experienced by people with diabetes and comorbidities in terms of diagnosis and treatment. Multidisciplinary Teams (MDT), where healthcare professionals (HCP) from different medical specialtiesmeet and discuss the diagnosis, treatment, and overall patient-centered care, are suggested as one such approach (McGill et al., 2016; Powell et al., 2015).Previously, various MDT approaches have been applied in different diabetes settings with promising results in terms of improved glycemic control (Ni et al., 2019; Siaw& Lee, 2019) and other health-related outcomes.

4. Advocacy and Support

Nurses play an important role in advocating for patients and ensuring that their sexual health concerns are taken seriously. This may involve advocating for the inclusion of sexual health in diabetes care guidelines, supporting patients in seeking referrals to specialists, and providing ongoing emotional support for patients dealing with sexual dysfunction.

Conclusion

Orgasmic dysfunction is a prevalent and distressing condition among patients with diabetes, affecting both men and women. The mechanisms underlying this condition are complex and multifactorial, involving vascular, neurological, hormonal, and psychological factors. Effective management of orgasmic dysfunction requires a multidisciplinary approach that addresses both the physical and emotional aspects of sexual health.Nurses play a critical role in identifying and treating orgasmic dysfunction in patients with diabetes. By promoting glycemic control, offering pharmacological and psychosexual therapies, and encouraging lifestyle modifications, providers can help individuals with diabetes improve their sexual health and quality of life.

Furthermore, open communication and patient education are essential for ensuring that sexual health concerns are addressed in a supportive and comprehensive manner.Given the significant impact of orgasmic dysfunction on the well-being of individuals with diabetes, it is imperative that healthcare providers integrate sexual health into routine diabetes care and provide patients with the resources and support they need to manage this challenging condition.

Declaration of Interests

The author has no conflict of interest to declare.

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