ISSN: 2837-4614

DOI: 10.33552/ARM.2025.01.000523

Archives of Reproductive Medicine

Iris Publishers

Mini Review

Sexual Concerns in Breast Cancer Survivors

Ayda Soltanian, MD[1]* and Tracey O'Connor, MD[2]

[1]*Department of Internal Medicine, University of South Florida, USA*

[2]*Department of Breast Oncology, Moffitt Cancer Center, USA*

Corresponding author: Ayda Soltanian, MD, Department of Internal Medicine, University of South Florida, USA

Received Date: September 26, 2025

Published Date: October 09, 2025

Abstract

Advances in breast cancer detection and treatment have improved survival, yet many survivors face persistent quality-of-life challenges. Sexual dysfunction is one of the most prevalent and distressing concerns, affecting up to 90% of breast cancer survivors (BCSs). Reported difficulties include reduced sexual desire, vaginal dryness, dyspareunia, and body image disturbances, all of which can negatively impact psychological well-being and intimate relationships. Sexual health concerns in BCSs stem from both physical and psychosocial factors. Surgical interventions can influence body image and intimacy, with breast-conserving surgery generally associated with better outcomes than mastectomy with or without reconstruction. Hormonal changes induced by chemotherapy and endocrine therapy contribute to genitourinary syndrome of menopause (GSM), characterized by vaginal dryness, irritation, recurrent infections, and pain with intercourse. First-line management relies on nonhormonal approaches, though selective use of vaginal estrogen, DHEA, and selective estrogen receptor modulators may provide relief in carefully selected patients. Pelvic floor dysfunction and vaginal stenosis also play important roles in dyspareunia, with interventions such as pelvic floor physical therapy and vaginal dilators offering benefit. Beyond physical symptoms, hypoactive sexual desire disorder (HSDD) is highly prevalent, with multifactorial origins. Pharmacologic treatments, including flibanserin and bremelanotide, are available for premenopausal women, though data in BCSs remain limited. Despite the burden of sexual dysfunction, clinical conversations are often hindered by provider discomfort and patient hesitancy. Greater clinical attention, tailored interventions, and inclusive research are needed to address these unmet needs and improve overall quality of life for breast cancer survivors.

Keyword: Breast Cancer Survivors; Sexual Dysfunction; Quality of Life

Abbreviations:

BCS: Breast Cancer Survivors
DHEA: Dehydroepiandrosterone
GSM: Genitourinary Syndrome of Menopause
HSDD: Hypoactive Sexual Desire Disorder

Introduction

Breast cancer is most prevalent type of cancer in females. In the United States, over 2.8 million women are breast cancer survivors, with 7% younger than 50 years old and two-thirds aged 65 years and older. The 5-year relative survival rate has markedly improved from 75% in the 1970s to approximately 91%, due to earlier detection and the introduction of effective systemic treatments [1]. However, there are critical aspects related to quality of life of these patients. Sexual dysfunction is a highly prevalent concern among breast cancer survivors (BCSs), with estimates suggesting that 76-90% of breast cancer survivors report some form of sexual difficulty [2]. A 2023 review identified sexual activity and sexual drive as the most frequently cited unmet needs among survivors, with 52% reporting persistent sexual health concerns [3]. Specific problems that were reported were diminished sexual desire, dyspareunia, vaginal dryness and altered body image. These issues are commonly associated with emotional distress and strain in intimate relationships. Although there have been some studies discussing this topic and suggesting tailored interventions, there remains a paucity of information. In this mini-review, we examine the current evidence on sexual health among cisgender women surviving with breast cancer.

Discussion

Surgery and Body Image

Surgical treatment often affects body image, intimacy, and sexual function. A retrospective study was done to assess the impact of sexual health of patients who underwent breast conserving therapy (BCT) or postmastectomy breast reconstruction (PMBR) via Sexual Well-Being Scores. The investigators found that those who underwent PMBR had significantly lower scores that those who underwent BCT from the preoperative time to 5 years postoperatively [4]. Studies show that women who undergo breast-conserving surgery generally report greater satisfaction with breast appearance, fewer disturbances in arousal and orgasm, and improved sexual adjustment compared with those who undergo mastectomy [5]. Mastectomy, even when combined with reconstruction, can lead to long-term body image concerns, and reduced sexual well-being [6]. Additional complications such as lymphedema may further exacerbate sexual dysfunction and impair quality of life [7].

Genitourinary syndrome of Menopause

Many breast cancer patients develop Genitourinary syndrome of menopause (GSM) due the chemotherapy or endocrine therapy they receive. GSM is a chronic condition caused by estrogen deficiency. Symptoms commonly include vaginal dryness, burning, irritation, and decreased lubrication, which often lead to dyspareunia, urinary urgency, recurrent urinary tract infections, and overall sexual dysfunction. First-line management typically involves nonhormonal therapies such as vaginal lubricants, hyaluronic acid, moisturizers, and pelvic floor physical therapy [8]. For patients with persistent symptoms despite nonhormonal methods, low-dose vaginal estrogen therapy may be utilized, although their use in breast cancer survivors with estrogen dependent cancers requires individualized risk–benefit discussions as their safety in this population is not firmly established. Formulations such as suppositories and rings have been shown to have less systemic absorption than creams [9]. Dehydroepiandrosterone (DHEA), or prasterone, may also be considered; a prospective pilot study assessed use of prasterone in BCS treated with aromatase inhibitors, and found it to be a safe and effective option [10].

Hypoactive Sexual Desire Disorder

While GSM primarily manifests through physical and genitourinary symptoms, breast cancer survivors may also experience disorders of sexual desire, with hypoactive sexual desire disorder (HSDD) representing another common and distressing contributor to sexual dysfunction in this population. In breast cancer survivors, HSDD is common and multifactorial, often arising from treatment-induced hormonal changes, fatigue, body image disturbances, mood disorders, and relationship stress. Unlike transient decreases in libido, HSDD is considered a clinical condition when symptoms persist for at least six months and are not better explained by another medical or psychiatric disorder. Currently there are two pharmacologic options for treatment that are approved by the Food and Drug Administration in premenopausal women. Filbanserin is a 5-HT1A receptor agonist and 5-HT2A receptor antagonist was studied in women receiving tamoxifen therapy. They received the drug over 24 weeks and the study found improved overall sexual function in most women [9,11]. Bremelanotide is a self-injected melanocortin receptor agonist, which has shown improvement in sexual desire in trials, but there is lack of evidence in breast cancer survivors [12].

Barriers to Care

Despite the prevalence of sexual dysfunction, these issues remain underdiscussed in clinical encounters. Barriers include provider discomfort, time constraints and patient reluctance to initiate conversation. Survivors frequently describe sexual concerns as “unmet needs,” with unmet supportive care extending across the survivorship continuum [2]. A 2020 study investigated the barriers reported by women with breast cancer regarding clinical discussions of sexual health. Patients were clustered based on their endorsement of barriers; the two factors were patients’ perceived inability to discuss sexual health (“self-centered barriers”) and patients’ perceptions of providers’ reactions to discussing sexual health (“provider-centered barriers”). The investigators found that women more strongly endorsed self-centered barriers than provider centered, which they report is significant in developing better tools to help these patients feel more comfortable in discussing their sexual concerns [13].

Conclusion

There is a pressing need for more inclusive and rigorous research on sexual health after breast cancer. Sexual health strongly influences other aspects of patients’ well-being: psychological health, relationship satisfaction and quality of life.

Conflict of Interest

No financial interest or any conflict of interest exists.

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