## **Genitourinary Symptoms** in Breast Cancer Survivors: Prevalence, Correlates, and Relationship With Sexual Functioning

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OBJECTIVES: To evaluate (a) the prevalence of genitourinary symptoms, (b) which demographic and clinical factors predict genitourinary symptoms, and (c) the association between genitourinary symptoms and sexual functioning in breast cancer survivors.

SAMPLE & SETTING: A secondary analysis of crosssectional, patient-reported outcomes data from 1.085 breast cancer survivors was conducted.

METHODS & VARIABLES: Prevalence and correlations with demographics, clinical factors, and sexual functioning were identified using descriptive analysis, multivariable logistic regression analysis, chi-square tests, t tests, and Pearson correlation coefficients.

**RESULTS:** Symptoms included vaginal/vulvar irritation, pelvic discomfort, problems with urinary control, vaginal infection, and vaginal bleeding. Younger age, more comorbidities, and taking treatment for menopausal symptoms were significantly related to reporting genitourinary symptoms. Experiencing more symptoms was associated with lower sexual functioning.

IMPLICATIONS FOR NURSING: The prevalence, correlates, and relationship of genitourinary symptoms with sexual functioning supports the assessment and treatment of these symptoms as part of routine care for breast cancer survivors.

**KEYWORDS** breast cancer survivors; genitourinary symptoms; sexual functioning; vaginal atrophy ONF, 48(2), 229-241.

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bout 70% of postmenopausal women experience genitourinary symptoms (Gandhi et al., 2016; Moral et al., 2018; North American Menopause Society, 2020). Although genitourinary symptoms are usually caused by naturally occurring postmenopausal estrogen loss, they can also be caused by chemotherapy and/or endocrine therapy for breast cancer (Mac Bride et al., 2010; North American Menopause Society, 2020). Many breast cancer survivors experience genitourinary symptoms, yet they are underreported (Baumgart et al., 2011), underassessed, and undertreated (Biglia et al., 2020; Cook et al., 2018; Lester & Bernhard, 2009; Moral et al., 2018). Genitourinary symptoms, also called genitourinary syndrome of menopause (Portman & Gass, 2014), are defined as unpleasant symptoms that include urologic and genital symptoms. Urologic symptoms indicate problems with urinary control, such as stress/urge incontinence (Chung et al., 2020), urgency, frequency, dysuria or burning, recurrent urinary tract infections, and dryness (Cook et al., 2018). Genital symptoms include vaginal dryness, vaginal/vulvar irritation, soreness and burning, itching, bleeding, infection, and vaginal/pelvic pain (Nappi & Kokot-Kierepa, 2012; Portman & Gass, 2014). Genitourinary symptoms are associated with lower quality of life among breast cancer survivors and can interfere with sexual functioning (Gandhi et al., 2016; Lester & Bernhard, 2009).

A comprehensive assessment of genitourinary symptoms in breast cancer survivors has not been previously reported (Cook et al., 2018; Lester & Bernhard, 2009). Most studies have focused on a single symptom or the most common symptoms, such as vaginal