Online article: Ingrid Peterson

https://sidekickhealth.com/news/breast-cancer-psychosocial-support-dtx/

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# **Breast Cancer Patients Need Psychosocial Support and a DTx Solution Can Help**

by Dr Ingrid Peterson 7 minute read

Advances in breast cancer treatment are transforming patients' lives leading to a renewed emphasis on quality of life and patient engagement as critical goals in breast cancer care. But an ongoing unmet need for psychosocial support among breast cancer patients may undermine optimal care and limit the impact of recent treatment advances. Effective, <u>patient-centered</u>, <u>digital therapeutics (DTx)</u> provide a leading-edge solution for psychosocial support that can optimize breast cancer outcomes.

# The Psychosocial Impact of Breast Cancer

The patient journey for breast cancer is often marked by anxiety and emotional distress. Chemotherapy, radiation, and surgery, exhaust patients both physically and emotionally. After these high-touch treatments are over, a low-touch at-home treatment cycle begins, during which many patients face physical sequelae and uncertainty about their prognosis.

At this time, patients often experience feelings of <u>isolation</u>, <u>depression</u>, <u>and anxiety</u>. Persistent <u>fear of recurrence</u>—driven by negative, maladaptive thought patterns—is <u>a prominent</u> <u>psychosocial impact of breast cancer</u>, which can diminish the patient quality of life.

#### **Psychosocial Well-being Affects Breast Cancer Outcomes**

<u>Multiple studies</u> have identified anxiety and depression as independent risk factors for breast cancer recurrence or death, acting through both biological behavioral mechanisms. In cancer survivors, anxiety and depression have been linked to maladaptive cognitive responses and unhealthy behaviors, including poor medication adherence, healthcare avoidance or overuse, substance use, sedentary behavior, and social isolation.

<u>Chronic stress</u> may also contribute to dysregulated innate and adaptive immune responses that promote <u>cancer progression</u>. Notably, randomized clinical trial data showed that <u>cognitive behavioral therapy (CBT)</u> significantly increased immune function in breast cancer patients.

### **Connecting Clinicians and Patients: Essential But Challenging**

Studies have shown that a <u>positive clinician-patient relationship</u> and use of digital tools to facilitate it significantly improve the quality of life of breast cancer patients. By encouraging patients' involvement and trust in their cancer care, clinicians can help minimize patients' stress and anxiety. The <u>clinician-patient connection</u> is even more essential in the era of <u>precision oncology</u>, as the outcomes of individualized treatment are less predictable, necessitating a continual reassessment of goals and expectations.

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However, despite wanting to do so, <u>clinicians find it challenging</u> to provide high-quality, patient-centered care, as they struggle with rising patient volumes and the demands of increasingly complex oncology care. Unfortunately, suboptimal communication and low awareness of patients' psychosocial needs are common in cancer care: it's common to <u>underestimate patients' cancer symptoms</u> and to fail to provide mental health referrals for cancer-related distress.

## DTx-A Key Tool for Psychosocial Support in Breast Cancer Care

DTx are gaining prominence as a tool to provide much-needed psychosocial support for cancer patients. In a 2020 scientific publication, the <u>authors note that</u>,

Digital interventions...with easy access and use, may provide low cost, highly accessible wide reach support for cancer survivors with unmet psychosocial needs.

Unlike other digital health products, such as wellness apps, DTx are <u>medical devices</u> that deliver therapeutic interventions shown in clinical research to <u>improve psychosocial</u> <u>outcomes</u> in patients with breast and other cancers. In DTx, a digital algorithm—the active principal driving the therapeutic effect—generates user-responsive treatment modalities, such as CBT, which interact with patients' thoughts, increasing awareness of dysfunctional thoughts and behaviors.

DTx-driven cognitive restructuring algorithms are disease-specific. For breast cancer, algorithms address cancer-related distress, including fear of recurrence, empowering patients to develop coping skills specific to their condition.

The power of DTx is enhanced by digital elements that increase bioavailability of treatment modalities. An appealing user-interface, gamification, and an AI-driven personalized experience are key elements that promote patient engagement and adherence with DTx interventions. DTx may also include modules that facilitate patient-clinician communication and remote symptom monitoring, providing a timely and holistic view of patients' well-being that can influence care decisions.

#### **DTx** is Backed Up By Science

An <u>extensive body of research</u> has shown that mind-body interventions, including CBT, mindfulness, and meditation have a positive impact on the quality of life of cancer patients, and their use is now recommended in clinical guidelines for cancer. In clinical trials, <u>CBT lowered serum cortisol levels in breast cancer patients</u>, with effects lasting at least 12 months. Meta-analyses have demonstrated that CBT and other mind-body practices reduce emotional distress, pain, and fear of recurrence in patients with cancer, including breast cancer.

Notably, <u>CBT can provide long-term benefits</u>, decreasing depressive symptoms in breast cancer patients for up to 15 years after primary treatment. Studies have also shown that mind-body interventions are effective in <u>diverse populations</u>—a key finding, as breast cancer affects individuals from all walks of life. A DTx solution that offers an array of mind-body interventions can give breast cancer patients the support they need.

Using responsive technologies tailored to each patient, DTx offers a holistic solution with modules for pain relief, self-management, and physical exercise.

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<u>Studies of breast cancer patients</u> have reported that DTx significantly improved stress management, quality of life and dietary habits, and significantly lowered fatigue and cancer-related anxiety. Studies also report that digital monitoring in DTx significantly reduces the number of ER visits and improves survival and quality of life in patients with advanced cancer.

### DTx is Integral to Personalized Breast Cancer Care

Recent advances in breast cancer treatments are enabling individualized approaches to care that can dramatically improve patient outcomes, but also add complexity to care. Some treatment regimens are now available as patient-administered oral formulations, which require patient engagement to achieve proper use and adherence in the home setting. New breast cancer therapies are often used long-term, intensifying the need for ongoing clinician-patient engagement to monitor and manage drug toxicities.

Breast cancer care thus increasingly depends on patient self-efficacy and psychosocial well-being to optimize outcomes, yet many patients have unmet psychosocial needs. By skilfully supporting patients' psychosocial needs, DTx adds a critical dimension to personalized breast cancer care that can enhance the outcomes of pharmacological therapy.

DTx based on CBT, such as Sidekick Health, have shown promising results, positively affecting the well-being of cancer patients. A DTx solution can improve the quality of life of breast cancer patients by addressing unmet psychosocial needs of patients on treatment in the adjuvant setting.