

Psychotherapy

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Online First Publication, January 13, 2022. <http://dx.doi.org/10.1037/pst0000390>

CITATION

Kilkus, J. L. (2022, January 13). Applications of Cognitive Behavioral Therapy in Cancer Survivorship. *Psychotherapy*. Advance online publication. <http://dx.doi.org/10.1037/pst0000390>

Applications of Cognitive Behavioral Therapy in Cancer Survivorship

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There are over 17 million cancer survivors in the United States. The nature of cancer and the taxing treatments often required to control or eradicate the disease can leave longstanding psychological and physiological effects, even beyond the completion of treatment. Many factors contribute to successful recovery in cancer survivorship. Attention to adequate management of side and late effects, awareness and integration of cultural considerations, and effective navigation of systemic health-care issues and disparities in care are essential for an effective transition from active treatment. Cognitive behavioral therapy (CBT) is a particularly useful intervention in cancer survivorship, as its components can be implemented to address the biopsychosocial nature of concerns associated with a cancer diagnosis. In addition, CBT can be tailored to the individual, making this an ideal intervention for understanding a patient's unique difficulties within a cultural and societal context. This article presents an overview of the diversity of concerns facing those in cancer survivorship, provides a framework for conceptualizing the presenting concerns in patients with a history of cancer utilizing the biopsychosocial model, and highlights the use of CBT as an intervention to address these concerns via case studies.

Clinical Impact Statement

Question: What is the applied clinical practice question this article is hoping to address? This article hopes to address the question of how psychotherapists can approach the intersection of health and psychological concerns facing individuals impacted by a cancer diagnosis. **Findings:** How would clinicians meaningfully use the primary findings of this article in their applied practice? The article provides a framework for conceptualizing the presenting issues of cancer survivors and highlights the use of a biopsychosocial intervention, cognitive behavioral therapy, in psychotherapy with this population. **Meaning:** What are the key conclusions and implications for future clinical practice and research? This article illustrates the use of an effective and flexible intervention in an oncology population that can be directly applied to future clinical practice with a variety of presenting concerns. **Next Steps:** Based on the primary findings and limitations of this article, what are the future directions to be explored in clinical practice and research? Future directions to be explored include tailoring psychotherapy interventions to cancer stage and type as well as implementation of evidence-based interventions in cancer survivorship.

Keywords: cancer, psycho-oncology, cancer survivorship, biopsychosocial model, cognitive behavioral therapy

“There is no profit in curing the body if, in the process, we destroy the soul.” An early leader at the City of Hope treatment and research facility, Samuel H. Golter’s words highlight the challenge in the attempt to eliminate disease while also honoring the humanity and quality of life of the individuals receiving medical care. As a psychologist specializing in psycho-oncology, I regularly encounter the shifting balances inherent in treating this devastating disease. Psycho-oncology is the interdisciplinary field that is involved in

studying and addressing the psychological, physical, social, and behavioral aspects of cancer. Providing psychological care for cancer requires holding space for innumerable intersections of ideas and experiences—optimism and realism, acceptance and change, science and faith, the physiological and the emotional. Psycho-oncology above all demands flexibility: The nature of the disease itself, its treatment, and its evolution over time often necessitates repeated reconceptualization and shifting treatment focus.

Cancer is defined as a group of diseases characterized by the uncontrolled spread of abnormal cells (American Cancer Society, 2020). Although cancer is often thought of as one disease, its presentation varies widely in its location in the body and ranges from an acute immediate threat to a manageable chronic illness (Institute of Medicine, 2008). As a result, the experience of a diagnosis and treatment for cancer is highly variable. Even within the same type of cancer, the treatment course may be completely different from one patient to another. For example, some prostate cancers

Jennifer L. Kilkus served as lead for writing – original draft, review, and editing.

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are slow growing, and active surveillance or “watchful waiting” may be the only treatment recommended in the short term, whereas fast growing types may require immediate and aggressive treatment (American Cancer Society, 2019a). Having an indolent cancer that does not require immediate treatment for some can be a relief, whereas others may become hypervigilant of physical sensations and symptoms as a signal that the cancer is spreading uncontrolled. Those with a more aggressive tumor type may focus more on the physical impact of the treatments themselves or worry about recurrence. As a result of this variability, the psychological impact of a cancer diagnosis often depends on an individual’s unique experience with the disease and its treatment. The treatment options for cancer are physically taxing and can include any combination of surgery, chemotherapy, immunotherapy, radiation, and adjuvant therapies from a period of months to years. These therapies commonly cause a range of acute side effects that last during treatment and may resolve after treatment is completed. However, late effects—defined as treatment impacts that persist in the months and years post treatment—can lead to significant functional and quality of life impairment well beyond the completion of active treatment (Treanor & Donnelly, 2016). Improvements in treatment effectiveness and reductions in cancer incidence, primarily due to reduction in tobacco use and improved detection, has resulted in over 2.9 million fewer cancer deaths over the past 2 decades (American Cancer Society, 2020). As a result, there is a higher number of living cancer survivors with ongoing physical and psychological sequelae of the disease or its treatment beyond the acute treatment phase (Recklitis & Syrjala, 2017), increasing the amount of exposure that psychotherapists may have to the complex issues that can arise in cancer survivorship.

The 2006 report from the National Research Council, *From Cancer Patient to Cancer Survivor: Lost in Transition*, was fundamental in highlighting the critical period of time following active treatment for cancer. The report acknowledged that many cancer survivors will face permanent and disabling symptoms post treatment and emphasized the need to coordinate a specific after care plan for cancer survivors with the aim to prevent recurrence and adequately manage the lasting effects of cancer treatment. The challenge of implementing these practices persists today. The 2018 follow-up report to *Lost in Transition, Long-Term Survivorship Care After Treatment: Proceedings of a Workshop*, provides an update on progress in cancer survivorship care since 2006 and outlines areas for improvement. The report repeatedly highlights the need for the provision of evidence-based interventions for prevention and treatment of distress, side and late effects of cancer therapies, health promotion, and prevention of recurrence, offering opportunities for the engagement of skilled psychotherapists in survivorship care (National Academies of Sciences, Engineering, & Medicine, 2018).

Cancer patients are commonly considered cancer survivors from the time of diagnosis until the end of life, regardless of current disease or treatment status (National Cancer Institute, 2020a). Although this is the typical term used when describing an individual with a history of cancer, both in research and in clinical practice, it is important to note that the term “survivor” is not accepted by all patients (Berry et al., 2019). Using one term to describe the incredibly varied experience of individuals who receive this diagnosis can be problematic. Some reject the term, as they feel it should be reserved for others with more advanced cancers,

whereas others are concerned about being labeled and do not wish to include “cancer survivor” as part of their identity (Berry et al., 2019; Smith et al., 2016). I will use the terms “cancer survivor” and “cancer survivorship” in this article to denote the experience of cancer along a continuum that includes diagnosis to end-of-life, but do so while acknowledging the ongoing conversation around these terms.

This article has three goals: first, to present an overview of the diversity of common concerns facing those in cancer survivorship that may arise in psychotherapy; second, to provide a framework for conceptualizing presenting concerns in patients with a history of cancer by utilizing the biopsychosocial model; and third, to highlight the application of cognitive behavioral therapy (CBT) to these concerns via a series of case studies. In addition, the role of cultural considerations and health-care disparities in both presenting concerns and intervention approaches is discussed. It is my hope that this article will provide a greater understanding of the experience of cancer survivorship along with practical tools for acknowledging and addressing the interrelated biological, psychological, and social processes that impact the needs of these patients (Institute of Medicine, 2008).

Common Concerns in Cancer Treatment and Survivorship

Psychological and Psychiatric Concerns

Distress

Results from pooled studies suggest that around 40% cancer patients experience significant distress following diagnosis and treatment (Carlson et al., 2012), with some estimates as high as 52% (Mehnert et al., 2018). Like with many aspects of the cancer experience, the experience of distress varies, both by disease characteristics such as cancer type and stage as well as demographic characteristics such as patient age and gender (Mehnert et al., 2018). The National Comprehensive Cancer Network Clinical Practice Guidelines in Oncology for distress management define distress as “. . . a multifactorial, unpleasant experience of a psychologic (i.e., cognitive, behavioral, emotional), social, spiritual, and/or physical nature that may interfere with the ability to cope effectively with cancer, its physical symptoms, and its treatment” (Riba et al., 2019). The term “distress” was chosen intentionally as an attempt to reduce stigmatization of psychological or emotional concerns and refers to a wide continuum, from typical adjustment and existential concerns to diagnoses of psychiatric conditions such as major depressive disorder and posttraumatic stress disorder and psychiatric crises such as steroid-induced mania and delirium (Institute of Medicine, 2008; Riba et al., 2019; Roth & Weiss, 2010). Lack of identification and adequate treatment for distress is of significant concern in oncology, as research has linked high distress to longer hospital stays, poor quality of life, and barriers toward adherence to treatment and screening (Riba et al., 2019). As such, distress in oncology has been referred to as “the sixth vital sign,” (Bultz & Carlson, 2005) and screening for distress and connection to appropriate resources is now considered a standard part of oncology care (Institute of Medicine, 2008; Riba et al., 2019).

There are numerous aspects of the cancer experience that may cause distress. For many, the end of active treatment is the

beginning of attempts to transition back to normal work and home routines; however, this occurs alongside the often persistent impact of cancer treatment on nearly all domains of life (National Research Council, 2006; Treanor & Donnelly, 2016). A leading cause of distress in cancer survivors is physical disability (Banks et al., 2010), with significant costs in impacts to quality of life, lost productivity and wages, caregiving burden, emotional well-being, and more (Silver, Baima, & Mayer, 2013). Often co-occurring with physical disabilities from treatment are significant physical changes to the body that may be temporary or permanent. Cancer survivors often need to adjust to change in physical appearance, such hair loss, weight fluctuation, surgery scars, and disfigurement, or may need to adapt to the use of an ostomy (Lehmann et al., 2015). This can manifest in body dissatisfaction, a reduced sense of physical competence, feelings of loss of control of one's body, or a shift in perception to the body as a threat to health (Hopwood & Hopwood, 2019; Lehmann et al., 2015). Fear of cancer recurrence (FCR) is another commonly reported cause of distress in cancer survivors and has been identified as one of the most prevalent unmet needs of survivors (Tauber et al., 2019). Although FCR may have some benefit by motivating survivors to engage in ongoing surveillance and modifying health behavior, it may also lead to preoccupation with physical symptoms and rumination about recurrence, worsening distress (Simard et al., 2013). FCR also appears to be driven in part by the occurrence and intensity of physical symptoms, with survivors with more physical symptoms reporting higher FCR (Simard et al., 2013). It is apparent that the physical impact of cancer treatment is a significant contributor to distress throughout the treatment continuum and does not necessarily resolve at the end of active treatment.

Of those individuals that identify distress at some point during their treatment trajectory, some will have symptoms that meet criteria for a diagnosable psychiatric condition. Data from the World Mental Health Surveys estimate 12-month prevalence rates of anxiety and mood disorders to be 18.4% among patients with active cancer and 14.6% among cancer survivors, in contrast to 13.3% of cancer-free respondents (Nakash et al., 2014). It has been estimated that between 20% to 25% of these diagnoses are attributable to the diagnosis and treatment itself (Dekker et al., 2015). Identifying clear prevalence rates of psychiatric disorders in oncology has been a challenge. For example, reported prevalence for major depressive disorder has been cited at anywhere between 3% and 38% (Massie, 2004). Differences in assessments, definitions, and populations measured have contributed to this variability. In addition, measurement of depression in cancer patients can be confounded by symptoms that may be a consequence of treatment effects, such as fatigue and weight changes. Identification of depression in oncology may be more effective when relying on symptoms such as depressed mood, anhedonia, or feelings of guilt and low self-worth rather than neurovegetative symptoms (Mehta & Roth, 2015). However, research is clear that disease characteristics and treatments play a role in the development of depression, with those with more advanced disease and greater functional impacts from disease or treatment being most likely to experience symptoms of depression (Massie, 2004). It is also clear that there are substantial consequences to these conditions being untreated or undertreated, as evidence points to a higher mortality rate in cancer patients with mental illnesses (Davis et al., 2020; Musuza et al., 2013; Perini et al., 2014).

Psychiatric Emergencies

As cancer survivors with mental illness are at a higher risk of cancer-related mortality, they are also at higher risk of death by suicide. A recent analysis of over 8.6 million cancer patients estimates a fourfold increase in the risk of death by suicide relative to the general population (Zaorsky et al., 2019), and patients with a psychiatric history are more likely to consider suicide (McFarland et al., 2019). Suicidal ideation estimates vary significantly, with one estimate as high as 46% in a population of patients with advanced cancer (Cheng et al., 2014; Kolva et al., 2020). People with certain cancer types, such as lung cancer and head and neck cancer, have been identified as being at a higher risk for completed suicide (Zaorsky et al., 2019). This is likely attributable to a multitude of factors including disease burden, such as functional impairment or uncontrolled pain, and that these cancers tend to occur most often in older men—the demographic among cancer patients most likely to die by suicide (McFarland et al., 2019; Pessin et al., 2010; Zaorsky et al., 2019). Psychological factors such as perceived burdensomeness, loss of control, lack of social support, demoralization, and existential concerns are also potential risk factors that may increase vulnerability to suicide (Pessin et al., 2010). Risk for suicide in cancer shifts over time, with the highest risk occurring in the first year following diagnosis and, in particular, the first week after receiving a diagnosis. This elevated risk decreases over time, but generally stays high in the first 5 years after diagnosis (McFarland et al., 2019).

Screening and clear assessment is essential in addressing suicidality in an oncology population. Just as in risk assessment with nonmedically ill patients, it is necessary to evaluate predisposing factors, frequency, intensity, duration of suicidal thoughts; any suicidal plans or access to means to complete plans; and lack of protective factors (Rudd & Joiner, 1999). However, therapists must also be aware of the risk factors specific to cancer as noted earlier as well as related but distinct constructs from suicidal ideation, such as a desire for hastened death and fear of pain and loss of dignity in the dying process (McFarland et al., 2019). Thorough assessment allows for a greater understanding of the emotions and concerns underlying these desires, which then provides essential data for further intervention. A patient may have a wish to die as a result of fear of the dying process, uncontrolled pain, or feelings of burdensomeness: Each of these wishes may guide a psychotherapist toward different psychological interventions or to facilitate connection to palliative or hospice care. Decision-making regarding intervention should carefully assess the immediacy of risk, as interventions such as psychiatric hospitalization may not be feasible for severely medically ill patients (Breitbart et al., 2006) and instead may require heavier reliance on support systems and coordination with the medical team.

In addition to increased risk of suicide, it is particularly important for psychotherapists to be familiar with risk factors in medically ill patients that may increase the likelihood of a psychiatric emergency. Patients with advanced disease or with ongoing physical symptoms that are not adequately treated (pain, nausea) are at higher risk for developing acute distress and delirium (Roth & Weiss, 2010). In addition, progression of disease, such as brain metastasis, or the impact of corticosteroid treatment, may mimic psychiatric symptoms such as mania (Roth & Weiss, 2010). An otherwise stable patient with a change in mental status, such as a

sharp increase in anxiety, confusion, anger, or impulsive behavior, should be encouraged to follow up with their oncologist, as this may be indicative of metastasis or other acute medical concern. Of course, any apparent emergency, psychiatric or otherwise, should be treated as such, and coordination with family or emergency services may be necessary.

Side and Late Effects of Treatment

As previously noted, improvements in cancer screening and treatments have resulted in improvements in survival over the last 2 decades. However, these improvements in survival often result in physical symptoms in the acute treatment phase that can become permanent after treatment is complete and can significantly interfere with quality of life. These difficulties can range from temporary sleep interruption to impairment of major organs or increased risk of a secondary cancer (Institute of Medicine, 2008). These symptoms often cluster together; for example, fatigue and sleep disruption often co-occur and may share underlying mechanisms (National Academies of Sciences, Engineering, & Medicine, 2018). Management of these symptoms is not only important because of the distress and quality of life impacts they may cause but also due to the many downstream effects these untreated symptoms may have, including difficulty adhering to adjuvant treatments or inability to return to work (Henry et al., 2012; Sun, Shigaki, & Armer, 2017). This section outlines the most common persistent late effects of treatment in cancer survivorship that may be modifiable via targeted intervention in psychotherapy.

It is important to mention that although psychotherapy can often play a role in more effective management of these symptoms, there could also be treatable medical concerns that are contributing to these symptoms. Thyroid dysfunction, anemia, and lymphedema are examples of the common potential contributors following cancer treatment. Referral to an appropriate provider to rule out underlying medical concerns may be needed in some cases. In addition, there are a multitude of specialty oncology providers that are invaluable in addressing care from a more team-based approach: Psychiatry, physical therapy and rehabilitation, social work, and chaplaincy are just a few. Several treatment guidelines for the symptoms outlined in the following sections are provided as resources for further reading at the conclusion of this article and outline specific medical concerns to be aware of as well as potential follow-up interventions and suggested medical specialties to engage.

Fatigue

Fatigue is the most common symptom reported by cancer survivors and can be significantly impairing to activities of daily living (Institute of Medicine, 2008). Cancer-related fatigue is more intense and pervasive than “typical” fatigue and is not relieved by sleeping or resting (Bower, 2019). In fact, it has been characterized as an “overwhelming and sustained exhaustion” (Cella et al., 1998) that impacts multiple domains, including the social, occupational, functional, and emotional aspects of one’s life (Silver, Baima, & Mayer, 2013). Approximately one third of patients report persistent fatigue that significantly impairs quality of life even years after completing treatment (Bower et al., 2014; Oerlemans et al., 2013). Risk factors for cancer-related fatigue include pretreatment fatigue and the type of cancer treatment received, with those receiving chemotherapy at higher risk for persistent

fatigue (Donovan et al., 2004; Goedendorp et al., 2013; National Academies of Sciences, Engineering, & Medicine, 2018).

The causes of cancer-related fatigue are not clearly understood. Currently, it is viewed as a multifactorial process that involves a combination of interacting physiological, psychological, and clinical factors (Thong et al., 2020). Treatment may impact a number of bodily systems that can create or exacerbate cancer-related fatigue, such as activation of the proinflammatory cytokine network and dysregulation of cortisol levels or the development of anemia. Other relevant contributors include preexisting medical or psychiatric comorbidities or psychological factors such as rumination and catastrophizing (Thong et al., 2020).

Sleep

Sleep disruption often co-occurs with fatigue, with incidence rates ranging from 23% to 60% of cancer patients diagnosed with insomnia (Yue & Dimsdale, 2010). Disrupted sleep often lasts well into survivorship, with estimates of sleep problems 10% to 27% higher among long-term cancer survivors compared to the general population (Arndt et al., 2017; Otte et al., 2015; Slade et al., 2020). Similar to fatigue, the etiology of these symptoms is multifactorial and can include any combination of disease and treatment-related factors (anemia, pain, inflammation, disruption in circadian rhythms, neuroendocrine disruption, to name a few; Bower, 2019; Breitbart & Alici, 2010). Poor sleep is of particular concern for cancer survivors, as sleep disruption is related to other physical and emotional impacts of cancer, such as pain, fatigue, and distress (Lin et al., 2013), and could contribute to poor healing or the increased risk of cancer recurrence (Christian et al., 2006; Palesh et al., 2014; Otte et al., 2015).

Pain

Pain is also a common and impairing problem for cancer survivors, with over two thirds reporting severe pain at some point in their treatment (Breitbart et al., 2010). This number increases in those with advanced and terminally ill disease and can vary across disease site (Foley, 1975). Similar to fatigue and sleep, many survivors have persistent pain beyond the completion of active treatment (Carlson et al., 2013). Cancer pain can have a variety of sources: Tumors pressing on nerves, organs, or bone; postsurgical pain; peripheral neuropathy from chemotherapy treatments; or skin burns from radiation treatment are common sources of cancer pain (American Cancer Society, 2019b; Portenoy & Lesage, 1999). Cancer pain can be acute and resolve with the resolution of the trigger, or may be chronic and incapacitating (Breitbart et al., 2010).

Clear conceptualization of pain in cancer is essential, as management of acute versus chronic pain generally requires different interventions with different expected outcomes. Acute pain is typically adaptive and often responds well to short-term NSAID or opioid management, whereas chronic pain is often much more complex, is ongoing, and may require multidisciplinary teams for effective management (Novy & Aigner, 2014; Syrjala et al., 2014). Distinguishing cancer-related pain from chronic noncancer pain is also necessary, as there is evidence that the use of opioids is less helpful with this type of pain relative to cancer-related pain (Scholten, 2013; Von Korff et al., 2011). Poorly managed cancer pain is associated with poor quality of life, depression, desire for

hastened death, and suicidality (McFarland et al., 2019; Syrjala et al., 2014) and is the most expensive symptom experienced by cancer survivors due to the impact of numerous factors including lost wages and productivity and high health care utilization (Li et al., 2018; Neufeld, Elnahal, & Alvarez, 2017).

Cognitive Impairment

More recently, the impact of cancer treatment on cognitive functioning has been more seriously studied. Cognitive changes after chemotherapy, known as “chemo brain” or “chemo fog,” is a common complaint among cancer patients, with most studies estimating between 15% and 25%, with some estimates as high as 61% (Ahles, 2012). These changes tend to manifest in difficulty with attention, concentration, working memory, and executive function. For a significant proportion of these patients, this cognitive decline is impairing to a degree that effective functioning in work, education, and home is no longer possible (Institute of Medicine, 2008; National Comprehensive Cancer Network, 2020). Again, as with other common side and late effects, the etiology of treatment-related cognitive impairment is thought to be multifactorial, with some contribution of gray and white matter volume loss, cytokine deregulation, and hormonal changes as the result of treatment (National Academies of Sciences, Engineering, & Medicine, 2018). A number of factors influence risk for persistent impairment following treatment, including older age, mood disorders, cognitive reserve, sleep disorders, and fatigue (Ahles, 2012; Hardy et al., 2018).

Sexual Functioning

Perhaps underrecognized, sexual functioning is also often impacted by cancer treatment as a result of postsurgical body changes, hormonal changes, fibrosis or inflammation from radiation treatment, and changes in mucosal linings from chemotherapy (Roth, Carter, & Nelson, 2010). Symptoms of sexual dysfunction can manifest as low desire, trouble staying aroused or achieving orgasm, and pain during sex (National Comprehensive Cancer Network, 2020). Ongoing distress or mental health concerns, poor sleep, fatigue, untreated pain, relationship stress, and body image concerns are all also factors that could influence willingness and ability to engage in sexual activity (Bober & Varela, 2012; DeSimone et al., 2014). Estimates of difficulties in sexual functioning vary widely depending on the cancer and treatment type reviewed (Sadovsky et al., 2010). Sexual intimacy is often an important part of quality of life and may be overlooked in medical follow-ups due to prioritization of other treatment-related issues or patient and provider discomfort (Schover, 2005).

Reducing Risk of Recurrence

Another opportunity for intervention in cancer survivorship is targeting health behaviors to reduce the risk of cancer recurrence. An unsettling reality for patients who have been diagnosed with cancer is the possibility of another diagnosis of cancer in the future, either through a recurrence of a primary cancer or discovery of a second cancer (Aziz, 2007; Institute of Medicine, 2008). Close follow-up with an oncology team is recommended, as ongoing screening and surveillance is encouraged throughout survivorship to allow for the earliest possible intervention in the case

of a recurrence or secondary cancer (Cohen et al., 2016; El-Shami et al., 2015; Runowicz et al., 2016; Skolarus et al., 2014). In addition, attention to lifestyle factors that may increase cancer risk is essential for patients in the survivorship phase. Behavioral changes such as management of obesity and tobacco cessation are recommended to reduce the risk of recurrence (Cohen et al., 2016; El-Shami et al., 2015; Runowicz et al., 2016; Skolarus et al., 2014), and a large proportion of cancer patients indicate that they are interested in modifying lifestyle behaviors following cancer diagnosis (Demark-Wahnefried, 2010). Psychotherapists can serve an important role in assisting patients in reducing modifiable risk factors for cancer recurrence.

Culturally Competent Psycho-Oncology

Disparities

It is imperative that psychotherapists are aware of systemic biases that may perpetuate disparities in health-care treatment, exacerbating the difficulty in navigating cancer care. Although individuals from any racial, ethnic, socioeconomic, or cultural background can be diagnosed with cancer, the experience of the diagnosis can vary widely depending on these factors. It has been well-established that individuals with limited economic means are less likely to have access to preventative care and are thus more likely to be diagnosed at a later stage, leading to worse treatment outcomes (Institute of Medicine, 2008). However, this research has identified more frequent recurrence and higher mortality rates among racial and ethnic minority groups even within groups with equal health-care access (Betancourt et al., 2003; Braveman, 2012), demonstrating that lack of access does not fully explain these disparities.

A 2003 review by Betancourt, Green, Carillo, & Ananeh-Firempong II presented a multilevel analysis to organize the sociocultural barriers to quality health care identified in the literature: organizational barriers, structural barriers, and clinical barriers. This work offers a basic structure for understanding the impact of these barriers on subsequent health outcomes. Organizational barriers speak to the lack of representation of racial and ethnic minorities in health-care leadership and the health-care workforce. Research suggests that patients are more satisfied with their care and perceive their care as higher quality when their race or ethnicity is concordant with their health-care provider, and patient-provider interactions are more in line with patient cultural norms (Betancourt et al., 2003; Saha et al., 1999). Thus, this lack of representation may potentially exacerbate a historically warranted lack of trust in the health-care system and subsequent reduction in health-care engagement. Structural barriers refer to complex and bureaucratic processes in navigating the health-care system that unequally impact people of lower socioeconomic status and minority groups. This may range from lack of interpreter services to inflexible appointment times, creating challenges for patients to actively participate in the close follow-up care necessary for effective cancer survivorship. Lastly, clinical barriers point out the difficulties that can arise in the interactions between the patient and family and the health-care provider. Differences in attitudes toward medical care, health beliefs, and differing levels of trust in the health-care system may lead to poor adherence as well as result in stereotyping or biased treatment of patients by providers based

on patients' sociocultural background (Betancourt et al., 2003). These identified barriers highlight the multilayered and interacting challenges that ultimately result in poorer medical outcomes for patients of color, sexual and gender minorities, and women (Balsa & McGuire, 2001; Betancourt et al., 2003; FitzGerald & Hurst, 2017; Penner et al., 2014; Rosenkrantz et al., 2017).

Cultural Awareness

Cultural factors shape a wide variety of beliefs, knowledge, and values that intersect with an individual's experience of and participation in their health care. Adequate conceptualization includes recognition of the role these factors play in how an individual understands their diagnosis, both in the "how" and "why" of its development and subsequent treatment as well as their ability to process and emotionally reconcile this diagnosis (Strada & Sourkes, 2010). For example, someone with a cultural background that emphasizes personal responsibility for health may experience stigma and shame when diagnosed with cancer. This may lead to a reluctance to access potential avenues for social support or compound the already challenging emotions arising in response to a cancer diagnosis. This is also common in certain diagnoses such as lung cancer. In the United States, a diagnosis of lung cancer presumes a tobacco use history and thus a disease that could have been prevented resulting in blame of the individual and reduced empathy (American Lung Association, 2014). As mentioned earlier, therapists are also likely to encounter individuals who have experienced health-care disparities, including biased treatment, further exacerbating the stress experienced in navigating a cancer diagnosis. Because cultural factors can significantly influence a survivor's perception of their disease, their treatment, and their role as a "patient" in the health-care system, assessment of these factors is critical as part of a thorough understanding of a survivor's concerns in psychotherapy.

Culturally competent psycho-oncology practice involves not only awareness and understanding of health-care disparities and cultural differences in health beliefs but also explicit inquiry about a survivor's experience of these issues and the use of appropriately adapted interventions in response. This allows for the identification of psychotherapy as safe space for addressing these concerns and validates the survivor's experience (Graham, Sorenson, & Hayes-Skelton, 2013). It is common, for example, to encounter cancer survivors who feel their health-care providers are not taking their preferences into account in decision-making. A psychotherapist attending to culturally relevant issues could ask if the survivor feels their identity is playing a role in their difficulty and utilize an intervention such as cognitive restructuring to address these concerns. It is essential in implementing this type of intervention to take care to avoid questioning the validity or truthfulness of the individual's experience and focus the intervention on challenging internalized negative views of themselves based on stereotypes or biases (Graham-LoPresti et al., 2017).

The Biopsychosocial Model

The lingering impact of cancer and cancer treatment has been referred to in the literature as "the price of survival" (Ganz, 2002). It is evident in the description of the numerous concerns facing cancer survivors that this impact goes beyond adjustment to cancer and resolution of emotional aftereffects and can shape the trajectory of

an individual's quality of life and level of functioning well beyond the conclusion of active treatment. The nature of the often co-occurring and overlapping symptoms throughout many of the most common side and late effects experienced by survivors clearly highlights the need for clear and holistic conceptualization of individuals presenting in active cancer treatment or survivorship. The biopsychosocial model is a helpful lens through which to understand the complexity of the impact of cancer treatment on well-being (Engel, 1977; Institute of Medicine, 2008). This model developed from the recognition that relying on biological factors alone for understanding health and disease are not adequate. Health instead can be understood from an interaction of biological influences alongside psychological and social influences (Engel, 1977).

The biopsychosocial model outlines the interrelated factors that influence vulnerability to and recovery from illness, including psychosocial issues (mood, attitudes/cognitions, personality, coping style, social support), biological factors (heredity, age, sex, injury), health behaviors (sleep, diet, smoking behavior, screening), and life stress (trauma, socioeconomic status, minority group status; Lutgendorf & Costanzo, 2003). Of note, the biopsychosocial model as it has been applied in health research has been criticized for the "social" domain receiving less attention than biological and psychological factors (Suls & Rothman, 2004). A more recent version of the model proposed by Lehman, David, and Gruber (2017) highlights the influence of contextual factors (culture, norms, policies, and values) on health. In addition, their model incorporates Bronfenbrenner's work on micro, meso, and exosystems, providing a broader understanding of the influence of structural and social factors such as health-care policy, experiences with discrimination, and neighborhood and home environment on stress and subsequent health outcomes.

A primary pathway that these factors influence health is through influence on the stress response in the body. Stressors play a critical role in the immune system via their interaction with the sympathetic nervous system and the hypothalamic-pituitary-adrenal axis. Immune downregulation that occurs during acute stress, such as proinflammatory processes triggered by norepinephrine and cortisol, is generally short-lived and returns to homeostasis once the stressor is resolved (Brothers et al., 2010; Engert, Grant, & Strauss, 2020). However, chronic stress has a significant impact on the body by suppressing immunity and increasing nonspecific inflammation (Engert, Grant, & Strauss, 2020). Allostatic load is the accumulation of physiological disturbance as a result of repeated or chronic stress (Lehman, David, & Gruber, 2017; McEwen, 2005). Research has suggested that differences in allostatic load as a result of social and structural factors such as socioeconomic status, housing and food insecurity, racism, and exposure to violence contribute to health disparities and health outcomes (Carlson & Chamberlain, 2004; Duru, Harawa, Kermah, & Norris, 2012). This likely compounds the stress already inherent in navigating a cancer diagnosis and treatment. In addition, chronic stress also creates a downstream effect on behavior, as proinflammatory cytokines produced in response to stress have been linked to "sickness behaviors," such as fatigue, depressed mood, and lethargy that may reduce engagement in positive health behaviors including treatment compliance (Anisman & Merali, 2003; Brothers et al., 2010).

An example of the need for clear conceptualization utilizing the biopsychosocial model is the common experience of premature menopause in young breast cancer patients. Numerous treatments for breast cancer (some types of chemotherapy, adjuvant hormonal

treatments, prophylactic oophorectomy) may result in premature ovarian failure, or early menopause (Howard-Anderson et al., 2012; Rosenberg & Partridge, 2013). Reduction of estrogen levels as a result of premature ovarian failure is accompanied by a multitude of symptoms impacting quality of life, including weight gain, fatigue, sleep disturbance, and changes in mood (Rosenberg & Partridge, 2013). Any of these physical symptoms may precipitate or perpetuate the others: For example, fatigue can precipitate depression, and depression can exacerbate fatigue. Weight gain may contribute to lower energy, which in turn becomes a barrier toward participating in physical activity that could mitigate weight gain. Individual and cultural narratives around these symptoms may also influence their severity and resolution; a cultural narrative that emphasizes “a stiff upper lip,” for example, could result in feelings of shame and withdrawal from engagement with self-management strategies or initiation of medical or psychological services that could address these difficulties. Effective treatment for a complex scenario such as the one described earlier requires attention to the multiple factors working in concert to inhibit better quality of life.

Cognitive Behavioral Therapy: A Biopsychosocial Approach

Perhaps one of the most extensively studied interventions in oncology, CBT has been accepted as an efficacious treatment for mood symptoms and physiological sequelae of the disease and treatment such as pain, fatigue, and insomnia in both an individual and group format (Antoni et al., 2001; Aricò et al., 2016; Gielissen et al., 2006; Mishel et al., 2005; National Academies of Sciences, Engineering, & Medicine, 2018; Sandler et al., 2017; Tatrow & Montgomery, 2006). Treatment guidelines for numerous concerns of cancer survivors, including cancer related distress, pain, fatigue, and sleep, all cite CBT as a recommended intervention for management of these symptoms (American Society of Clinical Oncology, 2014; Howell et al., 2013; National Comprehensive Cancer Network, 2020; Riba et al., 2019).

CBT includes several key components: cognitive restructuring, where the emphasis is on identifying and modifying negative thoughts that perpetuate or exacerbate an individual’s symptoms (Beck, 1995), and behavioral strategies that include techniques such as behavioral activation, systematic desensitization, exposure, and graded exercise (Brothers et al., 2010; Hulbert-Williams et al., 2018; Sandler et al., 2017). CBT interventions in oncology may also include components to specifically target the management of stress and physiological symptoms, such as progressive muscle relaxation (PMR) and guided imagery for symptoms of panic or nausea (Brothers et al., 2010). CBT is a highly flexible intervention that targets many of the modifiable processes outlined in the biopsychosocial model, such as coping style, social support, stress, and health behaviors. Its inclusion of strategies to address cognitive, behavioral, and physiological factors may allow for a cascade effect on co-occurring symptom clusters, such as fatigue and sleep.

Andersen et al.’s (2004) work with the biobehavioral intervention for cancer stress was foundational in highlighting the significant benefit of behavioral interventions in cancer survivors. Their intervention included components to improve social support, reduce stress, increase positive health behaviors and reduce negative health

behaviors, and improve physical functioning by focusing on symptom management. Results showed significant improvement in health behaviors such as reduced smoking and improved diet, improved immunity, reduced emotional stress, improved physical functioning, and improved social support (Andersen et al., 2004). This model directly targets factors known to influence stress responses in the body; their work demonstrated that it is possible to impact immune function via behavioral and social pathways in cancer survivors. Later research examining the impact of psychosocial interventions on immunity has continued to build evidence supporting these effects. A recent meta-analysis of the impact of psychosocial interventions, including CBT, on seven immune outcomes found that CBT was significantly associated with enhanced immune system function (Shields, Spahr, & Slavich, 2020). Individuals receiving CBT were measured to have lower proinflammatory cytokine levels, higher immune cell counts, and higher natural killer cell activity as well as other beneficial immune outcomes such as reduced postoperative infectious diseases. There appeared to be no difference between disease states or reason for treatment, age, or sex, and these effects were still seen at 6 months post CBT (Shields, Spahr, & Slavich, 2020). This meta-analysis provides additional support for the impact of CBT on biological processes.

Cognitive Behavioral Therapy in Cancer Survivorship

Modifications and Precautions

Although CBT has clearly demonstrated efficacy in oncology, there are unique aspects of the cancer experience that may require modification. For example, as previously described, survivors who have been treated for cancer can often have realistic concerns such as the possibility of recurrence. Therefore, cognitive restructuring or reframing may be most useful when directing patients to consider any assumptions that being made; for example, a bias toward confusing a low probability with high probability event. Alternatively, it may be more useful to instruct a patient to redirect thoughts toward more positive or more helpful statements rather than emphasizing an examination of evidence for and against a thought. In general, even when thoughts perpetuating distress have some truth to them, there is often a preoccupation with or exaggeration of the likelihood of these concerns and tailored cognitive restructuring may be appropriate. An example of this may be a survivor who has the recurring thought “I just know my cancer is going to come back.” No one can say with absolute certainty whether or not the cancer will recur, although we may have some access to information about this possibility, and this could be helpful in clarifying the actual risk. If a survivor is aware they have a 20% risk of recurrence in the next 5 years, it may be useful to reframe the thought, “My doctor says I have a 80% chance that my cancer will not recur in the next 5 years.” Alternatively, in the absence of this information or in circumstances where this reframe does not reduce the emotional intensity in response to this worry, a focus on what else is known could be more beneficial: “I know I am here now and I have done everything my doctors have recommended to reduce my risk of recurrence” or simply positive coaching statements such as “Right now I am healthy and safe.”

Behavioral activation strategies warrant careful consideration of a survivor’s physical limitations as well as emphasis on realistic and paced activities. Although physical activity is recommended

for nearly every side and late effect experienced by cancer survivors (National Comprehensive Cancer Network, 2021), clinical trials on activity in cancer emphasize the need for energy conservation (Barsevick et al., 2004) to avoid exacerbation of fatigue or pain due to a “boom bust” cycle of activity (Antcliff et al., 2021). Creativity may be needed in adapting previously enjoyed activities to accommodate current symptoms. Lastly, interventions such as progressive muscle relaxation should also be used with caution. The “tensing” aspect of PMR may exacerbate pain in some patients (Hiltebrand & Annala, 1998; Krebs, 2015), whereas diaphragmatic breathing may be contraindicated for patients with difficulty breathing due to surgery or tumor burden and may be best instructed by a professional in a field such as pulmonary rehabilitation (Michaels, 2016).

Case Studies

The following case studies are presented as an example of conceptualization and treatment of issues in cancer survivorship utilizing CBT as an intervention. The names and demographics of the individuals described have been changed to protect confidentiality. In addition, specific aspects of diagnosis, treatment, and symptoms have been altered to further disguise the case material presented. Although the biopsychosocial model is best understood as a series of interrelated and dynamic factors, clinical and treatment factors in these case studies are discretely categorized as *biological*, *psychological*, and *social* for the purposes of clarity and organization.

In these case studies, I reference the use of the Patient Health Questionnaire-9 (PHQ-9) and the Generalized Anxiety Disorder 7 Scale (GAD-7). This is both a clinical and a practical decision. These scales capture many of the common symptoms experienced by cancer survivors. In addition, the PHQ-9 and GAD-7 are brief, show acceptable reliability, have been validated in medical populations, and have good sensitivity and specificity (Kroenke et al., 2001; Spitzer et al., 2006). The PHQ-9 and the GAD-7 are also recommended by the American Society of Oncology Clinical Guidelines for the screening of depression and anxiety in a cancer population (Andersen et al., 2014). Although they do not provide detailed information about concerns such as pain and quality of life, I have elected not to include additional measures in my clinical practice to minimize survey burden and instead assess further via clinical interview. There are many factors to consider in choosing assessments to measure patient outcomes in oncology, (Oncology Nursing Society, 2021) and an in-depth discussion on available assessments is beyond the scope of this article. However, in the conclusion, I provide recommendations for further reading for many of the topics discussed in this article. Most of the treatment guidelines recommended include suggestions for assessments for different symptoms.

Jane

Presenting Concerns. Jane, a White woman in her 40s, presented for an initial consultation for psychotherapy following completion of treatment for a type of head and neck cancer. Jane identified as heterosexual and was married with no children. Prior to cancer, she enjoyed her career and traveling with her husband. Jane’s treatment course included a neck dissection and concurrent chemotherapy and radiation. Her treatment was difficult and included hospitalization for mucositis and considerable weight loss. At initial consultation, Jane reported symptoms of depressed mood

and anxiety that she felt were significantly impairing. She attributed her symptoms primarily to the ongoing impact of her treatment on numerous aspects of her life: difficulty swallowing and subsequent trouble with maintaining weight, fatigue, dizziness, overall physical deconditioning, neck pain, and challenges with clarity of speech. Jane noted significant disappointment, sadness, and anger that she continued to struggle so much following the completion of her treatment, remarking, “I’m supposed to be better now.” This sentiment was echoed by her family, who did not understand why she continued to struggle following the completion of her treatment. In addition, she reported difficulty coping with ruminative worries about cancer recurrence and returning to work after being out on leave. Symptoms as measured by the PHQ-9 and GAD-7 were in the mild range at 4 and 3, respectively, not reflecting the patient’s reported level of difficulty in session. Of note, Jane did report a primary coping strategy of “putting my head down to get through it” and a childhood environment that resulted in a tendency to “shove down” negative emotion, perhaps influencing these scores. She denied any suicidal ideation or history of suicide attempts or self-harm of any kind. She had no history of psychiatric diagnosis, although she had attended psychotherapy once in the past for assistance coping with work and marital stress.

Conceptualization. Jane’s concerns were multifactorial and interacted with one another to perpetuate symptoms of depression and anxiety. *Biological:* Jane’s ongoing late effects from her cancer treatment (fatigue, weight loss, dizziness, neck pain, physical deconditioning, and scarring) were contributing to her distress in a number of ways. These symptoms made every-day activities, such as eating and talking, a significant challenge. Her swallowing difficulty exacerbated the trouble she had gaining weight, which prevented improvement in overall physical strength and may have also contributed to fatigue. In addition, Jane found herself withdrawing from previously enjoyed activities due to her physical symptoms, leaving her with few pleasurable activities to assist in coping. Further, her visually obvious symptoms—scars, weight loss, and altered speech—created additional distress in the form of rumination. Jane found herself preoccupied by these symptoms, as they were a reminder of her cancer treatment and thus served as a cue for cancer recurrence worries. Jane was also concerned that these symptoms would draw attention to her and increase the likelihood she may need to answer questions about these changes, challenging her efforts to “put cancer behind me.” As a result, she found herself avoiding talking to friends or work colleagues, further contributing to feelings of isolation. *Psychological:* Jane found her symptoms of depression and anxiety to be impairing and noted that she was finding it a challenge to “be positive,” instead observing “I think about the worst-case scenario.” In addition, she had lost some of the strategies she typically engaged in to help cope, such as walking and talking to friends, further worsening her negative mood. Her typical strategy of coping by “putting my head down” was minimally effective in a situation where her stressors were chronic, daily, and slow to improve, also contributing to ongoing mood symptoms. *Social:* Jane had a number of changes in her social domain that influenced her symptoms, including the loss of a sense of purpose and means of social connection during her leave from work; loneliness due to the lack of same age peers with a similar cancer to her, as her cancer type most often presents in older adults; and reduced social support from her family who felt that everything should be “back to

normal” with Jane’s treatment complete. For Jane, this perception included an expectation that she should return to her familial role as caregiver for her aging father. This included managing his physical needs, such as scheduling and providing transportation to doctor’s appointments, as well as his emotional needs, which often resulted in multiple phone calls each day providing reassurance and problem-solving for him. Jane was finding it more difficult to focus on both her own health and the health of her father and at times would overextend herself to meet his needs. In addition, her mood symptoms were compounded by feelings of guilt for not functioning as effectively in this role postcancer treatment. It is estimated that 66% of informal caregivers in the United States are women (National Alliance for Caregiving & AARP, 2009), and female caregivers may spend as much as 50% more time in caregiving responsibilities than male caregivers (Family Caregiver Alliance, 2016). This is particularly important in Jane’s case, as research has suggested that women who care for their parents more likely experience depression and anxiety symptoms than noncaregivers and may neglect their own health to focus on that of their loved ones (Office on Women’s Health, 2019).

Based on her Jane’s symptoms, I concluded that adjustment disorder with mixed anxiety and depressed mood was the most relevant diagnosis.

Treatment. I shared my conceptualization with Jane and collaborated with her on prioritizing her goals. Her stated goals were to better manage her depression and worries about cancer recurrence, increase her weight, and build up strength lost over cancer treatment. *Biological:* To address Jane’s late effects from treatment, we agreed to use behavioral activation and goal-setting strategies to set diet and exercise goals that were tailored to what Jane felt was manageable. These goals were developed based on input from an oncology dietician and physical therapist. With increased weight and improved physical conditioning, we could potentially influence multiple symptoms (fatigue, depression, and dizziness) at one time. *Psychological:* Once Jane felt comfortable that she was moving forward with her diet and exercise goals, I introduced the concept of unhelpful thinking styles/cognitive distortions to address her depression and anxiety symptoms that were related to worries about cancer recurrence and how others would respond to her physical changes. Jane identified a number of these cognitive biases that were typical for her—primarily, jumping to conclusions, all-or-nothing thinking, and catastrophizing. I then asked Jane to start to take note of her thoughts in response to a trigger or a shift in her emotional state. After completing several thought diaries, Jane and I identified her most common automatic thoughts: “I’m afraid my cancer will come back,” “If my cancer comes back, I will not survive it,” and “I feel like a freak (in response to scarring from her surgery).” In Jane’s case, there is a good chance that her cancer will recur, and we collaboratively determined it would be more helpful to develop thoughts that focused on what she could control and what is happening “here and now” to address these worries. Jane developed several thoughts she could practice in response to worries about cancer recurrence: “I know several people with my type of cancer who are still alive years after their treatment,” “I can focus on taking good care of myself and enjoying life now,” and “I survived before, I can survive again.” To address thoughts specific to her concerns about her scars, she found it most helpful to reframe the meaning of her scars, “These scars mean I survived,” and to remind herself

“I do not have to answer anyone’s questions if I do not want to.” *Social:* Throughout our treatment, I encouraged Jane to begin to reach out to others again. Using behavioral activation strategies, she set goals for herself to call one friend each week and to become involved in a head and neck cancer support group. Although she was unable to find a group that included younger survivors, it was helpful for her to see others who had a similar cancer experience to her and who were now doing well. In addition, we generated some “broken record” statements she could use when responding to those who either expressed curiosity about her physical changes or her family dismissing her ongoing difficulties, such as “I would prefer not to talk about that” and “I may be done with treatment but I am still healing.” This helped Jane feel more confident in her ability to engage in social interactions again. Jane was also interested in redefining her role as caregiver for her father. We discussed explicitly the disparate familial expectations for her to serve in the caregiving role rather than her brother as well as the negative impact on her health she was experiencing by trying to fulfill this role in the same capacity as she had in the past. Jane identified several strategies she could use to reduce her time in this role, including requesting more help from her brother, setting a maximum amount of time that she felt she could devote to her father’s care each week without sacrificing her own health, and identifying areas where she had assumed responsibilities that her father could still manage independently. She successfully applied cognitive restructuring to address negative automatic thoughts and guilt that arose when she began to redefine her caregiving role.

After 12 sessions, Jane felt she had made enough progress to discontinue therapy. Her PHQ-9 and GAD-7 scores remained unchanged; however, she subjectively reported less intense and frequent mood symptoms, less frequent worry about cancer recurrence, and had slowly been increasing weight and increasing her physical activity level. Her dizziness had resolved, and her fatigue was improving. She had successfully returned to work and felt more confident in how she was managing family expectations. Although her symptoms had not completely remitted, she noted feeling she had become “unstuck” from the thoughts and behaviors that were worsening their intensity.

Sonya

Presenting Concerns. Sonya, a Black heterosexual woman in her 40s, presented for psychotherapy with a history of metastatic breast cancer. She lived at home with her husband and two teenage children. She had a full-time job in a medical office and also worked part time in another office on the weekends. In addition, Sonya was enrolled in an online master’s degree program. Prior to her cancer diagnosis, she was actively involved in her local church. She was referred to therapy by her oncologist, who had concerns about Sonya as she seemed more depressed and withdrawn at visits. Sonya had completed over a year and half of treatment for triple negative breast cancer with mastectomy, chemotherapy, and radiation, only to find her cancer had recurred and metastasized less than 6 months after completing her full treatment course. She had recently started a new treatment to address her metastasis that caused significant fatigue and joint pain. Sonya confirmed her oncologist’s observations of being depressed and added that her fatigue and joint pain made it impossible to do anything but work and sleep. She also described interrupted

sleep, as she often woke up throughout the night. Her symptoms as measured by the PHQ-9 were in the severe range at initial consultation (19), and her score on the GAD-7 was minimal at a 4. She denied any active suicidal ideation but acknowledged having thoughts that it “would be easier if I was not here.” She reported a past history of depressive episodes although had not previously received psychotherapy treatment and was uncertain that it could help her.

Conceptualization. There were a number of biopsychosocial factors that influenced Sonya’s symptoms and impaired her functioning. *Biological:* The physical burden of Sonya’s initial cancer treatment as well as her current treatment for her metastasis were substantial—she likely never fully recovered from her initial treatment before having to undergo another toxic treatment. Although her family was extremely supportive, they often showed their support by being solicitous to her need to rest, often bringing her dinner in bed and spending time together without her. This unfortunately likely exacerbated her fatigue, depression, and sleep difficulties, as she was spending most of her time home in bed, resulting in poor sleep efficiency, physical deconditioning, and few pleasant experiences or social connection day-to-day. In addition, she kept up a demanding schedule even throughout her treatments, and this was likely compounding her already existing fatigue. *Psychological:* Sonya had a history of untreated depressive episodes in the past, which may have been contributed to the severity of this most recent episode (Hung, Liu, & Yang, 2017). In addition, she described herself as generally being an optimistic person and was finding it difficult to access this quality during her cancer treatment, leading to self-critical thoughts about her resilience. She felt too fatigued to attempt any type of coping strategy that may have helped her symptoms. *Social:* Sonya felt very isolated in her experience of her cancer. Her religious community, once a source of support, was now experienced as judgmental and unhelpful. As Sonya commented, “This is not God’s plan, and I could scream every time someone says that to me.” Although her family was supportive, they often demonstrated their support by allowing Sonya to rest and continue activities on their own, which contributed to her feeling disconnected from them. Sonya also expressed a concern about being perceived as “the angry Black woman,” resulting in reluctance to share her feelings with others, including her church community and her medical team. This archetype of the Sapphire, or the Angry Black woman, is a reflection of the perception of Black women as being hostile and aggressive and often serves as a mechanism for dismissing the legitimate emotions experienced by Black women as a result of historical and structural inequities (Waldron, 2019). This was likely compounding the significant threat Sonya was experiencing from her disease and the toxic treatments she was enduring.

The diagnosis most consistent with Sonya’s symptoms, given the length of time, severity, and her previous history, was major depressive disorder, recurrent episode, severe.

Treatment. When discussing Sonya’s goals, she was reluctant to identify any. She shared that she could not see how therapy could help, because, as she noted, “You cannot take away my cancer.” I acknowledged that although that was true, that did not mean that we could not try strategies that may make her symptoms more manageable and outlined some possibilities before deciding to move forward with therapy. *Biological:* I suspected that Sonya’s fatigue had components of both behavior as well as

treatment side effects. I asked her about the possibility of adjusting her current busy schedule. I shared the concept of the “boom bust” cycle of activity with her and that her need to be in bed immediately after returning to work likely had some basis in how much of her time was occupied in work and tasks. Unfortunately, more time in bed also was not working to improve her fatigue and may have been contributing to her sleep difficulty as well. I also inquired if Sonya has asked her oncologist if any other drugs may be available for her to try, as individuals can have more intense side effects with one versus another, and there may be a drug available that may not cause her as much joint pain. We also discussed the possibility of a psychiatry referral should her symptoms not improve with therapy and these changes alone. *Psychological:* I suggested to Sonya that we address her depression both through behavioral activation strategies as well as potential cognitive restructuring. I provided education on cognitive distortions and noted a tendency toward “mind reading” that served as a barrier toward her asking for help due to the possibility that others may judge her for not either not being “strong” enough—a criticism that Sonya often levied as herself as well—or for being too strong, reflected by her concern of the Sapphire stereotype. *Social:* Sonya’s disconnection from her religious community was a significant loss, as this had been a primary source of social support and coping for her. I suggested that as part of our treatment, we explicitly discuss her concerns and problem-solve ways she may be able to communicate her needs and concerns to others that helped her feel more empowered. Similarly, Sonya’s concerns about her oncologist’s perception of her was also serving as a barrier toward having her needs met, although her concerns were legitimate and based on experiences with bias and marginalization based on her race. I was hopeful that with further discussion we could work together to find strategies that helped her feel more comfortable asserting her needs with her treatment team.

Sonya returned for a second visit, feeling more confident that there were steps she could take to help reduce her symptoms. In fact, she shared that her husband was supportive of her taking the time she needed to shielding recover and encouraged to drop what she needed to and had already taken action to pause her master’s degree program to see if this would help her symptoms. She also shared with her family my thought that she could benefit from spending less time in bed. They were thrilled with this, and her children in particular loved that the idea that they could “boss Mom around and kick her out of bed.” They instituted a “no dinner in bed” rule and agreed someone could come in and wake her up if she slept past 9 a.m. on the weekends. Our focus then became maintaining these goals with an emphasis on gradual improvements over time: Instead of going to bed at 8 p.m., trying to make it to 8:15, and gradually increasing over time.

In addition to these specific goals, we also began work to try cognitive restructuring with regard to Sonya’s worries about sharing her concerns with her church community and her oncologist. She acknowledged a tendency toward mind reading—“They’re going to think I’m complaining” and “They’re going to question my faith”—and shoulding/musting—“I should be stronger than this.” In querying Sonya about her concern that her oncologist would think she was complaining, she again identified a concern about being stereotyped by her race. I invited Sonya to share her experiences with being stereotyped as well as to discuss biases she had encountered throughout her experience in the medical system.

I validated Sonya's concerns and acknowledged her lived experience of racism as a Black woman in the United States. In assisting her with cognitive restructuring, I wanted to ensure I was not invalidating her by disputing or questioning her experiences and instead focused on targeting the internalization of these biases toward herself and identifying encouraging statements she could use when feeling reluctant to discuss her needs.

Sonya worked to reframe these thoughts in a way that did not dismiss her experience, but instead focused on what she wanted to happen instead: "It's important that my oncologist knows what my symptoms are so I can be informed about all the choices I have" and "I want to spend more time with my family and feel better and this conversation could help with that." Similarly, Sonya also identified that she was mind reading with her church community. We developed a two-pronged approach to manage this. First, Sonya identified reassuring self-statements such as "I know my faith is strong, and it is normal to struggle during this" and "I can choose to have the people in my life that are most supportive of me." Second, Sonya developed a short phrase she could use when someone made a comment about her cancer that she felt was judgmental or unhelpful: "That's not helpful to me," along with a request, "This is what would be helpful. . ."

Over time, Sonya had a successful conversation with her oncologist that led to trialing a different agent. Although her fatigue did not improve significantly, her joint pain was much better on this new medication. She reevaluated the necessity of her part-time job and determined it was in her best interest to stop for now and would reevaluate starting again in the future. Although we were making progress on her mood symptoms and sleep with less time in bed, her fatigue was still significantly impairing after 3 months. At that time, I suggested a psychiatry consultation. Following consultation, Sonya initiated venlafaxine, an SNRI that has been shown to be helpful in managing pain, chronic fatigue, as well as mood (Farshchian et al., 2018).

By our 20th session, Sonya's depression was now significantly improved from her initial visit and in the moderate range as measured by the PHQ-9 with a score of 10. She was still coping with some side effects from her treatment, but was successfully engaging more with her family, church, and overall felt she was managing much better. Unfortunately, Sonya and I discontinued prematurely as a result of my moving out of state, but we both agreed she had created a solid foundation for continued improvement.

John

Presenting Concerns. John, a heterosexual White man in his 60s, presented to psychotherapy after a recent diagnosis of lung cancer following several months of persistent cough and shortness of breath. John immigrated to the United States from an English-speaking country 30 years ago and owned a successful business with his brother. Unfortunately, after learning of his diagnosis, John had been told that his cancer is non-surgically-resectable. After getting two other opinions, he planned to start experimental chemotherapy in the near future. He reported symptoms of severe anxiety as measured by the GAD-7 (20), described as ruminative worry about his diagnosis, restlessness, feeling "on edge" and irritable, insomnia, and reduced appetite. He noted that shortness of breath triggered anxiety and often progressed into a panic attack. He denied any significant symptoms of depression and had a score

of 3 on the PHQ-9. He had no psychiatric symptoms of note prior to his diagnosis. The patient stated he had difficulty adjusting to his diagnosis both because he considered himself very healthy and active and felt this situation is completely out of his control—something that was new to him. Physical activity was a big part of his life prior to his symptoms, and he felt this helped him cope. He was no longer able to exercise due to his cough and shortness of breath. John had no history of past mental health treatment or diagnoses. He was prescribed Lunesta, Xanax, and Valium following his cancer diagnosis but found they did not help manage his symptoms and had discontinued them. He denied any thoughts of suicide and has no history of suicide attempts. He was a pack/day smoker for 30+ years, smoked one cigar/day for about 10 years after that, and ultimately quit 3 years prior to his diagnosis. He reported often criticizing himself for not quitting earlier, although he denied feeling stigmatized for judged for being diagnosed with lung cancer as a smoker.

Conceptualization. John had numerous biopsychosocial factors that were interacting to worsen his symptoms. *Biological:* John's difficulty breathing as a result of his lung cancer was triggering hyperventilation and developing into panic attacks. His shortness of breath was particularly distressing as someone who considered himself physically fit relative to his peers. *Psychological:* John's inability to access his typical coping strategy of exercise due to fear of triggering a panic attack likely worsened other symptoms of anxiety that were the result of the uncertainty around the effectiveness of his cancer treatment options. His ruminative worry about his diagnosis and his shift in conceptualization of himself as a "healthy" person both contributed to perpetuation and exacerbation of his anxiety symptoms. *Social:* John grew up in a culture that emphasized self-reliance and stoicism. This was particularly true for men of his culture and generation. As a result, John found it difficult to share his emotions around his diagnosis and his worries about the future with his loved ones, unfortunately compounding a sense of isolation in his diagnosis.

Determining a diagnosis in John's case was challenging. Although his panic was resulting in part from shortness of breath caused by his lung cancer (leading to a differential of anxiety disorder due to another medical condition), his anxiety symptoms were not limited to panic caused by shortness of breath. His panic attacks were also specific to feeling shortness of breath and chest discomfort, not meeting the symptom threshold for panic disorder. As John's worry was specific to his cancer and his health status and had only occurred for about a month, he also did not meet criteria for generalized anxiety disorder. Ultimately, a diagnosis of adjustment disorder with anxiety was the best representation of John's symptoms.

Treatment. John had few specific goals for therapy and noted, "I just want the panic to go away." *Biological:* Given the distress John experienced from his shortness of breath and panic, I suggested we begin with a focus on relaxation and breathing training to provide tools to directly intervene with his physiological symptoms of anxiety. I first instructed John in progressive muscle relaxation to good effect. He commented that he was not aware how tense he was and suspected he was tense throughout much of the day. In addition to progressive muscle relaxation, I modified instructions for diaphragmatic breathing to accommodate John's limited lung capacity. Instead of instructing John to breathe from his diaphragm, I instead asked him to focus on slowing his breathing and on the sensations of air coming into his nose. On the

exhale, I instructed him to breathe out through pursed lips. This is a common technique used with individuals with chronic obstructive pulmonary disease or other pulmonary conditions and leads to a slower breathing rate (Cleveland Clinic, 2018). I also asked John to tell me more about his exercise history. He shared that he used to be an avid runner but stopped when he started having trouble breathing. He said he is fearful of exercise because he does not want to trigger shortness of breath and subsequent panic. I asked John to ask his physician if it was safe for him to exercise and how he may be able to modify exercise to work around his shortness of breath. Ultimately, he did start exercise again with a walking program with the permission of his physician. He found by keeping a slower pace and staying on level surfaces he was able to manage his shortness of breath. *Psychological*: Over the course of four sessions, John reported a gradual improvement of his anxiety symptoms with use of PMR and breathing exercises. He simply slowed down his breathing using the pursed lip technique and found it he could get it under control. He also noted his sleep had improved, as he practiced PMR before bed and found this effective for calming his body and mind. With these symptoms under control, I asked John if he would like to address his worry about his cancer and guilt over his smoking history with cognitive strategies. John declined, stating that he felt more like himself with the use of PMR and pursed lip breathing as well as being able to exercise again. *Social*: John and I discussed his internalized messages about keeping a “stiff upper lip” and reluctance to discuss his concerns with family and friends. Although he acknowledged that there may be some negative consequences to this strategy, he was not interested in discussing this further in therapy.

Overall, John found treatment with PMR and breathing very helpful for his anxiety symptoms. At his fifth and final session, his anxiety as measured by the GAD-7 had significantly lowered to a score of 3, indicating minimal symptoms and treatment was discontinued. Although John was not interested in discussing other potential avenues for addressing more longstanding habits in thought and coping, he appeared to have found his time in therapy to be valuable. It may be the case that the internalized messages he had about maintaining stoicism and self-reliance were themselves barriers toward discussing these issues further in therapy, particularly as he felt his symptoms were well managed without doing so.

Conclusion

The number of cancer survivors in the United States is growing, with projections of just over 22 million survivors by 2030 (National Cancer Institute, 2020b). Although this is positive news in terms of reduced mortality, it can be reasonably expected that larger numbers of cancer survivors will seek psychotherapy to address acute and long-term emotional and physical impacts of the disease and its treatment. The needs of these survivors are complex and diverse and will require numerous strategies to adequately address these needs. Adaptation of current psychotherapeutic practices, additional training in interventions specific to cancer survivorship, and institutional support of psycho-oncology positions are just a few of the pressing needs facing the field. Psychotherapy with cancer survivors is complex but endlessly rewarding. Having evidence-based tools to address the varied needs of this population is essential to providing compassionate and effective care. Work in cancer survivorship is ongoing, with a particular

need in delivering “the right therapy to the right person at the right time” (Patricia Ganz, National Academies of Sciences, Engineering, & Medicine, 2018). Numerous evidence-based interventions exist to address the issues that occur in cancer survivorship, but future work is needed in tailoring these interventions to the specific needs of survivors, as they vary along stage, cancer type, and the cancer treatment continuum (National Academies of Sciences, Engineering, & Medicine, 2018).

This article provides only a brief overview of the many issues experienced by cancer survivors and options available to help support cancer patients as they navigate their treatment and lives post-treatment. The field of psycho-oncology and cancer survivorship is broad and includes essential areas with a robust research base not mentioned here—pediatric, adolescent, and young adult populations, palliative care, caregivers, and neuropsychology, to name just a few. Although this article is limited in scope, it is hoped it can provide a foundation for further investigation and study as psychotherapists inevitably encounter more individuals affected by this disease.

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Received December 31, 2020

Revision received July 2, 2021

Accepted July 3, 2021 ■