Review Article

Depression among cancer survivors – An untold story

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ABSTRACT

Mental health is an important area in the treatment of patients. Cancer not only burdens the individual during the treatment phase but also during the survivorship period. Multi-morbidities, being female, pre-existing psychological illness are few among risk factors that intensify the course of depression among cancer survivors. Depression can seep in through various means from the effects of treatment to accepting the reality of survivorship and it may vary depending on the type of cancer. Screening and as sessing for depression, patient self-management strategies, internet based mindfulness therapy and psychoeducational interventions are few among the possible ways to tackle the threat of depression in cancer survivors. This review summarizes the causes of depression, depression among various cancer types [thyroid, prostate, breast and rectal/ colorectal cancer] and applications of evidence to practice to overcome depression in cancer survivors.

Key words: Depression, cancer survivors, breast cancer, prostate cancer, thyroid cancer, rectal cancer

The psychological impact of diseases is an important aspect of the clinical cure of patients. “Mental illness is like any other medical illness” is an undeniable truth and necessitates immediate action in the healthcare sector [1]. Psychological problems are persistent among cancer patients, depression and anxiety being very common. This can make the treatment more challenging with additional difficulty in the management and cure of cancer. Depressive symptomatology is evident during the advanced stages of the disease and in the inpatient settings [2]. Studies have elaborated on the need for developing a management strategy to address the increasing burden of depression symptomatology among cancer patient [3].

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Causes

The psychological impact of diseases is an important aspect of the clinical cure of patients. “Mental illness is like any other medical illness” is an undeniable truth and necessitates immediate action in the healthcare sector [1]. Psychological problems are persistent among cancer patients, depression and anxiety being very common. This can make the treatment more challenging with additional difficulty in the management and cure of cancer. Depressive symptomatology is evident during the advanced stages of the disease and in the inpatient settings [2]. Studies have elaborated on the need for developing a management strategy to address the increasing burden of depression symptomatology among cancer patients [3].

A variety of factors can steer depression among cancer survivors which may or may not interact with one another. Individual characteristics such as age, gender, ethnicity, sexuality, religion, disability, co-morbid health conditions and marital or co-habitation status influence development of depression. Psychological distress, coping behaviour, hopelessness, denial, anger, fear, grief, resilience, concern for others, change in self-image are psychological response to diagnosis and in the journey thereafter that impacts a cancer patient’s mental health. Social and contextual factors that has an undeniable affect are educational level, employment status, healthcare system, social and family support and stressful life events such as loss of a loved one.

Prior psychological behaviour is also another less enquired history for cancer patients and it includes preexisting psychiatric disorders, previous suicidal behaviour and prior coping behaviour. Finally, treatment related modalities have a huge impact on the current and future status of cancer patients. They

include long term complications associated with treatment such as development of infertility and secondary cancers that can have adverse mental effects [7].

Multiple comorbidities among cancer survivors also can influence their treatment outcomes and further research can prevent the development of adverse events due to comorbid conditions in these patients [8]. Screening for depression is crucial in the web of multi-morbidities. Approaches for managing multi-morbidities should also include effective ways to tackle the impending threat of depression [9].

Depression among Various Types of Cancer Survivors

Thyroid cancer

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Prostate cancer

Prostate cancer is the second most prevalent cancer after lung cancer among men. Treatments tailored include radical prostatectomy, radiotherapy, observational or watchful waiting and chemotherapy. They pose adverse risk of side effects such as incontinence of urine, bowel problems, erectile dysfunction, pain, insomnia and fatigue that persists for a long time. Gynecomastia and hot flashes are the two prominent side effects of androgen deprivation therapy. They are associated with shame, loss of masculinity, stigma and followed by psychological distress. Urine incontinence may trigger fear of smelling, leakage of urine and an embarrassment to use incontinence pads, together culminating in social isolation with aggravated depressive symptoms [12]. Physical side effects are positively associated with sleep disturbances and increases the burden of cancer-related fatigue. Thus, the pleiades of consequences post treatment among cancer survivors can pose a significant risk for depression in this cohort [13].

Lack of food security, racial discrimination, housing instability and other consequent effects of racial differences can elevate the incidence of depression among prostate cancer survivors belonging to specific communities. Racial disparities can have an impending burden on the existing situation of a prostate cancer survivor. In a study conducted by Parikh et al, it has been concluded that incident depression is common among African American cohort of prostate cancer survivors in comparison to the Whites [14]. Although evidence is nascent, future studies, should examine the impact of race on the development of depression among cancer survivors.

Breast cancer

Breast cancer is the most prevalent cancers in the world. Emotional distress among breast cancer patients can reduce their medication adherence, and lead to poor quality of life and intense fear of their disease. Breast cancer patients often experience a spectrum of depressive symptomatology [15]. The prevalence of depression among breast cancer survivors ranges from 13% to 45% [16]. Breast cancer survivors include those who have received treatment and are on long term follow up to reduce the recurrence of cancer and to improve the quality of life [17].

Breast cancer survivors are much-ignored section of the population who are at an increased risk of developing depression in comparison to breast cancer patients. They experience a multitude of symptoms such as impaired sleep, fatigue, arthralgia, stress, impaired sleep, hot flashes, vaginal dryness, decreased sexual interest, problems during urination, weight gain, anxiety and depression. There is an impending need to address these issues and timely deliver interventions to help them [18].

Screening for depressive symptoms is needed but without assessing the need for intervention, the practicality of the issue remains unmet. Shreds of evidence reflect a greater incidence of depression among the early survivors [within 5 years of treatment] than late survivors [within 10 years of treatment]. The preceding group of survivors tend to experience depression due to fear of recurrence and treatment related side effects [19].

A recent study conducted among the black breast cancer survivors reiterates the need for a good patient-provider relationship and patient empowerment as the key components to develop during the breast cancer survivorship program. Incidence of depression can be largely decreased among the black breast cancer survivors with the incorporation of special patient-centered communication [20].

Rectal/ colorectal cancer

The different types of surgery instituted for rectal cancer are permanent ostomy, temporary ostomy followed by anastomosis and initial anastomosis. A study has found that the prevalence of depression among rectal cancer survivors to be 24.7% among long term survivors and more prevalent among long term survivors who have undergone permanent ostomy. As per the findings of the study conducted by Chongpison et al. females face greater burden of depression when undergoing permanent ostomy in comparison to anastomosis [21].

Colorectal cancer survivors also develop persisting symptoms of depression, approximately 1 in 5 survivors post treatment. Risk factors such as multi-morbidities, being single or divorced, lower educational status and high disease stage can contribute to the genesis of depression in this vulnerable cohort. Hence, it is vital to know whether the survivors need psychological help to reduce their depressive symptoms [22].

Application of Evidence in Clinical Practice

Patient reported outcomes is the corner stone of cancer survivorship. Therefore, it is necessary to also assess the symptoms associated with mental health among cancer survivors during their routine health check-up. Screening and assessing for depression in the oncology setting can improve and help achieve better patient outcomes [23]. The screening will help detect patients who have a major depressive disorder but are not undergoing any treatment or patients in whom depression is not recognized [24].

Certain cancer treatments are prone to induce neurotoxicity and this aspect should be considered while screening for psychiatric conditions. Certain symptoms that are associated with poor outcomes and examples include pain and anxiety among depressed patients. Targeting these symptoms can be an inestimable strategy to cope with depression. It is also necessary to engage in depth interviews that can extract the exact symptoms that are known to interfere with the function and quality of life. Fatigue, hopelessness, worthlessness, negative self-image and helplessness are a few of them. Hence, the importance of identifying the symptoms and their associated burden on the patients cannot be neglected and should be incorporated during the screening and counselling process [6]. It is necessary to raise awareness across various strata of the healthcare system about mental health symptoms during cancer survivorship.

Patient preferences are another unexplored area when considering screening for depression. Evidence suggests that cancer patients prefer screening services during follow up through face to face interviews at regular intervals with a nurse within their cancer services. The patient perspective remains an unquestionable area of importance, as patient centered care is the aim of medical care [25]. Oncology health professionals are better suited for screening and can initiate the process of screening than wait for any adverse event from occurring. Routine screening can be applied for depression screening in cancer patients and among survivors, than selectively providing psycho-oncology services [26].

The patient when visiting the primary health care centres can seek self-management techniques. Good eating habits, engaging in daily exercise and hygienic sleeping practices are few to follow. Patients are also encouraged to engage in community reconnection, make interpersonal changes and function optimally [27]. Evidence suggests incorporation of physical activity as a part of daily routine to prevent developing depression among cancer survivors.

Participating in physical activity and meeting weekly goals of exercise duration and intensity, is a low cost, nonpharmacological intervention that can reduce the severity and incidence of depression during cancer survivorship [28]. As per Consensus statements from an International Multidisciplinary roundtable meeting, it is concluded that cancer survivors should participate in exercise training, improve their physical fitness and restore their normal functioning which can help them mitigate the overwhelming effects of depression post-treatment. Aerobic training, aerobic plus resistance training and resistance training alone in specific doses can prevent the advent of depression among cancer survivors [29].

It is advocated that every survivor develops a ‘culture of wellness’ and proactively works to maintain a healthy mental state. Internet based mindfulness therapy is another novel and patient friendly approach practiced actively in the developed nations. This is a particularly useful technique among the breast and prostate cancer cohort as they have documented long term survival. This method not only addresses the acute symptom care but also teaches skills that can help patients prevent symptom aggravation and reversal. Old age is a significant barrier to internet based therapy attributed to their inadequate knowledge about internet and lack of motivation. Internet based therapy is useful for individuals as they can participate from their homes. This is a promising method for patients who do not seek special psychological treatment [30]. Online mindfulness therapy can be employed for various groups of patients such as those in whom mindfulness skills will be difficult to reach out traditionally and for those who are on waitlist for face to face interview [31]. Endorsement of such techniques through the clinician or healthcare professionals can drive patient uptake and engagement [32]. Although internet based mindfulness therapy is in its infancy, in the context of public health it is an emerging strategy to alleviate depressive symptomatology and reduce the prevalence of depression among cancer survivors.

Clinical trials have shed light on the novel methods that can be incorporated in healthcare practice for managing depression among cancer survivors. A study conducted in Quebec and Ontario has discussed about the usefulness of telephone-delivered depression self-care intervention for cancer survivors. As per the findings of their study CanDirect, a telephone-delivered intervention produced greater reduction in depressive symptoms and greater quality of life. Thus, instilling hope in newer directions such as CanDirect can satisfy the unmet needs of cancer survivors in the society [33].

Evidence also suggests the role of a nurse-delivered intervention in addition to the usual care that can substantially improve the clinical outcomes in patients with cancer. Nurse-delivered interventions include education about depression, conducting a problem-solving session to develop a positive attitude among patients while dealing with testing situations, helping them communicate their concerns to the clinicians and also gaining the cooperation of clinicians [34]. Nursing interventions targeted to alleviate depression among breast cancer survivors should accommodate the psychological needs of the patient and their care takers [35].

Screening for depression can be implemented through the PHQ-2 item questionnaire, further diagnosis can be established where screening results necessitate treatment initiation. Although the rate of false positive detection for depression remains high, nurse based interviews and screening should be considered. It should be conducted to improve symptoms and prevent relapse, rather than increasing the duration or burden of treatment [36]. Inculcating a strong evidence based practice from the point of care itself can be the genesis of improved mental health among cancer survivors.

There is an unmet need for psycho-educational interventions among cancer survivors which needs to be addressed. Psychological needs have been categorized as one of the eight unmet needs in a cancer patient'/survivor' journey, especially among breast cancer survivors. Studies from the United States highlight a higher preference among patients for individual professional counselling over received pharmacological treatment for depression. Psychiatric medications are least preferred and are only desired by patients when diagnosed with depression. Therefore, it can be understood that psycho-educational counselling is well recognized by the patients and can be readily adopted within the cancer care setting [37].

CONCLUSION

Depression is a leading cause of concern in the healthcare sector. The scientific community has addressed the importance of identifying major depressive disorder among cancer patients. There is still a lack of strong evidence and very less attention is paid to the mental health vulnerabilities faced by cancer survivors. It is more pronounced among females who carry a higher risk for mental health diseases. From the given review, it is understood that individuals diagnosed with cancer undergo varying levels of trauma during their treatment. Not only are the treatment effects a causative factor for the development of depression, but the future concerns associated with cancer cure are equally contributory. Cancer itself and a cure from it pose the risk of depression, but the situation is even grim when the needs of a survivor remains unaddressed. Future studies are warranted to assess the prevalence of depression across various cohorts. Such scientific and epidemiological shreds of evidence can help tailor the right strategies for addressing health concerns prevalent in society.

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