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The role of psychooncology in cancer treatment – a literature review

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Abstract

Introduction and objective. Receiving a cancer diagnosis can lead to significant mental distress, highlighting the necessity for comprehensive medical care that includes psychological support. Effective psycho-oncological therapy can help patients find fulfillment regardless of their prognosis, while also improving overall outcomes and treatment adherence. This article aims to review the medical literature on the mental health challenges faced by cancer patients and to explore potential treatment modalities.

Review methods. Implementing Google Scholar and PubMed, a literature analysis was conducted, with particular attention paid to terms like "psychooncology," "anxiety," "depression," "cancer," "grief," and "PTSD." The period of consideration for articles was from 2017 to 2024.

Brief description of the state of knowledge. Grief, anxiety, PTSD, despair, and other mental health problems can arise after receiving a cancer diagnosis. In order to improve treatment adherence and survival rates, psychological well-being must be addressed. Empirical evidence indicates that psychological disorders can hinder adherence to therapy and elevate the risk of death from cancer. Furthermore, as families often endure significant stress throughout the disease, psychological care is beneficial to both patients and their relatives. It is possible to enhance adherence and reduce symptoms by using an integrated strategy that takes into consideration both physical and mental health.

Conclusions. An essential part of holistic cancer care is psycho-oncology, which enhances patients' general health and quality of life. Psycho-oncological therapy must be incorporated into standard cancer care in order to improve treatment outcomes and assist patients in overcoming their condition.

Keywords: Psychooncology; cancer; anxiety; depression; PTSD; grief

Introduction and objective

In today's world, malignant tumors are a major concern. WHO statistics indicates that there were approximately 9 million cancer-related deaths and 20 million newly diagnosed cases in 2022. One in five people are predicted to have cancer in their lifetime, and one in nine men and one in twelve women will pass away from the disease [1,2]. Although new pharmacological therapies and higher patient survival rates are made possible by modern medicine's ongoing advancements, many cancer patients still perceive their disease as a death sentence [3,4]. Their lives may be completely turned upside down by the awful diagnosis. This is why it is so important to provide patients with comprehensive medical attention, and part of that care should include psychological assistance. The prevalence of cancer and the extension of survival for patients have given rise to a new scientific discipline called psycho-oncology. The science of psychooncology is a relatively recent multidisciplinary field consisting of clinical oncology, psychiatry, clinical psychology, and health psychology [4]. A patient's well-being is negatively impacted by the build-up of negative emotions like dread and anxiety, which lowers their mood and reduces the efficacy of cancer treatment. Psychological therapies primarily address how to manage anxiety, sadness, discomfort, and exhaustion as well as how to enhance one's quality of life in these situations [5]. Psychooncology asserts that a person's medical state and mental state are closely related and have an important influence on each other. Effective psycho-oncological treatment has a positive impact on patients' compliance with their whole medical experience and, as a result, on the effectiveness of their overall treatment. Regardless of how much time they have left, psychooncology enables patients to rediscover joy in life and to recognize its significance [6]. It is important to note that cancer impacts not only the sufferers but also their families and loved ones, who must contend with this harsh diagnosis. It is crucial to keep in mind that providing care for a relative who is nearing the end of their illness can be equally taxing on the patient and the caregiver. Families of patients must therefore be given equal consideration in comprehensive psycho-oncological care, and they should be offered the

chance to consult with professionals both during the course of the illness and following the loss of someone they cherish [7].

At this point, the field of psycho-oncology is not officially recognized by the Polish legal system. Furthermore, the National Health Fund (NFZ) does not specifically fund psycho-oncological services. Psychological support is given to patients through services offered in psychotherapy offices or psychological clinics. On the other hand, psycho-oncological care in larger clinical centers could be provided through psychiatric consultations and visits with psychologists while the patient is in the ward. Oncology treatment experts highlight the importance of a well-organized healthcare system and the presence of a distinct section in the oncology treatment catalog for psycho-oncological health services. Consequently, steps should be taken to recognize psycho-oncologists as a separate medical specialty [4]. Considering the significant role of mental health in oncology therapy, the aim of our article is to compile existing medical knowledge regarding the mental health issues faced by cancer patients, as well as the potential therapeutic methods that can be proposed to them.

Review methods

The literature review was conducted using the electronic databases PubMed and Google Scholar. Key search terms included "Psychooncology," "anxiety," "depression," "cancer," "cancer treatment," "grief," "PTSD," and their variations. The review focused on clinical trials, double-blind randomized controlled trials, meta-analyses, reviews, and systematic reviews published from 2017 to 2024, with particular attention to articles from the last five years. Findings from case reports were not included in this analysis. Additionally, the review incorporates cancer incidence and mortality statistics from the World Health Organization (WHO).

State of knowledge

Cancers are turning more and more into chronic illnesses as a result of numerous contemporary therapy options [8]. This is linked to a greater overall survival period, which consequently results in an extended period of exposure to illness-related factors. Psychologic pressures originating from the disease's actual symptoms together with beliefs concerning the illness and its stigma are frequently brought on by cancer diagnosis and treatment. This is also linked to promoting the concept of quality of life among patients and their families. They therefore emphasize that it is important not only to survive, but also to live with a sense of well-being in various areas of existence. This results in a desire to receive the most effective and least debilitating therapy in order to maintain physical health as well as to preserve psychological stability through psychological and psychiatric support [9]. Psychological problems including despair, anxiety, delirium, PTSD, and many more affect a large number of patients [8,9,10,11]. Research and experiences from Western nations suggest that 20–30% of cancer patients need extensive psychological support [4]. It is essential to pay close attention to cancer sufferers' mental health.

Depression

Among cancer patients, depression and anxiety disorders are the most prevalent mental health conditions. One in four cancer patients are thought to experience depression. Even in patients

who have experienced a long-term remission from their illness, depression can resurface at any point [12]. Research indicates that compared to the general population, cancer patients have a five-fold increased risk of developing depression [13].

In addition to causing suffering on their own, anxiety and depression can also have a negative impact on physical and mental wellness, treatment compliance, and overall well-being. [10]. Mental health conditions like depression can influence on how well a patient follows their treatment plan and manages their condition, which frequently accelerates the illness's course. Experts claim that depression and anxiety disorders are related with higher levels of mortality among cancer patients [14]. There are multiple risk factors linked to the onset of depression, which can be broadly classified into two categories: variables particular to the patient and those connected to the treatment. Table 1 provides information about these components.

Table 1. Depression Risk Factors in Cancer Patients [12,15].

Patient-specific risk factors	<ul style="list-style-type: none"> Young people Female gender Past history of mental illness Addiction to drugs Individuals without social support People from less prosperous backgrounds
Risk factors associated with treatment	<ul style="list-style-type: none"> Hair loss Weakness Exhaustion Vomiting Need for frequent hospital visits

Anxiety and depression can be measured on certain scales, such as the Hospital Anxiety and Depression Scale (HADS). It is easier to detect these disorders when they exceed the specified cut-off points since they are useful in detecting them and have clinical applicability early in their evolution. It's significant that this scale does not include somatic symptoms like headaches or weight loss, which could be brought on by the sickness itself instead of psychological problems. Because physical symptoms are not considered HADS is able to concentrate on the patient's emotional state, resulting in a more accurate assessment of anxiety and depression [10]. Nowadays, the DSM-5-TR and ICD-11 criteria are used to diagnose depressive disorders in cancer patients. The use of the word "feeling of hopelessness", which is a key diagnostic signal, is a crucial component of the diagnostic process. Low self-esteem, thoughts of suicide, guilt, and psychomotor slowness that lasts longer than a month are important indicators. Furthermore, there is a distinction made between the idea of sadness and grief, which pertains to events connected to the diagnosis or advancement of the illness [16]. Patients with cancer should receive interdisciplinary treatment for depressive disorders. Strong focus must be placed on psychological and psychotherapeutic support combined with medication, particularly in the early phases of the condition when such support may be sufficient. Just as experiencing loneliness during one's illness may increase the potential of getting depression in cancer patients, seeing a psychologist in person might be a treatment in and of itself [12]. There is a growing

focus on cancer patients' mental health. Consequently, treatments known as mindfulness-based interventions (MBIs) have been developed to assist patients' mental and physical health. MBIs ease pain and anxiety while assisting people in managing their circumstances.

In order to achieve inner peace, these interventions include breathing exercises and meditation approaches. Furthermore, patients tolerate these activities well, they don't have any negative effects on the body, and they only cost a small amount of money in comparison to pharmacotherapy [14]. Besides being beneficial in lowering stress, mindfulness yoga helps patients rediscover body confidence. The relationship between the brain, body, mind, and behavior is the main focus of this approach. It helps to increase psychological well-being, which benefits bodily functioning [17]. All of these results demonstrate how beneficial and essential it is to combine medication with non-invasive support for neurological functions. The value of psychologists, psychotherapists, and psychiatrists in the treatment of depression in cancer patients cannot be underestimated. Their expert care significantly enhances the efficiency of cancer treatment, fosters improved communication with doctors, and reduces overall cancer-related mortality.

Anxiety

A considerable percentage of cancer patients suffer from anxiety problems. Prevalence rates range from 12% to 25% [12]. Anxiety is an individual's normal reaction to stress, but in cancer patients, if it is not recognized and treated promptly, it can develop into a pathological condition that impairs normal functioning. Fears of death, recurrence, illness progression, and treatment approaches are common issues for cancer patients. Patients with anxiety disorders have a reduction in their quality of life, which is exacerbated by disruptions to everyday activities, sleep problems, and the potential for depression [18,19]. Patients with anxiety disorders may also experience palpitations, which they describe as an uncomfortable feeling in their chest and an irregular, fast heartbeat [20]. Dyspnea is another prevalent symptom, and its strong correlation with anxiety has been well established in the literature [21]. It is significant to note that the co-occurrence of anxiety and depression is far more frequently observed than either symptom occurring alone. This leads to a complex clinical appearance as various illnesses' symptoms frequently overlap and intersect [22]. Psycho-oncological approaches to the treatment of anxiety disorders provide a range of therapeutic approaches. Among them is dignity treatment, which aims to assist patients in preserving their sense of self-respect when dealing with a terminal illness. During this process, the patient must examine their personal values, learn to value their life, and consider the legacy they want to leave behind. Studies have demonstrated the efficacy of this therapy in enhancing hope, anxiety, and sadness in cancer patients, underscoring its significance within the framework of all-encompassing medical care [23]. Finding less taxing and less hospital-related coping mechanisms for cancer patients with psychosocial problems is becoming increasingly important. They are turning more and more to complementary and alternative medicine (CAM) and other alternative types of help in their treatment as a result of these demands. Receptive music therapy (MT), in which patients listen to music on a player while being guided by therapists, is a useful strategy for treating anxiety disorders. In addition to showing promise in lowering medication side effects, these therapies help to lessen stress, anxiety, and rage [24]. Aromatherapy is another treatment approach that

falls under the category of CAM. It uses essential oils to improve overall health. These oils' molecules can enter the body through the skin during massage, or they can be breathed in a variety of ways.

Studies have demonstrated the efficacy of aromatherapy in reducing anxiety levels in cancer patients, especially when lavender oil is used, as it possesses calming and relaxing qualities [25]. For cancer patients to receive better treatment outcomes and a higher quality of life, early detection and efficient treatment of anxiety and depression disorders are essential. Studies have indicated that these illnesses have a major effect on treatment adherence and raise cancer-related mortality. Better treatment adaption and symptom relief can result from a comprehensive strategy that considers both physical and mental health. Good psychological care benefits patients and their families as well, as the sickness causes stress for the family as well. Thus, it is imperative that interventions related to mental health become a fundamental component of oncological therapy [26].

Posttraumatic Stress Disorder

PTSD arises when individuals are unable to process and recover from a traumatic experience. The hallmark of this disease is a recurrent anxiety of experiencing the trauma, which frequently results in intrusive thoughts, nightmares, or flashbacks to the incident. Trauma-related memories are frequently automatic and may elicit strong sensory responses, in contrast to typical memories, which can be deliberately recalled [27]. Posttraumatic stress disorder, or PTSD, affects people with cancer even though it is mainly linked to veterans of combat or those who have experienced physical trauma. Cancer is acknowledged as a stressor that can contribute to the development of post-traumatic stress disorder (PTSD) in accordance with the recommendations provided in the Diagnostic and Statistical Manual of Mental Disorders, Fourth Edition (DSM-IV) [28]. The Event Scale-Revised is a useful tool for assessing symptoms of post-traumatic stress disorder (PTSD) since it measures behaviors like avoidance, intrusive thoughts, and elevated arousal. These symptoms often coexist with sleeplessness, which has a detrimental effect on general quality of life and results in cognitive complaints. This emphasizes the complicated impact of trauma on cancer survivors' physical and mental health [29]. Ten studies looking at PTSD in cancer survivors with different kinds of tumors were analyzed, and the results show a varied incidence of this illness. Just 4.5% of patients with testicular cancer had complete PTSD, which is a low prevalence. On the other hand, the prevalence of melanoma patients was much higher, up to 48%, indicating a stronger psychological burden related to this kind of illness. The frequency of PTSD in breast cancer survivors varied greatly, from 6.3% to 18%. These results underscore the significance of more investigation and the requirement for psychological assistance customized to patients' individual requirements according to their type of cancer [30]. In comparison to patients who were just given conventional care, individuals who had therapy and endured acute emotional distress and received psychological support shown considerable improvements in their quality of life. Following therapy, these patients had significantly reduced anxiety levels and showed improvements in a number of areas, such as their physical and mental health, social functioning, and self-esteem. In addition, compared to the control group, they experienced improved adherence to treatment, shorter hospital stays, lower medical expenses, and more satisfaction

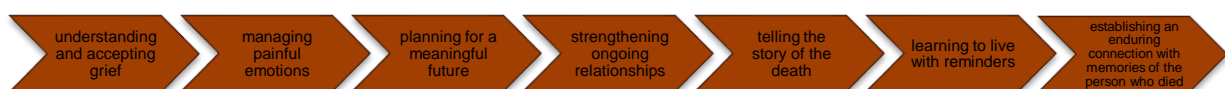
with their care. This highlights the significance of psychological assistance in enhancing the quality of life for individuals with cancer [31]. According to recent assessments, psychedelics show promise in the treatment of depression and PTSD, particularly in cancer patients.

For example, psilocybin has demonstrated long-lasting antidepressant effects that can extend up to six or twelve months after therapy. Its efficacy has been compared to escitalopram, a popular antidepressant, in certain studies. Ketamine has also drawn interest as a quick fix for people with depression who are resistant to conventional treatments. Significantly, these trials document no severe adverse effects in carefully monitored environments, suggesting that these treatments have a good safety record. This growing body of research highlights how psychedelics can significantly enhance the psychological health of cancer patients, opening the door for novel therapeutic approaches in the field of psycho-oncology [32].

Grief

Depending on the individual's experiences and the stage of the illness, grief is a multifaceted process that affects people with cancer and those close to them. "Grief" is a term used to describe extreme sadness, especially when a loved one has passed away. Grief can set in for cancer patients even before they receive their diagnosis. They frequently feel feelings of loss and dread that are related to their future ambitions and well-being. Chemotherapy and radiation treatments can intensify these emotions even worse, making patients feel hopeless and alone [33]. As a patient's health declines, family members of the patient also go through grief, worry about what will happen to their loved ones, and feel a sense of loss. The weight of having to make important treatment decisions and offer emotional support could be too much for them to handle [34]. Pre-loss grieving and, more recently, readiness for death are terms used to describe the time between learning that a loved one has a terminal illness and dying. [35]. It's critical to understand the differences between pathological and physiological mourning. The natural emotional process that follows a loss is known as physiological grieving. On the other hand, symptoms like sadness, longing, and loneliness become excessively intense, and the state of grief is prolonged in pathological grieving [36]. Tailored support to help caregivers adjust after the loss may be quite beneficial, especially if they experience poor levels of preparedness for the death of their family members. It's critical to recognize and embrace the feelings of bereaved persons in therapy while also listening to them with patience as they share their experiences with the departed and the circumstances surrounding their passing. Complicated grief therapy (CGT) is an evidence-based way to care for individuals experiencing difficult sorrow. This type of treatment supports a person's adjustment to life without the deceased while also helping them accept and cope with their loss [36]. According to Iglewicz's (2020) article, there are seven core themes addressed during CGT, which are illustrated in Figure 1.

Figure 1. The core themes addressed during Complicated Grief Therapy (CGT) [36].



Novel methods of grief therapy have arisen in recent years in an effort to help a larger number of people who are impacted by this problem. One such solution is web-based interventions that utilize cognitive-behavioral techniques and are based on structured writing tasks and feedback from therapists [37]. In order to help families of cancer patients deal with the feelings brought on by the death of a loved one, grief counseling is essential.

We facilitate the process of their recovery and enhance their capacity to function in a manner that reduces the likelihood of dysfunction by helping them to find purpose and resilience in the face of hardship.

Conclusions

Psycho-oncology is a crucial component of holistic cancer therapy, as it unites mental and physical well-being. Significant psychological illnesses can result from receiving a cancer diagnosis and its aftereffects. Mental symptoms are frequently more upsetting than the physical symptoms of the disease. Anxiety, despair, and PTSD are more common among cancer patients. Implementing consolidated and coordinated psycho-oncological care that assists patients during the course of treatment is therefore essential. In addition to improving patients' quality of life, treating psychological problems has a positive impact on overall health results. Psychological support, comprising mindfulness-based therapies and additional well-being-promoting techniques like music therapy and aromatherapy, can successfully relieve the symptoms of anxiety and depression. It is significant to remember that the impacts of cancer frequently affect family members and relatives who go through stress and anguish in addition to the individual sufferer. Consequently, a key element of psycho-oncological care is integrated family support. Even though psycho-oncological care has been shown to be effective, there are still large funding gaps and the Polish healthcare system does not recognize it as a distinct specialty. Having psycho-oncology recognized as a specialty would improve care quality by guaranteeing that patients and their families receive the necessary psychological support during this challenging period. To sum up, in order to help cancer patients fight their illness, enhance treatment results, and improve their general quality of life, psycho-oncological therapies must be a regular part of cancer patients' care. It is necessary to conduct more research on cutting-edge therapy approaches and to take into account new diagnostic standards for mental illnesses that consider the particular situations faced by cancer patients. Furthermore, investigating the possible application of psychoactive substances in the treatment of various illnesses may enhance the psychological well-being of cancer patients.

Disclosure

Author's contribution:

Conceptualization: KJ, MK

Methodology: KJ, MP

Software: MK, MJ

Check: KJ, WMS

Formal analysis: MK, MJ

Investigation: MC, JW, KKK

Resources: JW, JP

Data curation: KWP, MP

Writing-rough preparation: KJ, MK

Writing-review and editing: KJ, WMS

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