

Cancer's Psychosocial Aspects: Impact on Patient Outcomes

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Abstract

Cancer is one of the leading causes of morbidity and mortality in the world and has a significant psychosocial impact on patients, caregivers, and communities. The purpose of this study is to discuss psychosocial aspects of cancer treatment, which include psychological, social, emotional, and spiritual factors. This study examines the current global cancer trends and inequalities in incidence, access to treatment, and survival in low- and middle-income countries. By elucidating the psychosocial aspects of cancer patients, where the diagnosis, treatment, and post-treatment phases present a multitude of difficulties, the study highlights the criticality of psychological, social, and emotional support in addition to the medical aspect of cancer. Furthermore, the study evaluates the efficacy of such psychosocial interventions in cancer treatment. This study explains the effects of cognitive-behavioral therapy, mindfulness-based stress reduction, and support groups on patients' well-being, treatment compliance, and therapeutic outcomes. Lastly, this study stresses that the range of positive effects of psychosocial support in cancer is vast and encompasses improvements in the quality of life, a decrease in psychological distress, an increase in the level of compliance with treatment regimens, and possibly an influence on immunological status and survival rates. The introduction of psychosocial care as part of the medical model of cancer care delivery will go a long way in ensuring that patients are empowered and supported not only physically but also psychologically during the course of their treatment. This study sourced and utilized published articles from reputable academic databases.

Keywords: *Cancer, Psychosocial interventions, Psychoeducation, Cancer care, Chemotherapy*

1. Introduction

Cancer is a disease that involves the development of abnormal cells that can spread to other parts of the body. These cells can spread and destroy healthy tissues and organs, causing various signs and symptoms, depending on the type of cancer and the site involved (1,2). Some of the early signs include: tiredness, changes in appetite, skin discoloration, changes in bowel movement or frequency of urination, coughing or difficulty breathing, and unusual bleeding or bruising (3,4). Many cancer cases have obvious symptoms, and early diagnosis and treatment greatly enhance the

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chances of recovery and a normal life (5). Cancer is the second-leading cause of death in the world (6,7). Cancer is a major and chronic disease that affects not only the physical but also the psychological, social, and mental aspects of a person (8). A cancer diagnosis constitutes a stressful process marked by anxiety, depression, and fear, not only for the patients but also for their families. The subsequent treatments—surgery, chemotherapy, and radiation—can lead to alterations in body image, self-esteem, and cognitive abilities (9). These changes can result in social exclusion, role loss, and existential vulnerability (10). Thus, psychosocial care is a vital component of addressing these complex issues. It encompasses counseling, support groups, informative materials, and other integrative therapies for addressing the quality of life of individuals diagnosed with cancer. It is crucial to address psychosocial issues, as they may impair the patient's coping with the disease, following treatment recommendations, and general quality of life. If left unaddressed, psychosocial distress leads to the onset of psychiatric conditions and noncompliance with treatment, which poses challenges in cancer management (11). The aim of this manuscript is to thoroughly review the literature on the psychosocial aspects of cancer care and how they influence the patient's prognosis and treatment effectiveness. The present paper aims to emphasize the need for a comprehensive approach to cancer management by highlighting the importance of integrated psychosocial care. This review will guide subsequent studies, policies, and interventions that seek to enhance the well-being and health of cancer patients across the globe.

2. Methodology

This review focuses on cancer psychosocial factors and their effects on patient outcomes. This paper followed an orderly procedure in identifying, retrieving, and synthesizing the articles. We conducted a search for articles published in English, peer-reviewed journals, systematic reviews, meta-analyses, and clinical guidelines. The review also excluded non-English-language articles, studies that were not specifically concerned with cancer, articles published before 2000, and case reports that did not contain empirical evidence. We retrieved information from the selected articles, including the study type, participant details, psychosocial factors reviewed, types of interventions, outcomes, and authors' findings. The review was based on the role and influence of psychosocial aspects on patient outcomes, the efficacy of various interventions, variations in psychosocial experiences among different groups, and guidelines for incorporating psychosocial care into cancer treatment.

3. Overview of cancer as a global health issue

Cancer is a well-known disease that affects a vast number of people worldwide and has a tremendous impact on the social, economic, and medical fields. It is a group of diseases that involve the proliferation of abnormal cells that are capable of invading and destroying healthy tissues. It can occur in almost any organ of the body (12,13). Cancer is a leading global killer that has a huge impact on low- and middle-income countries (LMICs) (14). According to the data provided by the World Health Organization, in 2020, there were 19.3 million new cases and nearly 10 million cancer-related deaths globally (15). Regrettably, the global population could experience 28.9 million new cases and 16.2 million deaths by 2040. LMICs have the highest disease burden, accounting for 65% of the estimated 10 million cancer deaths in 2020. According to the 2020

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global cancer statistics, 60% of new cancer cases and 70% of cancer deaths occurred in LMICs (16). These percentages are likely to increase in the future due to population growth. Cancers related to aging and lifestyle, such as breast, prostate, and colorectal cancers, are more common in developed countries, while cancers related to infections, such as cervical, liver, and stomach cancers, are more common in developing nations (7). Tobacco use, an unhealthy diet, a lack of physical activity, and alcohol consumption are some of the major causes of cancer, with tobacco being the primary cause (17). Other non-modifiable risk factors include exposure to pollutants at the workplace, such as air, radiation, and chemical products (18). Some pathogens, like Human papillomavirus (HPV), hepatitis B virus (HBV), hepatitis C virus (HCV), and *Helicobacter pylori*, are associated with particular types of cancer, particularly in LMICs (19). Screening programs to detect cancer at an early stage are beneficial for increasing treatment effectiveness (20). Other measures include vaccinations, such as the HPV and hepatitis B vaccines, which serve to prevent infections (21). Health drives involve informing the community on ways they can lead healthy lives and the effects of certain behaviors on their health. Reductions in major risk factors and the application of well-established cancer control interventions can prevent about one-third to half of all cancer mortality (22). However, a large number of health systems in LMICs are least equipped to handle this burden, and millions of cancer patients worldwide are either not able to get their diseases diagnosed in time or receive inadequate treatment. The incidence of cancer is rising worldwide, and the disease has an extensive impact on people's physical and emotional well-being, as well as on the healthcare system. It is difficult to address the rising rates of cancer incidence and mortality in LMICs because of a number of issues, including inadequate infrastructure, a dearth of hospitals and clinics, a scarcity of highly qualified cancer physicians and nurses, restricted access to drugs and vaccines, and restricted availability of diagnostic tools, screening equipment, and surgical facilities (23).

4. Importance of psychosocial aspects in cancer care

Psychosocial aspects of cancer care refer to the patient's psychological, social, emotional, and spiritual well-being. The impact of a cancer diagnosis on mental health, interpersonal relationships, roles, and quality of life are among these aspects (11). Psychosocial distress has an impact on a patient's ability to effectively handle cancer, its symptoms, and treatment processes. Psychosocial distress is associated with poor psychological health, life satisfaction, social interactions, and optimism (24). If left untreated, psychosocial distress may result in psychiatric disorders and poor adherence to prescribed treatment (25). Cancer care psychosocial factors enhance patients' quality of life, treatment compliance, emotional and psychological well-being, coping strategies, social networks, family support, and overall health (26). Thus, the standard of cancer care should integrate psychosocial care. Screening for distress allows for its early detection and management. Therefore, it is essential to engage multidisciplinary teams, including oncology professionals, psychologists, social workers, and caregivers, to ensure that patients receive adequate psychosocial care (27).

Meeting psychosocial needs can help patients become more resilient, better manage stress, and experience decreased anxiety and depression (28). An integrated model of care, focusing on the patient as a person, may have more enduring positive outcomes, helping patients adapt to life after cancer and dealing with mental health issues (29).

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5. The Psychosocial Experience of Cancer Patients

The psychosocial experience of cancer patients involves several difficulties that affect people, their families, and society as a whole. Knowledge of these experiences is essential in order to provide total care to the patient by not only addressing the body but also the mind. Cancer survivors and patients have various psychosocial challenges that affect them at different points in their journey. The first moment of the cancer diagnosis leads to various emotional experiences such as shock, depression, anxiety, and fear of recurrence of the disease, which worsens hopelessness and increases uncertainty about the treatment outcomes (30). Cancer can also change social interactions or roles, create new roles, result in stigma and isolation, or limit activities, which may cause patients, caregivers, or those unable to return to previous activities to experience loneliness (31). Surgery, chemotherapy, and radiation therapy can cause changes in body image and self-esteem, cognitive dysfunction, and existential distress as patients struggle to redefine their purpose and goals in life (32). There is financial strain due to treatment costs and income loss, which creates another source of stress (33). Literature has demonstrated the importance of providing psychosocial care to cancer patients at every stage of their journey. That is why psychosocial factors can be considered essential determinants of a patient's quality of life, effectiveness rates, and state of health. The identification of psychological problems in cancer patients, such as anxiety and depression, raises concern about the need for integrated psychosocial support and interventions in the cancer care continuum. Meeting psychosocial needs is significant for improving quality of life and delivering comprehensive care to patients with cancer (34).

6. Coping Mechanisms and Adaptation of cancer patients

Cancer patients employ various ways and means of coping and adapting to the physical, psychological, and social ordeal of the disease and its treatment. Individual, cultural, and social attributes can influence these strategies (35). Cognitive and behavioral methods include using social support by approaching friends and families, joining cancer support groups, seeking professional help, practicing mindfulness and relaxation, maintaining a positive attitude, and seeking information (36). Practical and behavioral coping measures include learning about the disease, getting medical advice, eating healthily and exercising, coping with side effects, and turning to complementary therapies (37). Some of the social and cultural adjustments include community integration, volunteering, cultural or religious activities, work, and finances (38). Goal setting, developing a survivorship care plan, and advocating for cancer research are some of the ways to achieve long-term adaptation and survivorship (39). The need for patient-centered care and interventions is evident when considering the various ways in which cancer patients manage their condition and its impact on their lives. Research indicates that cancer patients who utilize these adaptive coping mechanisms experience enhanced psychological adjustment, decreased distress, and enhanced quality of life (40). Age, marital status, and living situation also play an important role in coping and adaptation (41). The nursing profession is important in helping cancer patients cope and manage their condition by providing comprehensive, uninterrupted, patient-tailored care that is physical, emotional, and social (42). Nurses should evaluate each patient's coping resources and help them adopt the most appropriate ways to deal with the disease's demands.

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7. Psychosocial Interventions and Their Efficacy in cancer management

Cancer support interventions are among the most crucial components of cancer treatment, which aims at identifying and managing the psychological, social, and emotional issues of cancer patients. These interventions aim to improve the overall health, psychological well-being, and physical condition of cancer patients. Some psychosocial interventions in cancer management have proven to be effective.

1. **Cognitive-Behavioral Therapy (CBT):** CBT is a type of psychotherapy that aims at altering negative feelings, behaviors, and beliefs in a structured, purposeful manner. The cognitive model, the foundation of CBT, asserts that an individual's interpretation of a situation shapes their emotional and behavioral responses to it (43). CBT assists in altering unhealthy thinking and behavioral patterns in a patient. Research also shows that CBT improves cancer patients' quality of life by reducing anxiety, stress, and depression (44).
2. **Mindfulness-Based Stress Reduction (MBSR):** MBSR is a systematic approach that aims to alleviate stress and enhance the quality of life through mindfulness. MBSR is an integration of mindfulness meditation and yoga that assists people in achieving enhanced awareness of their current state and enhanced ways of managing stress (45). Research studies have shown that MBSR helps reduce stress, improve mood, and improve coping abilities in cancer patients (46).
3. **Support Groups:** These groups provide patients with a sense of community, comfort from others experiencing similar conditions, and access to information from other patients (47). Being involved in support groups is beneficial for the decrease of loneliness, the enhancement of mental health, and, in some cases, the extension of one's life expectancy (48).
4. **Psychoeducation** is defined as educating patients and their families about cancer, available treatments, and techniques to manage it. This approach also helps to minimize stress, improve patient compliance with the prescribed treatment and educational programs, and enable patients to make their own decisions about their treatment (49).
5. **Art and Music Therapy:** These therapies involve the use of creative techniques that enable the patient to talk out their feelings and manage the disease. Art and music therapy have been known to help with stress and pain, as well as have an impact on patients' psychological health (50).
6. **Exercise and Physical Activity Programs:** This means that the patient gets into a structured exercise regime that is in concordance with his or her capabilities and health status. Physical activity indeed has the benefits of reducing fatigue, enhancing mood and physical function, and improving the quality of life (51).

8. Impact of Psychosocial interventions on cancer treatment outcomes

Cancer support programs have become an essential component of the multifaceted approach to cancer treatment, which focuses on cancer patients' psychological, social, and emotional needs. These interventions enhance quality of life, reduce distress, and potentially improve cancer

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treatment outcomes (52). Psychosocial interventions have significant impacts on the outcomes of cancer treatment.

- i. Improved Quality of Life: Counseling, support groups, and stress management methods are important aspects that enhance the quality of life of patients with cancer. These interventions help patients manage the psychological impact of cancer diagnosis and treatment, which has a positive effect on their mental health (53).
- ii. Reduced psychological distress: Cancer diagnosis and treatment processes cause patients to develop anxiety, depression, fear, and other psychological symptoms. Psychosocial interventions such as cognitive behavioral therapy and mindfulness-based stress reduction effectively alleviate these symptoms. This is because lower distress levels are likely to lead to better compliance with treatment regimens and treatment outcomes (54).
- iii. Enhanced Treatment Adherence: Psychosocial support enhances patients' compliance with treatment regimens. These interventions enable patients to finish their therapies by managing emotional and practical barriers to treatment adherence, which is important for cancer treatments (55).
- iv. Improved immune function: Studies suggest that psychosocial interventions may enhance immune function (56). Stress and depression can have a negative impact on the immune system, while stress reduction and improved mood may have a positive impact on the immune system and possibly affect cancer and recovery (57).
- v. Better pain management: Cancer patients frequently experience pain, and relief is essential for improving the patient's quality of life and treatment outcomes. Researchers have found that using relaxation and hypnosis more frequently than pain medications can enhance patient benefits in pain management (58).
- vi. Enhanced social support: Research has established that social support plays a crucial role in determining cancer survival (59). Group and family interventions allow patients to establish social support networks and receive practical assistance, leading to improved coping strategies and ultimately improved clinical outcomes (60).
- vii. Improved interactions with health care professionals: The best results in cancer treatment require proper interaction between patients and health care providers (61). Some of the components of psychosocial interventions include improving patients' communication ability so that they can understand their treatment plans, their rights to express what they want or need, and their roles in decision-making (62).
- viii. Reduced healthcare costs: Psychosocial interventions can lead to cost savings in healthcare by increasing psychological well-being and compliance with treatment (63). Improved psychological well-being and decreased levels of psychological distress directly translate into fewer hospitalizations and a decrease in the utilization of healthcare services, which in turn are associated with overall cost savings for both the patient and the healthcare system (64).

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- ix. Survival Rates: There is some evidence that psychosocial support may have a positive impact on survival rates, which may be attributable to better mental health and/or better compliance with therapy (65).

9. Conclusion

Cancer is a broad and diverse topic that touches on the lives of many patients, families, and healthcare centers around the world. The inclusion of psychosocial support in cancer care is essential for meeting the patients' needs and promoting the quality of life as well as the effectiveness of the treatment process. Specific psychological treatments such as cognitive-behavioral therapy, mindfulness-based stress reduction, and art therapy are useful in decreasing distress, improving quality of life, and increasing treatment compliance. As a result, it is crucial to have a more complex approach to the problem where oncology professionals, psychologists, social workers, and caregivers are involved. Future studies and policy directions should aim at reducing the disparities in psychosocial support, especially in low-income countries, and creating culturally appropriate interventions for different groups. Thus, addressing psychosocial factors in cancer care can help healthcare systems assist patients in their fight against cancer, enhance their well-being, and extend their lifespan.

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