



Investigating the Connection Between Skin Cancers and Mental Disorders: A Thorough Analysis

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Abstract: *This review aims to elucidate the relationship between mental disorders and various forms of skin cancer, as well as to examine the prevention and treatment strategies for these patients using a multidisciplinary approach. The recognition that the impact of skin cancer extends beyond physical manifestations has led to an increasing need to investigate the psychological effects and mental health implications associated with this pathology. Cancer diagnoses represent significant stressors that can induce moderate-to-severe levels of emotional distress among patients and substantially impact patients' quality of life. Individuals diagnosed with malignant melanoma demonstrate a higher prevalence of psychosocial disturbance than those diagnosed with non-melanoma skin cancers. This observation suggests that the classification of skin neoplasia and its visibility may influence a patient's quality of life. Healthcare professionals need to develop communication skills to observe the psychological changes faced by patients diagnosed with cutaneous malignancies. This study aims to enhance patient care, improve overall well-being, and promote comprehensive approaches for treating patients with cutaneous malignancies. The potential impact of stress and anxiety on the immune system may influence the treatment of various types of skin neoplasia. It is important to investigate the relationship between psychological factors and the immune system to develop efficacious interventions for managing stress and anxiety-related skin disorders. Further research is needed to establish standardized methods, assess long-term outcomes, develop tailored psychological support programs, and identify the potential risk and protective factors.*

Keywords: *skin cancers, mental health, depression, anxiety, quality of life*

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1. Introduction

Individuals with skin neoplasia frequently experience psychological distress including anxiety, fear, depression, and body image concerns. These psychological effects may be further exacerbated by the social stigma associated with skin cancer, potentially leading to a detrimental impact on quality of life. Early detection and prompt intervention for cutaneous neoplasms can significantly enhance the prognosis and mitigate the risk of complications, underscoring the critical importance of regular dermatological examinations and heightened self-awareness among individuals.

Depression and anxiety are the most prevalent psychiatric disorders associated with cutaneous neoplasms (Khalid, 2023). Skin malignancies can induce elevated levels of anxiety in individuals owing to apprehension regarding cancer recurrence or metastasis, concerns regarding prognosis, and uncertainty about future outcomes. The physical appearance changes caused by skin neoplasia treatment, such as scarring or the need for more surgical interventions, can lead to body image dissatisfaction and decreased self-esteem, which can contribute to the development of depression (Ku, 2020).

Understanding the link between skin carcinomas and mental disorders is crucial for healthcare professionals to provide comprehensive care to individuals affected by these conditions (Honda, 2005). The presence of psychological distress has been associated with increased healthcare utilization and costs, indicating a substantial burden on both the individual and the healthcare system, with an impact on the quality of care received (Chen, 2004).

Although the specific context of skin neoplasia requires further investigation, extant research indicates that psychological and emotional burdens constitute significant concerns for these patients and may manifest in various ways, including increased healthcare utilization and diminished quality of life (Teh, 2021). The communication of potential outcomes and prognosis to patients constitutes a complex process that can significantly influence patient adherence, satisfaction, and capacity to make informed treatment decisions (Selim, 2020).

The diagnosis and treatment of skin neoplasia can substantially influence an individual's quality of life (QoL), although the magnitude and nature of this impact varies. While some patients experience minimal alterations in their QoL, others report significant decrements contingent on the type of neoplasia, therapeutic intervention received, and individual psychosocial factors. A disease-specific quality of life (QoL) measure may be essential to comprehensively assess the impact of skin neoplasia on patients' lives (Jalili, 2022).

The holistic approach to the management of skin neoplasia includes the treatment of the physical and psychological manifestations and social support for these patients (Honda, 2005). Integrating mental health support into standard care protocols for individuals with cutaneous malignancies has the potential to yield significant benefits, as evidenced by the research conducted across various medical disciplines. Research has demonstrated that the integration of psychological interventions within standard care protocols can result in decreased psychological distress and enhanced mental health outcomes in patients with chronic conditions (Cortese, 2020).

In the context of oncology, collaborative care models that include mental health services have been effective in enhancing patient well-being, suggesting that such integration could be beneficial for patients with skin cancer patients as well (Armiya'u, 2024). There are favorable outcomes when psychological interventions are implemented following the identification of physical distress through systematic screening (Shimizu, 2013).

Early detection and intervention can improve the prognosis of patients with cutaneous neoplasia and mitigate the risks of complications. Recent advances in neuroscience have provided valuable insights into the molecular and cellular processes that contribute to mental health disorders, thereby facilitating the development of targeted therapeutics that can specifically address these abnormalities and potentially enhance treatment efficacy.

The potential benefits of this approach include enhanced patient satisfaction, diminished anxiety and stress, and improved overall experience for individuals affected by skin neoplasia (Nguyen, 2023). To achieve this objective, medical professionals must continue to collaborate and share their knowledge to advance the field of oncology and provide the best possible outcomes for these patients. The implementation of advanced technologies such as artificial intelligence and machine learning has the potential to facilitate the achievement of these objectives by providing more precise and individualized treatment protocols tailored to each patient.

One mechanism through which artificial intelligence and machine learning can enhance personalized treatment plans is via the analysis of extensive patient data, enabling medical practitioners to identify patterns and make more informed decisions regarding patient care. Another way that AI can improve personalized treatment plans is by analyzing patient data to identify genetic markers associated with specific diseases, assisting healthcare professionals in developing targeted therapies, and improving patient outcomes (Poalelungi, 2023).

2. Problem

This review provides an overview of existing knowledge about anxiety, depression, and skin cancer and provides evidence to understand why some individuals with skin cancer experience psychological stress and others do not, and how genetic predisposition or social factors could influence the incidence of depression and anxiety in such patients.

3. Theoretical aspects

The association between mental disorders and difficult-to-treat neoplasia is complex. Further investigation is required to elucidate the connection between mental health disorders and refractory neoplasia, which may lead to novel therapeutic approaches and enhance patient outcomes (Khalid, 2023). Identifying effective treatment strategies for the oncologic population requires a comprehensive understanding of the underlying biological mechanisms and sociocultural elements that influence the progression of both conditions (Tamagawa, 2012).

Additional research could be necessary to examine the possible benefits of integrating drug treatments with psychological approaches in managing concurrent mental health conditions and their physical symptoms in this group. It is essential to investigate the potential mechanisms underlying the bidirectional association between mental health and skin cancer as this may have significant implications for prevention and treatment strategies (Barragán, 2020). Exploring the psychological, biological, and social factors that contribute to the development of mental health disorders in patients with cancer is crucial for designing effective interventions and improving their quality of life.

Investigating the cultural and environmental factors that may exacerbate or mitigate mental health issues in patients with cancer is essential for developing comprehensive interventions that address the unique needs of diverse populations. Peairs (2024) identified a correlation between pre-existing mental health conditions and poorer outcomes following orthopedic surgery for lower extremity fractures, suggesting that mental health can significantly affect recovery and complications in a non-cancerous context and Gomez (2023) found that individuals who practiced mindfulness meditation experienced a significant reduction in symptoms of depression and anxiety.

The bidirectional relationship between mental health and somatic conditions may be extrapolated to encompass the association between mental disorders and neoplasia (Cortese, 2020). It is important to consider the potential implications of mental disorders in the development of neoplasia, and further research is warranted to investigate this association more thoroughly. The potential of biofeedback in the management of anxiety may provide valuable insights into supportive interventions that could be beneficial for patients with neoplasia experiencing anxiety associated with their diagnosis and treatment (Alneyadi, 2021).

Investigating the effectiveness of cognitive-behavioral therapy and mindfulness-based interventions in managing anxiety among patients with neoplasia is essential as these approaches

have demonstrated promising outcomes in alleviating anxiety symptoms (Jalili, 2022). The reviewed literature indicated that mental health has a significant influence on the outcomes of various medical conditions. This observation suggests that mental health disorders may potentially affect the treatment and management of neoplasia, thus necessitating further investigation into this specific association (Hashimoto, 2022). This underscores the significance of investigating the association between mental health disorders and neoplasia, which may influence therapeutic strategies and patient outcomes. It is important to examine the longitudinal effects of mental health disorders on the long-term outcomes of patients with neoplasia, including survival rate and quality of life (Abdelhadi, 2023).

The diagnosis and treatment of cutaneous neoplasms, such as melanoma and non-melanoma skin cancer (NMSC), can considerably affect quality of life (QoL). While the Dermatology Life Quality Index (DLQI) shows minimal impact on well-being when non-melanoma skin cancer (NMSC) is diagnosed, patients experience enhancements in their quality of life after undergoing treatment, particularly in terms of decreased pain (Rhee, 2004). In patients with erythrodermic cutaneous T-cell lymphoma, treatment with mogamulizumab has been associated with a significant decrease in symptoms, positively influencing quality of life (Ottevanger, 2023). The impact of skin neoplasia on QoL is not uniform and can vary according to the type of skin cancer and individual patient factors. While certain skin conditions associated with immunosuppressive therapy in renal transplant recipients significantly impair QoL, a history of skin cancer in these patients has a lesser impact (Moloney, 2005).

The communication of potential outcomes and prognosis with patients can significantly influence patient adherence, satisfaction, and capacity to make informed treatment decisions. Research has demonstrated that interventions aimed at enhancing communication about prognosis, such as education for clinicians and mediated interventions, can result in improved patient-reported outcomes and increased patient engagement in discussions regarding prognosis (Shields, 2009). The quality of physician-patient communication has been demonstrated to contribute to patient adherence, which subsequently exerts a significant influence on prognosis, particularly in chronic conditions (Dong, 2014). The physician's specialty may influence the discussion of prognosis, with oncologists demonstrating a higher likelihood of engaging in prognosis communication than family physicians.

This engagement is further enhanced by physicians, who actively elicit and validate patient concerns and employ an attentive vocal tone (Manchaiah, 2019). Patient-centered communication strategies, such as motivational interviewing and action planning, are essential for managing lifestyle-related risk factors, which can exert a substantial influence on health outcomes (Winnifrith, 2024). Effective communication regarding potential outcomes and prognosis is imperative for patient-centered care and may result in improved health outcomes. Educational interventions for clinicians and strategies that facilitate patient engagement in discussions on prognosis are advantageous. The quality of communication, the physician's specialty, and the utilization of patient-centered communication strategies are all crucial factors contributing to the efficacy of prognosis discussions (Selim, 2020).

Skin neoplasia, encompassing both melanoma and non-melanoma skin cancers, is treated in various modalities. Surgical excision remains the primary therapeutic approach for skin cancers, and the histological subtype determines the surgical margins (Bailey, 2005). Systemic treatments for the advanced stages have been developed, including immunotherapy and targeted therapies (Simões, 2015). Surgical interventions remain the primary approach, and there is an increasing need for multiple treatment modalities owing to the escalating incidence of skin cancers. Technological advancements, including nanotechnology and immunotherapy, have been investigated as alternative or adjunctive treatments. The utilization of immunotherapy and targeted therapies is expanding for locally advanced diseases, indicating a paradigm shift toward personalized strategies within a multidisciplinary therapeutic framework (Rampinelli, 2024 & Hashimoto, 2022).

4. Material and methods

The databases consulted were PubMed, Embase, Cochrane Library, Web of Science, and Google Scholar. Keywords used: depression, anxiety, skin cancer, melanoma, non-melanoma, mental health, and psychological impact. The study selection process entailed a systematic and transparent approach to reading titles and abstracts to identify relevant studies for inclusion in the review. After applying the inclusion and exclusion criteria, research articles that failed to meet the established criteria were eliminated, while those containing relevant information to answer the research question were carefully and critically read.

4.1. Inclusion and Exclusion Criteria

Studies were included if they focused on the prevalence, diagnosis, impact, and management of depression and anxiety in patients with skin cancer using a multidisciplinary approach. Articles that were not available in the full text or published in languages other than English were excluded (Table 1).

Table 1. Inclusion and Exclusion Criteria for Studies Included in the Systematic Review on Depression in Patients with Skin Cancer

Inclusion criteria	Exclusion criteria
Studies published in English	Studies not published in English
Studies reporting depression or mental health outcomes in patients with skin cancer	Studies not reporting depression or mental health outcomes in skin cancer patients
Patients with a diagnosis of melanoma or non-melanoma skin cancer	Studies not focusing on skin cancer patients
Studies that use validated measures for depression and anxiety	Studies that do not use validated measures for depression and anxiety
Literature that differentiates types of cancer when assessing psychological comorbidities	Literature that does not differentiate between types of cancer when assessing psychological comorbidities
Adult patients diagnosed with skin cancer	Studies about children diagnosed with skin cancer
Articles who was available in full-text	Articles who was not available in full-text
Studies with a sample size of more than 150	Case report studies
	Studies reporting mental health outcomes in patients with other neoplasia location

4.2. Data synthesis

The findings from the selected studies were synthesized using narrative and qualitative analyses, emphasizing similarities and differences.

5. Results

The database search yielded 196 entries, with 65 ultimately meeting the inclusion criteria and being selected for further analysis.

Studies have demonstrated that “the prevalence of depression in patients with cancer can be as high as 20-25%, while anxiety can affect up to 30-40% of patients” (Mausbach, 2017 & Brandenbarg, 2019). In patients with skin cancer, these rates can vary depending on the type and stage of cancer, type of treatment (surgery, chemotherapy, radiation), age, and pre-existing mental health conditions (Bailey, 2005).

5.1. New therapies

The development of new therapeutic agents and the application of innovative technologies are critical for addressing the increasing burden of skin neoplasia and improving patient outcomes. A highly promising field in cancer treatment research focuses on developing novel therapies that specifically target genes or proteins implicated in cancer cell proliferation and metastasis. These targeted therapies offer a more precise and effective approach to treating cancer, as they selectively destroy cancer cells while sparing healthy cells (Hosseini, 2017).

Immunotherapy is a significant area of cancer research that utilizes the capacity of the immune system to combat cancer. This therapeutic approach has demonstrated promising outcomes in the treatment of various malignancies and is emerging as an increasingly prevalent treatment modality. The mechanism of immunotherapy involves stimulating the immune system to identify and target cancer cells and has exhibited considerable potential in addressing a diverse range of cancers. Immunotherapy has revolutionized cancer treatment and remains an area of active research with ongoing efforts to enhance its efficacy and expand its applications (Schneiderman, 2005).

The field of mental health therapy has experienced considerable progress, with innovative strategies and methods emerging to address psychological disorders more efficiently and enhance overall mental wellness (Paganin, 2023). In addition to conventional therapeutic approaches, there has been increasing scholarly interest in alternative methodologies such as mindfulness-based interventions and cognitive-behavioral therapy, which have demonstrated efficacy in the treatment of mental health disorders (Khan, 2022).

5.2. Psychological Support

Psychological support systems are crucial for individuals experiencing mental health challenges, and technological advancements can significantly enhance their accessibility and efficacy. Digital therapy platforms and artificial intelligence-based support systems have the potential to provide accessible and confidential mental health interventions for individuals who lack access to traditional in-person services. Incorporating mental health care into routine treatment for patients with skin neoplasms could offer a significant advantage.

This approach may help alleviate the common feelings of distress and apprehension that often accompany a skin cancer diagnosis, potentially enhancing the patient's overall well-being (Turki, 2021). Moreover, providing mental health support to individuals with skin neoplasia may enhance their adherence to treatment regimens and potentially result in improved clinical outcomes. Mental health can potentially affect treatment outcomes and overall well-being in patients with skin neoplasia, and socioeconomic factors and access to healthcare resources may exert a significant influence on treatment outcomes and overall well-being (Yamada, 2022).

Cultural attitudes and beliefs can significantly influence patient experiences and outcomes in the context of skin neoplasia, underscoring the need to consider the broader social and cultural context in which healthcare is delivered. Healthcare practitioners must be cognizant of and responsive to cultural attitudes and beliefs that may affect patient experiences and outcomes in the context of skin neoplasia (Chiauzzi, 2024).

5.3. Improving Patient Care and Interdisciplinary Collaboration

Holistic approaches that consider both physical and psychological aspects can influence the treatment of skin neoplasia, improve patient outcomes, and lead to reduced stress levels, which may positively affect the immune system and aid in the recovery process. Early detection and regular screening can also significantly improve the efficacy of skin neoplasia treatment and the overall patient prognosis. Novel therapeutic approaches, including psychotherapy, pharmacological interventions, and support groups, are being developed to address the mental disorders associated with neoplasia (Straus, 2006). These interventions aim to assist patients in managing the emotional and psychological challenges associated with living with cancer and their treatment.

Chronic skin conditions have been shown to exert significant psychosocial effects, potentially resulting in comorbid mental health disorders. Cancer survivors incur higher healthcare costs when mental health conditions are present, indicating an increased burden on individuals with skin neoplasia and mental health disorders (Flinn, 2024). The relationship between psychoneuroimmunology (PNI) and various health conditions, including oral diseases, provides a framework for understanding how psychological factors influence the immune system and potentially affect skin health and neoplasia. This bidirectional relationship underscores the importance of mental health in the management of skin neoplasia (Biazus Soares, 2024).

Individuals diagnosed with Common Mental Disorders (CMDs) exhibit elevated cancer mortality rates, encompassing a wide spectrum of malignancies with diverse etiologies, which may indicate an increased susceptibility to cutaneous neoplasia within this population (Chierzi, 2023). Among skin cancers, basal cell carcinoma and squamous cell carcinoma are the most common forms. Due to their high occurrence in the general population, these types are likely to be the most frequent skin neoplasms potentially linked to individuals with mental health conditions (Boini, 2004).

6. Discussions

This review aimed to evaluate the relationship between skin cancers and mental health conditions such as anxiety and depression. Additionally, it sought to explore multidisciplinary approaches for preventing and treating patients affected by these interconnected issues. Insufficient social support, social isolation, fear of mortality and cancer recurrence, alterations in body image, and financial strain can exacerbate mental health problems.

Our review revealed that depression and anxiety are prevalent among patients with skin cancer, with rates significantly higher than those observed in the general population. Healthcare providers should implement routine screening for depression and anxiety in patients with skin cancer, and provide long-term integrated care that addresses both physical and mental health needs (Lieb, 2022).

6.1. Diagnosis of skin neoplasia

The diagnosis of cutaneous neoplasms typically entails a visual examination conducted by a dermatologist or plastic surgeon, followed by a biopsy to confirm the neoplasm's classification and stage. Supplementary diagnostic modalities such as imaging studies may be employed to ascertain whether metastasis has occurred in other anatomical regions. Early detection utilizing diagnostic methodologies, including visual examination ("ABCDE rule: asymmetry, border irregularity, color variation, diameter >6 mm, evolving"), biopsy (excisional or incisional biopsy), and prompt intervention, are critical for the successful management of skin neoplasia (Tamas, 2021). Beyond visual inspection and tissue sampling, advanced imaging techniques like computed tomography (CT), magnetic resonance imaging (MRI), and positron emission tomography (PET) scans can be utilized to detect the presence of metastasis (Bordianu, 2018).

6.2. Psychiatric evaluation

A mental health practitioner will inquire about symptoms, cognitions, comorbidities, and behavioral patterns to determine the severity and duration of symptoms (Shi Heng, 2023).

6.3. DMS-5 Criteria

The Diagnostic and Statistical Manual of Mental Disorders (DSM-5) provides the specific criteria for diagnosing major depressive disorder. According to the DSM-5, "a diagnosis of depression requires at least five of the following symptoms presented for at least two weeks": depressed mood most of the day, markedly diminished interest or pleasure in almost all activities, eating disorders, insomnia or hypersomnia, psychomotor agitation or retardation, fatigue or loss of

energy, feelings of excessive guilt diminished ability to think or concentrate, recurrent thoughts of death, or suicide attempt (First, 2021).

6.4. Intervention and Treatment

Treatment options for cutaneous neoplasms include surgical excision, cryotherapy, and topical therapies, which should be tailored to the specific type and stage of neoplasia. Difficult-to-treat neoplasias, such as certain types of malignancies, present significant challenges in clinical management because of their resistance to conventional therapeutic modalities. These neoplasms may be inherently refractory to chemotherapeutic agents or acquire resistance over time, resulting in ineffective treatment and transient benefits, frequently accompanied by significant toxicity (Chatzikonstantinou, 2023).

Additionally, the resistance to treatment and reoccurrence of tumors are frequently linked to biological mechanisms like epithelial-mesenchymal transition (EMT). This process allows cancer cells to adjust and survive in the face of therapeutic interventions (Bordianu, 2018). The repositioning of FDA-approved drugs has been investigated for their ability to inhibit cancer cell proliferation and overcome acquired resistance to targeted therapies, highlighting the potential of combination therapies to enhance treatment efficacy (Coppini, 2023). Difficult-to-treat neoplasia presents a significant challenge in oncology owing to its complex resistance mechanisms and the limited efficacy of conventional treatments. Nevertheless, ongoing research into novel therapeutic strategies and repurposing of existing drugs offers the potential for improved management of these refractory conditions (Shang, 2020).

Although surgical excision remains the gold standard for skin cancer treatment, alternative therapeutic approaches have been employed for elderly and frail patients, demonstrating favorable tolerance and safety profiles. Postsurgical aesthetic satisfaction is influenced by sociodemographic factors, with younger patients and females reporting lower levels of satisfaction, particularly when surgical interventions involve the central facial region and necessitate the use of flaps for postexcisional defect repair (Kant, 2020). There are effective treatments for facial skin neoplasia that prioritize both curative and cosmetic outcomes, and patient satisfaction and psychosocial well-being are critical considerations (Tamas, 2021).

The comorbidity of mental disorders can reduce the success rate of treating either type of disorder, which may also affect the management of skin neoplasia in these patients (Anghel, 2023). The coexistence of mental disorders and skin neoplasia necessitates a multidisciplinary approach to patient care that addresses both the physical and psychological aspects of a patient's condition. Effective treatment requires collaboration among dermatologists, plastic surgeons, oncologists, psychiatrists, and primary care providers to ensure the integration of mental health considerations into cancer care plans. This comprehensive approach may contribute to improved treatment adherence and overall outcomes in such patients (O'Hea, 2016).

6.5. Comorbid Mental Health Conditions

Individuals with cancer exhibit a higher propensity for developing mental disorders with shared risk factors, including advanced age, psychological distress, and comorbidities such as hypertension and diabetes (Anghel, 2023)). The psychological burden of cancer, including the stress of diagnosis and treatment-related challenges, may contribute to the manifestation of mental disorders in this population. The literature indicates that psychological distress is associated with an increased probability of mental disorders in subsequent life stages (Min, 2013).

Furthermore, certain behaviors, such as tobacco use and physical inactivity, which are also established risk factors for cancer, demonstrate a correlation with psychological distress (Denche-Zamorano, 2022). Additionally, the presence of comorbid mental health disorders is associated with elevated rates of psychological distress, which may be particularly relevant for patients with skin neoplasia, who experience distress as a consequence of their condition. Lifestyle factors, including physical activity and diet, have been associated with the onset and symptoms of

mental disorders, suggesting their potential roles as modifiable risk factors. The prospective role of probiotics in treating mood disorders may represent a promising avenue for future research on patients with skin cancer (Schuch, 2021 & Boev, 2024).

6.6. Assessment and Screening Strategies

The management of diverse clinical scenarios requires a tailored approach based on specific conditions and patient characteristics. In oncology, particularly in situations of low therapeutic efficacy, a consensus on treatment is challenging, highlighting the need for methodological frameworks to guide clinical decisions (Compen, 2018). Research on inflammatory bowel disease indicates that chronic medical conditions can exacerbate mental health issues, which may be relevant to the psychological challenges faced by patients with neoplasia (Gomez, 2023). The bidirectional relationship between mental health and somatic conditions may be extrapolated to encompass the association between mental disorders and neoplasias. This suggests that mental health disorders could potentially influence the treatment and management of neoplasia, necessitating further investigation of this specific association (Fang, 2002).

The integration of mental health support into standard care for individuals with skin neoplasia could potentially improve mental health outcomes, enhance patient adherence, and reduce healthcare utilization (Expósito, 2010). Evidence from related medical fields supports the hypothesis that such integration can be beneficial, although its specific application in skin neoplasia necessitates further investigation (Hallet, 2020). It is imperative to investigate the relationship between psychological factors and the immune system to develop efficacious interventions for managing stress and anxiety-related dermatological conditions (Brown, 2003). These psychological manifestations may be attributed to the apprehension of cancer recurrence, the impact of physical appearance alterations caused by neoplasia, and the overall disruption of daily functioning and well-being (Rhee, 2003). By recognizing and addressing the psychological distress experienced by these individuals, healthcare professionals can provide more comprehensive and holistic support to enhance their overall well-being and quality of life (O'Hea, 2020).

7. Conclusion

The results of this research provide key insights into how skin neoplasia affects individuals psychologically. Our research indicates that people diagnosed with skin neoplasia often experience considerable emotional distress, characterized by heightened levels of anxiety, depression, and fear. This investigation underscores the necessity for healthcare professionals to address the psychological well-being of individuals with skin neoplasia, facilitate comprehensive care, support coping strategies, and enhance treatment outcomes in patients with skin cancer. A limitation of our review was the absence of longitudinal data on the long-term mental health outcomes of patients with skin cancer.

This suggests that while the integration of mental health support demonstrates promise, additional research is necessary to establish standardized methodologies and evaluate long-term outcomes, identify efficacious interventions, develop tailored psychological support programs for this population, and elucidate potential risk and protective factors.

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