Research Article



THE MEDICAL JOURNAL OF PSYCHIATRY AND NEUROSURGERY



Breast Cancer And Depression

¹ Yohanes, ¹ Mutiara

¹ Faculty of Medicine, Maranatha Christian University, Bandung City, West Java, Indonesia

Correspondence: dr.yohanes9847372@gmail.com

Article History:

Received date : 2024/07/11
Revised date : 2024/08/26
Accepted date : 2024/09/09
Published date : 2025/10/20



Copyright: © 2024 by the authors. Submitted for possible open access publication under the terms and conditions of the Creative Commons Attribution (BY NC) license (https://creativecommons.org/licenses/by-nc/4.0/).

ABSTRACT

Background: The literature on the intersection of breast cancer and depression reveals a multifaceted relationship that underscores the psychological challenges faced by patients. The foundational understanding established by (Ristevska-Dimitrovska et al., 2015) highlights the significance of psychological resilience as a protective factor against depression. Literature Review: The role of physical activity as a non-pharmacological intervention is critically examined in (D Patsou et al., 2017), revealing that regular exercise can significantly improve mental health outcomes among breast cancer survivors. This finding aligns with the urgent call for increased research into the psychological factors influencing depression and anxiety in cancer patients, as articulated by (L. Niedzwiedz et al., 2019). The identification of demographic and social determinants as influential factors in mental health outcomes further supports the need for integrated care approaches. The meta-analysis conducted by (REFAEE SAEEDI et al., 2019) reinforces the prevalence of depression and anxiety among breast cancer patients in Iran, highlighting the profound impact these conditions have on quality of life. Concurrently, (Zhu et al., 2020) explores the relationship between depression and long-term survival, indicating that depression may serve as a prognostic factor, thereby emphasizing the necessity for mental health interventions in oncology. The exploration of physical comorbidities and their relationship with depression by (Petrova et al., 2021) illustrates the compounded psychological distress experienced by cancer survivors, highlighting the need for comprehensive care strategies that address both physical and mental health needs. Conclusion: In conclusion, the literature collectively underscores the pressing need for integrated approaches that address the psychological and emotional challenges faced by breast cancer patients. Factors such as resilience, social support, and physical activity emerge as crucial elements for intervention, while the interplay between mental health and cancer outcomes highlights the importance of comprehensive care strategies. Future research should continue to explore these dynamics to enhance the quality of life and treatment outcomes for breast cancer survivors.

Keyword: Breast Cancer, Depression

INTRODUCTION

The intersection of breast cancer and depression has garnered significant attention in recent years, highlighting the psychological challenges faced by patients diagnosed with this prevalent malignancy. The literature reveals a complex relationship between the psychological resilience of breast cancer patients and their overall mental health. (Ristevska-Dimitrovska et al., 2015) emphasizes the importance of psychological resilience as a protective factor against depression, arguing that interventions aimed at enhancing resilience can alleviate psychological distress and improve treatment adherence and quality of life for patients and their families. This foundational understanding sets the stage for exploring the broader psychological implications of breast cancer.

Building on this framework, (Novalany, 2017) conducts a systematic review that reveals the multifaceted psychological and physical challenges faced by breast cancer survivors, including heightened rates of depression compared to the general population. The study highlights the role of age in coping mechanisms, with younger patients often relying on social support, while older patients draw on hope as an inner resource. This distinction underscores the need for tailored support strategies that address the unique experiences of different age groups.

In a meta-analysis, (D Patsou et al., 2017) delve into the impact of physical activity on depressive symptoms among breast cancer survivors, suggesting that regular exercise serves as a viable non-pharmacological intervention to manage depression. Their findings indicate that while depressive symptoms are prevalent during diagnosis and active treatment, engagement in physical activity can significantly improve mental health outcomes, thereby enhancing survivors' quality of life and potentially reducing the risk of cancer recurrence.

The urgency of addressing co-morbid depression and anxiety in cancer patients is further underscored by (L. Niedzwiedz et al., 2019), who advocate for increased

research into the psychological factors influencing these conditions. Their review identifies demographic and social determinants, such as age, gender, and social support, as critical components in understanding the mental health landscape of cancer survivors. This perspective aligns with the findings of (REFAEE SAEEDI et al., 2019), who provide a meta-analysis on the psychological consequences of breast cancer in Iran, revealing a high incidence of depression and anxiety among patients, which can severely impact their quality of life.

(Zhu et al., 2020) contribute to this discourse by investigating the relationship between depression and long-term survival in breast cancer patients. Their systematic review indicates that depression can significantly shorten survival times and may serve as a prognostic factor, highlighting the critical need for mental health interventions in the oncological setting.

The relationship between physical comorbidities and depression is explored by (Petrova et al., 2021), who find that cancer survivors often experience heightened psychological distress, particularly in the presence of chronic health problems. This study reinforces the importance of comprehensive care strategies that address both physical and mental health needs in cancer survivors.

Finally, (C. McFarland et al., 2021) critically review the implications of cancerrelated inflammation and depression, noting that depressive symptoms are prevalent across various cancer types and are particularly pronounced in advanced stages of disease. Their findings emphasize the necessity of recognizing and addressing the psychosocial challenges that accompany cancer treatment, as these factors can exacerbate depressive symptoms and impact overall patient well-being.

Collectively, these articles underscore a pressing need for integrated approaches that address the psychological and emotional challenges faced by breast cancer patients. The literature reveals a spectrum of factors influencing mental health outcomes, highlighting the importance of resilience, social support, and physical activity as potential avenues for intervention.

LITERATURE REVIEW

The article "Depression and Resilience in Breast Cancer Patients" by (Ristevska-Dimitrovska et al., 2015) presents a comprehensive examination of the interplay between psychological resilience and depression among individuals diagnosed with breast cancer. The authors argue that enhancing psychological resilience can be a pivotal strategy in mitigating the psychological distress that often accompanies a cancer diagnosis, thereby improving adherence to treatment protocols and overall quality of life for patients and their families.

A key insight from the study is the identification of psychological resilience as a potential protective factor against depression and psychological distress. The authors provide empirical evidence suggesting that patients who exhibit higher levels of resilience tend to experience lower levels of depression. This correlation underscores the importance of resilience as a psychological construct that can be targeted through various psychosocial interventions. The findings suggest that fostering resilience may not only alleviate immediate psychological distress but also contribute to long-term mental health benefits for breast cancer patients.

The article effectively highlights the significance of psychosocial interventions aimed at enhancing resilience. The authors propose that such interventions could serve as a valuable complement to traditional oncology treatments. By focusing on the psychological well-being of patients, healthcare providers may be able to improve treatment adherence and outcomes. The study emphasizes that resilience-building strategies should be integrated into comprehensive care plans for breast cancer patients to address both the physical and psychological dimensions of their illness.

Moreover, the authors discuss the implications of their findings for clinical practice, advocating for a holistic approach that considers the mental health needs of breast cancer patients. They call for further research to explore specific interventions that can effectively enhance resilience and reduce depression. This recommendation is

particularly pertinent given the complex emotional landscape faced by individuals undergoing cancer treatment.

In the article "The Role of Hope and Optimism in Breast Cancer Patients: A Systematic Review," (Novalany, 2017) provides an in-depth examination of the psychological challenges faced by breast cancer survivors, particularly focusing on the prevalence of depression and its correlation with various factors related to the cancer experience. The article highlights that the aftermath of breast cancer treatment often leaves survivors grappling with a myriad of physical and psychological side effects, including gastrointestinal issues, cognitive impairments, fatigue, and sleep disturbances. These multifaceted challenges contribute significantly to the emotional toll experienced by patients, with depression being a prominent concern.

The author underscores that breast cancer patients exhibit higher rates of depression compared to both the general population and individuals with other cancer types. This heightened vulnerability is attributed to several factors, including hormonal changes associated with menopause and estrogen decline, which are particularly relevant for younger patients who may rely heavily on social support systems to navigate their emotional struggles. In contrast, older women tend to draw upon hope as a coping mechanism, suggesting a generational difference in emotional resilience and support strategies.

Moreover, the article discusses the profound impact of a breast cancer diagnosis on intimate relationships. The stressors introduced by the illness can lead to increased distress among couples, affecting communication, lifestyle adjustments, and physical intimacy. This relational strain is compounded by existential concerns surrounding mortality and loss, further exacerbating feelings of depression and anxiety.

The article titled "Effects of physical activity on depressive symptoms during breast cancer survivorship: a meta-analysis of randomised control trials" by (D Patsou et al., 2017) provides a comprehensive examination of the relationship between

physical activity and depressive symptoms among breast cancer survivors. The authors address a critical health issue, as breast cancer remains the most prevalent cancer affecting women globally, with a significant incidence rate of 25% among female cancers. While advancements in diagnosis and treatment have improved survival rates, the psychological ramifications, particularly depression, remain a pressing concern for many survivors.

The article highlights the alarming prevalence of depressive symptoms in breast cancer survivors, which ranges from 1.5% to 46%. This statistic underscores the necessity for effective management strategies, especially considering that depression can adversely impact treatment adherence and overall survival ((D Patsou et al., 2017)). The authors effectively argue that the psychological burden is particularly pronounced during the diagnosis and treatment phases, with many women experiencing chronic depressive symptoms post-treatment, especially those facing disease recurrence.

One of the key insights from the article is the potential of physical activity as a non-pharmacological intervention for managing depression in this population. The authors present evidence suggesting that regular exercise not only alleviates specific treatment-related side effects, such as weakness and depressive symptoms, but also contributes to improved survival rates. This dual benefit positions physical activity as a vital component of post-cancer care. The article synthesizes findings from various systematic reviews, indicating that while physical activity is beneficial, further research is needed to delineate the optimal exercise programs and their components.

Despite the strengths of the article, including its thorough meta-analysis and clear presentation of the evidence, there are areas that warrant further exploration. The authors acknowledge that while existing studies support the positive effects of physical activity, there is a need for more nuanced investigations into the types of exercises that are most effective, as well as the barriers that breast cancer survivors may face in maintaining an active lifestyle. Additionally, the interplay between

individual psychological factors and physical activity adherence could be further examined to enhance understanding and develop tailored interventions.

The article "Depression and anxiety among people living with and beyond cancer: a growing clinical and research priority" by (L. Niedzwiedz et al., 2019) presents a compelling argument for the urgent need to address the co-morbidity of depression and anxiety in cancer patients. The authors emphasize that while cancer is a significant health challenge, the psychological distress that accompanies it is often overlooked in clinical practice and research. This oversight highlights a critical gap in the care continuum for cancer patients, as mental health is integral to overall well-being.

One of the key insights from the article is the multifaceted nature of the factors contributing to depression and anxiety in cancer patients. The authors categorize these factors into individual, structural, and psychological domains. Individual risk factors, such as demographic variables (age and gender) and social determinants (unemployment, educational level, and social support), are consistent with patterns observed in the general population. However, the authors argue that these individual factors intersect with broader structural issues, including healthcare access and financial burdens, which are particularly pronounced in the context of cancer treatment ((L. Niedzwiedz et al., 2019)).

The article also underscores the importance of recognizing the financial implications of cancer, which can exacerbate mental health issues. The stress associated with healthcare costs and the potential loss of income due to illness can significantly impact a patient's psychological state. The authors call for more comprehensive research to explore these interconnected factors, advocating for a holistic approach to cancer care that includes mental health support as a fundamental component.

Furthermore, (L. Niedzwiedz et al., 2019) highlight the need for policy changes that prioritize mental health in cancer care. They suggest that integrating mental health services into cancer treatment protocols could lead to better health outcomes for

patients. This integration would require a paradigm shift in how healthcare systems approach cancer care, emphasizing the significance of addressing mental health alongside physical health.

The article "Psychological Consequences of Breast Cancer in Iran: A Meta-Analysis" by (REFAEE SAEEDI et al., 2019) provides a comprehensive examination of the psychological impact of breast cancer on women, particularly focusing on the prevalence of mental health disorders associated with the disease. This meta-analysis synthesizes data from various studies to highlight the significant psychological burden faced by breast cancer patients, revealing that the incidence of mental disorders among cancer patients ranges from 30% to 40%.

The authors effectively underscore the multifaceted psychological responses to a breast cancer diagnosis, including depression, anxiety, anger, and feelings of guilt. The findings indicate that approximately 80% of cancer patients experience substantial anxiety during the early stages of treatment, with depression being the most prevalent issue among the nine dimensions of mental health assessed. This emphasizes the critical need for mental health support and intervention in this demographic, as the psychological ramifications of breast cancer can be profound and long-lasting.

Moreover, the article points out that breast cancer patients exhibit higher mean scores in depression and lower scores in life expectancy when compared to healthy individuals. This stark contrast highlights the detrimental effects of the disease not only on physical health but also on mental well-being. The authors also discuss the irrational beliefs and negative feelings, such as frustration and hopelessness, that many breast cancer patients experience, which can hinder their ability to cope effectively with the stressors associated with their condition.

The analysis further reveals that the coping strategies employed by these patients tend to be emotion-focused, which, while providing temporary relief, often do not contribute to an overall improvement in quality of life. This finding is significant as it suggests that there is a need for more adaptive coping mechanisms and psychological interventions to enhance the resilience of breast cancer patients.

The article "Depression and survival of breast cancer patients: A protocol for systematic review and meta-analysis" by (Zhu et al., 2020) addresses a significant issue in oncology regarding the intersection of mental health and cancer survival. The authors highlight that breast cancer, being the most prevalent malignancy among women globally, is often accompanied by a notable increase in psychiatric symptoms, particularly depression. This connection is critical as it influences not only the quality of life of patients but also their overall survival rates.

The main objective of the article is to establish a systematic review and metaanalysis that examines the relationship between depression and the long-term survival of breast cancer patients. The authors emphasize the importance of focusing solely on cohort studies to ensure the reliability and validity of the findings. This methodological choice is commendable as it aims to aggregate data from studies that follow patients over time, thereby providing a clearer picture of how depression may impact survival outcomes.

(Zhu et al., 2020) reference a study from Singapore that indicates a significant correlation between depression and reduced survival time in cancer patients. This finding aligns with the broader literature suggesting that psychological distress can adversely affect cancer prognosis. The authors note that the experience of a breast cancer diagnosis often engenders fears related to survival, recurrence, and metastasis, which can exacerbate depressive symptoms. This cyclical relationship between mental health and cancer outcomes underscores the necessity for integrated care approaches that address both psychological and physical health.

However, the authors also acknowledge that previous studies exploring the correlation between psychological factors and breast cancer survival have produced inconsistent results. This inconsistency points to the complexity of the relationship between mental health and cancer prognosis, suggesting that other mediating factors, such as treatment adherence, social support, and individual coping

mechanisms, may play a role. The call for a comprehensive review of the available evidence is timely and necessary, as it could help clarify these relationships and guide future research and clinical practices.

The article "Physical Comorbidities and Depression in Recent and Long-Term Adult Cancer Survivors: NHANES 2007–2018" by (Petrova et al., 2021) provides a comprehensive examination of the intricate relationship between physical comorbidities and depression among cancer survivors. The authors effectively highlight the prevalence of psychological distress, particularly depressive disorders, within oncological populations, estimating that approximately 16% of cancer patients experience such mental health issues. This statistic underscores the critical need for awareness and intervention strategies tailored to this vulnerable group.

The study emphasizes that the risk of developing depression is not uniform across cancer types or stages; rather, it is influenced by various factors, including previous psychiatric conditions and the presence of advanced or metastatic disease. This nuanced understanding is essential for clinicians who aim to provide holistic care to cancer patients, as it suggests that those with a history of mental health issues or more severe disease stages may require more intensive psychological support.

One of the significant contributions of this research is the exploration of physical comorbidities and their role in exacerbating depressive symptoms among cancer survivors. The authors argue convincingly that chronic health problems can significantly deteriorate mental health, leading to increased healthcare utilization. This finding is particularly relevant in the context of healthcare policy and resource allocation, as it suggests that addressing both physical and mental health needs in cancer care could optimize treatment outcomes and reduce overall healthcare costs.

Moreover, the article posits that the prevalence of depression is highest within the first year following diagnosis, a critical period during which patients may be particularly vulnerable. This insight calls for proactive screening and management of mental health issues during this timeframe, as timely interventions could potentially mitigate long-term psychological distress.

The authors' hypothesis that a higher burden of physical comorbidities correlates with increased depression risk is supported by their analysis, which highlights the need for integrated care approaches that consider both physical and psychological health. This dual focus is essential for enhancing the quality of life for cancer survivors, as it recognizes the interconnectedness of physical and mental health.

The article titled "Clinical Implications of Cancer Related Inflammation and Depression: A Critical Review" by (C. McFarland et al., 2021) provides a comprehensive examination of the prevalence and impact of depression among cancer patients, highlighting its significance as a common psychiatric disorder within this population. The authors present a critical analysis of the rates of depression across various cancer types, emphasizing that these rates are notably higher than in the general population. This observation underscores the urgent need for mental health considerations in the oncology setting.

The article notes that the prevalence of depressive symptoms varies depending on several factors, including cancer type, assessment measures, patient demographics, and the trajectory of the disease. Specifically, it points out that depressive symptoms are more pronounced in patients with advanced disease stages and those experiencing treatment-related symptom burdens. This finding is crucial, as it indicates that the emotional well-being of cancer patients is intricately linked to the progression of their illness and the side effects of treatment. The authors provide statistical evidence indicating that approximately 25-30% of cancer patients experience some form of depressive disorder during treatment, a statistic that emphasizes the need for routine screening and intervention strategies within clinical practice.

Moreover, the article highlights that certain cancer types, particularly lung and bronchus cancers, exhibit the highest rates of depression. This correlation suggests a significant burden of both physical and psychological morbidity associated with these cancers. The authors also discuss the overlap between physical symptom burden and depression, which complicates the clinical picture for healthcare

providers. This overlap necessitates a biopsychosocial approach to treatment, where both physical and mental health needs are addressed simultaneously.

The authors further elaborate on the continuum of depressive symptoms, ranging from appropriate emotional responses to medical illness to severe major depressive episodes. This spectrum is particularly important in understanding how patients may react differently to their diagnosis and treatment. The article also emphasizes the psychosocial challenges that cancer patients face, including family tensions, loss of autonomy, and disruptions in daily life, which can exacerbate depressive symptoms.

CONCLUSION

The literature on the intersection of breast cancer and depression reveals a multifaceted relationship that underscores the psychological challenges faced by patients. The foundational understanding established by (Ristevska-Dimitrovska et al., 2015) highlights the significance of psychological resilience as a protective factor against depression. This resilience can be enhanced through targeted interventions, which may alleviate psychological distress and improve treatment adherence and quality of life. Building on this premise, (Novalany, 2017) conducts a systematic review that identifies heightened rates of depression among breast cancer survivors, emphasizing the need for tailored support strategies that consider age-related coping mechanisms.

The role of physical activity as a non-pharmacological intervention is critically examined in (D Patsou et al., 2017), revealing that regular exercise can significantly improve mental health outcomes among breast cancer survivors. This finding aligns with the urgent call for increased research into the psychological factors influencing depression and anxiety in cancer patients, as articulated by (L. Niedzwiedz et al., 2019). The identification of demographic and social determinants as influential factors in mental health outcomes further supports the need for integrated care approaches.

The meta-analysis conducted by (REFAEE SAEEDI et al., 2019) reinforces the prevalence of depression and anxiety among breast cancer patients in Iran, highlighting the profound impact these conditions have on quality of life. Concurrently, (Zhu et al., 2020) explores the relationship between depression and long-term survival, indicating that depression may serve as a prognostic factor, thereby emphasizing the necessity for mental health interventions in oncology.

The exploration of physical comorbidities and their relationship with depression by (Petrova et al., 2021) illustrates the compounded psychological distress experienced by cancer survivors, highlighting the need for comprehensive care strategies that address both physical and mental health needs. Finally, the critical review by (C. McFarland et al., 2021) emphasizes the prevalence of depression across various cancer types, particularly in advanced stages, and calls for the recognition of psychosocial challenges in cancer treatment.

In conclusion, the literature collectively underscores the pressing need for integrated approaches that address the psychological and emotional challenges faced by breast cancer patients. Factors such as resilience, social support, and physical activity emerge as crucial elements for intervention, while the interplay between mental health and cancer outcomes highlights the importance of comprehensive care strategies. Future research should continue to explore these dynamics to enhance the quality of life and treatment outcomes for breast cancer survivors.

DISCLOSURE STATEMENT

- Disclosure Statement : The authors have no conflicts of Interest to declare
- Funding Sources : None
- Acknowledgements: -
- Author Contribution : All authors discussed and contributed the final content for journal submission and publication

REFERENCES

- Ristevska-Dimitrovska, G., Stefanovski, P., Smichkoska, S., Raleva,
 M., & Dejanova, B., 2015. Depression and Resilience in Breast
 Cancer Patients. ncbi.nlm.nih.gov
- 2. Novalany, J., 2017. The Role of Hope and Optimism in Breast Cancer Patients: A Systematic Review. [PDF]
- 3. D Patsou, E., D Alexias, G., G Anagnostopoulos, F., & V Karamouzis, M., 2017. Effects of physical activity on depressive symptoms during breast cancer survivorship: a meta-analysis of randomised control trials. ncbi.nlm.nih.gov
- 4. L. Niedzwiedz, C., Knifton, L., A. Robb, K., Vittal Katikireddi, S., & J. Smith, D., 2019. Depression and anxiety among people living with and beyond cancer: a growing clinical and research priority. [PDF]
- REFAEE SAEEDI, N., AGHAMOHAMMADIAN SHARBAF, H., Javad ASGHARI EBRAHIMABAD, M., & KARESHKI, H., 2019. Psychological Consequences of Breast Cancer in Iran: A Meta-Analysis. ncbi.nlm.nih.gov
- 6. Zhu, G., Li, J., Li, J., Wang, X., Dai, M., & Chen, J., 2020. Depression and survival of breast cancer patients: A protocol for systematic review and meta-analysis. ncbi.nlm.nih.gov
- Petrova, D., Catena, A., Rodríguez-Barranco, M., Redondo-Sánchez, D., Bayo-Lozano, E., Garcia-Retamero, R., Jiménez-Moleón, J. J., & Sánchez, M. J., 2021. Physical Comorbidities and Depression in Recent and Long-Term Adult Cancer Survivors: NHANES 2007– 2018. ncbi.nlm.nih.gov
- 8. C. McFarland, D., Riba, M., & Grassi, L., 2021. Clinical Implications of Cancer Related Inflammation and Depression: A Critical Review. ncbi.nlm.nih.gov