J Prev Epidemiol. 2024;9(1):e35238 Mini-Review

doi 10.34172/jpe.2024.35238 Journal of Preventive Epidemiology http jprevepi.com

Psychological and psychiatric issues in patients diagnosed with cancer: A review study

Roya Vaziri Harami[1], Anna Ghorbani Doshantapeh[2], Shahrzad Ghaffariyan[3], Navid Asgari[4], Mohammad Akbari[5], Farideh Ranjbaran[6], Hakimeh Karimi Aliabadi[7], Nima Jamali[8*]

[1]Department of Psychiatry, School of Medicine, Shahid Beheshti University of Medical Sciences, Tehran, Iran
[2]Department of Hematology-Medical Oncology, Shahid Beheshti University of Medical Sciences, Tehran, Iran
[3]Department of General Medicine, School of Medicine, Shahid Beheshti University of Medical Sciences, Tehran, Iran
[4]Department of Internal Medicine, School of Medicine, Shahid Beheshti University of Medical Sciences, Tehran, Iran
[5]Department of Nursing, Faculty of Nursing and Midwifery, Hormozgan University of Medical Sciences, Bandar Abbas, Iran
[6]Department of Psychiatry, Arak University of Medical Sciences, Arak, Iran
[7]Department of Anesthesiology, Kerman University of Medical Sciences, Kerman, Iran
[8]Department of Clinical Psychology, Faculty of Psychology and Educational Science, University of Shiraz, Shiraz, Iran

Correspondence to:
Nima Jamali, Email: Jamili.nima@outlook.com

Received: 1 Oct. 2023
Accepted: 26 Dec. 2023
ePublished: 29 Dec. 2023

Keywords: Psycho-oncology, Psychiatry, Neoplasm, Cancer, Mental health, Self-control, Mental health costs

Abstract

Getting diagnosed with cancer can be a tremendous stressor; it can even be recognized as an emotional trauma that can lead to several mental health problems and dysfunction in many aspects of one's life. Recent studies demonstrated that mental health issues can affect the quality of life, compliance with cancer treatment, medication efficacy, mortality rate costs of health services, and economic loss of cancer patients. In this review study, we gathered the literature by searching the databases, including Web of Science, Scopus, and PubMed. Google Scholar search engine was also used to make an extensive search strategy. We chose articles based on reporting the prevalence rate of mental health problems and the psychological and psychiatric problems that can influence the treatment of patients with cancer. The literature review showed that one-third of all cancer patients suffer from psychiatric disorders and psychological dysfunctions, and the most common mental disorders that can be comorbid with cancer are depression spectrum and anxiety disorders.

Citation: Vaziri Harami R, Ghorbani Doshantapeh A, Ghaffariyan S, Asgari N, Akbari M, Ranjbaran F, Karimi Aliabadi H, Jamali N. Psychological and psychiatric issues in patients diagnosed with cancer: A review study. J Prev Epidemiol. 2024;9(1):e35238. doi: 10.34172/jpe.2024.35238.

Introduction

Cancer is a preventable disease with genetic defects caused in 5-10% of cases, and the remaining (90-95%) are linked to the environment and lifestyle (1). These diseases are the second most common cause of mortality globally, following ischemic heart disease. Lung, liver, and stomach cancers are the deadliest (2). In cases of gender difference, the deadliest cancers in females and males are breast and lung, respectively (3). Due to the high mortality rate and bad prognosis of this disease in patients with cancer, their mental health is an important aspect of spiritual well-being (4). These problems may influence both aspects of treatment and the progress of cancer and they are crucial to address in cancer care (5,6).

Previous studies on mental health problems in cancer patients have been limited in recent decades; however, there is a growing understanding of the mental processes involved in cancer treatment and the appropriate mental rehabilitation and therapies for these patients (7). This article provides information on various aspects of cancer patients' dysfunctional mental health issues, including healthcare costs, mortality rates, mental disorders onset, prevalence, living beyond cancer with mental health issues, prognosis, specialized mental health care, the association between mental health problems and cancer treatment compliance, and cancer incidence and mortality rate in psychiatric patients. Mental health encompasses emotional, psychological, and social aspects, and is crucial in determining stress, relationships, and decision-making.

Key point

In a literature review of previous studies, we found that around one-third of cancer patients experience psychiatric disorders and psychological dysfunctions at different stages of cancer diagnosis and treatments; and providing mental health services is crucial to eliminating depression spectrum disorders and anxiety disorders as the most common mental disorders that can be comorbid with cancer.

Despite the prevalence of mental health problems, fewer than half of cancer patients seek mental health care services, and a quarter receive proper care.

Health care costs and economic losses of cancer patients

Being diagnosed with cancer (any cancer) can lead to a multi-layer of financial expenses. Patients often have to quit their jobs due to chemotherapy side effects and the pain caused by the cancer. In many cases, the family members who care for their ill loved one also need to quit their jobs because patients need a full-time caring agenda (8). Further, being diagnosed with a mental disorder or experiencing mental health problems can also affect the financial expenses even more by getting mental health care services. Cancer and mental disorders can bring dysfunction into different areas of one's life. One is economic loss by being unable to handle a job properly and losing many occupational chances (8,9). Even if the cancer treatment goes well and the patients experience a low range of cancer symptoms, the mental disorders symptoms will paralyze the mastery of the patients being occupied in a job (10).

Mental health problems related to cancer mortality

Research indicated that patients diagnosed with mental health problems may usually have a lower chance of surviving cancer (9). Mental health disorders magnify the fear of death, dim the light of hope for survival, and reduce patients' compliance in the process of cancer treatment (3). In terminally ill cancer patients who have less time to live, mental disorders significantly reduce their quality of life (11).

The onset of mental disorders at the different stages of cancer

Mental health problems can onset in different stages of being diagnosed with cancer. If the diagnostic process is latent, the chances will be higher for patients to develop mental disorder symptoms such as anxiety, depression, and even post-traumatic stress disorders (PTSDs) (9,12). Symptoms of mental disorders can also develop after being diagnosed with cancer and even after receiving cancer treatments (13). Some patients may also carry on the symptoms after the cancer is entirely treated, so they may live with mental health problems beyond cancer, usually carrying symptoms such as sexual disorders, anxiety, and depression disorders, drug abuse disorders, body dysmorphia, and even experiencing psychological symptoms such as demoralization, constant fear of cancer returning and fear of death (9,14).

Prevalence of mental disorders in cancer patients

Studies illustrated that one-third of cancer patients experience mental health disorder symptoms. Half of this population seeks mental health assessment, and only a quarter of this half receive mental health care services (15). Depression spectrum and anxiety disorders are prevalent in cancer patients, but prevalence is heterogeneous because of different expressions of these disorders and the way of diagnosis by different researchers (5,16). Statics show that 15% of cancer patients experience traits and symptoms of PTSD and sub-types of PTSD. Adjustment disorders (that refer to a patient's malfunctional emotional reactions to an event) also affect 20-25% of cancer patients. Somatic symptoms and mind-body-related symptoms may occur even after cancer treatment. 2-5% of cancer patients may experience neurocognitive smiled syndromes or disorders such as amnesia and delirium. Depending on the stage of the disease, delirium ranges from 10 to 80% prevalence rate among cancer patients. Sexual disorders and dysfunctions affect nearly 25-40% of patients, 37.7% of patients experience health anxiety, and 28.8% experience demoralization (6).

In comparison, the incidence rate of mental disorders in cancer patients is not greater than in the average population (15). However, the mortality rate due to mental disorders and the rate of not reaching mental health services is much higher in cancer patients compared to the average population. The reason can be that oncologists focus more on the treatment than the patients (9).

Specialized mental health care and drug and psycho-therapies in oncology

Recent research shows that psychiatric disorders and psychological symptoms such as demoralization, fear of death, experiencing meaninglessness, fear of cancer reoccurrence, and hopelessness can influence the treatment of cancer and chemotherapy in a destructive (6). Mental health problems can reduce the positive effect of chemotherapy, reduce compliance, bring more healthcare costs and economic losses, and even increase the mortality rate of cancer patients. Research has shown that integrated psycho-therapies can have short-term advantages on mental health problems in cancer patients, and psychiatric drugs can have more prolonged effects (6,8). Mental health services specialized for cancer patients need to be studied to find more effective psychiatric drugs that do not interfere with the chemotherapy and have fewer complications. Psychiatrists need to practice better prescriptions for cancer patients. Researchers have shown that "self-management" can play a vital role in healing patients from cancer and being cooperative in the treatment process (5). Effective self-management includes monitoring one's condition and affecting the cognitive, behavioral, and emotional responses required to maintain a satisfactory quality of life. Consequently, a dynamic and continuous process of self-regulation is established when an individual can manage the symptoms, treatment, physical and psychosocial consequences, and lifestyle changes inherent in living with a chronic condition.

Cancer incidence and mortality rate in psychiatric patients

In comparison, the chance of developing psychiatric disorders in cancer patients in an average population is closely even, but the mortality rate in cancer patients is much higher, which may be because oncologists focus more on the cancer treatment and less on the patients and psychological symptoms are miss-diagnosed with chemotherapy effects (6,13).

Conclusion

Research demonstrated that one-third of all cancer patients suffer from psychiatric disorders and psychological dysfunctions either before getting diagnosed, in the latency of getting diagnosed, after being diagnosed, or even after they get treatment for cancer. In some cases, the psychological effects (fear of cancer returning, demoralization, disabilities after being healed from cancer, post-traumatic stress, and anxiety disorders comorbid with depression) still stay with patients wholly healed from cancer. Due to that reason, providing mental health services has a significant role in patients diagnosed with cancer, before getting diagnosed, in the middle of treatment, and post-cancer to eliminate as much dysfunction as possible. The most common mental disorders that can be comorbid with cancer are depression spectrum disorders and anxiety disorders. Less common psychiatric disorders that can be comorbid with cancer are PTSD, sexual disorders, body dysmorphia, drug abuse, and even suicide.

Authors' contribution

Conceptualization: Roya Vaziri Harami and Navid Asgari.
Data curation: Nima Jamali and Farideh Ranjbaran.
Funding Acquisition: All authors.
Investigation: Mohammad Akbari and Hakimeh Karimi Aliabadi.
Resources: Shahrzad Ghaffariyan.
Supervision: Nima Jamali.
Validation: Anna Ghorbani Doshantapeh and Shahrzad Ghaffariyan.
Writing–Original Draft: Anna Ghorbani Doshantapeh, Hakimeh Karimi Aliabadi, Navid Asgari, Nima Jamali, and Shahrzad Ghaffariyan.
Writing–Review & Editing: Mohammad Akbari, Farideh Ranjbaran, and Roya Vaziri Harami.

Conflicts of interest

The authors declare that they have no competing interests.

Ethical issues

Ethical issues (including plagiarism, data fabrication, and double publication) have been completely observed by the authors.

Funding/Support

None.

References

1. Anand P, Kunnumakkara AB, Sundaram C, Harikumar KB, Tharakan ST, Lai OS, et al. Cancer is a preventable disease that requires major lifestyle changes. Pharm Res. 2008;25:2097-116. doi: 10.1007/s11095-008-9661-9.
2. Mattiuzzi C, Lippi G. Current Cancer Epidemiology. J Epidemiol Glob Health. 2019;9:217-22. doi: 10.2991/jegh.k.191008.001.
3. Li M, Wang S, Han X, Liu W, Song J, Zhang H, et al. Cancer mortality trends in an industrial district of Shanghai, China, from 1974 to 2014, and projections to 2029. Oncotarget. 2017;8:92470-82. doi: 10.18632/oncotarget.21419.
4. Tao R, Chen Y, Kim S, Ocier K, Lloyd S, Poppe MM, et al. Mental health disorders are more common in patients with Hodgkin lymphoma and may negatively impact overall survival. Cancer. 2022;128:3564-72. doi: 10.1002/cncr.34359.
5. Niedzwiedz CL, Knifton L, Robb KA, Katikireddi SV, Smith DJ. Depression and anxiety among people living with and beyond cancer: a growing clinical and research priority. BMC Cancer. 2019;19:943. doi: 10.1186/s12885-019-6181-4.
6. Caruso R, Breitbart W. Mental health care in oncology. Contemporary perspective on the psychosocial burden of cancer and evidence-based interventions. Epidemiol Psychiatr Sci. 2020;29:e86. doi: 10.1017/s2045796019000866.
7. Roberts BM, Maybery D. Dual diagnosis discourse in Victoria Australia: the responsiveness of mental health services. J Dual Diagn. 2014;10:139-44. doi: 10.1080/15504263.2014.929332.
8. Van Beek FE, Wijnhoven LMA, Holtmaat K, Custers JAE, Prins JB, Verdonck-de Leeuw IM, Jansen F. Psychological problems among cancer patients about healthcare and societal costs: A systematic review. Psychooncology. 2021;30:1801-35. doi: 10.1002/pon.5753.
9. Kadan-Lottick NS, Vanderwerker LC, Block SD, Zhang B, Prigerson HG. Psychiatric disorders and mental health service use in patients with advanced cancer: a report from the coping with cancer study. Cancer. 2005;104:2872-81. doi: 10.1002/cncr.21532.
10. Boele FW, Given CW, Given BA, Donovan HS, Schulz R, Weimer JM, et al. Family caregivers' level of mastery predicts survival of patients with glioblastoma: A preliminary report. Cancer. 2017;123:832-40. doi: 10.1002/cncr.30428.
11. Kashyap M, Harris JP, Chang DT, Pollom EL. Impact of mental illness on end-of-life emergency department use in elderly patients with gastrointestinal malignancies. Cancer Med. 2021;10:2035-44. doi: 10.1002/cam4.3792.
12. Golińska PB, Cieślak M, Hubert O, Bidzan M. Mental Health and the Symptoms of PTSD in People with Depression and Anxiety Disorders during the COVID-19 Pandemic. Int J Environ Res Public Health. 2021;18. doi: 10.3390/ijerph18115542.
13. Kisely S, Crowe E, Lawrence D. Cancer-related mortality in people with mental illness. JAMA Psychiatry. 2013;70:209-17. doi: 10.1001/jamapsychiatry.2013.278.
14. Nakash O, Levav I, Aguilar-Gaxiola S, Alonso J, Andrade LH, Angermeyer MC, et al. Comorbidity of common mental disorders with cancer and their treatment gap: findings from the World Mental Health Surveys. Psychooncology. 2014;23:40-51. doi: 10.1002/pon.3372.
15. Vehling S, Mehnert-Theuerkauf A, Philipp R, Härter M, Kraywinkel K, Kuhnert R, Koch U. Prevalence of mental disorders in patients with cancer compared to matched controls - secondary analysis of two nationally representative surveys. Acta Oncol. 2022;61:7-13. doi: 10.1080/0284186x.2021.1992008.
16. Nikbakhsh N, Moudi S, Abbasian S, Khafri S. Prevalence of depression and anxiety among cancer patients. Caspian J Intern Med. 2014;5:167-70.