A Survey on Mental Health Status and Related Factors among Cancer Patients in Iran

masood taheri (masood.mirghaed@gmail.com)
Tehran University of Medical Sciences
mahnaz afshari
Tehran University of Medical Sciences
saeede alidoost
Tehran University of Medical Sciences
hassan abolghasem gorji
Tehran University of Medical Sciences
amir rakhshan
Tehran University of Medical Sciences

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Abstract

Background: Cancer is one of the most common non-communicable diseases and the second cause of death in Iran. The progress in medical technologies and treatment plans has caused the patients to live longer; however, these patients are confronted with psychological challenges and their mental health is influenced because of different reasons. This study is carried out to investigate the mental health status of the cancer patients in the Center for Specific Diseases. Methods: The present research is a cross-sectional, descriptive, and analytic study carried out in 2018 in Tehran province, Iran. In the present study, the mental health of the cancer patients referring to the Center for Specific Diseases in Tehran was evaluated in one setting, and no intervention was provided. The research population included 124 cancer patients of Tehran referring to the Center for Specific Diseases. Results: the overall prevalence of psychiatric disorders in patients under study was 50%. The highest sensitivity to mental disorders in each of the variables was related to men (52.7%), patients aging 40-55 (45.7%), married (51.5%), unemployed (62.5%), and illiterate patients (80%). The findings of this study indicated that there is no statistically significant relationship between the prevalence of psychiatric disorders among patients with cancer and the variables in the study. Conclusions: The results of this study indicated a high prevalence of depression disorder among cancer patients. Psychosocial stresses caused by cancer cause mental disorders, including depression in patients.

Background

Cancer is one of the most common non-communicable diseases and the second cause of death in Iran. The rate and prevalence of cancer has considerably increased over the recent years due to a myriad of factors such as aging population, industrialization, changes in the lifestyle, and environmental changes [1]. Skin cancer is one of the most common types of cancer in Iran with 7000 new diagnoses every year. Breast, esophagus, stomach, and prostate cancer are the most common types of cancer in Iranian population and their occurrence is increasing. Despite the increase in the cases of cancer affliction, the fatality rate due to this disease is not severe. The progress in medical technologies and treatment plans has caused the patients to live longer; however, these patients are confronted with psychological challenges and their mental health is influenced because of different reasons [2 & 3].

Cancer influences the individual and social performance of the patients and caused disabilities in performing typical, routine, and normal roles and eventually social isolation. On the other hand, carrying out diagnostic and treatment measures in the patients influences their mental well-being and health and confronts the individual with a vast range of psychological disturbances such as depression and anxiety [4 & 5]. Anxiety is one of the most important psychological disorders, which is generally diagnosed in patients in the beginning stages of diagnosis. Events taking place while diagnosis and management of the disease influence on the anxiety [6]. Depression is also one of the most important psychological disorders of cancer patients with higher frequency in breast, pancreas, and lung cancer. Its evaluation, however, is complicated because of the vast range of symptoms. Depression can also play a role in the progress of the disease and patients mortality [7 & 8]. The American Society of Clinical Oncology has

provided guidelines for screening, evaluation and treatment of depression symptoms in cancer patients. In addition, valid instruments are employed to periodically screen the mental health of cancer patients. Recognition of mental health of patients would positively contribute both to the improvement of physical and mental health and evaluating the effects of mental and psychological interventions in cancer patients [9].

Several factors including fear of recurrence, change of life roles, physical and psychological influences of the treatment, as well as reduced family and friends support can cause mental disorders and influence mental health of cancer patients. The degree to which such factors influence is influenced by factors such as income, education, age, and marital status [9 &10].

Therefore, paying heed to the psychological disorders and mental health of cancer patients is an important aspect in managing cancer patients, this aspect, however, tends to receive much less attention than the physical aspects of the disease. Appropriate recognition of the cancer patients' mental wellbeing can help understand the needs of these patients and therefore provision of services and interventions necessary to improve their mental health and quality of life. This can prevent the exacerbation of the patients' mental and physical health [11]. Hence, this study is carried out to investigate the mental health status of the cancer patients in the Center for Specific Diseases.

Methods

The present research is a cross-sectional, descriptive, and analytic study carried out in 2018 in Tehran province, Iran. In the present study, the mental health of the cancer patients referring to the Center for Specific Diseases in Tehran was evaluated in one setting, and no intervention was provided. The research population included 124 cancer patients of Tehran referring to the Center for Specific Diseases. These people were included in the study via survey. The data collection was carried out prior to drug injection. The questionnaire was filled by the participants. The researcher attended the participants in case they needed any clarification. The data collection tool was the General Health Questionnaire (GHQ-28). This questionnaire involves four domains of physical symptoms, anxiety, disorder in social performance and depression. The reliability and validity o f the questionnaire had been obtained [15]. The questionnaire is scored based on a Likert scale and each response is assigned zero to three points. The cut-off score (point) is the total score of 23 [12]. Accordingly, all people who scored less than 23 were classified as mentally healthy, and those with a score of 23 and beyond were classified as having mental and psychiatric disorders.

All ethical considerations including confidentiality of information and the freedom of the participants to take part in the research were observed. Data were analyzed by SPSS-22 using descriptive statistics, t-test, one-way ANOVA, and chi-square test at a significant level of 0.05.

Results

In this study, 124 cancer patients were examined using GHQ. 74 (59.7%) were male and 50 (40.3%) were female. Of these patients, 97 (78.2%) were married and 27 (21.8%) were single. In the dimension of employment variable, 37 (29.8%) were employed, 16 (12.9%) were unemployed, 37 (29.8%) were housewives, and 34 (27.4%) were retired. The distribution of the prevalence of psychiatric disorders in patients under study is shown in Table 1. Based on this table, the overall prevalence of psychiatric disorders in patients under study was 50%. The highest sensitivity to mental disorders in each of the variables was related to men (52.7%), patients aging 40-55 (45.7%), married (51.5%), unemployed (62.5%), and illiterate patients (80%). The findings of this study indicated that there is no statistically significant relationship between the prevalence of psychiatric disorders among patients with cancer and the variables in the study (Table 1).

Based on the subscales of the questionnaire, 7.3% of patients were suspected of physical symptoms disorder, 7.2% suspected of abnormal social function and 2.4% suspected of depression, none of the patients was suspected to have anxiety and insomnia (Table 2).

The findings of Table 3 show that none of the variables have a significant effect on the probability of developing mental disorders in the studied patients. The odds ratio for different variables is shown in the table, which shows that the probability of developing mental disorders in patients with cancer is not different in any of the demographic variables. In other words, none of the variables can increase or decrease these disorders.

Discussion

The aim of this study was to determine the mental health status of patients with cancer in the Center of Special Diseases. According to the findings of this study, half of the subjects had and suffered from mental disorders. The findings of this study are consistent with other countries in terms of psychiatric disorders in cancer patients [12 & 13]. In the study by Sarafino, above-normal occurrence of psychiatric disorders has been reported among cancer patients. This study examines the detection of psychiatric disorders that occur after the diagnosis of serious illnesses such as cancer. It has shown that there is an irrefutable association between depression, anxiety, and stress associated with the onset of cancer among patients [14]. Most studies show that mental illnesses among cancer patients is 20-40% [15-20]; however, the findings of this study reported higher prevalence of psychiatric disorders among cancer patients, that is, above 50% [21-22]. The difference in findings is due to differences in the type of cancer, different research methods, retrospective or prospective studies, the characteristics of the studied population and sample size. In addition, based on the findings of the present study, the patients were suspected to have physical symptoms, dysfunction in social performance and depression. None of the patients was suspected of anxiety and insomnia. Lueboonthavatchi has introduced the prevalence of depression and anxiety on top of the list of psychiatric disorders [23]. Given that depression disorder was identified in this study, but the anxiety was not included in the list of identified disorders, this could indicate the need for special attention to vulnerable groups and the design of more specialized studies in this regard. A number of studies have come up with different results from this study. For example, Hadi et

al. concluded that the prevalence of depression and anxiety was not significantly different between the case group, patients with breast cancer and the control group including healthy women [24]. Of course, the point to be made about this study is that the group was made up of women who had not been diagnosed for one year and had not received any treatment such as metastasis.

The results of this study showed that the demographic factors had no significant effect on the probability o developing mental disorders in the studied patients. In the study of Taqizadeh et al., performed on cancer patients in two educational hospitals of Mashhad University of Medical Sciences, there were no significant correlation between the level of education, marital status, living in rural or urban areas, and mental disorders in cancer patients [25]. In a study by Dabrowsky, aimed at investigating mental disorders in 268 patients with breast cancer, there was no significant relationship between demographic factors and mental disorders [26]. Other studies carried out on gastric ulcer patients were consistent with the findings of this study [27]. In some studies, a significant relationship between female genders, low level of education, advanced stages of disease, young ages, low socioeconomic status and low social support with mental disorders in cancer patients [28-35]. Differences in sample size, types of cancer, and cultural and social aspects may account for the differences in the findings. It is worth noting that behaviors, habits, and lifestyle can affect health and well-being. Anything from smoking, excessive drinking or poor diets, or poor personal hygiene can be among these factors. Kuzaka and Maritimo's study was indicative of the impact of people's lifestyle on functioning of their immune system. They showed that the immune system functioning of those who have a healthy lifestyle including exercising, adequate sleep, not smoking, and a balanced diet tends to be stronger [36].

Research limitations:

Of the limitations of this study is the study design which is a cross-sectional one in which patients' follow-up and intervention have not been performed. By designing interventionist studies on high-risk patients, one can obtain better results. In addition, it would be better to separate types of cancers to obtain more accurate results for each disease.

Conclusions

The results of this study indicated a high prevalence of depression disorder among cancer patients. Psychosocial stresses caused by cancer cause mental disorders, including depression in patients. Failure to attend to this disorder and treatment of depression may prolong hospitalization and impair medical treatment, hence shorter survival time. In this study, a high prevalence of disorders of physical symptoms, social dysfunction and depression was observed in patients with cancer. Therefore, early detection and provision of appropriate intervention for such mental disorders can be helpful in the treatment of cancer patients.

Abbreviations

WHO: world health organization

GHQ-28: 28-item General Health Questionnaire

EQ-5D: EuroQoL 5-Dimension 5-Level

Declarations

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Availability of data and materials

Upon reasonable request, the data are available from the corresponding author.

Author's contributions

Study conceptualization and data collection: MTM, HAG, MA. Analysis and interpretation of data: MA, MTM. Drafting the article or revising it critically for important intellectual content: MTM, HAG, and AR. All authors have read and approved the manuscript.

Ethics approval and consent to participate

The study was approved by the Ethics Committee of Iran University of Medical Sciences with the ethical code IR.IUMS.REC 1396. informed consent, written, was obtained from all participants Furthermore, the authors commit themselves to avoiding Plagiarism in the entire article, not deliberately manipulating the data or analyses, refraining from data making or fabrication, and considering honesty, objectivity, integrity and carefulness.

Consent for publication

If patients were under the age of 18 years, they were allowed to participate in the study of their

Parents.

Competing interests

The authors declare that they have no competing interests

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Tables

Due to technical limitations, tables 1 through 3 are only available as a download in the supplemental files section.

Supplementary Files

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