



Psychological anxiety among cancer patients from their point of view

القلق النفسي لدى مرضى السرطان من وجهة نظرهم

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Abstract : In this study, which aimed to determine the level of psychological anxiety among cancer patients, the descriptive-analytical approach was adopted. Noting that the questionnaire was used as a study tool and that several recommendations were made in light of the results, including the creation of social support-based treatment programs to treat psychological disorders among cancer patients, as well as the necessity to develop treatment and awareness programs for patients' families that simulate the nature of better and healthier patient interaction in order to reduce their psychological anxiety and increase their effectiveness in this regard.

Keywords: Psychological anxiety, patients, cancer.

الملخص: هدفت الدراسة التعرف على درجة القلق النفسي لدى مرضى السرطان ، وتم استخدام المنهج الوصفي التحليلي وأداة الدراسة الاستبيان، وبلغت العينة (374) مريض تم اختيارهم بطريقة العينة القصدية، وكان من أهم النتائج : أن الدرجة الكلية للقلق النفسي لدى مرضى السرطان من وجهة نظرهم مرتفعة جدا. وفي ضوء النتائج تم تقديم جملة من التوصيات منها تصميم برامج علاجية تعتمد على المساندة الاجتماعية للتخفيف من حدة الاضطرابات النفسية لدى مرضى السرطان، ضرورة إعداد برامج علاجية وتوعية لأهالي المرضى، تحاكي طبيعة التعامل الصحي مع المرضى للتقليل من ضغوطهم النفسية وزيادة كفاءتهم في التعامل النفسي الجيد مع المرضى.

الكلمات الدالة : القلق النفسي، المرضى، السرطان .

1- **Introduction:** A human being faces many situations and events in his life, which include unwanted or threatening experiences such as the loss of a loved one, family conflict, being a victim of a crime such as theft, having a chronic illness, etc. The latter—chronic illness—involves a wide range of diseases that differ in terms of their origin, symptoms, and prognosis of their pain, which typically grows slowly and lasts for a long time and is difficult to predict, and in which full recovery is frequently intractable. And some of the most widespread at the moment are the following: cardiovascular diseases, chronic renal failure, rheumatic diseases, chronic headaches, diseases of the intestinal system, diabetes, addiction diseases, and finally the disease of cancerous tumors, the latter of which has received the attention of psychological researchers for many years in the field of chronic diseases. Chronic disease research fields, such as psychological manifestations or psychosocial anxiety, had developed, and the significance of this development may stem from the growing need of medical departments for psychological knowledge regarding the prevention, treatment, and rehabilitation of these patients, which constitute the majority of their total care.

The researcher notices that a variety of diseases, including cancer, are defined by the growth of abnormal cells that divide in an uncontrollable manner and have the capacity to infiltrate and destroy the normal body tissues. Additionally, cancer often has the capacity to spread throughout the entire body.

The second-leading cause of death worldwide is cancer, but because of improvements in cancer detection, treatment, and prevention methods, survival rates are rising for many types of the disease. Patients with cancer experience severe and chronic psychological anxiety, because they are afraid of becoming disabled and may have serious psychological anxiety for various medical reasons.

Cancer is considered one of the most common and dangerous chronic diseases, characterized by its serious physical and psychological effects and consequences that are responsible for a lot of suffering and pain. Furthermore, cancer is a broad term that refers to a group of diseases that can affect any part of the body; these are known as malignant tumors, and one of the hallmarks of cancer is the rapid generation of abnormal cells that can grow beyond their known boundaries, invade body parts, and spread to other organs. Cancer also refers to a group of diseases in which the cells are aggressive, meaning they grow and divide

without boundaries and can invade and destroy neighboring tissues or relocate to distant tissues. (Qaqi, 2019, P1)

Cancer, one of the world's most serious health problems, kills (4.3) million people each year, with (2.3) million of those deaths occurring in developing countries alone. Cancer is also one of the most expensive diseases to treat because the patient needs a lot of ongoing medical care and follow-up for many years. The spread of cancer has been linked to the quick cultural and social changes that have taken place in developed societies as a result of the Industrial Revolution, which have resulted in fundamental changes in human nature and lifestyle, according to researchers, who rank cancer as the second most dangerous human disease after heart disease. (AL-Dosari, 2020, P. 720)

Since ancient times, particularly during the Islamic era, scholars and researchers have been interested in the psychological factors that help or obstruct healing. This is due to a broad understanding of the extent of the connection between the body and the psyche, and stress is one of the "psychosomatic" symptoms in which the psychological aspect must be taken into consideration. Researchers have confirmed that there is a link between psychological elements in the occurrence and progression of the disease and that how an individual perceives an event influences how the immune system and autonomous nervous system react. According to statistics from around the world, psychological stress is the root cause of 80% of modern diseases, and 25% of society experiences stress and psychological anxiety in some way. (Bagsir, 2017, P. 365)

According to the Palestinian Ministry of Health, there are 83.8 new cases of cancer for every 100,000 people living in Palestine. 1,664 new cases were registered in women, representing 52.4% of all cancer cases, while 1,510 new cases were reported among men, accounting for 47.6% of all cases. The total number of cancer cases in the West Bank governorates was 3,174 worldwide in 2019, and the cancer incidence rate there was 117,8 per 100.000 people. Ramallah and Al-Bireh governorates had the greatest incidence of cancer cases, amounting to 151,3 cases per 100,000 people, while Tulkarem governorate came in second with an incidence rate of 139,2 cases per 100,000 people, according to the geographic distribution of reported cancer cases. (Palestinian National Information Center, 2019)

2- Study Problem:

A human being faces a variety of situations, including unwanted or threatening experiences that interrupt his welfare and put him at risk, and one of these situations is chronic diseases such as cancer, which is regarded as one of the stressful life events and is linked to the incidence of psychosocial disorders. (Mazloq, 2014, P. 29)

Living with cancer causes pressures that have a hard psychological impact, including body image problems, sexual problems, personal relationship difficulties, anxiety related to survival, and fear of the return of the disease. Most of the injured with cancer show mild or fluctuating symptoms of anxiety and depression, and others develop severe symptoms such as anxiety, depression, or post-traumatic stress disorder, and these cases need special treatment. (Kouachi, 2020, P. 3)

Based on that, cancer patients face a lot of psychological pressure and ongoing experiences of anxiety that cause huge psychological effects on their personalities and social compatibility, all of which can reflect positively or negatively on their attitude. (Dahimi, 2020, P.8)

From what has been asked, the problem of the study can be summed up as follows: What is the level of psychological anxiety among cancer patients from their point of view?

3- The Hypotheses of the Study:

From the perspective of the cancer patients, there are no variations in the level of psychological anxiety linked to the following variables: (gender, age, work, and marital status) at the level of significance ($\alpha \leq 0,05$).

4- The Significance of the Study:

It stems from the importance of the topic it addresses, which is psychological anxiety among cancer patients from their point of view, and the significance can be divided into the following:

4.1 Theoretical Significance:

1. Increase the literature on the subject of the study related to the means by which the effects of psychological anxiety on cancer patients can be minimized.
2. Know the psychological anxiety severity and what leads to it.
3. Create a set of recommendations by which psychological anxiety can be minimized.
4. Identify a set of concepts and terminologies related to the study variables.

4-2 Applied Significance:

1. Know the role of the demographic variables (gender, age, work, and marital status) on the degree of psychological anxiety among cancer patients from their point of view.
2. The lack of local scientific studies that dealt with this topic within the limits of the researcher's knowledge.
3. Provide the study recommendations and outcomes to institutions that care for cancer patients.

5- Study Goals:

1. Identify the concept of psychological anxiety and cancer.
2. Finding the degree of psychological anxiety among cancer patients from their point of view depends on some variables (gender, age, work, marital status).
3. Provide the relevant institutions and ministries with these results.

6- Study Limits:

1. Time limit: the study will be conducted in the first semester of the academic year (2022\2023).
2. Spatial limit: the study is conducted in Tulkarm governorate.
3. Human limit: all cancer patients in Tulkarm governorate.

7- Study Variables:

1. Independent variables: gender, age, work, marital status.
2. Dependent variable: paragraphs that measure psychological anxiety among cancer patients from their point of view.

8- The Study Methodology: To fit in with the current study, the researcher used descriptive analytical method, which provides independent data about the study variables as well as a realistic explanation for the relevant factors of the study subject. As this methodology describes what is there and defines situations and relations between the facts.

9- Study Community: It consisted of all cancer patients in Tulkarm governorate; according to the governorate's health directorate in Tulkarm, there were 960 cancer patients in the governorate.

10- Study Sample: The researcher chose a sample from the study community represented by a number of cancer patients in Tulkarm governorate, and they were chosen by the non-probabilistic

intentional method, and the study sample size was (374) cancer patients.

The following table shows the distribution of the study sample according to its independent variables (n=374)

Table(1)

independent variables	Variable levels	Repetition	Percentage %
Gender	Male	325	86.9
	Female	49	13.1
	Total	374	100%
Age	Less than 15 years old	68	18.2
	15-20 years old	252	67.4
	21 years and over	54	14.4
	Total	374	100%
Work	Working	236	63.1
	Not working	138	36.9
	Total	374	100%
Marital status	Married	243	65.0
	Single	58	15.5
	Other	73	19.5
	Total	374	100%

11- Study Tool: The researcher designed a unique questionnaire to determine the psychological anxiety among cancer patients from their perspective after becoming familiar with a number of previous studies and the tools used in them. The final questionnaire consisted of two sections: the first contained preliminary information about the examinees, including their gender, age, work, and marital status; the second was composed of (31) paragraphs measuring psychological anxiety among cancer patients as seen from their perspective.

12- Tool Validity: The researcher used two types of validity: the first is face validity, which was determined by giving the tool to a number of

examiners who responded to it easily, as the questions and paragraphs were clear to them, and this was an indicator of the validity of the face tool. Secondly, the arbitrators' validity, which the researcher presented the tool to them, and the modifications were made according to their observations.

13- Tool Stability: To determine the degree of tool stability, the Cronbach Alpha scale was used, and the test result reached (0.92), indicating that the scale has a high degree of stability.

14- Study Terms: Psychological anxiety: is defined as a generalized and persistent state of stress caused by the expectation or threat of actual danger, accompanied by vague fear and psychological symptoms. (Grealish&McCray,2020,p24)

And the researcher defines it procedurally as a vague feeling or a feeling of fear and danger in an exaggerated way 'that the individual is prevented from practicing his daily life properly as a result of his illness.

Cancer disease: It is a set of cancers that begins in the bone marrow and results in a large number of abnormal white blood cells. These cells did not fully grow, and they are called leukemic cells. They have the symptoms of bleeding blood, bruise problems, feeling tired, and an increased risk of infection with other infectious diseases. (Cox, 2021, p7) And the researcher procedurally defines it as a generalized expression of a large set of diseases characterized by chaotic and uncontrolled cell growth.

2. Theoretical framework and previous studies

2.1 Cancer

Chronic diseases are considered one of the problems that threaten human societies, and according to the World Health Organization it is a health problem that requires care over several years or decades; it includes a lot of diseases, such as cancer, diabetes, heart disease, parkinson's disease, etc. And whatever the disease, what distinguishes it is its severity, duration, and the extent to which it affects social, professional, emotional, and family life. (Bakheet, 2020, 25)

Cancer leads to a variety of physical disorders, such as various infections, feelings of stress and nausea, disorders of the central nervous system, and weight changes, in addition to psychological symptoms such as anxiety, depression, and sleeplessness. Cancer patients suffer from some stressful social effects, such as loss of income, and isolation. Also, numerous researchers have addressed behavioral responses and psychological symptoms associated with cancer, such as patients' feelings of chaos, anxiety, fear, and depression. (Zaabut, 2018, 83)

Undoubtedly, psychological anxiety follows a person throughout his life, causing him to be anxious about certain desired things. This type of anxiety is normal when it stems from a specific reason and for real reasons that cause concern, but the anxiety that can be said to be psychological is the one that a person feels permanently and that has become inherent to him in all his life matters and occurs without a real or convincing reason to the extent of hindering the normal course of his life and negatively affecting him as the state of psychological anxiety causes him. (Osman, 2014:88)

2.2 Cancer Symptoms

- The rapid and abnormal growth of cancer cells significantly consumes the body's energy, exhausting its resources to feed this accelerated pace of growth at the expense of the needs of the rest of the body's organs and their vital functions, and this may cause blood loss, exhaustion and fatigue, thinness and weight loss, loss of appetite, indigestion, constipation or diarrhea, unusual hyperthermia with an impaired general condition of the body.
- Symptoms caused by the loss of function of the affected organ: Consists of abnormal increase in work rates, an example is this; excessive secretion of some glands such as the thyroid and pancreas, decreased or completely stopped functioning, vomiting and coughing.
- Symptoms caused by the spread and impact on other organs such as (direct invasion, i.e. the cells grow penetrating the tissues to other nearby tissues, the occurrence of cracks in the blood vessels and then bleeding, pressure on the nerve areas, and the occurrence of severe pain, frequent hemoptysis, uterine bleeding, anal bleeding, skin ulcers, and mucous ulcers). (Mazlooq, 2014, 224-225)

3.2 Psychological Anxiety

An unpleasant Composite emotional state represents a combination of feelings of ongoing fear and threat, panic, horror, and worry as a result of the expectation of evil and the suspicion of its occurrence or a sense of danger and threat from something mysterious that one cannot identify or determine objectively.

4.2 Psychological Anxiety of Cancer Patients

Cancer considers one of the most chronic diseases that cause death because of its danger and threat to the life of the injured person. As well as the type of medical treatments provided that affect negatively the physical and mental health as a result of its side effects, which

sometimes cause the appearance of mental disorders and may be severe, which require medical intervention provided by a mental health doctor, and psychological support alone is not enough in this case. The most important mental disorder is psychological anxiety, which considers one of the negative emotional states resulting from the diagnosis of cancer, and this is a result of the radical change that the disease causes in the individual's life and his resort to a new lifestyle based on trying to adapt to the disease and its treatments. Some studies have shown that 49% of patients show anxiety when entering the hospital for surgery, 52% have death anxiety and 71% have fear of resection or amputation, and the anxiety increases in the absence of communication with the treating team. (Al-Abdi, 2020, 35)

A new medical study conducted in Australia has shown that anxiety and psychological stress cause the spread of cancer cells in a patient body, as the researchers found that psychological stress leads to large and supercharged blood vessels in the body, which enhances the movement of cancer cells and increases the spread of the disease in the body. Scientists have found that the hormones produced by stress and psychological tension increase cancer cells in the "lymphatic system", which in turn moves these cells to new places, leading to the spread of the disease in the human body. (Lubany, 2020, 138)

5.2 Previous Studies

(Turkey, 2020) a study entitled: "Psychological Reflections (Anxiety and Depression) in Women with Cancer." This study aimed to identify the psychological reflections (anxiety and depression) in women with cancer and followed the descriptive-analytical approach in conducting this study by applying it to a sample of Algerian women with cancer, which was 530 singles. Also, the study reached many results, the most prominent of which was the anxiety levels among a sample of women with cancer and undergoing chemotherapy were high, reaching 86%, in addition to the absence of differences depending on the variables of age, work, the duration of the diagnosis of the disease, while the study found differences in the variable of marital status in favor of single women and monthly income.

(Dahimi,2020) a study entitled: "The Psychological Effect (Anxiety and Depression) for Chemotherapy in Cancer Patients: a field study at the Al-Zahrawi Hospital Foundation." It aimed to identify the psychological impact (anxiety and depression) of chemotherapy in cancer patients: a field study at Al-Zahrawi hospital foundation, and this study followed the descriptive approach that a sample of 250 cancer

patients undergoing chemotherapy was selected at the Al-Zahrawi hospital foundation. In the end, the study came to a number of conclusions, the most significant of which is that there are no differences based on gender, age, or academic qualification. However, there are differences based on marital status, the nature of disease, and the family's monthly income.

(Lubany, 2020) a study entitled: "Anxiety Level and its Relationship with Optimism among Cancer Patients in Jordan." The purpose of this study was to assess the amount of anxiety and its relationship to optimism in Jordanian cancer patients. (100) patients with colorectal cancer from the King Hussein Cancer Center formed up the study sample. The anxiety status and trait and optimism scale was created to help the study reach its objectives, and the findings revealed that patients had low levels of anxiety and high levels of optimism. The results also indicated that women experienced greater levels of anxiety than men. In addition, there were no significant differences in the variables of the study sample depending on the variables (gender, age, work), and there was the presence of differences for each (place of residence, marital status, type of treatment, duration of diagnosis of the disease).

(Al-Tanbouli, 2020), a study entitled: "Life Meaning and its Relationship with Future Anxiety among Leukemia Patients from the Perspective of General Practice in Social Work." The purpose of this study is to determine the relationship between life meaning and future anxiety among leukemia patients. The study followed the descriptive approach and used a social survey sample of leukemia patients. The sample consisted of (119) cases, aged between (18-30) years, and used the following tools: life meaning measurement and future anxiety measurement. The findings of this study revealed that there is a statistically significant inverse correlation between future anxiety and the meaning of life in leukemia patients; this may be because these dimensions express the study's objectives and there are differences depending on the social status of the study sample, and there are no differences for other variables (age stage, academic qualification, work, place of residence).

(Rubaih, 2018), a study entitled: "Recognizing the Disease and its Relationship to Anxiety and Depression Responses in Cancer Patients: A Field Study at the Cancer Control Center in Ouargla State." Its goal was to investigate the phenomenon and discover all of its true aspects and dimensions among cancer patients in Ouargla. Assumed that there is a distinct perception of his illness in the cancer patient, including his

perception of the causes of cancer and the high level of anxiety and depression he has, and that there is a relationship between the dimensions of his perception of the disease and the level of anxiety and depression he has, and that this relationship differs depending on age, gender, academic level, social and economic level, cancer type, duration of time, and type of treatment. We estimated that the modified disease perception questionnaire (IPQ-R) and the anxiety and depression hospitalization scale (HADS) are suitable tools for such a study, and their validity and stability were confirmed. The basic study sample was represented by 85 patients, and the results reached: - A high perception of cancer patients in both the dimensions of consequences, self-control, and therapeutic, the consistency of the disease, periodicity, and emotional effects, and relatively low in the temporal dimension compared to the average answers. - There are differences in the dimensions of the disease depending on gender, social level, and duration of time, while there are differences according to age at the dimensions (consistency, self-control, and emotionality) for the benefit of young people, differences according to academic level at the dimensions (temporal, consistency, self-control, periodicity, and emotionality) for the benefit of high academic level, and differences according to economic level at the dimension (consequences) for the benefit of high economic level. -The association of the dimension of identity with the accompanying symptoms, and the absence of significant differences depending on gender, age, academic, social, and economic level, and the duration of time. - The high significance of differences in psychological, behavioral, and belief/religious-based reasons. And a slight decrease in the significance of genetic or family reasons. With no significant differences in the causes of the disease depending on gender, age, educational and social level, and the duration of time. - The presence of anxiety and depression in cancer patients and their rising prevalence in females compared to males. - The relationship between the dimensions of the perception of illness, anxiety, and depression came as a function of all dimensions and with a strong correlation with the dimension of emotionality.

(Botto, 2022) a study entitled: "Anxiety, Depression, and Grief Evaluation in Breast Cancer Patients: Comparison of Different Stages of the Disease." This study aimed to evaluate anxiety, depression, and grief symptoms in a sample of breast cancer patients who are in different stages of the disease. This sample consisted of 301 cancer patients, while the study findings showed that patients diagnosed for the first time with

clinically related anxiety have increased from being after surgery (35.8%), to receiving adjuvant therapy (53.7%), and follow-up (61.5%). In patients with relapse, stress was stable between stages of the disease, but many patients had clinically related anxiety (55.65%) and depression (43.48%). Also, the study found differences for the variables of the duration of the diagnosis of the disease, and age, and the absence of differences for the variable of monthly income.

(Li, 2022) a study entitled: "Alleviating Excessive Worries Improves Co-Occurring Depression and Pain in Adolescent and Young Adult Cancer Patients: A Network Approach." This study uses a network model to show the relationships between anxiety, depression, and pain symptoms in Chinese AYA cancer patients. 218 AYA patients, aged between 15 and 39 years at diagnosis; completed the patient health questionnaire and generalized anxiety disorder questionnaire. The results showed that 38.07% of the participants reported depression, 30.73% reported anxiety, and the study found differences for the marital status variable and gender but no differences for the type of treatment variable.

(Naser, 2021) a study entitled: "Depression and Anxiety in Patients With Cancer: A Cross-Sectional Study." The purpose of this study was to describe the prevalence and risk factors for depression and anxiety in cancer patients in inpatient and outpatient settings. The study sample consisted of 1,011 participants (399 inpatients and 612 outpatients). Patients' psychological status was assessed using the Hospital Anxiety and Depression Scale (HADS). The results showed that the prevalence of depression and anxiety symptoms among all patients was 23.4% and 19.1%–19.9%, respectively. Depression symptoms were more prevalent among patients who were hospitalized (37.1%) compared with patients in the outpatient setting (14.5%) ($p < 0.001$). Around 42.7% and 24.8% of the patients, respectively, said that they felt anxious and depressed, and only 15.5% of them were using medications to manage their conditions. The study found differences for the work variable and no differences for the duration of the illness variable.

(Momenimovahed, 2021) a study titled: "Psychological Anxiety among Cancer Patients During the COVID-19 Pandemic in the World: A Systematic Review." a comprehensive search was carried out in PubMed, Web of Science, and Scopus in order to investigate the psychological distress among cancer patients during the COVID-19 pandemic and offer system-adapted individual solutions. The results of this study showed that COVID-19 had a significant impact on cancer patients' psychological health. The most common reason of

psychological distress in oncology patients that can affect patients' decisions regarding treatment include fear of COVID-19, concern of disease progression, disruption of oncology services, cancer stage, and immunocompromised status. Although psychological distress affects a large number of people, it has the chance of leaving cancer patients so confused that they stop receiving treatment out of fear of infection and a worsen of their condition. The study found differences for the location variable of the disease and no differences for the gender variable.

(Niedziedz, 2019) a study titled: "Depression and Anxiety among People Living with and Beyond Cancer: A Growing Clinical and Research Priority." The purpose of this study is to study depression and anxiety among people living with and beyond cancer, a growing clinical and research priority, by collecting current systematic reviews related to cancer and common mental disorders, focusing on depression and anxiety. This study searched several electronic databases for relevant reviews on cancer, depression, and anxiety from 2012 to 2019. And several areas are covered: factors that may contribute to the development of common mental disorders among people with cancer; the prevalence of depression and anxiety; and potential care and treatment options. People with cancer may experience depression and anxiety due to a variety of individual, psychological, social, and contextual factors, as well as the characteristics of cancer and treatment. The prevalence of depression and anxiety is typically reported to be higher among cancer patients compared to the general population, but estimates can vary depending on a number of factors, including treatment setting, type of cancer, and time since diagnosis. The majority of high-quality research on the mental health of people with cancer following treatment and among long-term survivors are lacking, especially for the less common cancer types and younger people. Studies that focus on prevention are minimal, and research covering low- and middle-income populations is limited. The study found differences in the income level variable and the type of treatment, and no differences in the work variable and the place of residence.

6.2 Commenting on the previous studies

The previous studies agreed with this current study, which examines the subject of anxiety among cancer patients and its relation to some variables. In addition, the approach followed in some studies was a descriptive-analytical approach, which differed from other studies that used an experimental approach. This study is unique in that it was conducted in the governorate of the second order in Palestine, where

cancer is widespread, it addresses new study variables, and provides recommendations that help alleviate anxiety intensity in patients.

3- Discussion of the results

The Main Question: What is the psychological anxiety degree among cancer patients in Tulkarm Governorate from their point of view?

An arithmetic mean and standard deviation were used to determine the value of each paragraph of the questionnaire parts and to determine whether the respondents agreed or disagreed with them in order to answer the study's core question. As shown in Table (3)'s results, psychological anxiety in cancer patients can be identified from their perspective. In order to interpret the results, the score was converted to levels ranging from (1-5) degrees and classified into five levels using the following equation:

$$\text{upper limit-lower limit (for gradation)} \quad 1-5$$

$$\text{Category length} = \frac{\text{The number of assumed levels}}{5} = \frac{1-5}{5} = 0.8$$

Accordingly, the answer levels on the scale are as shown by Table (2):

Table (2) degrees of levels calculation

Degree	The average	Percentage %
Very low	Less than 1.8	Less than 36%
Low	1.8 – 2.5	36% - 51%
Medium	2.6 – 3.3	52% - 67%
High	3.4 – 4.1	68% - 83%
Very high	4.2 and over	84% and over

Table (3): arithmetic averages, standard deviation and percentages of the degree of psychological anxiety in cancer patients from their point of view are arranged in descending order by degree of anxiety.

	Paragraph	Arithmetic average	Standard deviation	Percentage	Anxiety degree
1	I worry that the illness will come back.	4.8396	0.53403	96.79	Very high
2	Constant medical examinations exhaust me.	4.8316	0.52393	96.63	Very high
3	I getting upset	4.8316	0.51878	96.63	Very high

	of depending on others.				
4	I get excited quickly for no apparent reason.	4.8289	0.56018	96.58	Very high
5	I lost my appetite for food.	4.8235	0.54392	96.47	Very high
6	I suffer from insomnia and a sleep disorder.	4.8182	0.56159	96.36	Very high
7	I feel lonely and isolated from others after being ill.	4.8155	0.63048	96.31	Very high
8	I have strange fears for which I don't know the reason.	4.8128	0.59691	96.26	Very high
9	The way the treatment has affected my appearance disturbs me.	4.8075	0.61295	96.15	Very high
10	I am finding it harder to enjoy life.	4.8075	0.59068	96.15	Very high
11	I find myself confused in a lot of situations.	4.8048	0.58294	96.10	Very high
12	I feel short of breath.	4.8048	0.58752	96.10	Very high
13	I always complain of fatigue and lack of activity.	4.8048	0.59657	96.10	Very high
14	I feel that my memory has become weak.	4.8021	0.60684	96.04	Very high

Psychological anxiety among cancer patients from their point of view

15	I suffer from physical pain and constant anxiety.	4.7995	0.60817	95.99	Very high
16	I see myself as less effective than others.	4.7995	0.60817	95.99	Very high
17	I always complain about anxiety and stress.	4.7941	0.63657	95.88	Very high
18	I stopped making decisions the way I had in the past.	4.7941	0.65320	95.88	Very high
19	I feel hopeless.	4.7861	0.65676	95.72	Very high
20	I get anxious and irritable at times.	4.7834	0.65383	95.67	Very high
21	I feel a loss of psychological stability.	4.7807	0.67910	95.61	Very high
22	I am a physical obstacle to my family due to constant examinations.	4.7781	0.71480	95.56	Very high
23	I feel bad and worthless.	4.7727	0.73532	95.45	Very high
24	I always feel psychological anxiety and despair.	4.7674	0.71138	95.35	Very high
25	When I take a look at my past life I find only so many failures.	4.7674	0.71514	95.35	Very high

26	I lose hope of survival.	4.7620	0.69818	95.24	Very high
27	I feel that God is punishing me for my mistakes.	4.7594	0.74016	95.19	Very high
28	I am afraid of losing the support of my family.	4.7567	0.73747	95.13	Very high
29	I feel that I am not able to do what I want.	4.7567	0.69633	95.13	Very high
30	I am more afraid of the future than the present.	4.7567	0.70779	95.13	Very high
31	I lost confidence in myself.	4.7380	0.77203	94.76	Very high
	Total degree	4.7931	0.56460	95.86	Very high

* Statistically significant at the level of $(0.05 \geq \alpha)$

According to the total average percentage of respondents' responses to all paragraphs (95.86%), Table 3 demonstrates that from the perspective of cancer patients, there is a very high level of psychological anxiety. The researcher hypothesizes that this is caused by the patients' fear of getting the condition again, particularly because of the traumatic experiences they had both before and during treatment, as well as the type of psychological and physical stress they experienced at the time. This outcome was consistent with the findings of the studies conducted in Turkey (2020), Botto (2022), and Niedzwiedz (2019). Despite not agreeing with the study's findings (Loubani, 2020).

Discussing the results of the first hypothesis: The arithmetic means of the degree of psychological anxiety among cancer patients from their point of view, according to the gender variable, do not show any statistically significant differences at the level of significance $(0.05 \geq \alpha)$.

To test the hypothesis, I used the Test (t) for two independent groups (Independent t-test) and the results of Table (4) show that:

Table (4) results of the Test (t) for the significance of differences in the arithmetic averages of the degree of psychological anxiety among cancer patients from their point of view depending on the gender variable.

Gender	Male (n=325)		Female (n=49)		Calculated (t)	significance level
	average	Deviation	average	Deviation		
Total degree	4.9346	0.33830	3.8545	0.81841	16.337	*0.00

*Statistically significant at the significance level ($\alpha \leq 0,05$)

Table 4 shows that the total level of psychological anxiety among cancer patients from their perspective, according to the gender variable, was (0.00), rejecting the null hypothesis. This indicates that there is a difference among the sample members in favor of males, and the researcher believes that this is because both genders make every effort to overcome and adapt to the conditions they are exposed to as a result of illness, as the disease affects their ability to perform their jobs. Males are more vulnerable to psychological anxiety due to their inactivity from work and practicing their social life, but females are also more vulnerable due to the pity of those around them and the nature of life, despite the researcher's belief that the psychological damage that a cancer patient is exposed to does not distinguish between a male or a female. She thus feels hopeless.

This study was similar to the study of (Dahimi 2020), the study of (Lubani 2020), and the study of (Rubaih 2018), while this study contradicted the study of (Abu Eishah 2017), the study of (Li 2022), and the study of (Momenimovahed 2021).

Results of the second hypothesis: According to the variable of age, there are no arithmetic means of the level of psychological distress among cancer patients that are statistically different from one another at the level of significance ($0.05 \geq \alpha$).

The arithmetic averages were extracted based on the age variable in order to test the hypothesis. One-Way ANOVA was then used to determine the significance of the differences in the arithmetic averages based on the age variable. As seen in Tables (5) and (6):

Table (5): Arithmetic averages of the degree of psychological anxiety among cancer patients from their point of view, according to the age variable.

Age	Less than 15 years	15-20 years	21 years old and over
	Average	Average	Average
Total Degree	4.9625	4.8874	4.1398

Table (5) shows that there are differences in the arithmetic means, and the One-Way ANOVA test was used to find whether these differences are statistically significant. This is explained in Table 6:

Table (6) Results of one-way analysis of variance to indicate differences in the degree of psychological anxiety among cancer patients from their point of view, according to the variable of age.

Age	source of contrast	sum of squares	degrees of freedom	average deviation	Calculated (f)	significance level
Total Degree		27.239	2	13.619	55.122	*0.00
		91.665	371	0.247		
		118.904	373			

* Statistically significant at $(0.05 \geq \alpha)$ level

** Statistically significant at $(0.01 \geq \alpha)$ level

Table (6) makes it clear that the significance level calculated for the overall level of psychological anxiety among cancer patients according to the age variable was (0.00), and that this value is lower than the significance level specified for the study $(0.05 \geq \alpha)$. As a result, we reject the null hypothesis.

To determine who benefited from these differences, the (LSD) test was used for post-comparisons. The results of Table (7) show that:

Table No. (7) The results of the (LSD) test for the post-comparisons between the averages for the degree of psychological anxiety among cancer patients from their point of view according to the variable of age.

(A) Age	(B) Age	Difference in mean (A-B)	Standard error	Significance level
Less than 15 years	15-20 years	0.07517	0.06793	0.269
	21 years old	0.82274*	0.09060	0.000

	and over			
15-20 years	Less than 15 years	-0.07517	0.06793	0.269
	21 years old and over	0.74757*	0.07454	0.000
21 years old and over	Less than 15 years	-0.82274*	0.09060	0.000
	15-20 years	-0.74757*	0.07454	0.000

According to the age variable, there are statistically significant differences between the age groups ((less than 15 years), (15-20 years), and the age group (21 years and over) in the level of psychological anxiety experienced by cancer patients from their perspective, which is statistically significant in favor of the age groups ((less than 15 years), (15-20 years).

This result, according to the researcher, is due to the nature of the disease, which creates a set of pressures that may affect patients of all ages. In this case, the researcher believes that the age group (less than 15 years) (15-20 years) is the group that needs support and assistance the most because it is going through a period of increasing growth. They need to reduce the psychological effects of cancer because they are less able to deal with the symptoms of the disease, which may increase psychological anxiety, so they are the most in need of support, and the researcher's opinion supports this matter where they are. Which depends on starting out in good health for an individual's future stages of life. Younger age groups are always less able to handle the emotional and physical stresses brought on by an incurable illness like cancer.

This study was similar to the studies of (Turkey 2020), (Dahimi 2020), (Lubani 2020), (Al-Tanbouli 2020), (Rubaih 2018), and (Abu Aisha 2017), while this study contradicted the study of (Botto 2022).

Results of the third hypothesis: The arithmetic means of the degree of psychological anxiety among cancer patients from their point of view, according to the work variable, do not statistically differ at the level of significance ($0.05 \geq \alpha$). The independent t-test was applied for two groups to evaluate the hypothesis, and the findings are shown in Table (8):

Table (8) results of the (t) test to indicate differences in and arithmetic averages of the degree of psychological anxiety among cancer patients from their point of view, according to the work variable.

Work	Working (n=236)		Not working (n=138)		Calculated (t)	Calculated significance level
	average	deviation	average	deviation		
Total degree	4.8846	0.44677	4.6365	0.69742	4.191	0.00*

*Statistically significant at the significance level ($\alpha \leq 0,05$)

We reject the null hypothesis since these differences were in favor of working patients, as shown in Table 8 where the value of the significance level based on the overall degree of psychological anxiety among cancer patients from their point of view according to the work variable was (0.00). And according to the researcher, this is because people who work are more likely to be exposed to social and psychological pressures resulting from the nature of their work or from interactions with those around them as a result of their cancer diagnosis. This may cause them to be treated as having a contagious disease, which has a negative impact on their mental health and causes feelings of psychological anxiety, in addition to the fact that they may lose their jobs.

This study was similar to the studies of (Turkey 2020), (Lubani 2020), (Al-Tanbouli 2020), and (Niedzwiedz 2019), while this study contradicted the study of (Naser 2021).

Results of the fourth hypothesis: According to the variable of social position, there are no statistically significant differences at the level of significance ($\alpha \leq 0,05$) in the arithmetic means of the level of psychological anxiety among cancer patients from their perspective. The arithmetic means were extracted based on the social status variable, and an analysis of one-way was used to determine the significance of the variations in the arithmetic means based on the variable of marital status. Tables (9) and (10) show that:

Table (9) Arithmetic means of the degree of psychological anxiety among cancer patients from their point of view, according to the variable of social status.

Social status	Married	Single	Other
	Average	Average	Average
Total degree	4.8958	4.2742	4.8635

It is shown in Table (9) that there are differences in the arithmetic means. The One-Way ANOVA test was employed to determine whether these differences had reached the level of statistical significance.

Table (10) Results of one-way analysis of variance to indicate differences in the degree of psychological anxiety among cancer patients from their point of view, according to the variable of social status.

Social status	source of contrast	sum of squares	degrees of freedom	average deviation	Calculated (f)	significance level
Total degree	Between groups	18.541	2	9.271	34.270	0.00*
	Within groups	100.363	371	0.271		
	Total	118.904	373			

* Statistically significant at $(0.05 \geq \alpha)$ level

** Statistically significant at $(0.01 \geq \alpha)$ level

Table (10) makes it clear that the significance level calculated for the overall level of psychological anxiety among cancer patients from their perspective in relation to the variable of social status was (0.00), indicating that the null hypothesis is rejected. To determine who these differences were, the (LSD) test was used for comparisons dimensionality, and the findings of Table (11) shows that:

Table (11) The results of the (LSD) test for the post-comparisons between the averages for the degree of psychological anxiety among cancer patients from their point of view according to the variable of social status.

(A) social status	(B) social status	Difference in mean (A-B)	Standard error	Significance level Sig.*
Married	Single	0.62160*	0.07601	0.000
	Other	0.03234	0.06942	0.642
Single	Married	-0.62160*	0.07601	0.000
	Other	-0.58926*	0.09149	0.000
Other	Married	-0.03234	0.06942	0.642
	Single	0.58926*	0.09149	0.000

According to Table 11, there are statistically significant differences in the level of psychological anxiety among cancer patients from their perspective, in relation to the variable of marital status, between patients

whose marital status is (single) and patients whose marital status is (married, other) (married, other).

The researcher attributing this finding to the cancer patients in this group's fears of an early death, the loss of those near to them, or the infliction of sorrow on them, which leads to a condition of psychological anxiety and stress for them and has a negative impact on how they live their lives. The researcher agrees with this finding since the individual is under severe psychological pressure due to his exposure to the possibility of dying at any time as well as the loss of his wife and family.

This study was similar to the study of (Abu Aisha 2017), while this study contradicted the study of (Turkey 2020), (Dahimi 2020), (Lubani 2020), (Al-Tanbouli 2020) and (Li 2022).

4- Conclusion

The second governorate in Palestine with a high prevalence of cancer, Tulkarem, was the subject of the study, which examined the level of psychological worry among cancer patients there. A descriptive analytical methodology and a questionnaire were employed. The sample was (374) patients who were chosen by the intentional sample method. From their perspective, there is a very high level of psychological anxiety among cancer patients.

5- Recommendations

1. The value of supporting cognitive-behavioral therapeutic programs to lower anxiety levels in cancer patient groups and establishing treatment plans based on social support to lower the severity of mental problems in cancer patients.
2. The necessity to develop treatment and education programs for patients' families that mimic the nature of healthy patient interaction in order to reduce their psychological stress and improve their effectiveness in having healthy psychological interactions with patients.
3. The importance of training programs that teach doctors, nurses, analytics experts, and everyone else who works with cancer patients how to communicate effectively and how to relieve the patient's stress.

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