

Anxiety disorders and depression in patients undergoing cancer treatment using the hads scale: An integrative review



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Dara Kretschmer Amorim

Undergraduate student in Medicine
Mato Grosso State University – UNEMAT

Samira Yukari Kamiyama

Undergraduate student in Medicine
Mato Grosso State University – UNEMAT

Larissa Soares Eisenhardt

Undergraduate student in Medicine
Mato Grosso State University – UNEMAT

Paola Souza Santos

PhD in Health Sciences
Mato Grosso State University – UNEMAT

Rosane Maria Andrade Vasconcelos

PhD in Science
Mato Grosso State University – UNEMAT

ABSTRACT

Introduction: Psycho-Oncology as a subspecialty, which studies cancer patients and their physical, emotional, and psychological suffering. Such a state of anguish, when impactful, can lead to the development of mental disorders, such as anxiety and depression. Thus, with negative interference in daily life and worsening of quality of life, there may be difficulty in adhering to treatment, worsening the prognosis and survival of the patient. **Objective:** To analyze common mental disorders in cancer patients using the HADS scale. **Methodology:** The study consists of an integrative review of the scientific literature. The guiding question of the research determined by the PICO method was "What are the findings of the assessment of anxiety and depression by the Hospital Anxiety and Depression Scale (HADS) in patients undergoing cancer treatment?". Articles were searched in the following databases: LILACS, SciELO, PUBMED, Science Direct and CAPES Journals. The Health

Sciences Descriptors used were: depression, anxiety, psycho-oncology, oncology and neoplasia. The included studies were full texts in English, Portuguese or Spanish, published between 2012 and October 2022. The use of the Hospital Scale for Anxiety and Depression (HADS) was used as a selection criterion. The data surveys were carried out in October and November 2022. The keywords were combined and the data found were read at the title level and, consequently, abstract. The articles selected by two independent evaluators were read in full and evaluated. In the end, the corpus consisted of 22 articles. **Results and Discussion:** The results of the review were subdivided into: symptoms of anxiety and depression, patients' perception of care, and the sociodemographic profile of cancer patients with psychiatric disorders. There is a higher prevalence of anxiety and depression in female cancer patients when compared to the general population. Anxiety symptoms were more prevalent in the immediate aftermath of diagnosis, and lower levels of anxiety were found throughout the course of the course and treatment. In addition, the need for a multidisciplinary approach and early application of Palliative Care is emphasized, in order to alleviate the suffering of those involved, corroborating the improvement of mental health. **Conclusion:** Psychiatric anxiety and depression disorders in patients undergoing cancer treatment are relevant pathologies to be researched due to their impact on cancer treatment adherence. Thus, the importance of a comprehensive approach to the patient, whether in the physical or emotional aspects through multidisciplinary follow-up, is noted, enabling greater well-being for the patient, resulting in the best treatment according to the need. Thus, we emphasize the need for further research on the subject, in order to update the findings according to the presence of new articles.

Keywords: Psycho-oncology, Anxiety Disorders, Depressive Disorder.



1 INTRODUCTION

Cancer (malignant tumor or neoplasia) is a generic name that defines a set of diseases, which have in common the abnormal and uncontrolled growth and multiplication of cells. According to the National Cancer Institute (INCA), Brazil is expected to register 704 thousand new cases of cancer each year from 2023 to 2025, with the south and southeast regions having about 70% of the incidence. Thus, the magnitude of the cancer problem in the country can be seen (INCA, 2022).

Oncology is the specialty in the health area that studies the behavior of cancer and all the information related to it, such as causes, symptoms, treatment and even the impact on the patient's life (FUNDAP, 2011). Psycho-Oncology, on the other hand, is a subspecialty of Oncology, which aims to study two important points of cancer diagnosis: the influence of the malignant tumor on the emotional aspect not only of the patient but also of the family members and professionals involved in the treatment and the impact of psychological and behavioral variables on the incidence and survival of cancer (CARVALHO, 2002).

The process of diagnosing and treating cancer presents a socially pessimistic view since there is a disease-death relationship, although there are currently many cases of cure, in addition to several aggressive therapeutic modalities that generate emotional exhaustion (CARVALHO, 2002). With this in mind and based on Psycho-Oncology, it is perceived that cancer patients, regardless of the stage of the disease and the treatment to be followed, go through not only physical suffering, related to the expenditure of energy resulting from the consumptive disease, but mainly emotional and psychological suffering.

Both anxiety and depression are mental disorders classified and detailed by the Diagnostic and Statistical Manual of Mental Disorders (DSM-5), where the former characterizes an excessive or constant worry disproportionate to the stimulus and the latter is related to a severe or persistent sadness capable of diminishing interest or pleasure in activities. In view of this, it can be said that these mental disorders are defined as pathological precisely because of the negative interference in daily life, resulting in the worsening of the patient's quality of life. Thus, the persistence of mental disorders throughout the follow-up of cancer patients can hinder adherence to treatment, as well as impair the prognosis and survival of the disease in question (American Psychiatric Association, 2014).

Finally, anxiety and depression disorders are associated with lower quality of life and social interaction, impairing rehabilitation, treatment and survival processes (FANN et al., 2008).

Thus, this review aimed to analyze the common mental disorders in cancer patients using the HADS scale, in order to provide not only the dissemination of knowledge about the relationship between such conditions, but also to facilitate the diagnosis and multidisciplinary treatment of anxiety and depression.



2 METHOD

This study consists of an integrative review of the scientific literature with the intention of establishing foundations for evidence-based clinical practice - EBP. For the construction of this review, the following procedures were used: (1) establishment of the hypothesis or research question; (2) literature search; (3) categorization of studies; (4) evaluation of the studies included in the review; (5) interpretation of the results; (6) synthesis of knowledge (MENDES; SCOTT; GALVÃO, 2008). These subsidized both the choice of articles and the design of the present research in execution and writing.

The selection and categorization of the studies was carried out and, according to the international protocols for integrative review studies, the guiding question was determined by the PICO method (P-participants; I-intervention; C-comparison; The outcome or outcome) (SANTOS; PEPPER; NOBRE, 2007). Thus, the research question was defined: what are the findings of the assessment of anxiety and depression by the Hospital Anxiety and Depression Scale (HADS) in patients undergoing cancer treatment?

Aiming for the widest possible coverage of evidence sources, the databases used were LILACS, SciELO, PUBMED, Science Direct and CAPES Journals. The research terms were defined according to the Health Sciences Descriptors (DeCS) and the search combinations were: (Depression OR Anxiety) AND Psycho-Oncology; (Depression OR Anxiety) AND Oncology; (Depression OR Anxiety) AND Neoplasia.

The studies included were full texts indexed in the selected databases, in English, Portuguese or Spanish, published between 2012 and October 2022 that had the theme related to the objective and that added to the answer to the pre-defined guiding question. Theses, dissertations, monographs, reviews, letters, editorials, news, obituaries, books and chapters, articles outside the established publication period, incomplete or in languages other than the three mentioned above were excluded. Those that touched on the theme, but did not add to the guiding question, were also excluded.

There are numerous scales that seek to assess the correlation between pathological processes, in this study of cancer specifically, and anxiety disorders and depression. However, in this review, we chose to use the Hospital Scale for Anxiety and Depression (HADS) as a selection criterion. This has 14 Likert questions, in the version validated in Portuguese. It is composed of two subscales, for symptoms of anxiety and depression, with seven items each. Each question has four answer choices with values ranging from zero to three. A high result indicates more symptoms of depression or anxiety, respectively. The authors suggest the value of eight as the cut-off point, so that the lower values are seen as the absence of anxiety and depression (ZIGMOND; SNAITH, 1983).

It is worth noting that in the HADS, the definition of depression is focused on the fundamentals of anhedonia, i.e., the loss of the ability to experience pleasure in activities in general, and anxiety is



defined as an unpleasant emotional state, which is related to fear and decreases behavioral efficiency, and may be accompanied by somatic discomfort (BOTEGA et al., 1995; ZIGMOND; SNAITH, 1983).

The data surveys were carried out in October and November 2022. The keywords were combined and the data found were read at the title level and, in a second moment, at the abstract level. Articles that met the inclusion criteria were selected. This was carried out by two independent evaluators, both medical students. The disagreements were analyzed jointly by the researchers and discussed, being included or excluded after consensus between them. Repeated texts were counted only once. Those selected were read in full and evaluated, and those who remained from this analysis process composed the final corpus.

The collection was tabulated in an Excel spreadsheet, in which, for each remaining article, the title, authors, year of publication, journal, type of study, sample, main results and conclusions, limits, and contributions to new studies were highlighted. The writing of the article was guided by the guidelines and checklist of the PRISMA protocol (PAGE et al., 2021). It is noteworthy that this method was used to analyze the quality of the report of the research data and its characteristics, and not its methodological quality. After the design of the studies presented in the results, the articles were analyzed in their entirety for the writing in order to answer the guiding question and, thus, achieve the proposed objectives.

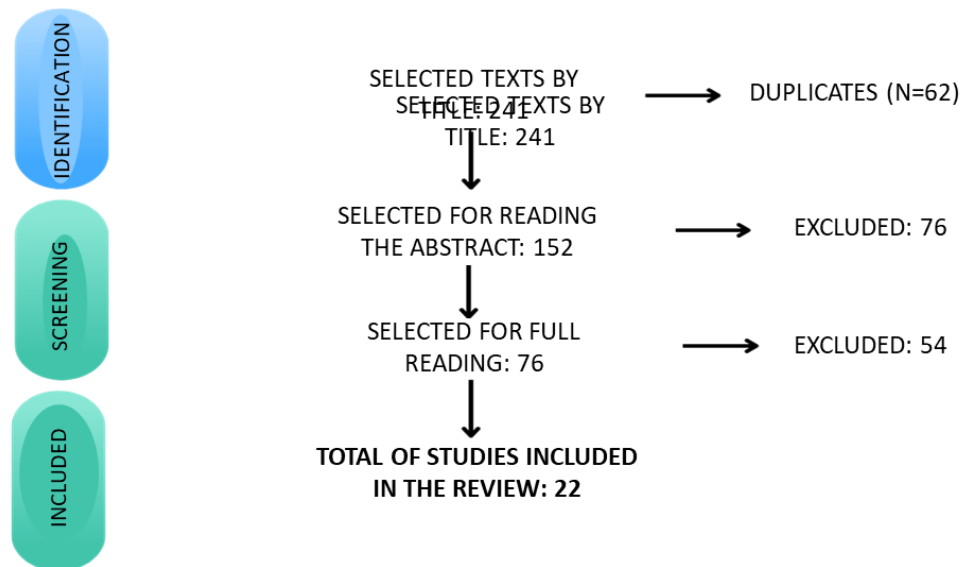
3 RESULTS

The processes of search, selection and categorization of the studies are summarized in the flowchart (Figure 1). Articles are in Portuguese, English or Spanish. The years with the greatest evidence were 2017, 2018 and 2020, with 54.54% of publications (18.18% each), followed by 2016 with 13.63%. All references that made up the corpus had the quantitative approach as a method (100% of the selected studies). Regarding the journals in which these studies were published, 59.09% are national and 40.91% are international.



Figure 1 - Flowchart: identification of studies through records

IDENTIFICATION OF STUDIES THROUGH RECORDS



Source: the authors.

Table 1 – Selected studies.

Title	Authors	Year of publication	Newspaper	Type of Study	Sample
Emotional adjustment in patients with sarcoma and the perception of autonomous support given by nurses (BASTOS et al., 2016).	Celeste Bastos; Célia Santos; Jorge Freitas; Emilia Magalhães; Lígia Lima.	2016	Portuguese Journal of Mental Health Nursing	Longitudinal study	Convenience sample consisted of 24 patients diagnosed with sarcoma undergoing treatment at two health institutions.
Anxiety and depression disorders in relation to the quality of life of patients with locally advanced or disseminated breast cancer (VALDERRAMA RIOS; SÁNCHEZ PEDRAZA, 2018).	Martha Carolina Valderrama Rios; Ricardo Sánchez Pedraza.	2017	Colombian Journal of Psychiatry	Cross-sectional study	Non-probabilistic sample consisting of 107 patients diagnosed with cancer histologically confirmed, locally advanced or disseminated breast cancer, undergoing treatment at the National Institute of Cancerology in Bogotá
Evaluation of anxiety and depression in	Débora Kawakami; Sabrina Olah;	2014	Colloquium Vitae.	Cross-sectional study	Sample of 50 cancer patients being followed



cancer patients undergoing outpatient chemotherapy (KAWAKAMI et al., 2014).	Naelly Pivetta; Renata Silva; Daiane Santos; Layane Napoleão; Susimary Padulla.				up at an oncology outpatient clinic in the interior of São Paulo.
Quality of Life in Patients With Brain Tumors: Importance of Psychological Variables (CORTÉS; CRESPO, 2015)	Ana Sanz Cortés; Maria Eugenia Crespo.	2015	Clinic & Health	This is a cross-sectional, comparative and correlational study.	The sample consisted of 28 patients with glioma who had already received a histopathological diagnosis and resection of the lesion at the Neurosurgery Service of the San Carlos Clinical Hospital in Madrid.
Breast cancer: estimation of the prevalence of anxiety and depression in patients undergoing outpatient treatment (FERREIRA et al., 2015).	Andreia Ferreira; Bruna Bicalho; Julie Maeda Oda; Sebastião Duarte; Richardson Machado.	2015	UNIPAR Health Sciences Archives.	Cross-sectional and exploratory study.	Sample consisted of 97 participants undergoing outpatient treatment for breast cancer.
Depression, anxiety and spirituality in oncology patients (TURKE et al., 2020)	Karine Turke; Juliana Canonaco; Thiago Artioli; Marina Lima; Amanda Batlle; Fernanda de Oliveira; Daniel Cubero; Claudia Sette; Auro del Giglio.	2020	Journal of the Brazilian Medical Association.	This is a descriptive, cross-sectional and observational study.	The sample consisted of 99 patients treated at the outpatient clinics of the ABC School of Medicine.
Differences in anxiety and depression by contextual variables in women with breast cancer (GARCÍA-HERNÁNDEZ et al., 2020).	Eva Magdalena García-Hernández; San Juana López-Guevara; Luz Elena Cano-Fajardo; Maribel Avila-Medina; Tirso Duran-Badillo; Delia Ponce-Martínez	2020	News in Psychology	This is a descriptive and comparative study.	The sample consisted of 91 women diagnosed with breast cancer treated at three hospitals.



Predictors of Emotional and Physical Symptoms Reported by Cancer Patients (ZAYAT et al., 2021)	Carolina Zayat; Isadora Azevedo; Edvane Domenico; Cristiane Bergerot.	2021	Psychology: theory and research.	This is a descriptive, correlational and quantitative study.	The sample consisted of 74 patients present at the chemotherapy outpatient clinic of Hospital São Paulo.
Indicators of hope, anxiety and depression of patients undergoing cancer treatment (GRANDIZOLI et al., 2017)	Mariana Vidotti Grandizoli; Ivone Ibiapina; Randolpho Junior; Viviane Bianchi Garcia.	2017	Health Sciences Archives.	Cross-sectional and descriptive study	The sample consisted of 118 patients undergoing treatment at the Cancer Institute and at the Hospital de Base de São José do Rio Preto.
Influence of emotional state on the symptomatology reported by patients with breast cancer and lung cancer during chemotherapy treatment (FERNÁNDEZ RODRÍGUEZ et al., 2013)	Concepción Fernández Rodríguez, Erica Villoria Fernández, Isaac Amigo Vázquez, Celina Padierna Sánchezb, Roberto Fernández Martínezb, Ignacio Peláez Fernándezb	2013	Palliative Medicine	Longitudinal study	The sample consisted of 66 patients, 29 with breast cancer and 37 with lung cancer.
Level of anxiety versus self-care in the preoperative and postoperative periods of total laryngectomy patients (ALMONACID; RAMOS; RODRÍGUEZ-BORREGO, 2016)	Clara Inés Flórez Almonacid, Alfredo Jurado Ramos, Maria-Aurora Rodríguez-Borrego	2016	Latin American Journal of Nursing	Observational, longitudinal study	The sample consisted of 40 patients with stage IV laryngeal cancer.
Life Satisfaction in Women With Breast Cancer (FONSECA; LENCASTRE; GUERRA, 2014)	Solange Fonseca; Leonor Lencastre; Marina Guerra.	2014	Paideia (Ribeirão Preto)	Observational, cross-sectional study	Sample of 55 women with breast cancer, organized into two groups: mastectomized and tumorectomized
Measurement	Elisângela	2018	Bioscience	Observational	The sample

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of psycho-emotional constructs and self-management in health of patients with cancer (SOUZA et al., 2018)	Souza; Ana Lima; Omar de Almeida-Neto; Fernanda Garcia; Cristiane Cunha.		Journal	Study/Prevalence Study	consisted of 70 adult patients diagnosed with cancer for at least 6 months and under outpatient follow-up.
Psychological morbidity and implications for adult recovery after cancer surgery (MATA et al., 2018).	Luciana da Mata; Ana Cunha; Cristiane Ziviani; Túlio Fonseca; Mariana Bernardes; Patrícia de Oliveira.	2018	Cogitare Nursing	Screening study. Cross-sectional, correlational, quantitative study	The sample consisted of 96 adults who underwent cancer surgery and were admitted to a large hospital in Minas Gerais between August and December 2015.
Women diagnosed with breast cancer: impact of post-traumatic growth (CAMARGO et al., 2020)	Maria Camargo; Randolpho Junior; Loiane dos Santos; Bianca Talhaferro; Aline Carniel; Ana Vianna.	2020	Changes	Diagnostic study/ Prognostic study	The sample consisted of 30 women diagnosed with breast cancer undergoing treatment at the Base Hospital.
Prevalence of symptoms and quality of life of cancer patients (SALVETTI et al., 2020)	Marina Salvetti; Caroline Machado; Suzana Donato; Adriana Silva.	2020	Chilean Journal of Anesthesia	Diagnostic study/ Observational study/ Prevalence study/ Risk factors/ Screening study. Cross-sectional study	Cross-sectional study sample consisted of 107 cancer patients.
Prevalence of Anxiety and Depression in Cancer Patients and Identification of Predisposing Variables (FERREIRA et al., 2016)	Andreia Ferreira; Bruna Bicalho; Luiza Neves; Marcella Menezes; Thais Silva; Thiago Faier; Richardson Machado.	2016	Brazilian Journal of Cancerology	Controlled clinical trial/ Observational study/ Prevalence study/ Screening study. Cross-sectional, analytical-descriptive study	Sample of 233 patients is a cross-sectional, analytical-descriptive study in which medical records were randomly selected from the reference hospital in the Midwest Region of Minas Gerais.
Psycho-oncological intervention in	Soledad Linares-Fernández;	2017	Psychological Therapy	Longitudinal study	The sample consisted of two groups of

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haematopoietic progenitor cell transplant (HPT): effects of emotional impact (LINARES-FERNÁNDEZ et al., 2017)	Nieves Pérez-Marfil; Francisco Cruz-Quintana; Antonio Romero-Aguilar; Lúcia Moratalla-López; Elisa López-Fernández.				patients: an intervention group, which underwent the intervention program prior to transplantation, and the control group that did not receive pre-transplant intervention.
Quality of life, anxiety and depression in cancer patients undergoing chemotherapy and their families (CORDEIRO; SAINTS; ORLANDI, 2021)	Larissa Cordeiro; Diana dos Santos; Fabiana Orlandi.	2021	Nursing in Focus (Brasilia)	Correlational, cross-sectional, quantitative study	The sample consisted of 130 cancer patients undergoing chemotherapy and 130 family members.
Quality of life, depressive and anxiety symptoms at the beginning of chemotherapy treatment in cancer: challenges for care (SIMÃO et al., 2017)	Delma Simão; Andreza Aguiar; Raissa Souza; Karine Captein; Bruna Manzo; Antonio Teixeira.	2017	Nursing in focus (Brasilia)	Observational, cross-sectional, analytical, correlational study	Sample consisted of 55 patients before chemotherapy.
Testing age as a moderator of the relationship between depression and healthy functioning in breast and gynecologic cancer patients (BÁRTOLO et al., [s.d.], p. 3)	Ana Bártoło; Sara Monteiro; Filipa Aires; Elizabeth Castelo Branco.	2018	Psychological Analysis	Cross-sectional study	The sample included 106 women, diagnosed with breast or gynecological cancer in the active phase, recruited from the Gynecology Service of the Portuguese Institute of Oncology of Coimbra Francisco Gentil.
Anxiety disorders and depression in relation to the	Martha Rios; Ricardo Pedraza.	2018	Colombian Journal of Psychiatry	Controlled clinical trial, cross-sectional	Sample consisted of a group of patients over 18

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<p>quality of life of patients with locally advanced or disseminated breast cancer (VALDERRA MA RIOS; SÁNCHEZ PEDRAZA, 2018)</p>					<p>years of age with a diagnosis of histologically confirmed breast cancer, at a locally advanced or disseminated stage, who attended the National Institute of Cancerology to receive treatment and consented to participate.</p>
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Source: the authors.

3.1 SYMPTOMS OF ANXIETY AND DEPRESSION

The study by Bastos (2016) shows that initially 50% of his sample does not have clinical levels of anxiety, but with subsequent evaluations there is an increase in the number of anxious patients. Regarding the degree of symptomatology of this anxiety, in this study there are cases of mild to moderate anxiety, but no severe patients were found. Regarding depressive symptoms, in this study it was noticed that among the few cases that were depressed, the number of cases and severity of symptoms remained constant, i.e., without statistically significant difference.

The Valderrama Rios and Sánchez Pedraza study (2018) evaluated 107 patients with cancer in locally advanced or disseminated stages and revealed clinical manifestations of anxiety in most patients, totaling 84.1% of the sample. It is noteworthy that, of the total sample of this study, 14% (n=15) of the patients were evaluated by the mental health services of the institution, indicating that 26.6% (n=4) of these patients had depressive disorders, and 25.2% of their sample had clinical depression according to the HADS scale, but it should be considered that the analysis considered patients with cancer already in locally advanced stages or in metastasis. A similar result was found by (FERREIRA et al., 2015) who found a result of 26.8% of cases of depression in their sample. Corroborating this statistic is the study by García-Hernández (GARCÍA-HERNÁNDEZ et al., 2020) revealing that 25.3% of the patients evaluated have depression and the article by Ferreira (2016), in which the mean was 5.04 and standard deviation of 4.19, with an estimated occurrence of depression in 26.18% of patients.

Still on the symptoms of anxiety and depression, there are studies that reveal the presence of symptoms for both, with the percentage of patients with symptoms for anxiety and depression being 61.5% and 39.6% respectively (MATA et al., 2018); 33.1% and 19.2% (LAMB; SAINTS; ORLANDI, 2021); 21.5% and 31.8% (SALVETTI et al., 2020); 20.5% and 17.8% (ZAYAT et al., 2021)



As for studies that reveal the presence of symptoms for anxiety only, the following percentage of patients is found: 51.6% (GARCÍA-HERNÁNDEZ et al., 2020); 31.3% (FERREIRA et al., 2015); 24.7% (FERREIRA et al., 2016). In addition, 21.8% of the participants were classified as "probable" anxiety (SIMÃO et al., 2017).

In Fonseca, Lencastre and Guerra (2014) (FONSECA; LANCASTER; GUERRA, 2014) found that only 7.3% of the participants had mild symptoms of depression, 9% had moderate depression and only 3.6% had severe depression, and 80% of the sample did not have depressive symptoms. It is also noteworthy that in this study, the HADS score ranged from 0 to 15, the mean was 4.85 (SD=3.96) and the median was 5 points, which represents the absence of depression.

Regarding the stage of cancer and treatment, a study by Almonacid, Ramos and Rodríguez-Borrego (2016) (ALMONACID; BRANCHES; RODRÍGUEZ-BORREGO, 2016) shows that 71.4% of cancer patients had anxiety symptoms before treatment surgery. Based on this, this article showed that 97.2% of these anxious patients persisted with anxiety after 7 days of the procedure, and 68.9% still maintained symptoms for 14 days after the intervention. On the other hand, the study (FERREIRA et al., 2016) shows that there is a higher prevalence among patients diagnosed and treated with cancer in the early stages.

When analyzing only patients after 6 months of glioma surgery, there are 21.4% of doubtful cases and 25% with clinical symptoms of depression. In addition, it is known that there is an inversely proportional relationship between the variables studied, especially depression, and quality of life (CORTÉS; CRESPO, 2015). Regarding depressive symptoms, in Simão's study (SIMÃO et al., 2017), 23.6% (n=13) of the participants were classified as "probable" depression.

Another study that evaluated anxiety and depression in 50 patients who were being treated with chemotherapy drugs found that 38% of these probably had one or both mental disorders (KAWAKAMI et al., 2014). In the study by (TURKE et al., 2020), 24.24% of patients reported anxiety at high or borderline levels, similarly, 21.21% of depression. Also in this same study, a positive correlation was found between levels of anxiety disorder and depression, demonstrating the possibility of coexistence (TURKE et al., 2020).

About the article by Rios et al. (2018) (VALDERRAMA RIOS; SÁNCHEZ PEDRAZA, 2018), it is evident that of the total sample, 14% (n=15) of the patients were evaluated by the institution's mental health services, and it was considered that 73% (n=11) of these patients had anxiety disorders, and 26.6% (n = 4) had depressive disorders.

In the study by Souza et al. (2018) (SOUZA et al., 2018) the scores to measure symptoms of anxiety and depression showed that these symptoms are at normal levels, equivalent to the levels of the general population. This result may be related to the high levels of self-esteem shown in the study in question.



The higher the levels of anxiety and depression, the worse the quality of surgical recovery, since there is a moderate negative correlation between psychological morbidity and surgical recovery ($r = -0.56$; $p < \text{or equal to } 0.00$) (MATA et al., 2018).

Regarding the presence of a mental disorder, 23 participants (77%) reported never having been diagnosed with a mental disorder, 5 (17%) of the patients stated that they had already been diagnosed with depression, and 2 (6%) had already been diagnosed with some type of anxiety (CAMARGO et al., 2020).

When examining the results of the HAD scale, the anxiety score (6.6) showed a higher prevalence when compared to the depression score (CAMARGO et al., 2020). In (FERREIRA et al., 2016), the sociodemographic and clinical variables did not show any statistically significant difference in relation to the occurrence of anxiety and depression.

In the study by Cordeiro, Santos and Orlandi (2021)(CORDEIRO; SAINTS; ORLANDI, 2021), patients had an average of 5.9 for anxiety symptoms and 4.5 for depressive symptoms. The study by Fernández Rodríguez et al. (2013) (FERNÁNDEZ RODRÍGUEZ et al., 2013) reveals that patients diagnosed with anxiety during treatment with multidrug therapy have a significant decrease in anxiety symptoms after the end of treatment. On the other hand, the same study shows that there is no decrease in symptoms of depression at the end of treatment, with the exception of patients with lung cancer. Thus, the study demonstrates that changes in the symptoms of anxiety and depression are correlated with the type of cancer in question.

3.2 PATIENTS' PERCEPTION OF CARE

Patients report a good relationship with nurses throughout the period evaluated, being considered promoters of autonomy during treatment (BASTOS et al., 2016). In addition, in more advanced stages of the pathology, patients who report a better perception of the therapeutic environment have lower rates of anxiety and depression (BASTOS et al., 2016) (BASTOS et al., 2016).

3.3 SOCIODEMOGRAPHIC PROFILE

Studies show that older patients have more depressive disorders throughout the treatment process (BASTOS et al., 2016). On the other hand, the study by Valderrama Rios and Sánchez Pedraza (2018)(VALDERRAMA RIOS; SÁNCHEZ PEDRAZA, 2018) found no association between age as a risk factor for the development of psychiatric disorders. In the study by (BÁRTOLO et al., [n.d.]), the results indicate that the group aged 50 years or older had higher HADS-D scores than the younger ones in the group.



In the study (MATA et al., 2018), a negative relationship was identified between the variable age and anxiety symptoms ($r = -0.20$; $p < \text{or equal to } 0.04$), and the younger the age, the higher the anxiety levels. In addition, the study by (TURKE et al., 2020), observed that women tend to be more anxious than men.

In the initial evaluation (BASTOS et al., 2016), it was found that patients who are married or in a stable relationship are more anxious than those who are single and divorced or separated. In the third evaluation, the first ones had more depressive symptoms than the others. On the other hand, the study by Grandizoli et al. (GRANDIZOLI et al., 2017)(2017) showed that patients who report having partners have a lower rate of depression and anxiety when compared to single, widowed, or divorced patients.

Valderrama Rios and Sánchez Pedraza (2018)(VALDERRAMA RIOS; SÁNCHEZ PEDRAZA, 2018) did not find a correlation between the stage of the disease and a higher prevalence of anxiety disorder, however, it noted a statistically significant association between more advanced disease and depression.

The existence of children also makes patients more anxious at the beginning of treatment (BASTOS et al., 2016).

According to (TURKE et al., 2020), spirituality is inversely proportional to the levels of depression and anxiety, that is, the more witty the patient, the lower their rates of mental disorders should be, in general. Similarly, another study showed a negative relationship between hope and these disorders (GRANDIZOLI et al., 2017).

Patients who are away from work are more clinically depressed than patients who have maintained a work activity (BASTOS et al., 2016).

In the study (SOUZA et al., 2018), only depression, in the HADS subscale, showed a statistical difference between the means, regarding gender and age group ($p < 0.05$).

The study (FERREIRA et al., 2016) discusses that one of the articles discussed states that depression is associated with the female sex, since there is a great social influence where men deal with a certain "indifference" in relation to the disease, either due to a state of denial or shock. That is why there is a need to pay attention to the particularities that exist between genders, since the possibility of underdiagnosis is great.

On the other hand, in the study by (GARCÍA-HERNÁNDEZ et al., 2020), there was no relationship between anxiety or depression and work status, schooling, clinical internship, schooling, or age.

In the study by (ZAYAT et al., 2021) there was a considerable relationship (48.6%) between anxiety disorders or depression and the presence of moderate to severe distress. In addition, these disorders have also been associated with poorer quality of life.



Among the limitations presented in the articles of the corpus, the small number of participants (BASTOS et al., 2016; CAMARGO et al., 2020; FERREIRA et al., 2015; FOSTER; LANCASTER; WAR, 2014; SOUZA et al., 2018; VALDERRAMA RIOS; SÁNCHEZ PEDRAZA, 2018) and the limited period in which the sample was collected (CAMARGO et al., 2020; FOSTER; LANCASTER; GUERRA, 2014). There were also reports of dispersion due to the number of institutions that offer the treatment being much broader than those surveyed (BASTOS et al., 2016)), lack of differentiation between patients who underwent surgical treatment or not, or classification according to stage of the disease or prognosis (FERREIRA et al., 2015). Not only that, cross-sectional studies do not allow the establishment of a cause-and-effect relationship (BÁRTOLO et al., [n.d.]; FOSTER; LANCASTER; WAR, 2014; MATA et al., 2018; SIMON et al., 2017; TURKE et al., 2020).

4 DISCUSSION

Initially, it is worth noting that many studies (GULLICH et al., 2013; LUCCHESI et al., 2014; ROMBALDI et al., 2010) point out that the prevalence of anxiety and depression in cancer patients is higher when compared to the general population.

Regarding the sociodemographic profile, the studies chosen both (TURKE et al., 2020) and (FERREIRA et al., 2016) highlighted the association of anxiety disorders and depression with the female gender, respectively. This information is also presented in the article by Andrade, Viana and Silveira (2006)(ANDRADE; VIANA; SILVEIRA, 2006), in which, in addition to indicating that women are more predisposed to such psychiatric disorders, he states that the evolution of two disorders concomitantly is common in patients.

Regarding the state of anxiety in cancer patients, studies such as (REPOSSI, 2008a) indicate that anxiety is a symptom of common incidence in patients after diagnosis, during treatment and especially in individuals who need surgeries to follow up on cancer treatment.

According to (MATA et al., 2018), anxiety is characterized as a reaction to acute events and probably decreases after completion of primary treatment, once patients become familiar with the side effects of treatment and can receive positive prognostic information. In the same line of reasoning, the article by (AMORIM, 1999) shows that, in the immediate moment after the diagnosis of cancer, the patients indicated a high level of anxiety. However, when the signs and state of anxiety in the pre- and postoperative periods were analyzed in the articles (REPOSSI, 2008b) and (MEDEIROS; NUNES, 2001), a medium level of anxiety was perceived, which corroborates the point of the selected article (MATA et al., 2018).

Regarding chemotherapy, in the study (VALLIM et al., 2017) there were more anxious symptoms in patients after this procedure, which may be a result of the decrease in follow-up visits by the multidisciplinary team and, consequently, a reduction in words of comfort and assurance regarding



cancer recurrence. Now, regarding adherence to chemotherapy, the article (SOUZA et al., 2014) showed that most patients undergoing chemotherapy treatment did not present depressive symptoms.

In the cases of patients with advanced cancer, the study (FISCHER; CRIPE; RAND, 2018) presented the counterpoint of hope and optimism in depression and anxiety, respectively. In other words, it was noticed that hopeful and optimistic patients sought to cope with the pathology in a re-signified way, obtaining a positive impact on quality of life when compared to less hopeful and optimistic people, who presented more severe psychiatric symptoms.

It is also possible to perceive a relationship between the degree of anxiety and depression in cancer patients with the application of palliative care. It is worth noting that, according to the World Health Organization, the practice of palliative care is care promoted by a multidisciplinary team with the aim of providing care that improves the quality of life and rescues the dignity of patients facing a life-threatening disease ("Manual-Palliative Care.pdf", [n.d.]). Thus, the study (AZEVEDO et al., 2017) addresses precisely the need for early insertion of Palliative Care in order to mitigate the patient's suffering, since the results of the research showed that 21.7% of the patients had moderate to severe symptoms of anxiety and 16.6%, depression.

It is also interesting to point out the role of spirituality and religiosity in the mental health of cancer patients. According to the article (BÜHRER; ORNELL, 2022), the practice of religiosity and spirituality in cancer patients is associated with an improvement in mental health, including depression and anxiety, in addition to providing improvements in the physical (reduced fatigue and higher sleep quality) and social health of such individuals.

In the article by (BASTOS et al., 2016), it is noted that the patients had a favorable perception of the support care provided by the health team, which enabled better emotional adjustment in view of the advanced pathology. However, when analyzing the undervaluation of the diagnosis of psychiatric diseases, it is perceived that the depressive condition is not properly seen in many cases, according to the study by (REYES-GIBBY et al., 2012), in which only 35% of cases are diagnosed and managed properly.

Regarding the undervaluation of the diagnosis of anxiety, the research by (BASTOS et al., 2016) initially indicated a minimal presence of anxious clinical symptoms, but which showed an increase throughout the follow-up of patients in appropriate treatments.

In view of these facts, it is important to prepare health professionals to fully address the concerns and needs of cancer patients, since the proportion of adequate support from the health team is capable of positively influencing the psychosocial adjustment of the sick person, as presented in the article (JACOBSEN; JIM, 2008).



5 CONCLUSION

Therefore, based on the analysis of the results found, it is concluded that the psychiatric disorders of anxiety and depression in patients undergoing cancer treatment are relevant pathologies to be researched due to the impact on adherence to cancer treatment evidenced. The importance of a comprehensive approach to the patient is emphasized, both physically and emotionally. Thus, through multidisciplinary follow-up, greater patient well-being is possible, resulting in the best treatment according to the need. Thus, further studies on this subject should be developed in order to update the findings according to the presence of new articles.



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