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Will to live in cancer patients receiving palliative care

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Abstract

The will to live is a complex dimension in illness and at the end of life, related to multiple factors. This study aimed to analyze the prevalence of the will to live and associated factors in cancer patients receiving palliative care. The longitudinal study used a structured script for socioepidemiological assessment; the Edmonton Symptom Assessment Scale; the Social Support Scale; the Depression, Anxiety, and Stress Scale; the Herth Hope Scale; and the Analogical Will to Live Scale. It was found that none of the sociodemographic variables influenced the will to live. People who had increased social support in the affective dimension had a reduction in the will to live at T1 (p=0.047); those who had low social interaction had a low will to live at T2 (p=0.011). In terms of hope, those who started with increased scores had a reduction in the will to live from T1 to T2 (p=0.011), but those who maintained high scores at T2 maintained a high will to live (p=0.008).

Keywords: Palliative care. Neoplasms. Social support. Anxiety. Depression. Hope. Volition.

Resumo

Vontade de viver em pacientes com câncer em cuidados paliativos

Vontade de viver é uma dimensão complexa na doença e no final da vida, relacionada a múltiplos fatores. O objetivo do estudo foi analisar a prevalência da vontade de viver e fatores associados em pacientes oncológicos em cuidados paliativos. O estudo longitudinal utilizou roteiro estruturado para avaliação socioepidemiológica; escala de avaliação de sintomas de Edmonton; escala de apoio social; escala de depressão, ansiedade e estresse; escala de esperança de Herth; e escala analógica da vontade de viver. Verificou-se que nenhuma das variáveis sociodemográficas influencia a vontade de viver. Pessoas que apresentaram apoio social aumentado na dimensão afetiva tiveram redução na vontade de viver em T1 (p=0,047); as que apresentaram baixa interação social tiveram baixa vontade de viver em T2 (p=0,011). Na esperança, aqueles que iniciaram com escores aumentados tiveram redução na vontade de viver de T1 para T2 (p=0,011), mas quem manteve escores altos em T2 manteve alta vontade de viver (p=0,008).

Palavras-chave: Cuidados paliativos. Neoplasias. Apoio social. Ansiedade. Depressão. Esperança. Volição.

Resumen

Deseo de vivir en pacientes con cáncer en cuidados paliativos

El deseo de vivir es una dimensión compleja en la enfermedad y al final de la vida, relacionada con múltiples factores. El objetivo del estudio fue analizar la prevalencia del deseo de vivir y los factores asociados en pacientes oncológicos en cuidados paliativos. El estudio longitudinal utilizó un guion estructurado para la evaluación socioepidemiológica; la Escala de Evaluación de Síntomas de Edmonton; la Escala de Apoyo Social; la Escala de Depresión, Ansiedad y Estrés; la Escala de Esperanza de Herth; y la Escala Analógica de Deseo de Vivir. Se verificó que ninguna de las variables sociodemográficas influye en las ganas de vivir. Las personas que presentaban un mayor apoyo social en la dimensión afectiva mostraron una reducción en el deseo de vivir en T1 (p=0,047); las que presentaban una baja interacción social mostraron pocas ganas de vivir en T2 (p=0,011). En cuanto a la esperanza, aquellos que comenzaron con puntuos elevados tuvieron una reducción en el deseo de vivir de T1 a T2 (p=0,011), pero los que mantuvieron puntos altos en T2 mantuvieron uno alto deseo de vivir (p=0,008).

Palabras clave: Cuidados paliativos. Neoplasias. Apoyo social. Ansiedad. Depresión. Esperanza. Volición.

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Research

Palliative care (PC) interventions should be evidence-based and include prevention, early identification and assessment, and management of physical suffering (pain and other symptoms), social needs, and psychological and spiritual distress, while respecting individuals' values and beliefs [1]. In addition, they are applicable and modifiable throughout the course of the disease and according to the patient's needs [2].

For cancer patients in PC, one facet of treatment needs to be focused on controlling physical signs and symptoms, such as pain, fatigue, anorexia, dysphagia, nausea, vomiting, and constipation, among others [3]. These symptoms deteriorate functionality and significantly impact quality of life and should be managed effectively and humanely [4].

The Canadian Edmonton Symptom Assessment System scale [5], translated and validated into Brazilian Portuguese as the *Escala de Avaliação de Sintomas de Edmonton* (ESAS), is a simple and useful instrument for clinical practice in various settings. This is a tool that uses the patient's report to assess the intensity of symptoms using a numerical visual scale, ranging from 0 (minimum intensity) to 10 points (maximum intensity): pain, tiredness (weakness), shortness of breath, nausea, sadness, anxiety, drowsiness, appetite, and well-being [6].

Physical symptoms can influence the prevalence of anxiety and/or depression symptoms, whether it is the development or worsening of these symptoms [7]. Thus, the Depression, Anxiety, and Stress Scale (DASS), originally developed by Lovibond and Lovibond [8], allows tracking different emotional states in a single instrument. The DASS-21 was adapted and validated for Brazilian Portuguese by Vignola [9] as a self-administered scale, comprising three subscales (one for each emotional state), each with 7 Likert-type items.

In the DASS-21, for each of the 21 items, the person being evaluated must indicate their degree of agreement with what was read in the following options: "Did not apply at all" (0 points), "Applied to some degree, or for a short time" (1 point), "Applied to a considerable degree, or for a good part of the time" (2 points), "Applied a lot, or most of the time" (3 points) [9].

Social support refers to the relationships through which a person receives emotional, affective, and material help to cope with difficult situations, perceiving themselves as cared for, valued, cherished, and loved within the context of the groups to which they belong [10,11]. When patients perceive themselves as important within their social network, they may exhibit better adaptation to the disease, adopt positive behaviors such as adherence to or maintenance of the proposed therapy, have better prognoses, and greater survival [12].

In this context, Sherbourne and Stewart [13] developed a scale to assess and encompass the various dimensions of social support, called the Social Support Scale, to be used in the Medical Outcomes Study, a study with patients with chronic conditions, called MOS-SSS. This scale consists of 19 items originally distributed across five dimensions, covering different aspects of social support (affective, positive social interaction, emotional, informational, and tangible) [14,15].

Based on an initial instruction, the participant must answer: "If you need to, how often do you rely on someone?" selecting one of the five possible answers according to a five-point Likert scale: 0 ("never"), 1 ("rarely"), 2 ("sometimes"), 3 ("almost always"), and 4 ("always"). After the correlation assessment, the authors proposed combining the emotional and informational dimensions into a single subscale [13].

After a cancer diagnosis, it is essential to maintain hope, since the news, usually received as a death sentence, causes intense suffering and can lead to feelings of hopelessness, which negatively affect the prognosis. Balsanelli and Grossi [16] observed that patients who maintained or strengthened their feelings of hope demonstrated greater ability to accept the diagnosis and follow therapeutic recommendations, as well as higher rates of treatment adherence and, consequently, a more positive response to treatment.

To assess hope, there are currently 18 scales, with the Snyder Hope Scale and the Herth Hope Index [17] being the most widely used. The latter index was constructed and validated by Herth [18] and later adapted and validated in Brazil by Sartore [19] under the name *Escala de Esperança de Herth*

(EEH), comprising 12 items and based on three essential components: temporality and future, positive expectancy, and interconnectedness. Thus, it proves valuable as a screening tool [18]. Each item is graded on a 4-point Likert scale, ranging from "strongly disagree" (1) to "strongly agree" (4). The total score ranges from 12 to 48 points, and higher scores indicate a greater level of hope [20].

In studies with patients with advanced cancer, significant correlations were found between will to live and physical symptoms, anxiety, and sense of well-being [21]. The will to live was also found to vary during the course of the disease, possibly, and such fluctuations change as death approaches [22]. Another study found that most patients have a high will to live, even in the proximity of death. However, it also found that a low will to live is directly related to the existence of physical and psychological suffering [23].

In this context, the will to live is considered a complex dimension within the experience of illness and end of life and is related to multiple factors [24]. In the clinic, a single-item instrument to assess the will to live can serve as a starting point for discussing this complex topic and help the multidisciplinary team identify specific areas of intervention.

From the perspective of palliative care, the will to live has been little explored in the literature and is directly related to quality palliative care. Measuring the will to live and its related factors may increase professionals' awareness of care needs and improve patient care.

Thus, the objective of this study was to analyze the prevalence of the will to live and its associated factors, whether physical, social, psychological, or spiritual, in cancer patients in PC at a reference hospital for cancer treatment in Ceará.

Method

This is a longitudinal population study, conducted in two periods, designated T1 and T2, in which T1 refers to the first interview and T2 to the second, which occurred three months after the first. Data collection took place at the Haroldo Juaçaba Hospital (HHJ), a reference hospital for cancer treatment in Ceará, specifically at the Corina Parente Outpatient Clinic. Data collection took place between April and October 2023.

For this study, a structured socioepidemiological assessment script was created, with variables such as age, sex, race, origin, marital status, number of children, education, occupation, income, number of household members, who is the household provider, religion, and history of the current illness, which was the first instrument applied in the interview (T1). After this, the ESAS was applied, followed by the MOS-SSS, the DASS-21, the EEH, and finally the *Escala Analógica da Vontade de Viver* (VdV).

The VdV was created for this research based on the findings of Bornet and collaborators [24] to objectively assess the interviewee's self-reported will to live in a score format (1 to 10), in which 1 means little will to live and 10 means high will to live.

In the second interview (T2), the same scales were applied, in the same sequence, except for the socioepidemiological questionnaire. All individuals with a result ≥50% on the Palliative Performance Scale (PPS) were included in the study, provided they had a complete level of consciousness [25].

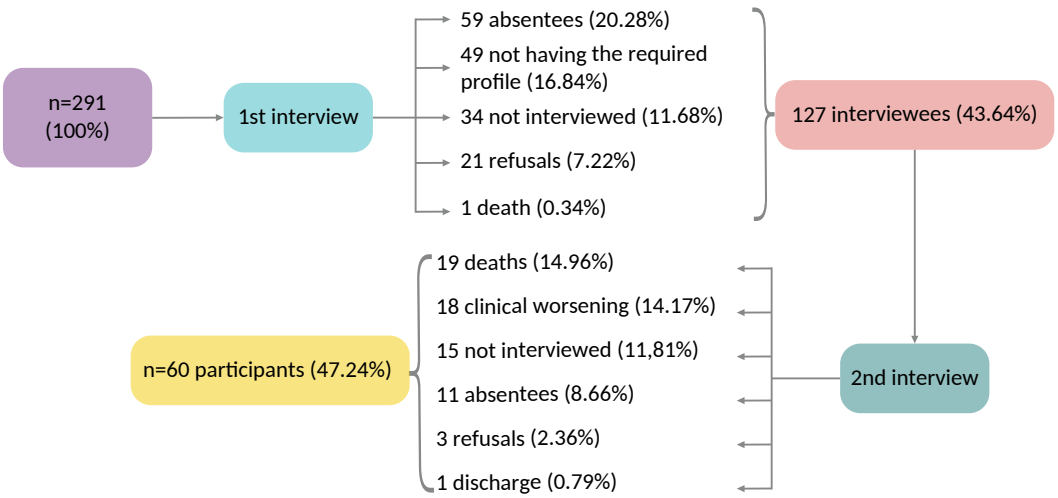
The study population included patients who, during the data collection period, had their first consultation at the Corina Parente Outpatient Clinic, in the pain and palliative care service. These people were referred from various other services at HHJ, such as clinical oncology, oncological surgery, or radiotherapy. In addition, patients referred directly from the screening service to the exclusive palliative care service at the time their medical record was opened were included.

Based on the study by Julião and collaborators [23], which observed that patients who can adapt to the disease have a greater will to live compared to patients who are not (75% versus 35.5%), an estimation was made that the study would require evaluating between 56 and 72 patients to obtain a sample that had between 80% and 90% power and 95% confidence in rejecting the null hypothesis of this study (Fleiss method with continuity correction).

After missed appointments, refusals, and exclusion of patients whose profile did not meet the clinical/cognitive requirements for participating in the study in T1, 127 patients were interviewed, representing 43.64% of the total number of patients admitted to the Pain and Palliative Care Clinic (n=291) over approximately 3 months. While the second interview (T2) was conducted with the same participants from T1, starting three months after the first evaluation, there was sample loss due to deaths, worsening of clinical/cognitive condition, refusal to continue in the study, and even discharge from follow-up.

Finally, 60 participants (47.24%) who met the inclusion criteria agreed to be interviewed again. With the appropriate sample size reached, data collection was concluded, and 15 participants (11.81%) were not interviewed (Figure 1).

Figure 1. Graphical representation of the final number of study participants



Source: developed by the authors (2025)

The data were expressed as mean ± standard deviation or as absolute and percentage frequencies. Cronbach's alpha internal consistency coefficients were calculated for each questionnaire and its respective constructs. The mean scores at T1 and T2 were compared using the Wilcoxon test, and the frequencies were compared using Pearson's chi-square test.

In addition, patients were categorized according to whether or not there was a reduction in the will to live at T1 and T2. These data were associated with other clinical-psychosocial variables using the Kruskal-Wallis/Dunn tests. In all analyses performed, a 95% confidence level was adopted. The collected data were tabulated and analyzed using IBM SPSS Statistics for Windows, version 20.0.

The project was submitted to the Ethics Committee on Plataforma Brasil for approval. The study followed the guidelines of Resolution 466/2012 of the National Health Council (CNS) [26].

Results

Sociodemographic, economic, and clinical assessment

Of the 60 participants evaluated, most were aged 50 to 79 years, lived in the capital city, identified as mixed-race, were female, and were married/living with a partner. Most reported having children, living with more than one person, and having attended school, but only at the elementary level. Catholicism predominated among the participants.

The majority (78%) reported not having any employment at the time of the interview. The individual income of 91% of respondents was between 1 and 2 minimum wages, which was also the family income range (85%), and most respondents stated they were not the sole financial provider for their family (68%). Most of the sample reported receiving retirement

benefits (45%), followed by those who reported having government social benefits as their only source of income (36%).

The following cancers were most prevalent in the medical records: breast cancer (20%), gastrointestinal tract cancer (16.7%), prostate cancer (18.3%), and head and neck cancer (11.7%). Half of the sample presented metastases; 35% of the sample had undergone combinations of two cancer treatment modalities (bimodal), with chemotherapy combined with radiotherapy being the most prevalent; another 35% of the sample underwent three or more different types of treatment (trimodal), with the combination of chemotherapy, radiotherapy, and surgery being the most prevalent.

Physical, social, psychological, and spiritual variables

In the overall assessment of will to live, both at T1 (9.32±1.86) and T2 (9.07±2.12), the scores were high (above 9), with a slight reduction at T2, but without a statistical difference (p=0.190). Stratification was also performed to determine who had a reduction, maintenance, or increase in will to live from T1 to T2. Of the 60 participants evaluated, 10 (16.7%) showed a reduction in the will to live from T1 to T2, and 46 (76.7%) maintained a high will to live.

Based on this last analysis of reduction, maintenance, and increase in the will to live, the results of all scales used in the research (ESAS, DASS-21, MOS-SSS, EEH) were evaluated to identify possible associations among variables. Age, sex, race, whether they live in the capital, marital status, whether they have children, number of people they live with, education, religion, working conditions, and income did not significantly influence the reduction in will to live. The same occurred with the clinical characteristics of the sample: type of cancer, presence or absence of metastases, and treatment modalities used did not significantly influence the will to live.

Regarding the ESAS, there was no statistically significant difference in will to live from T1 to T2. As for the DASS-21 scale, symptoms of anxiety, stress, and depression did not influence the variation in will to live from T1 to T2, as there was also no statistical difference.

Regarding the MOS-SSS, subdivided into domains, people who started the study at T1 with a reduced will to live showed increased scores in the affective dimension of social support (p=0.047). At T2, in the assessment of the positive social interaction dimension, people who obtained lower scores also presented a reduction in the will to live (p=0.011), showing an association between the two variables (Table 1).

In the hope scale assessment, people who started the study at T1 with increased hope scores were those who showed a significant reduction in the will to live (p=0.011). At T2, people who had higher hope also maintained a high will to live (p=0.008) (Table 2).

Table 1. Will to live and social support scale

MOSS-SSS	VdV from T1 to T2			*p*-value*
	Reduced	Maintained	Increased	
T1 Tangible dimension	**2.07±0.65**	**3.45±0.51**	**1.50±0.75**	**0.794**
Low	–	4 (8.7)	–	0.577
Medium	3 (30.0)	6 (13.0)	1 (25.0)	–
High	7 (70.0)	36 (78.3)	3 (75.0)	–
T1 Affective dimension	**3.65±1.16**	**2.13±0.31**	**–**	**0.047**
Low	1 (10.0)	1 (2.2)	–	0.075
Medium	4 (40.0)	5 (10.9)	–	–
High	5 (50.0)	40 (87.0)	4 (100.0)	–

continues...

Table 1. Continuation

MOSS-SSS	VdV from T1 to T2			*p*-value*
	Reduced	Maintained	Increased	
T1 Emotional/Informational dimension	**8.89±2.81**	**7.59±1.12**	**4.08±2.04**	**0.559**
Low	1 (10.0)	4 (8.7)	–	0.481
Medium	4 (40.0)	14 (30.4)	3 (75.0)	–
High	5 (50.0)	28 (60.9)	1 (25.0)	–
T1 Social Interaction dimension	**5.24±1.66**	**4.21±0.62**	**1.00±0.50**	**0.369**
Low	1 (10.0)	5 (10.9)	–	0.522
Medium	4 (40.0)	14 (30.4)	–	–
High	5 (50.0)	27 (58.7)	4 (100.0)	–
T2 Tangible dimension	**3.43±1.08**	**3.38±0.50**	**1.00±0.50**	**0.787**
Low	1 (10.0)	3 (6.5)	–	0.846
Medium	1 (10.0)	7 (15.2)	–	–
High	8 (80.0)	36 (78.3)	4 (100.0)	–
T2 Affective dimension	**2.66±0.84**	**1.75±0.26**	**–**	**0.174**
Low	–	–	–	0.341
Medium	3 (30.0)	7 (15.2)	–	–
High	7 (70.0)	39 (84.8)	4 (100.0)	–
T2 Emotional/Informational dimension	**8.95±2.83**	**6.01±0.89**	**2.87±1.44**	**0.160**
Low	2 (20.0)	2 (4.3)	–	0.375
Medium	3 (30.0)	10 (21.7)	1 (25.0)	–
High	5 (50.0)	34 (73.9)	3 (75.0)	–
T2 Social Interaction dimension	**5.84±1.85**	**3.59±0.53**	**1.50±0.75**	**0.189**
Low	4 (40.0)	2 (4.3)	–	0.011
Medium	1 (10.0)	15 (32.6)	2 (50.0)	–
High	5 (50.0)	29 (63.0)	2 (50.0)	–

**: p<0.05, Kruskal-Wallis/Dunn test (mean±SD) or Pearson's chi-square (n, %)*

Table 2. Will to live and hope scale

EEH	VdV from T1 to T2			*p*-value*
	Reduced	Maintained	Increased	
T1 EEH	**7.65±2.42**	**5.48±0.81**	**4.04±2.02**	**0.011**
Decreased	1 (10.0)	–	–	0.002
Normal	2 (20.0)	10 (21.7)	4 (100.0)	–
Increased	7 (70.0)	36 (78.3)	–	–
T2 EEH	**4.37±1.38**	**5.09±0.75**	**4.03±2.02**	**0.008**
Decreased	–	1 (2.2)	–	0.047
Normal	8 (80.0)	13 (28.3)	2 (50.0)	–
Increased	2 (20.0)	32 (69.6)	2 (50.0)	–

**: p<0.05, Kruskal-Wallis/Dunn test (mean±SD) or Pearson's chi-square (n, %).*

Research

Discussion

Regarding sociodemographic variables, most participants were female, with an average age of 65 years, low education, and low income, results similar to those of other studies with cancer patients in palliative care developed in Brazil [27-29].

In Brazil, an estimated 483,000 new cases were expected in 2023 (excluding non-melanoma skin cancer), with 49.5% (239,000) in men and 50.5% (244,000) in women. Female breast and prostate cancers each represent approximately 15% of new cases, followed by colorectal cancer (9.4%), trachea, bronchus, and lung cancer (6.7%), stomach cancer (4.4%), and cervical cancer (3.5%) [30]. In this study, the prevalence of breast cancer (20%) and prostate cancer (18%) was higher than expected for the country.

The presence of symptoms, especially pain in its biopsychosocial complexity, has been widely discussed as a determinant of quality of life for patients in PC [31-33]. Other symptoms, such as lack of appetite, dyspnea, depression, anxiety, and lack of well-being, and hospitalization were associated with a statistically significant reduction in survival [34].

This study found no statistical difference between the presence of physical symptoms and the will to live. Most patients maintained (76.7%) or increased (6.7%) a strong desire to live, despite the challenges and burdens faced in the course of approaching death, influenced by multiple physical and psychological aspects, as also described in another study [23].

Social support refers to an individual's perception of the people they can trust and rely on in times of need, and who make them feel cared for and valued [11]. The functional dimensions of social support are: emotional, affective, tangible, informational, and positive social interaction [13].

Specifically exploring the affective dimension on the MOS-SSS scale, the items evaluated are: "that shows love and affection for you," "that gives you a hug," and "that you love and that makes you feel loved," which presented high scores in T1, indicating a high perception of this support by the respondents. However, these people also showed a reduction in the will to live, an unexpected result.

This data showed that the reduction in the will to live occurred even under conditions of increased affective social support at T1, i.e., an increased affective dimension at T1 is a predictor of the reduction in the will to live from T1 to T2. Different results were found by Carvalho and collaborators [35], according to whom women diagnosed with breast cancer reported feelings of anguish, pain, suffering, sadness, and guilt. However, feelings of hope, faith, strength, peace, and the will to live, as well as social support, were also reported as sources of safety, motivation, and coping to continue, although without specifying the dimension.

A situation that may be related to the result found in this research was described in the study carried out by Supiano and collaborators [36], which observed participants concerned about becoming a caregiving burden on their families and friends, or a financial burden, a time commitment, emotional strain from observing the progression of the disease, and imminent death. Hudson and collaborators [21] found that the most common factors associated with the desire to anticipate death appear to be: feeling like a burden to others, loss of autonomy with the progression of the disease (and an associated desire to control the circumstances of death), physical symptoms (such as pain), depression and hopelessness, existential concerns and fear of the future.

The positive social interaction dimension, whose evaluation items are "to have fun together," "with whom to relax," "with whom to distract the mind," "with whom to do pleasant things," had reduced scores in T2 and was associated with a reduction in the will to live. In a study conducted to find out how families organize themselves to cope with cancer and the sick person, most family members reported investing in social life, with activities such as going to the beach and outings, with a predominance of family activities, to offer support to the sick member [37].

However, another study demonstrated a decrease in the functional capacity of individuals with cancer and, as a consequence, greater dependence in performing daily activities.

This reduction occurs due to possible alterations in the cognitive, locomotor, and communication systems caused by the disease or treatment [38]. Due to the loss of functionality resulting from the disease and/or treatment, there was an inferred reduction in the will to live, associated with decreased social interaction.

Depression and anxiety are prevalent disorders in cancer patients, frequently studied and evaluated in different ways and on different scales [39-43]. In clinical practice, there is difficulty in detecting depression in cancer patients, particularly because some somatic symptoms, frequently associated with depression, may result from the cancer itself or even from the treatment. Furthermore, depressive symptoms may be underestimated, mistakenly, because all cancer patients are "understandably depressed" [44].

This study found no significant relationship between symptoms of anxiety, stress, and depression, and the will to live. However, a longitudinal study conducted with elderly (non-cancer patients) found that, at the end of life, weakening of the will to live is a predictor of depressive symptoms, and not the other way around [45]. The life events theory argues that exposure to general life events, particularly negative ones (e.g., a cancer diagnosis), can disrupt the human organism and cause stress. Stress, in turn, initiates physiological and psychological adaptation processes that require investment of substantial personal resources (emotional, physical, behavioral, social, and financial). These significant adaptive demands and continuous efforts can lead to exhaustion and, consequently, physical illness, and the struggle to maintain physical and mental health often results in chronic stress and depression [46].

"Survivors," tired of fighting for existence and aware of the short life they have ahead of them, may begin to wonder if such a life is still worthwhile, an uncertainty that undermines their will to live. Such feelings can cause increasing apathy towards the world around them and a loss of motivation to continue living, as well as symptoms of passive suicidal ideation. Symptoms of this type lead to persistent withdrawal from regular social and health activities, even from previously pleasurable ones. Changes in daily behavior exacerbate the decline in health and function, which can further accelerate people's loss of interest in life and intensify the main symptoms of depression, including feelings of emptiness and apathy. Ultimately, this process can lead to pathological depression syndrome and loss of the will to live. Given this, maintaining a strong and stable will to live can protect people from declines in their mental health [45].

The fear of mortality among people with cancer is a significant element that permeates their experiences from the moment of diagnosis and influences their perspective and hope throughout the treatment process. The feeling of lack of control over one's own life, combined with the fear of death, compromises adaptive resources and undermines expectations regarding the future [47]. In contrast, characteristics observed in a study by Li and collaborators [48] that can lead to increased levels of hope are age less than or equal to 45 years, religious beliefs, and reporting of milder symptom burdens.

In this study, participants who started with higher hope scores showed a reduction in the will to live at T2, an unexpected finding. A different, but related, situation occurred in a study conducted in Türkyie [47], which observed that, with the increase in the educational level of the participants, the average scores of the hope subscales also increased, which may have contributed to improving the feeling of uncertainty, learning coping behaviors, investigating, and reading articles about the disease. In another longitudinal study [49], hope was not diminished after engagement in advance care planning, and may even be increased, i.e., having "difficult" conversations with patients can make them more comfortable and safer.

Hope often arises from a negative circumstance in which the probability of a given outcome is low, but highly important to the individual, such as remission or cure of a patient with advanced cancer. Although maintaining hope at higher levels yields proven benefits, both physical and psychological, it can also increase the likelihood that the patient will exhibit biases, such as motivated reasoning, self-deception, optimism, and superiority. This can also lead to overtreatment and regret [50].

In T2, people with higher hope scores also maintained a high will to live, and hope must be fostered and sustained at the end of life. In general, patients who feel they have more control over themselves at the end of life showed increased levels of hope [51,52]. Discussing end-of-life care, or even completing advance directives, can be an effective way for patients to gain the additional control needed to foster hope at the end of life [49].

Limitations

This study was conducted in a single hospital and over a specific period of time. Therefore, the characteristics of the study site and the social and cultural conditions of that period and population may have influenced the results in ways that are not generalizable. The follow-up period between assessments T1 and T2 was relatively short. It may not have been sufficient to capture significant changes in will to live and other variables of interest over time.

Multivariate analysis models combined with qualitative methods might provide additional insights into the patterns of association among the variables studied, thereby improving understanding of the data. Further studies in this area are needed, given the scarcity of publications on the subject.

Final considerations

Among participants, the will to live was high at both T1 and T2, with a slight reduction in scores at T2, but without statistical difference. From T1 to T2, 16.7% of those surveyed showed a reduction in their will to live, but 76.7% maintained a high will to live. The will to live was not found to be influenced from T1 to T2 by any of the variables studied: age, sex, race, housing, marital status, children, education, religion, work and income, type of cancer, metastases, or treatment modalities.

The ESAS assessment of physical symptoms was not significantly related to changes in the will to live. Participants who reported increased social support in the affective dimension showed a reduction in the will to live at T1, and those who reported low social interaction also showed low will to live at T2. The assessment of depression, anxiety, and stress by the DASS-21 was not significantly related to changes in the will to live.

Finally, it is noteworthy that people who started the study with increased hope scores had a reduction in the will to live from T1 to T2, and those who maintained increased hope scores at T2 also maintained a high will to live.

References

1. Radbruch L, Lima L, Knaul F, Wenk R, Ali Z, Bhatnaghar S *et al*. Redefining palliative care: a new consensus-based definition. J Pain Symptom Manage [Internet]. 2020 [acesso 31 dez 2021];60(4):754-64. DOI: 10.1016/j.jpainsymman.2020.04.027
2. Consensus-based definition of palliative care [Internet]. Houston: IAHCP; 2018 [acesso 20 mar 2022]. Disponível: https://bit.ly/4aMezlt
3. Silva IBS, Lima Júnior JRM, Almeida JS, Cutrim DSP, Sardinha AHL. Avaliação da qualidade de vida de pacientes oncológicos em cuidados paliativos. Rev Bras Cancerol [Internet]. 2020 [acesso 31 dez 2021];66(3). DOI: 10.32635/2176-9745.RBC.2020v66n3.1122
4. Silva MAS, Diniz MA, Carvalho RT, Chiba T, Mattos-Pimenta CA. Palliative care consultation team: symptom relief in first 48 hours of hospitalization. Rev Bras Enferm [Internet]. 2020 [acesso 14 fev 2024];73(6). DOI: 10.1590/0034-7167-2019-0391
5. Bruera E, Kuehn N, Miller MJ, Selmser P, Macmillan K. The Edmonton Symptom Assessment System (ESAS): a simple method for the assessment of palliative care patients. J Palliat Care [Internet]. 1991 [acesso 13 fev 2024];7(2):6-9.
6. Manfredini LL. Tradução e validação da Escala de Avaliação de Sintomas de Edmonton (ESAS) em pacientes com câncer avançado [dissertação] [Internet]. São Paulo: Hospital de Câncer de Barretos; 2014 [acesso 16 fev 2024]. Disponível: https://bit.ly/4s6QcoZ

7. Zayat CG, Azevedo IM, Domenico EBL, Bergerot CD. Fatores preditores de sintomas emocionais e físicos reportados por pacientes oncológicos. Psic: Teor e Pesq [Internet]. 2021 [acesso 14 fev 2024];37. DOI: 10.1590/0102.3772e37441
8. Lovibond SH, Lovibond PF. Manual for the depression, anxiety, stress scales. 4ª ed. Sidney: Psychology Foundation; 2004.
9. Vignola RCB. Escala de Depressão, Ansiedade e Estresse (DASS): adaptação e validação para o português do Brasil [dissertação] [Internet]. São Paulo: Universidade Federal de São Paulo [acesso 2 jan 2022]. Disponível: https://bit.ly/3MRhpwp
10. Cassel J. An epidemiological perspective of psychosocial factors in disease etiology. Am J Public Health [Internet]. 1974 [acesso 22 fev 2024];64(11):1040-43. DOI: 10.2105/ajph.64.11.1040
11. Cobb S. Social support as a moderator of life stress. Psychosom Med [Internet]. 1976 [acesso 22 fev 2024];38(5):300-14. DOI: 10.1097/00006842-197609000-00003
12. Winter VDB, Tonetto JK, Kolankiewicz ACB, Loro MM. Avaliação do apoio social na perspectiva de pacientes oncológicos internados. Salão do Conhecimento Unijuí [Internet]. 2020 [acesso 26 fev 2024];6(6). Disponível: https://bit.ly/4l6utut
13. Sherbourne CD, Stewart AL. The MOS social support survey. Soc Sci Med [Internet]. 1991 [acesso 26 fev 2024];132(6):705-14. DOI: 10.1016/0277-9536(91)90150-b
14. Chor D, Griep RH, Lopes CS, Faerstein E. Medidas de rede e apoio social no estudo pró-saúde: pré-testes e estudo piloto. Cad Saúde Pública [Internet]. 2001 [acesso 11 mar 2024];17(4):887-96. DOI: 10.1590/S0102-311X2001000400022
15. Griep RH, Chor D, Faerstein E, Werneck GL, Lopes CS. Validade de constructo de escala de apoio social do Medical Outcomes Study adaptada para o português no Estudo Pró-Saúde. Cad Saúde Pública [Internet]. 2005 [acesso 31 dez 2021];21(3):703-14. DOI: 10.1590/S0102-311X2005000300004
16. Balsanelli ACS, Grossi SAA. Predictors of hope among women with breast cancer during chemotherapy. Rev Esc Enferm USP [Internet]. 2016 [acesso 26 fev 2024];50(6):898-904. DOI: 10.1590/S0080-623420160000700004
17. Redlich-Amirav D, Ansell LJ, Harrison M, Norrena KL, Armijo-Olivo S. Psychometric properties of Hope Scales: a systematic review. Int J Clin Pract [Internet]. 2018 [acesso 27 fev 2024];72(7):e13213. DOI: 10.1111/ijcp.13213
18. Herth K. Abbreviated instrument to measure hope: development and psychometric evaluation. J Adv Nurs [Internet]. 1992 [acesso 27 fev 2024];17(10):1251-59. DOI: 10.1111/j.1365-2648.1992.tb01843.x
19. Sartore AC. Adaptação cultural e validação do Herth Hope Index para a língua portuguesa: estudo em pacientes com doença crônica [dissertação] [Internet]. São Paulo: Universidade de São Paulo; 2007. DOI: 10.11606/D.7.2007.tde-20042007-132715
20. Sartore AC, Grossi SAA. Escala de Esperança de Herth: instrumento adaptado e validado para a língua portuguesa. Rev Esc Enferm USP [Internet]. 2008 [acesso 28 dez 2021];42(2):227-32. DOI: 10.1590/S0080-62342008000200003
21. Hudson PL, Kristjanson LJ, Ashby M, Kelly B, Schofield P, Hudson R *et al*. Desire for hastened death in patients with advanced disease and the evidence base of clinical guidelines: a systematic review. Palliat Med [Internet]. 2006 [acesso 28 fev 2024];20(7):693-701. DOI: 10.1177/0269216306071799
22. Tataryn D, Chochinov HM. Predicting the trajectory of will to live in terminally ill patients. psychosomatics. Psychosomatics [Internet]. 2002 [acesso 27 fev 2024];43(5):370-77. DOI: 10.1176/appi.psy.43.5.370
23. Julião M, Chochinov HM, Samorinha C, Soares DS, Antunes B. Prevalence and factors associated with will-to-live in patients with advanced disease: results from a portuguese retrospective study. J Pain Symptom Manage [Internet]. 2021 [acesso 8 mar 2024];62(4):820-7. DOI: 10.1016/j.jpainsymman.2021.02.018
24. Bornet MA, Bernard M, Jaques C, Truchard ER, Borasio GD, Jox RJ. Assessing the will to live: a scoping review. J Pain Symptom Manage [Internet]. 2021 [acesso 27 fev 2024];61(4):845-57. DOI: 10.1016/j.jpainsymman.2020.09.012
25. Victoria Hospice. A Escala de Desempenho em Cuidados Paliativos versão 2 (EDCP v2) [Internet]. Columbia: VHS; 2009 [acesso 30 dez 2021]. Disponível: https://bit.ly/4l7c94s

26. Conselho Nacional de Saúde. Resolução nº 466, de 12 de dezembro de 2012. Aprova diretrizes e normas regulamentadoras de pesquisas envolvendo seres humanos. Diário Oficial da União [Internet]. Brasília, n. 12, p. 59, 12 dez 2012 [acesso 2 dez 2023]. Seção 1. Disponível: https://bit.ly/4aPNNc4

27. Pinheiro SM, Mendes EC. Profile of patients in palliative care treated by physiotherapy in home care at an oncology hospital. Mundo Saúde [Internet]. 2024 [acesso 7 mar 2024];48. DOI: 10.15343/0104-7809.202448e15322023P

28. Ralph RMC, Souza NR, Figueiredo EG, Freire DA, Oliveira TS, Brandão CP. Funcionalidade, sintomas diversos e qualidade de vida de pacientes submetidos à quimioterapia paliativa. Revista baiana de saúde pública [Internet]. 2021 [acesso 7 mar 2024];45(4). DOI: 10.22278/2318-2660.2021.v45.n4.a3316

29. Maia AES, Grello FACG, Cunha KC. Perfil sociodemográfico e clínico de pacientes com câncer cadastrados no Programa de Visita Domiciliar de um hospital da rede pública. Rev Bras Cancerol [Internet]. 2021 [acesso 7 mar 2024];67(2). DOI: 10.32635/2176-9745.RBC.2021v67n2.864

30. Santos MO, Lima FCS, Martins LFL, Oliveira JFP, Almeida LM, Cancela MC. Estimativa de incidência de câncer no Brasil, 2023-2025. Rev Bras Cancerol [Internet]. 2023 [acesso 7 mar 2024];69(1). DOI: 10.32635/2176-9745.RBC.2023v69n1.3700

31. Liu MZ, Ma J, Li JD, Sun J, Zhou H, Guan S *et al*. A comparison of the clinical effectiveness between low-dose strong opioids and non-steroidal anti-inflammatory drugs in the treatment of mild cancer pain: a randomized Trial. J Pain Res [Internet]. 2021 [acesso 8 mar 2024];14:3411-9. DOI: 10.2147/JPR.S322893

32. Mercadante S, Adile C, Aielli F, Gaetano L, Mistakidou K, Maltoni M *et al*. Personalized pain goals and responses in advanced cancer patients. Pain Med [Internet]. 2020 [acesso 8 mar 2024];21(2):215-21. DOI: 10.1093/pm/pnz254

33. Shamieh O, Khamash O, Khraisat M, Jbouri O, Awni M, Al-Hawamdeh A *et al*. Impact of outpatient palliative care (PC) on symptom burden in patients with advanced cancer at a tertiary cancer center in Jordan. Support Care Cancer [Internet]. 2016 [acesso 8 mar 2024];25(1):177-83. DOI: 10.1007/s00520-016-3395-8

34. Simão D, Barata PC, Alves M, Papoila AL, Oliveira S, Lawlor P. Symptom clusters in patients with advanced cancer: a prospective longitudinal cohort study to examine their stability and prognostic significance. The Oncologist [Internet]. 2024 [acesso 8 mar 2024];29(1):152-63. DOI: 10.1093/oncolo/oyad211

35. Carvalho CMS, Amorim FCM, Silva RTS, Alves VF, Oliveira ADS, Monte NS. Sentimentos de mulheres com diagnóstico de câncer de mama. Rev Enferm UFPE [Internet]. 2016 [acesso 8 mar 2024];10(11):3942-50. DOI: 10.5205/reuol.9881-87554-1-EDSM1011201616

36. Supiano KP, McGee N, Dassel KB, Utz R. A comparison of the influence of anticipated death trajectory an personal values on end-of-life care preferences: a qualitative analysis. Clinical Gerontologist [Internet]. 2017 [acesso 8 mar 2024];42(3):247-58. DOI: 10.1080/07317115.2017.1365796

37. Melo MCB, Barros EN, Campello MCVA, Ferreira LQL, Rocha LLC, Silva CIMG, Santos NTF. O funcionamento familiar do paciente com câncer. Psicologia em Revista [Internet]. 2012 [acesso 9 mar 2024];18(1):78-89. DOI: 10.5752/P.1678-9563.2012v18n1p73

38. Duarte ACF, Silva BA, Avelino PR, Menezes KKP. Força de preensão, capacidade funcional e qualidade de vida de indivíduos com câncer. Fisioter Pesqui [Internet]. 2020 [acesso 9 mar 2024];27(4):362-9. DOI: 10.1590/1809-2950/19039127042020

39. Bottino SMB, Fráguas R, Gattaz WF. Depressão e câncer. Arch Clin Psychiatry (São Paulo) [Internet]. 2009 [acesso 11 mar 2024];36(supl 3). DOI: 10.1590/S0101-60832009000900007

40. Cangussu RO, Soares TBC, Barra AA, Nicolato R. Sintomas depressivos no câncer de mama: inventário de depressão de beck: short form. J Bras Psiquiatr [Internet]. 2010 [acesso 11 mar 2024];59(2):106-10. DOI: 10.1590/S0047-20852010000200005

41. Bergerot CD, Laros JA, Araujo TCCF. Avaliação de ansiedade e depressão em pacientes oncológicos: comparação psicométrica. Psico-USF [Internet]. 2014 [acesso 11 mar 2024];19(2):187-97. DOI: 10.1590/1413-82712014019002004

42. Ferreira AS, Bicalho BP, Neves LFG, Menezes MT, Silva TA, Faier TA *et al*. Prevalência de ansiedade e depressão em pacientes oncológicos e identificação de variáveis predisponentes. Rev Bras Cancerol [Internet]. 2016 [acesso 11 mar 2024];62(4):321-8. DOI: 10.32635/2176-9745.RBC.2016v62n4.159

43. Joulaei H, Parhizkar M, Fatemi M, Afrashteh S, Parhizkar P, Akrami M *et al*. Mental health care utilization and its barriers among Iranian breast cancer survivors: a cross-sectional study. Int J Community Based Nurs Midwifery [Internet]. 2024 [acesso 11 mar 2024];12(1):44-56. DOI: 10.30476/IJCBNM.2023.99133.2289

44. Fanger PC, Azevedo RCS, Mauro MLF, Lima DD, Gaspar KC, Silva VF *et al*. Depressão e comportamento suicida em pacientes oncológicos hospitalizados: prevalência e fatores associados. Rev Assoc Med Bras [Internet]. 2010 [acesso 11 mar 2024];56(2):173-8. DOI: 10.1590/S0104-42302010000200015

45. Carmel S, Tovel H, Raveis VH, O'Rourke N. Is a decline in will to live a consequence or predictor of depression in late life? J Am Geriatr Soc [Internet]. 2018 [acesso 13 mar 2024];66(7):1290-5. DOI: 10.1111/jgs.15394

46. Holmes TH, Rahe RH. The social readjustment rating scale. J Psychosom Res [Internet]. 1967 [acesso 13 mar 2024];11:213-18. DOI: 10.1016/0022-3999(67)90010-4

47. Ozen B, Ceyhan O, Büyükcelik A. Hope and perspective on death in patients with cancer. Death Studies [Internet]. [acesso 27 fev 2024];44(7):412-8. DOI: 10.1080/07481187.2019.1626942

48. Li Y, Ni N, Zhou Z, Dong J, Fu Y, Li J *et al*. Hope and symptom burden of women with breast cancer undergoing chemotherapy: a cross-sectional study. J Clin Nurs [Internet]. 2021 [acesso 12 mar 2024];30(15-16):2293-300. DOI: 10.1111/jocn.15759

49. Cohen MG, Althouse AD, Arnold RM, Bulls HW, White DB, Chu E *et al*. Hope and advance care planning in advanced cancer: Is there a relationship? Cancer [Internet]. 2022 [acesso 12 mar 2024];128(6):1339-45. DOI: 10.1002/cncr.34034

50. Finkelstein EA, Baid D, Cheung YB, Schweitzer ME, Malhotra C, Volpp K *et al*. Hope, bias and survival expectations of advanced cancer patients: a cross-sectional study. Psychooncology [Internet]. 202 [acesso 12 mar 2024]; 30(5):780-8. DOI: 10.1002/pon.5675

51. Brown AJ, Sun CC, Urbauer DL, Borduka DC, Thaker PH, Ramondetta LM. Feeling powerless: locus of control as a potential target for supportive care interventions to increase quality of life and decrease anxiety in ovarian cancer patients. Gynecol Oncol [Internet]. 2015 [acesso 12 mar 2024];138(2):388-93. DOI: 10.1016/j.ygyno.2015.05.005

52. Sanatani M, Schreier G, Stitt L. Level and direction of hope in cancer patients: an exploratory longitudinal study. Support Care Cancer [Internet]. 2007 [acesso 12 mar 2024];16(5):493-99. DOI: 10.1007/s00520-007-0336-6

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Andreza Kelly Cardoso da Silva Soares participated in the study conception and design, data collection, bibliographic research, and manuscript writing. Marcelo Gurgel Carlos da Silva participated in the study design, methodological guidance, and critical review of intellectual content. Paulo Goberlânio Barros Silva participated in the study design, data analysis and interpretation, and critical review of the manuscript. Tallys Newton Fernandes de Matos participated in the text formatting and critical review of the manuscript.

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