

A Nutritional Lens on Psychological Health: Redefining Care for Cancer Warriors

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Abstract

Patients suffering from cancer often go through a lot of physical and emotional trauma like loss of appetite, depression or altered body image perception, and undernutrition. A recent study by Galiano and Nardi (2023) sheds light on a critical aspect of cancer care, revealing that patients facing nutritional risks are more vulnerable to developing depression. This finding helps understand how essential it is to prioritise early nutritional and psychological support for these patients. By offering these interventions sooner, we can help reduce the emotional strain and improve the overall well-being of individuals navigating both cancer and mental health challenges. While nutritional interventions are well-documented in oncology, their impact on mental health remains underexplored. This present qualitative research attempts to study the relationship between nutrition and the psychological well-being of patients suffering from cancer.

The present study can fill this void by understanding how nutrition and dietary changes impact psychological well-being. Using a mixed-methods approach, data will be collected through semi-structured interviews, patient diaries, and kinetic drawings (a projective art method) to uncover patients' views on nutrition and its effects on their mental health. Thereafter, thematic content analysis will be adopted for the data analysis. This approach gives a deeper perspective on how nutrition and psychological well-being coexist.

Therefore, this study enhances psycho-oncology through advocating for a more comprehensive model of care that brings the nutrition and mental health components together.

Keywords: cancer patients, dietary changes, nutrition, psychological well-being

"You may not control all the events that happen to you, but you can decide not to be reduced by them." – Maya Angelou

A cancer diagnosis often ushers in a storm of physical, emotional, and social challenges. For many, the journey becomes not only about overcoming illness but also about rediscovering life. Amid this journey, nutrition plays a crucial yet often understated role. Nutrition isn't just about physical health it's deeply connected to how people feel emotionally and mentally. Galiano and Nardi (2023) reflect that struggles with eating, like a loss of appetite or undernutrition, can leave patients feeling weaker both physically and emotionally, often leading to depression or anxiety. Combining nutritional support with emotional care helps them feel more in control during a time full of uncertainty. Emotional well-being is deeply connected to the healing process. Holistic care brings together nutritional and emotional support to meet

these connected needs. For instance, mindfulness practices paired with dietary counseling have been shown to reduce emotional distress and improve overall quality of life (Carlson et al., 2021).

Fortunately, advancements in cancer detection and treatment in 2024 have led to significant improvements in survival rates for many types of cancer. Breast cancer now has a five-year survival rate exceeding 90% in various countries. Lung cancer, traditionally associated with lower survival rates, has seen improvements, particularly with targeted therapies and immunotherapy. These statistics underline the progress made in cancer care, reflecting the power of combined efforts in medical research, public health initiatives, and patient care. Cancer patients often face significant physical hurdles, but addressing them with timely care can yield remarkable improvements. Malnutrition, affecting 30–80% of patients depending on cancer type and stage (Lis et al., 2012), is a critical challenge that, when managed well, enhances treatment efficacy and recovery. Targeted interventions are helping patients take charge of their health during treatment, emphasizing how crucial nutrition is for improving overall well-being and treatment results (Arends et al., 2017).

A cancer diagnosis brings emotional challenges, yet it also opens doors to resilience and personal growth. Support networks, therapy, and mindfulness improve emotional well-being, while altered body image can foster new perspectives. Nutritional support and advocacy programs empower patients, especially in underserved areas, to focus on healing (De Boer et al., 2015). Patients following tailored dietary plans have reported increased energy and optimism, even during intensive treatments (Zainal et al., 2022).

Recent advances in cancer care have led to better survival rates, with nutrition playing a key role in treatment success. Personalized nutrition therapy now works alongside treatments like immunotherapy, enhancing recovery and overall effectiveness (Arends et al., 2017). Recent research emphasis on the critical role of nutrition in cancer care, particularly in improving outcomes like recovery and survival rates, addressing malnutrition through early screening and tailored support can reduce treatment-related side effects and improve overall quality of life (Arends et al., 2020). These findings emphasize the need for a holistic care approach, where both nutrition and emotional well-being play key roles in recovery.

Emotional health is intrinsically related to physical recovery, with positive emotions, strong support systems, and a sense of agency playing a pivotal role in cancer outcomes. Optimism, self-efficacy, and meaningful relationships have been shown to enhance resilience and treatment adherence, directly influencing recovery trajectories (Carver et al. 2010). From a nutritional perspective, adequate and balanced nutrition does more than restore physical strength, it uplifts mood and fosters a sense of hope. Nutrient-dense diets with omega-3s, antioxidants, and vitamins improve emotional well-being by reducing inflammation and enhancing neurotransmitter function (Grosso et al., 2014; McNamara et al., 2016).. This approach emphasizes treating patients holistically by combining tailored nutrition with emotional and psychological support. It strengthens both physical and emotional resilience, improving quality of life and recovery outcomes (Lis et al., 2012; Zainal et al., 2022).

Objectives

1. To explore the connection between nutrition, the emotional well-being and psychological health of cancer patients.
2. To understand how proper nutrition can help reduce emotional distress and support mental health during cancer treatment.

Research Question

How can nutrition be used to improve the emotional well-being and psychological health of cancer patients during their treatment and recovery?

Purpose of the Study

This research explores the role of nutrition in supporting cancer patients both physically and emotionally. It highlights how tailored nutrition can boost energy, reduce fatigue, and improve mood, showing that nutrition is vital not just for physical recovery but for emotional healing. By combining proper nutrition with emotional and social support, this study aims to guide more compassionate and effective care, enhancing overall well-being and quality of life during treatment.

Theoretical Framework

The biopsychosocial lens in cancer care emphasizes the importance of viewing recovery through a holistic approach, focusing on the body, mind, and social environment. Studies have shown that personalized nutrition can improve physical resilience (Arends et al., 2017), while emotional support helps with mental well-being and treatment adherence (Andersen et al., 2014). Additionally, strong social connections reduce isolation and support overall recovery (Satia et al., 2022).

The Integrated Biopsychosocial Model is an essential framework for understanding how cancer patients experience their journey and how nutrition plays a central role in their recovery. On a biological level, good nutrition is critical for maintaining strength, especially during treatments like chemotherapy, which can weaken the body. Poor nutrition can worsen fatigue, delay healing, and reduce immunity. Psychologically, eating well can help improve mood and reduce feelings of depression or anxiety, which are common among cancer patients (Galiano & Nardi, 2023). Proper nutrition helps people feel more energized and boosts self-esteem, especially when dealing with body image changes. Socially, support from loved ones and cultural attitudes toward food can influence how well patients stick to their dietary plans. This model guided the creation of the study's questionnaire, which looks at how nutrition impacts physical health, emotional well-being, and social support. It emphasizes the importance of a well-rounded approach to cancer care that addresses all aspects of a patient's life.

Literature Review

Medical nutrition therapy plays a critical role in cancer management, with nutrient-rich diets improving immunity and helping combat treatment side effects (Mahan & Escott-Stump, 2012). Early nutritional intervention reduces malnutrition-related complications and enhances treatment tolerance (Arends et al., 2017). Targeted dietary plans can improve energy balance and physical function (Dev et al., 2017), while protein-rich diets aid physical recovery and psychological resilience. Proper nutrition can mitigate cancer cachexia, characterized by severe weight loss and muscle wasting, by addressing inflammatory and metabolic disruptions (Fearon et al., 2011). Nutrients like omega-3 fatty acids help reduce inflammation and improve both physical and emotional outcomes (Calder, 2013).

Malnutrition affects 30–80% of cancer patients, delaying healing, increasing fatigue, and reducing treatment efficacy (Lis et al., 2012). Poor dietary intake exacerbates psychological symptoms, forming a bidirectional relationship between nutrition and mental health (Weaver et al., 2014). Plant-based diets rich in phytonutrients offer similar benefits, improving mood stability and reducing fatigue (Calder,

2013). Tailored nutrition plans that consider taste alterations, nausea, and gastrointestinal issues help maintain adequate nutrient intake during treatment (Kim et al., 2016). Personalized meal planning improves both physical recovery and mental health (Gibson et al., 2018), while hydration supports cognitive function and energy levels (Grant et al., 2015).

The interconnectedness of nutrition and psychological health highlights the need for holistic approaches. Social and psychological support, combined with dietary counseling, improves mental health and adherence to nutrition plans (Cohen et al., 2004; Ravasco et al., 2005).

Mindfulness-based practices further reduce inflammation and emotional distress (Fitzgerald et al., 2015). Integrative care approaches that combine dietary, psychological, and physical interventions significantly enhance quality of life and survivorship (Yates et al., 2017).

The biopsychosocial framework underscores the importance of addressing biological, psychological, and social factors in cancer care. Good nutrition supports physical resilience during treatments like chemotherapy (Arends et al., 2017), while adequate nutrient intake improves mood and reduces anxiety (Galiano & Nardi, 2023). Social connections and cultural attitudes toward food influence dietary adherence, recovery, and emotional well-being (Andersen et al., 2014; Satia et al., 2022). Integrating personalized dietary plans, psychological support, and physical activity fosters a comprehensive approach, empowering cancer patients to thrive both physically and emotionally (Ligibel et al., 2014).

Methodology

Research Design

This study adopts a qualitative mixed-methods approach to understand how nutrition influences the psychological well-being of cancer patients. The research unfolds in two carefully designed phases, ensuring thorough data collection and insightful analysis. By integrating interviews, patient / survivors notes, and projective art techniques i.e kinetic drawings, the study captures a rich tapestry of patient experiences. This method allows for an in depth exploration of diverse perspectives, enhancing the authenticity, and reliability of the findings.

Participants

Sample Size

A purposive sample of 5 cancer patients from diverse demographic backgrounds and cancer types were selected to capture a range of experiences. Participants were adults aged 18 and above who were undergoing or had completed cancer treatment. Eligibility required willingness to participate in interviews. Those with severe cognitive impairments or conditions hindering qualitative data collection were excluded. This ensured a capable cohort for exploring the impact of tailored nutrition on physical and psychological well-being. Participants were recruited through oncology departments at cancer treatment centers and outreach to cancer support groups and patient networks. They received detailed information about the study's purpose, procedures, and confidentiality. **Written informed consent was obtained before participation.**

Data Collection

Data collection was conducted in **two phases** to capture an understanding of patients' experiences, balancing both reflective insights and real-time personal expressions.

Phase 1 involved semi-structured interviews using a questionnaire exploring the role of nutrition in physical and psychological well-being. And were aimed at exploring patients' perceptions of the role of nutrition in their cancer journey. Lasting 45–60 minutes, these interviews covered dietary habits, emotional responses to nutrition-related challenges, and the impact on mood, self-esteem, and health. Participants also discussed support from family, friends, and caregivers. Interviews were conducted in person and via video calls, audio-recorded, and transcribed verbatim, with field notes taken to capture non-verbal cues and context.

Phase 2 incorporated reflective notes to self, informal drawings and kinetic drawings. To complement the insights gained from the interviews. These tools allowed participants to express their experiences in real time and through creative means, providing a deeper, more personal perspective on the role of nutrition in their cancer journey. They also created drawings representing their cancer journey and the role of nutrition, explaining the themes and symbols they used to express resilience, control, and vulnerability.

This two-phase approach enriched the data, offering a nuanced and valid understanding of the connection between nutrition and psychological well-being.

Data Analysis Method

The data analysis employed a combination of thematic analysis, content analysis, and interpretation of kinetic and informal drawings to provide a comprehensive understanding of patients' experiences with nutrition and psychological well-being cancer in relation to the pre-post-during diagnosis. This integrated approach allowed for an exploration of both the verbal narratives and visual expressions shared by participants, offering deeper insight into their emotional and psychological journeys.

Thematic Analysis

Thematic analysis was applied to the semi-structured interviews and reflective patient notes to identify key patterns and themes in participants' stories. The process began with careful reading and re-reading of the transcripts and notes, allowing the researchers to immerse themselves in the data and note recurring ideas or sentiments. This initial phase helped to familiarize with the participants' unique experiences, challenges, and coping mechanisms.

Next, meaningful excerpts were highlighted and categorized into initial codes. These codes captured significant aspects of the data, such as the emotional impact of dietary changes, coping strategies, and the role of support systems. From these codes, broader themes emerged, including the impact of nutrition on mood and self-esteem, coping with dietary challenges, and support from family, friends, and healthcare providers. For example, participants often described how adhering to specific diets influenced their sense of control or how moments of frustration were alleviated by emotional support from loved ones. These themes were refined and validated to ensure they reflected the core experiences shared by the participants. Illustrative quotes were then selected to bring these themes to life, adding authenticity and depth to the analysis.

Content Analysis

Content analysis of the reflective notes offered a way to capture participants' real-time thoughts and feelings. The notes were examined for recurring words, phrases, and sentiments related to their daily

nutritional challenges and emotional states. This approach allowed researchers to categorize content into key areas, such as frustration with dietary restrictions, moments of emotional resilience, feelings of control, and instances of support. By tracking these varied emotions, the content analysis provided a dynamic view of how participants experienced nutrition-related challenges and how their psychological states evolved over time.

Interpretation of Kinetic and Informal Drawings

The kinetic and informal drawings created by participants offered a powerful visual representation of their experiences with nutrition and cancer. These drawings were analyzed for symbols, lines, colors, and spatial organization to uncover deeper meanings and emotional expressions. Participants' explanations of their artwork were essential for understanding these visual elements within the context of their personal narratives.

By integrating the visual insights with the verbal data from interviews and notes, the analysis captured a richer, more holistic picture of each participant's journey. The drawings added layers of emotional depth that words alone could not fully convey, offering a window into the unspoken aspects of their experiences.

This approach to data analysis, combining thematic and content analysis with the interpretation of drawings, provided an understanding of how nutrition influences the psychological well-being of cancer patients. By capturing both spoken and visual expressions, the study revealed the interconnectedness of dietary challenges, emotional states, and support systems. This layered analysis not only deepened the understanding of patients' lived experiences but also tapped upon the importance of addressing both the physical and emotional dimensions of cancer care.

Results

The results revealed sociable, psychological, and physiological challenges suffered by the patients. This study draws data from first-person accounts of cancer warriors. These results highlight the connection between nutrition and psychological well-being, and also stress the importance of the biopsychosocial model of cancer treatment, where a patient's well-being is addressed holistically by integrating physical health, psychological resilience, and social support into their care plan.

The thematic analysis points to the complexity of the experience of living with cancer, in its physical, emotional, and social dimensions. The results highlight that besides focusing on the treatment of cancer from the medical perspective, equal consideration should be paid to patients' psychosocial concerns. These were the themes drawn from the interviews (Phase I).

Themes	Sub-Themes	Description	Verbatim
Changes in Eating Patterns	Appetite Loss	Decreased desire to eat due to side effects like nausea, fatigue, or emotional distress.	"I didn't feel like eating anything."
	Taste Alterations	Altered taste perception, often metallic or bitter, making food unappealing or	"The taste of food changed completely."

		difficult to consume.	
	Dietary Monotony	Limited variety in meals due to difficulty tolerating certain foods or seeking comfort in repetitive, simple options.	"I stuck to juices and soups because they were tolerable."
Physical and Emotional Impact	Emotional Distress	Feelings of frustration, anxiety, or isolation caused by the physical and emotional burden of	"I used to get angry often and felt isolated."
		cancer treatment.	
	Body Image Concerns	Self-esteem issues arising from physical changes like hair loss or surgical scars, affecting social interactions.	"Losing my hair made me feel like I wasn't myself anymore."
	Physical Challenges	Side effects such as bloating, loose motions, or fatigue that hinder day-to-day functioning.	"I used to have bloating and loose motions after chemo."
Social and Family Dynamics	Family Involvement	Inadequate or limited support from family members, affecting emotional and practical needs during recovery.	"My husband didn't help with my diet."
	Peer Support	Emotional strength and guidance derived from interacting with others who share similar experiences.	"Talking to others helped me feel less alone."
Coping Mechanisms	Nutritional Adjustments	Adapting to changes by incorporating simple, energy-rich foods to sustain health and manage treatment side	"I drank carrot juice to keep my strength up."
		effects.	
	Counselling	Seeking professional psychological support to build resilience, reduce anxiety, and manage emotions.	"Counselling sessions helped me stay mentally strong."

	Peer Support	Sharing experiences and receiving encouragement through support groups to navigate challenges effectively.	"Support groups gave me the confidence to keep going."
Relationship with Food	Food as Comfort	Food serves as a source of emotional stability and recovery during treatment phases.	"My mood got better after eating."
	Emotional Connection	Strong emotional ties to specific foods that helped improve mood or health.	"I ate 30–40 kgs of potatoes during recovery."

The data collection also included the participants to write a note to self that encouraged reflective insights about their emotions and these were the results and tabular analysis.

Participant	Overview of Expression
Participant 1	Demonstrates resilience and strength , focusing on the journey as warrior and embracing scars as symbols of strength .
Participant 2	Expresses lingering emotional pain and struggle despite overcoming cancer. Reflects on the difficulty of finding joy and normalcy.
Participant 3	Describes a sense of emptiness and detachment , acknowledging the absence of clear emotions and a sense of resignation.
Participant 4	Highlights self-compassion , encouraging a gentle approach and acknowledging the value of small wins and moments of joy.
Participant 5	Emphasizes strength balanced with vulnerability , recognizing the need for rest , family support , and emotional self-care.

The analysis of all five participants' notes identified the following key themes . **Resilience and Strength, Emotional Pain and Struggle, Loss and Emptiness , Self-Compassion and Support, Small Wins and Daily Triumphs.**

Theme	P1	P2	P3	P4	P5	Frequency (Total)
Resilience and Strength	High	Moderate	Low	Moderate	High	8

Emotional Pain and Struggle	Moderate	High	Moderate	Moderate	Moderate	9
Loss and Emptiness	Low	High	High	Low	Moderate	7
Self-Compassion and Support	Moderate	Moderate	Low	High	High	8
Small Wins and Daily Triumphs	Moderate	Low	Low	High	High	6

Analysis of the Themes and Sub-themes

Major Themes	Subthemes	Representative Quotes
Resilience and Strength	Acknowledging personal strength	“तूने हर chemotherapy, हर weakness का सामना किया।” (Participant 1)
	Seeing scars as reminders of strength	“ये scars तेरा strength हैं, reminders हैं फ़क तू सक्षम है।” (Participant 1)
	Standing tall despite fear	“Even when scared, you stand tall.” (Participant 5)
Emotional Struggles	Lingering emotional pain	“तू जानता है फ़क अंदर ही अंदर तू अब भी लड़ रहा है।” (Participant 2)
	Feelings of emptiness and numbness	“न खुशी है, न गम। बस एक खालीपन है।” (Participant 3)
	Doubts about the future	“शायद अब सब कुछ पहले जैसा कभी नहीं होगा।” (Participant 2)
Coping Mechanisms	Taking things one step at a time	“Take things one moment at a time.” (Participant 4)

	Small joys as victories	“Small wins matter—a good meal, a walk, or a deep breath.” (Participant 4)
	Rest and self-care	“Rest when your body says stop.” (Participant 5)
Support Systems	Leaning on loved ones	“They love you, even if they don't say it much.” (Participant 5)
	Acknowledging support from others	“तूने हर chemotherapy, हर weakness का सामना किया।” (Participant 1)

The Phase II of the data collection also included kinetic drawings and informal drawings , as a segment of projective art techniques, to uncover the repressed or unexpressed emotions of the participants to get a deeper understanding . Although only 3 of the participants could draw while the others expressed various non-verbal cues, that will be discussed in the interpretation .

Analysis of the Drawings

Symbol	Meaning	Frequency
Mountains	Overcoming challenges	3
Broken Bridges	Emotional struggles and sense of loss	2
Sun or Light	Hope and resilience	4
Trees or Roots	Growth, stability, and connection to loved ones	2

Table 2

Central Theme	Sub-Themes	Supporting Symbols	Interpretation
Nutrition and Healing	Physical Strength	Mountains, Sun or Light	Reflects the journey of overcoming physical challenges and finding resilience in the healing process.
	Emotional Vulnerability	Broken Bridges	Highlights the emotional struggles, feelings of isolation, and loss experienced during recovery.
	Support Systems	Trees or Roots	Symbolizes the importance of growth, family connections, and a supportive network in achieving recovery.

Discussion

In the Phase 1 i.e. in interviews, participants frequently reported **changes in their eating habits** due to treatment side effects, such as nausea, fatigue, and emotional distress and sub-themes like **appetite loss** where patients experienced a decreased desire to eat due to chemotherapy-induced nausea and fatigue. For example, one patient stated, *"I didn't feel like eating anything."* This loss of appetite is consistent with findings by Lis et al. (2012), who noted that 30–80% of cancer patients suffer from malnutrition, which exacerbates fatigue and delays healing. **Taste alterations** elaborated as the metallic or bitter taste caused by chemotherapy made food unappealing. As one participant shared, *"The taste of food changed completely."* These sensory changes contribute to dietary monotony and reduced nutritional intake (Arends et al., 2017). And **dietary monotony** i.e. limited food choices were observed due to difficulty in tolerating diverse foods. Patients often relied on simple, tolerable options like soups and juices, as evidenced by the statement, *"I stuck to juices and soups because they were tolerable."* Early nutritional intervention, such as targeted dietary plans (Dev et al., 2017), can help mitigate these challenges and improve treatment outcomes.

Secondly, **the physical side effects and emotional distress** caused by cancer treatment were significant themes and various sub-themes like **emotional distress**, frustration, anxiety, and isolation were common. One participant remarked, *"I used to get angry often and felt isolated."* This reflects the psychological burden of cancer, which, if left unaddressed, can worsen treatment outcomes (Mahan & Escott-Stump, 2012). **Body image concerns** were prominent as hair loss and surgical scars affected self-esteem and social interactions. For instance, *"Losing my hair made me feel like I wasn't myself anymore."* Such concerns underline the need for psychosocial support to help patients cope with physical changes (van der Meij et al., 2013).

Relationship with Food was a significant theme that emerged as food served as both a comfort and a coping mechanism **Food as Comfort acted where certain foods provided emotional stability**. One participant expressed, *"My mood got better after eating."* Nutritional therapy can enhance psychological well-being (Dev et al., 2017). The emotional connection reflected as the strong ties to specific foods were noted, such as one patient's comment, *"I ate 30–40 kgs of potatoes during recovery."* This illustrates the complex emotional relationship with food during cancer treatment. Moreover, **Social and Family Dynamics** are an integral part of the journey wherein one of the subthemes were peer support where Sharing experiences in support groups fostered encouragement and confidence. Family Involvement impacted patients' emotional well-being. One participant shared, *"My husband helped with my diet."* The importance of family education and involvement in cancer care reflects in this statement and **peer support** like interacting with fellow patients provided emotional strength. For example, *"Talking to others helped me feel less alone."* Peer support groups have been shown to reduce feelings of isolation and improve coping mechanisms (Calder, 2013).

Patients adopted various strategies to manage their challenges like **nutritional adjustments** i.e. consuming energy-rich foods helped sustain strength. One patient noted, *"I drank carrot juice to keep my strength up."* Proper nutrition is critical for combating cancer cachexia (Fearon et al., 2011) and **professional psychological support** helped patients manage emotions and build resilience. As one participant stated, *"Counselling sessions helped me stay mentally strong."*

The participants' reflective notes provided deeper emotional insights, identifying five key themes: Resilience and Strength where participants like P1 and P5 demonstrated high resilience, focusing on their strength and courage. For example, P1 noted, *"तूने हर chemotherapy, हर weakness का सामना किया,"* reflecting an acknowledgment of personal strength. Emotional Pain and Struggle like P2 and P3

highlighted emotional pain and emptiness. P2's note, "तू जानता है कि अंदर ही अंदर तू अब भी लड़ रहा है," reveals the lingering impact of the cancer journey.

Loss and Emptiness was also observed where P3 and P2 expressed a sense of detachment and resignation, illustrating the psychological toll of cancer. For example, "न खुशी है, न गम. बस एक खालीपन है." Self-Compassion and Support was also reflected in the notes where P4 and P5 emphasized the importance of self-care and family support. P4's note, "*Take things one moment at a time*," reflects a gentle approach to recovery. An optimistic swing where Small victories like enjoying a meal or taking a walk were significant for P4 and P5. This aligns with research emphasizing the psychological benefits of acknowledging small achievements (Calder, 2013).

The kinetic and informal drawings collected in Phase II of the study provide profound insights into the repressed or unexpressed emotions of the participants living with cancer. These drawings reveal symbolic representations of their psychological and emotional states, which complement the verbal data gathered through interviews and notes to self. The analysis of these drawings identifies critical themes, supported by research evidence in psycho-oncology, emphasizing the biopsychosocial dimensions of cancer treatment. As mentioned, only 3 participants could put out their thoughts on the paper while the other two expressed a lot of hesitance and reluctantness when requested, indicating a resistance to feel and express their emotions, also these participants were under treatment while the others were on a recovery period from a subjective period of 6 months - 3 years.

There were various recurrent symbols in the drawings that will be discussed. The recurrent symbols in the kinetic drawings reveal key themes of resilience, emotional struggle, and hope in the context of cancer. **Mountains**, appearing in three drawings, represent the challenges of treatment and recovery, aligning with Lazarus and Folkman's Theory of Stress and Coping (1984), which emphasizes the need for both problem-focused and emotion-focused strategies. **Broken bridges**, symbolizing emotional struggles and loss, appear in two drawings. The imagery aligns with *disrupted life narratives* as discussed by Frank (1995) in "The Wounded Storyteller," where illness interrupts the continuity of life stories, leading to feelings of fragmentation and uncertainty. **Sun or light**, featured in four drawings, symbolizes hope and resilience, supporting Snyder's Hope Theory (1994) and research by Herth (2000) and Schroevers et al. (2004) on the positive impact of hope and optimism on cancer patients' well-being. **Trees and roots**, in two drawings, signify growth and stability, highlighting the importance of social support in recovery, consistent with Engel's biopsychosocial model (1977) and Cohen and Wills' research (1985).

The analysis of Phase 1 (interviews) and Phase 2 (kinetic drawings) reflect a strong connection in the way participants expressed their experiences with cancer. In the interviews, patients shared the emotional and physical struggles they faced, such as changes in eating habits, emotional distress, body image issues, and food serving as a source of comfort. These themes are reflected in the recurrent symbols found in their drawings like the mountains representing the challenges of treatment, broken bridges symbolizing emotional pain, and light or sun illustrating hope and resilience.

Both phases emphasise on the psychological impact of cancer treatment, with participants expressing feelings of isolation, loss, and emotional turmoil, themes that are echoed in their drawings. The role of social support is also evident, as symbols of trees and roots in the drawings align with the importance of family and peer support expressed in the interviews.

Moreover, the imagery of light in the drawings connects with the small victories and hope that participants shared in their verbal reflections.

Thus, the combined analysis of both phases offers a comprehensive view of the participants' experiences, showing how both verbal and visual expressions capture the complex emotional, psychological, and social dimensions of living with cancer.

Conclusion

This study tapped into the emotional, psychological, and social experiences of cancer patients, using both verbal interviews and visual (kinetic) drawings to capture their journey. The struggles patients expressed, such as appetite loss, emotional distress, and body image issues, were echoed in the symbols in their drawings, such as mountains, broken bridges. These symbols reflect their inner experiences, illustrating the power of creative expression in helping patients communicate complex emotions and gain deeper insight into their struggles. The findings emphasise the significant role of resilience and social support. This approach should prioritize not only medical treatment but also psychosocial interventions to enhance patients' overall well-being and support them throughout their cancer journey.

Significance of the Study

This study sheds light on the crucial yet often overlooked connection between nutrition and psychological well-being in cancer care. By focusing on patients' personal experiences, it highlights how tailored nutritional strategies can strengthen both physical and emotional resilience during and after treatment.

Combining nutrition with psychological support to enhance patients, the research underscores how improved dietary practices can boost mental health, self-esteem, and quality of life. Ultimately, it aims to guide healthcare providers and caregivers in creating comprehensive care plans that empower patients throughout their cancer journey.

Implications

The results of this research advocate for psychosocial interventions in cancer care. It strongly emphasizes that the emotional dimensions must be integrated along with the physical ones in promoting better patient results. The results further indicate that creative therapies such as art and expressive writing are useful interventions that empower patients to process their emotions.

Limitations

A limitation of this research is the small sample that may fail to capture the experiences of the breadth of cancer patients. The drawings of patients may be influenced by their emotional states that day, thereby affecting generalizability. Data collected through interviews and self-reflection may be influenced by the participants' subjective perceptions, biases, or emotional states, which could impact the accuracy and reliability of the findings.

Future Research Suggestions

The future studies could extend their coverage to the long-term emotional and psychological effects associated with cancer beyond immediate treatment and recovery periods. Increase the patient sample size and include several patient groups, which can yield a wider understanding of their experiences. Further research might also include and study the utility of creative therapies in cancer care and assess how digital platforms may facilitate social connections and enhance psychosocial well-being in patients.

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