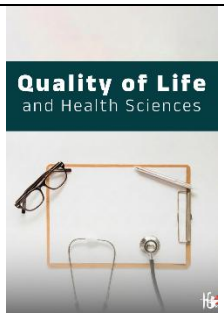
KMAN PUBLISHING INSTITUTE

Article history:
Received 19 September 2025
Revised 06 December 2025
Accepted 13 December 2025
Published online 01 January 2026

Quality of Life and Health Sciences

Volume 2, Issue 1, pp 1-17



Experiences of Symptom Burden, Treatment Fatigue, and Quality of Life Among Patients With Metastatic Colorectal Cancer Receiving Chemotherapy

Faisal. Al-Kuwari[1], Megan. White[2*], Amir. Hadžić[3]

[1] Department of Behavioral Sciences, Qatar University, Doha, Qatar
[2] Department of Evolutionary Psychology, St. Francis Xavier University, Antigonish, Canada
[3] Department of Clinical Psychology, University of Sarajevo, Sarajevo, Bosnia and Herzegovina

*** Corresponding author email address**: mwhite@stfx.ca

A r t i c l e I n f o

Article type:
Original Research

How to cite this article:
Al-Kuwari, F., White, M., & Hadžić, A. (2026). Experiences of Symptom Burden, Treatment Fatigue, and Quality of Life Among Patients With Metastatic Colorectal Cancer Receiving Chemotherapy. *Quality of Life and Health Sciences, 2*(1) 1-17.
http://dx.doi.org/10.61838/kman.qlhs.5771

A B S T R A C T

Objective: This study aimed to explore the lived experiences of symptom burden, treatment fatigue, and quality of life among patients with metastatic colorectal cancer receiving chemotherapy in Canada.

Methods and Materials: This qualitative phenomenological study was conducted among 24 patients with metastatic colorectal cancer receiving chemotherapy in outpatient oncology and chemotherapy centers in Ontario, Canada. Participants were selected through purposive sampling based on having a confirmed diagnosis of stage IV colorectal cancer, current or recent chemotherapy exposure, ability to communicate in English, and capacity to provide informed consent. Data were collected using a demographic and clinical information form, semi-structured individual interviews, and interviewer field notes. Interviews explored physical symptoms, treatment-related fatigue, emotional distress, functional limitation, family and social roles, coping strategies, treatment decision-making, and perceptions of quality of life. Interviews were audio-recorded, transcribed verbatim, anonymized, and analyzed using an interpretative phenomenological approach.

Findings: Inferential thematic analysis identified four major interconnected themes: living in a body dominated by symptoms, chemotherapy as a repetitive and exhausting life cycle, quality of life as a shifting and negotiated concept, and coping with uncertainty while maintaining control. Participants' accounts indicated that symptom burden was cumulative rather than episodic, with fatigue, gastrointestinal disruption, pain, neuropathy, appetite changes, sleep disturbance, and functional limitation interacting to reduce independence and bodily confidence. Treatment fatigue was inferred as a multidimensional experience involving physical exhaustion, anticipatory distress, emotional weariness, repeated appointments, uncertainty about treatment response, and ambivalence about continuing chemotherapy. Quality of life was interpreted as a dynamic balance between survival, tolerable suffering, dignity, relational connection, autonomy, and meaningful time.

Conclusion: The findings suggest that metastatic colorectal cancer care should move beyond disease control and adverse-event monitoring to include systematic assessment of cumulative symptom burden, treatment fatigue, coping capacity, and patients' evolving definitions of acceptable quality of life.

Keywords: *Metastatic colorectal cancer; chemotherapy; symptom burden; treatment fatigue; quality of life; qualitative study; phenomenology; oncology; patient experience.*

1. Introduction

Colorectal cancer is one of the most clinically consequential malignancies because of its high incidence, complex treatment trajectory, and substantial impact on patients' physical, psychological, social, and functional well-being. Although improvements in screening, surgery, systemic therapy, molecular diagnostics, and supportive care have altered survival patterns, a considerable proportion of patients continue to experience metastatic disease, either at initial diagnosis or following recurrence after primary treatment. Metastatic colorectal cancer is not only a biological and therapeutic challenge but also a deeply disruptive life condition, as patients must live with the uncertainty of disease progression while repeatedly adapting to treatment-related toxicity, changes in bodily function, and altered expectations for the future. Quality of life has therefore become a central endpoint in advanced colorectal cancer care, particularly because disease control and survival extension may be accompanied by persistent symptoms, cumulative fatigue, reduced independence, and emotional strain. Studies focused on stage IV colorectal cancer have emphasized that quality of life outcomes are closely tied to symptom intensity, treatment burden, functional capacity, psychological adjustment, and the patient's ability to maintain meaningful roles despite advanced illness (Feizpour et al., 2023; Frank et al., 2020; Refay et al., 2024).

The treatment landscape of metastatic colorectal cancer has become increasingly heterogeneous, with treatment decisions shaped by tumor biology, molecular profile, previous lines of therapy, patient age, functional status, comorbidities, treatment goals, and expected tolerance. Standard chemotherapy regimens, targeted agents, immunotherapy for selected molecular subgroups, and later-line therapies have created more opportunities for disease control, but they have also made the patient experience more complex. Evidence from trials and reviews indicates that systemic therapies may differ not only in tumor response and progression-free survival but also in adverse event profiles and health-related quality of life. For example, health-related quality of life findings from first-line pembrolizumab compared with chemotherapy in microsatellite instability-high or mismatch repair-deficient metastatic colorectal cancer highlight the importance of evaluating how treatment affects patients' daily functioning and well-being rather than relying exclusively on clinical efficacy indicators (André et al., 2021). Similarly, evidence concerning bevacizumab with chemotherapy, targeted therapeutic agents in RAS wild-type metastatic colorectal cancer, trifluridine/tipiracil with bevacizumab, and exploratory adjunctive approaches such as metformin with irinotecan or memantine illustrates the continuing effort to optimize treatment while managing toxicity and maintaining patient-centered outcomes (Bragagnoli et al., 2021; Choi et al., 2022; Jannesar et al., 2024; Moisuc et al., 2023; Rais et al., 2024).

Despite therapeutic progress, chemotherapy remains a central component of care for many patients with metastatic colorectal cancer and is often experienced as a repetitive, physically demanding, and psychologically exhausting process. Patients may undergo cycles of infusion, oral treatment, blood testing, imaging, oncology consultations, symptom monitoring, dose adjustments, and recovery periods, all while living with the knowledge that treatment is frequently palliative rather than curative. This reality distinguishes metastatic chemotherapy from short-term curative treatment because therapy may continue for months or years, may be interrupted and restarted, and may require patients to repeatedly weigh potential life extension against cumulative toxicity. Treatment fatigue has therefore emerged as an important concept in advanced cancer care. It includes physical exhaustion, emotional weariness, loss of motivation, distress before treatment, frustration with repeated appointments, uncertainty regarding treatment response, and the burden of continuing therapy despite adverse effects. In oncogeriatric populations, treatment-related fatigue has been described as a multidimensional phenomenon shaped by aging, comorbidity, cancer-related vulnerability, treatment exposure, and functional decline (André et al., 2022). In metastatic colorectal cancer specifically, network-based work on general, physical, and psychological fatigue suggests that fatigue is not a single symptom but a structured experience involving interconnected physical and emotional components that may require targeted coping strategies (Grégoire et al., 2025).

Symptom burden in metastatic colorectal cancer is especially complex because patients experience symptoms caused by the tumor, previous surgery, metastatic involvement, chemotherapy, targeted therapy, supportive medications, nutritional compromise, and psychological distress. Common symptoms may include fatigue, pain, gastrointestinal disruption, bowel urgency, constipation, diarrhea, nausea, appetite loss, weight change, sleep disturbance, neuropathy, weakness, and reduced exercise tolerance. A disease conceptual model of patient experience with metastatic colorectal cancer identified salient symptoms and impacts that extend across bodily, functional,

emotional, and social domains, reinforcing the need to understand not only which symptoms occur but also how patients interpret and live with them (Guillemin et al., 2022). In clinical trials, fatigue has been associated with outcomes among patients with advanced cancer, which underscores its significance as more than a subjective inconvenience (Mo et al., 2021). Research on minimally important differences for the EORTC QLQ-C30 in advanced colorectal cancer further shows that even measured changes in quality of life and symptom scales require careful interpretation in relation to what patients perceive as meaningful in everyday life (Musoro et al., 2020).

Fatigue is one of the most prominent and burdensome symptoms for patients receiving chemotherapy, but its meaning is often broader than tiredness. Cancer-related fatigue may impair walking, self-care, household tasks, work, family participation, concentration, emotional regulation, and willingness to continue treatment. In colorectal cancer survivors, physical activity has been examined as an intervention for cancer-related fatigue, and systematic reviews have suggested that structured activity may improve fatigue and related outcomes when feasible and appropriately tailored (Geng et al., 2023; Singh et al., 2020). In metastatic cancer populations, exercise interventions have also been explored in relation to symptom and physical fitness measures, suggesting that even individuals with advanced disease may benefit from carefully designed supportive approaches (Shallwani et al., 2025). Emerging work has additionally considered exercise and nutritional or phytochemical approaches, such as quercetin, in relation to cancer pathways and cognitive function, although translation into routine metastatic colorectal cancer care requires caution and further evidence (Lei, 2025). Evidence from other cancer populations, including patients receiving chemotherapy for breast cancer, also demonstrates how early skeletal muscle deconditioning and reduced exercise capacity can develop during treatment, offering a relevant framework for understanding functional decline during systemic therapy more broadly (Mallard et al., 2022).

Sleep and circadian disruption represent another important dimension of symptom burden and quality of life in advanced cancer. Chemotherapy schedules, corticosteroids, pain, anxiety, reduced daytime activity, hospital routines, gastrointestinal symptoms, and emotional distress may disturb sleep-wake cycles and contribute to daytime fatigue. Circadian disruption has been linked to cancer- and treatment-related symptoms, while research on circadian, hormonal, and sleep rhythms has emphasized potential implications for cancer progression and treatment experience (Amidi & Wu, 2022; Jagielo et al., 2023). In advanced cancer, circadian rhythm disorders have been identified as a clinically relevant but often under-recognized concern, and cancer survivorship literature has connected circadian rhythm disruption with quality of life across the cancer continuum (Gouldthorpe et al., 2023; Kisamore et al., 2024). Interventions aimed at supporting circadian regulation, including night-simulating eyeglasses and melatonin-related approaches, reflect growing interest in the biological and experiential links between sleep, fatigue, symptom burden, and quality of life during cancer treatment (Block et al., 2022; Ginzac et al., 2020).

The burden of metastatic colorectal cancer is also shaped by age, comorbidity, nutritional status, and functional reserve. Older adults with metastatic colorectal cancer represent a particularly important group because treatment decisions often require balancing efficacy, toxicity, frailty, independence, cognition, and caregiver support. Updates on the management of colorectal cancer in older adults emphasize that chronological age alone is insufficient for guiding care, while evidence concerning oxaliplatin-based first-line chemotherapy in elderly patients with metastatic colorectal cancer highlights the importance of carefully evaluating both benefit and safety (Fan et al., 2025; O'Donnell et al., 2024). Micronutrient deficiencies in gastrointestinal cancer may further complicate fatigue, weakness, treatment tolerance, and recovery, making nutritional assessment a relevant aspect of supportive care (Turkiewicz et al., 2023). Postoperative rehabilitation after colorectal cancer surgery and broader integrative therapeutic methods for improving functioning and quality of life in cancer patients show that physical recovery, functional restoration, and supportive care must be considered alongside systemic therapy, especially when metastatic disease follows prior surgery or multimodal treatment (Iliescu et al., 2024; Nusca et al., 2021).

Psychological adaptation is central to the experience of metastatic colorectal cancer because patients must process the meaning of advanced disease while coping with treatment uncertainty and bodily deterioration. Anxiety, depressive symptoms, resilience, social support, and perceived control may influence how patients interpret symptoms and evaluate quality of life. Among patients with colorectal cancer undergoing chemotherapy, resilience and anxiety or depression have been associated with quality of life, suggesting that psychological resources may shape the

subjective burden of treatment and illness (Tamura, 2021). At the same time, quality of life should not be reduced to psychological adjustment alone, because it is embedded in physical symptoms, family relationships, economic consequences, treatment access, healthcare communication, and existential concerns. Palliative care in colorectal cancer provides a framework for addressing these interconnected needs through symptom management, communication about goals of care, psychosocial support, and attention to dignity and comfort (Caponero, 2021). The issue of systemic treatment holidays also reflects the clinical and ethical complexity of advanced cancer care, as interruptions in therapy may be considered to reduce treatment burden, restore functioning, or preserve quality of life, while also raising concerns about disease control and patient anxiety (Kreines et al., 2021).

Supportive and complementary interventions have increasingly been examined as ways to reduce symptom burden and improve quality of life during chemotherapy. Hypnosis and cognitive behavioral therapy delivered through online sessions have been proposed as feasible approaches for reducing fatigue in patients undergoing chemotherapy for metastatic colorectal cancer, reflecting the need for accessible interventions that accommodate mobility limitations, infection risk, and treatment-related exhaustion (Baussard et al., 2022). Integrative methods have also been reviewed in relation to quality of life and functioning in cancer patients, although the strength of evidence varies across modalities and populations (Iliescu et al., 2024). Traditional Chinese medicine combined with chemotherapy and cetuximab or bevacizumab has been examined in metastatic colorectal cancer, suggesting that some patients and clinicians continue to seek multimodal approaches to symptom control and treatment support (Liu et al., 2020). Viscum album therapy has also been discussed in oncology as part of the broader complementary medicine literature, though its role requires critical appraisal within evidence-based care (Thronicke et al., 2022). These studies collectively indicate that supportive care should not be peripheral to metastatic colorectal cancer treatment; rather, it is central to how patients endure therapy and preserve quality of life.

Advances in genomics and hereditary cancer research have further contributed to the individualized treatment landscape, particularly as systemic therapies are increasingly matched to molecular defects, biomarkers, and inherited cancer syndromes (Hasanov et al., 2022). However, precision oncology does not eliminate the need for phenomenological and patient-centered research. Even when treatments are biologically tailored, patients still experience illness through fatigue, bowel disruption, pain, neuropathy, uncertainty, family role changes, and shifting definitions of acceptable quality of life. Quantitative measures are essential for evaluating symptoms and outcomes, but they may not fully capture the lived experience of repeatedly receiving chemotherapy while negotiating hope, exhaustion, dependency, and fear of decline. Cross-sectional and clinical studies provide valuable evidence about quality of life, fatigue, treatment safety, and symptom patterns, yet patients' narratives are needed to explain how these domains intersect in daily life and how individuals make sense of treatment that may be simultaneously life-prolonging and life-limiting in its burden.

The existing literature therefore points to a clear need for qualitative inquiry focused specifically on patients with metastatic colorectal cancer receiving chemotherapy. While prior research has examined quality of life outcomes, treatment efficacy, targeted therapy safety, fatigue measurement, circadian disruption, supportive care interventions, exercise, rehabilitation, nutrition, palliative care, and integrative approaches, less is known about how patients themselves describe the combined experience of symptom burden, treatment fatigue, and quality of life during ongoing chemotherapy. This gap is important because clinical decisions in metastatic colorectal cancer frequently depend on assumptions about what patients are willing to tolerate, what they define as meaningful benefit, and how they balance survival with daily suffering. A qualitative understanding can help clinicians recognize the cumulative and relational nature of treatment burden, improve communication about goals of care, and design supportive interventions that reflect patients' priorities rather than only biomedical endpoints.

The aim of this study was to explore the lived experiences of symptom burden, treatment fatigue, and quality of life among patients with metastatic colorectal cancer receiving chemotherapy in Canada.

2. Methods and Materials

2.1. Study Design and Participants

This study was conducted using a qualitative phenomenological design to explore the lived experiences of symptom burden, treatment fatigue, and quality of life among patients with metastatic colorectal cancer receiving

chemotherapy. The phenomenological approach was selected because the study aimed to understand how patients interpret and give meaning to the physical, emotional, social, and functional consequences of living with advanced colorectal cancer while undergoing repeated chemotherapy cycles. The study was carried out in Canada among patients receiving care in outpatient oncology and chemotherapy units affiliated with cancer treatment centers in Ontario. Participants were selected through purposive sampling in order to include individuals who had direct experience with metastatic colorectal cancer, ongoing chemotherapy, and the daily challenges associated with treatment-related symptoms and disease progression. The final sample consisted of 24 patients with metastatic colorectal cancer. Eligibility criteria included being 18 years of age or older, having a confirmed diagnosis of stage IV colorectal cancer, receiving systemic chemotherapy at the time of recruitment or within the previous four weeks, being able to communicate in English, and having sufficient physical and cognitive capacity to participate in an in-depth interview. Patients were excluded if they were medically unstable, experiencing severe cognitive impairment, receiving end-of-life care in the final days of life, or unable to provide informed consent. Recruitment continued until the research team determined that data saturation had been reached, meaning that additional interviews no longer generated substantially new concepts, interpretations, or experiential patterns. All participants were informed about the purpose of the study, the voluntary nature of participation, the right to withdraw at any stage without any effect on their medical care, and the confidential handling of all study data. Written informed consent was obtained from all participants before data collection.

2.2. Measures

Data were collected using a demographic and clinical information form, a semi-structured interview guide, and field notes recorded by the interviewer after each interview. The demographic and clinical information form was designed by the research team to obtain background information necessary for describing the study sample and interpreting participants' experiences in context. This form included items related to age, gender, marital status, educational level, employment status, living arrangement, time since diagnosis, time since metastatic disease was identified, chemotherapy regimen, number of chemotherapy cycles received, history of surgery or radiotherapy, presence of stoma, comorbid conditions, and current supportive or palliative care involvement. Clinical information was obtained through participant self-report and, when permitted, confirmed through available medical records. The purpose of this form was not to classify participants statistically, but to provide contextual detail regarding the diversity of disease trajectories, treatment exposure, and life circumstances among patients receiving chemotherapy for metastatic colorectal cancer.

The main data collection tool was a semi-structured interview guide developed specifically for this study on the basis of the research objectives, clinical knowledge of metastatic colorectal cancer, and the experiential domains of symptom burden, treatment fatigue, and quality of life. The interview guide contained open-ended questions that encouraged participants to describe their experiences in their own words. Questions explored how patients experienced physical symptoms such as fatigue, pain, nausea, diarrhea, constipation, neuropathy, appetite changes, sleep disturbance, weakness, and changes in bowel functioning; how these symptoms affected daily activities, independence, emotional well-being, family roles, social relationships, work, and future planning; and how participants perceived the cumulative burden of repeated chemotherapy cycles. Particular attention was given to treatment fatigue, including feelings of exhaustion with ongoing appointments, laboratory tests, infusion schedules, side effects, uncertainty about treatment response, and the psychological strain of continuing therapy despite limited predictability. The guide also included questions about coping strategies, sources of support, communication with healthcare professionals, decision-making about treatment continuation, and participants' understanding of quality of life while living with metastatic disease. Probing questions were used flexibly to clarify meanings, deepen descriptions, and encourage reflection on issues that emerged during each interview. The interview guide was reviewed by two oncology nursing specialists and one qualitative health researcher to ensure clarity, clinical relevance, and sensitivity to the condition of participants.

In addition to the interviews, field notes were used as a supplementary data collection tool. Immediately after each interview, the interviewer recorded observations related to participants' emotional tone, pauses, expressions of distress, emphasis placed on particular experiences, and contextual details that could assist interpretation during analysis. These notes also included the interviewer's preliminary reflections, methodological observations, and potential emerging

concepts. Field notes were not treated as substitutes for interview transcripts, but were used to support a richer understanding of the interview context and to strengthen the credibility of the interpretation. All interviews were conducted in a private and comfortable setting according to participant preference, either in a quiet room at the oncology center or through a secure video or telephone format when in-person participation was difficult due to fatigue, infection risk, transportation limitations, or treatment-related weakness. Interviews lasted between 40 and 75 minutes and were audio-recorded with participant permission. The recordings were transcribed verbatim, and all identifying information was removed during transcription to protect confidentiality.

2.3. Data Analysis

Data analysis was conducted using an interpretative phenomenological approach to identify how participants made sense of symptom burden, treatment fatigue, and quality of life in the context of metastatic colorectal cancer and chemotherapy. Analysis began with repeated reading of each transcript to achieve immersion in the data and to develop a detailed understanding of each participant's account. Initial notes were written in the margins of transcripts to capture descriptive content, emotionally significant expressions, metaphors, contradictions, and early interpretative insights. The analysis then moved toward the development of emergent themes within each individual transcript. These themes reflected both the explicit meanings expressed by participants and the deeper experiential patterns implied in their narratives. After each transcript was analyzed individually, themes were compared across cases to identify convergences and divergences among participants' experiences. This process allowed the research team to preserve the idiographic depth of individual accounts while also developing broader thematic patterns that represented the shared experience of living with metastatic colorectal cancer during chemotherapy.

The coding and theme development process was iterative and reflexive. Two researchers independently reviewed a subset of transcripts and developed preliminary codes related to physical symptom burden, emotional exhaustion, cumulative treatment fatigue, disruption of normal life, altered identity, dependence on others, uncertainty, coping, and redefinition of quality of life. The researchers then compared their coding decisions, discussed differences in interpretation, and refined the thematic framework. The remaining transcripts were analyzed using the revised framework while remaining open to new themes that emerged from the data. Analytical memos were written throughout the process to document interpretative decisions, relationships among themes, and the development of the final thematic structure. To enhance credibility, representative quotations were selected to support each theme, and the research team returned repeatedly to the original transcripts to ensure that the final interpretations remained grounded in participants' accounts. Trustworthiness was strengthened through prolonged engagement with the data, independent coding by more than one researcher, peer discussion of emerging themes, maintenance of an audit trail, and reflexive attention to the researchers' assumptions about cancer, chemotherapy, survivorship, and palliative care. Data management and coding were supported using qualitative data analysis software, while final theme development was completed through collaborative interpretation by the research team. The final analysis produced a coherent thematic account of how patients experienced the cumulative burden of symptoms and chemotherapy, how treatment fatigue shaped their emotional and practical lives, and how quality of life was continuously renegotiated in the context of advanced disease.

3. Findings and Results

The findings are presented on the basis of interviews with 24 patients with metastatic colorectal cancer receiving chemotherapy in Canada. Participants ranged in age from 42 to 78 years, with a mean age of 61.8 years. Fourteen participants were men and ten were women. Fifteen participants were married or living with a partner, five were widowed, three were divorced or separated, and one was single. Most participants lived in urban or suburban areas and were receiving outpatient chemotherapy at oncology centers in Ontario. Regarding educational status, seven participants had completed high school, nine had college or technical education, six had university education, and two had postgraduate education. Eleven participants had rectal cancer and thirteen had colon cancer. The mean time since initial cancer diagnosis was 3.4 years, and the mean time since confirmation of metastatic disease was 18.6 months. The most frequently reported metastatic sites were the liver, lung, peritoneum, and distant lymph nodes, with several participants reporting metastases in more than one site. At the time of interview, participants were receiving

chemotherapy regimens that included FOLFOX, FOLFIRI, CAPOX, or modified combinations with targeted agents. Fourteen participants had previously undergone surgery, eight had a current or previous stoma, and seven had received radiotherapy. Most participants had completed multiple chemotherapy cycles, and many described treatment not as a temporary phase but as an ongoing condition that had become embedded in daily life. Although participants differed in disease trajectory, treatment history, family support, and functional status, all described metastatic colorectal cancer as a condition that affected the body, emotions, relationships, independence, and sense of future simultaneously.

Table 1

Main Themes, Subthemes, and Interpretive Meanings Emerging From the Interviews

Main theme	Subthemes	Interpretive meaning
Living in a body dominated by symptoms	Persistent fatigue, gastrointestinal disruption, pain and discomfort, neuropathy, appetite and weight changes, sleep disturbance, loss of physical stamina	Participants experienced symptom burden as a continuous bodily presence that limited mobility, interrupted routines, and made the body feel unreliable. Symptoms were not described as isolated side effects but as overlapping and cumulative experiences that shaped daily life.
Chemotherapy as a repetitive and exhausting life cycle	Anticipatory distress before treatment, exhaustion after infusion, disruption caused by appointments, emotional weariness, uncertainty about response, difficulty continuing despite side effects	Treatment fatigue reflected more than physical tiredness. It included emotional, logistical, and existential exhaustion resulting from repeated cycles of chemotherapy, monitoring, waiting, recovery, and renewed treatment.
Quality of life as a shifting and negotiated concept	Redefining normal life, dependence and loss of role, preserving meaningful relationships, balancing survival and suffering, valuing small moments, fear of decline	Participants did not define quality of life only as symptom control or survival duration. They described it as the ability to preserve dignity, connection, autonomy, comfort, and meaningful activity despite advanced illness.
Coping with uncertainty and maintaining control	Information-seeking, selective optimism, treatment decision-making, reliance on family and clinicians, spiritual or personal reflection, practical adaptation	Participants attempted to regain control by managing routines, preparing for side effects, negotiating treatment decisions, drawing on support, and creating realistic but hopeful interpretations of their condition.

Table 1 summarizes the four major themes generated through the interpretative analysis. The findings showed that participants' experiences were organized around a central tension between continuing treatment for life extension and coping with the cumulative burden produced by both the disease and chemotherapy. Symptom burden was described as the most immediate and embodied aspect of metastatic colorectal cancer, but it was closely connected to treatment fatigue, because many symptoms intensified or reappeared in predictable patterns after each chemotherapy cycle. Quality of life emerged as a dynamic and personally negotiated concept rather than a fixed outcome. Participants repeatedly compared their present lives with their pre-diagnosis lives, yet many also reconstructed quality of life around smaller but meaningful experiences such as being at home, eating with family, sleeping without pain, walking independently, attending a family event, or having a day without severe nausea or diarrhea. Coping and control formed a cross-cutting theme that linked all other themes. Participants could not fully control the illness or the treatment trajectory, but they tried to control time, routines, communication, expectations, and decisions in order to maintain psychological stability and personal dignity.

Table 2

Theme One: Living in a Body Dominated by Symptoms

Subtheme	Description of participants' experiences	Representative quotation
Persistent fatigue	Fatigue was the most frequently reported and most disabling symptom. Participants described it as deeper than ordinary tiredness and as a form of bodily heaviness that did not fully improve with rest.	"It is not like being tired after a long day. It is like my whole body shuts down, and even getting from the bedroom to the kitchen becomes something I have to plan."
Gastrointestinal disruption	Diarrhea, constipation, urgency, bloating, cramping, unpredictable bowel movements, and stoma-related concerns were central to daily distress. Participants often organized their activities around bathroom access.	"I always know where the bathroom is. Before I go anywhere, that is the first thing I think about. It takes away your confidence."
Pain and physical discomfort	Pain was described in the abdomen, back, pelvis, surgical areas, and metastatic sites. Some participants minimized pain in order to continue treatment, while others described pain as a constant reminder of disease progression.	"The pain is not always sharp, but it is always there in the background. It reminds me that this is not over."
Neuropathy and sensory changes	Participants receiving oxaliplatin-based therapy frequently reported numbness, tingling, cold sensitivity, and difficulty using their hands and feet. These symptoms interfered with eating, dressing, walking, and household tasks.	"My fingers feel strange all the time. I drop things, and in winter I cannot touch anything cold. It makes me feel older than I am."
Appetite and weight changes	Loss of appetite, taste changes, early satiety, nausea, and weight loss affected participants physically and emotionally. Eating became associated with effort, discomfort, or disappointment.	"Food used to be part of family life. Now everyone wants me to eat, and I want to eat, but my body does not cooperate."
Sleep disturbance	Sleep was interrupted by pain, bowel urgency, anxiety, steroid effects, and discomfort after chemotherapy. Poor sleep intensified daytime fatigue and emotional vulnerability.	"The nights are difficult because everything feels louder. The pain, the thoughts, the fear. Then the next day I am exhausted before the day starts."
Loss of stamina and functional restriction	Participants described reduced walking capacity, difficulty climbing stairs, inability to perform previous work or household roles, and dependence on others for transportation and daily activities.	"I used to be the person who helped everyone. Now I have to ask someone to drive me, shop for me, sometimes even cook for me. That is hard to accept."

The first theme showed that symptom burden was experienced as a complex and cumulative condition rather than a simple list of side effects. Fatigue was the most dominant symptom and was often described as the symptom that determined whether participants could participate in ordinary life. Gastrointestinal symptoms were particularly important because of the colorectal nature of the disease and because they affected privacy, dignity, social confidence, and willingness to leave home. Participants with a stoma described additional concerns related to leakage, odor, body image, and the need to carry supplies. Neuropathy was also distressing because it transformed routine bodily functions into difficult tasks and created fear about permanent damage. Symptoms interacted with each other in a way that intensified total burden; for example, diarrhea disrupted sleep, poor sleep worsened fatigue, fatigue reduced physical activity, and reduced physical activity contributed to weakness and dependency. Participants emphasized that symptom burden was not only physical. It changed how they saw themselves, how much they trusted their bodies, how they planned their day, and how they related to others. The body was repeatedly described as unpredictable, fragile, or no longer fully under personal control. This loss of bodily reliability was one of the most emotionally significant consequences of metastatic colorectal cancer and chemotherapy.

Table 3

Theme Two: Chemotherapy as a Repetitive and Exhausting Life Cycle

Subtheme	Description of participants' experiences	Representative quotation
Anticipatory distress before treatment	Participants often experienced anxiety, dread, irritability, or emotional heaviness in the days before chemotherapy. Even when they accepted treatment, they anticipated the side effects that would follow.	"Two days before chemo, my mind already goes there. I know what is coming, so I start feeling sick before I even sit in the chair."
Post-infusion collapse	The days immediately after chemotherapy were described as a predictable period of physical and emotional decline. Participants used words such as crash, fog, shutdown, and lost days.	"After treatment I disappear for a few days. I am there, but I am not really living. I am just waiting for my body to come back."
Life organized around treatment schedules	Chemotherapy appointments, blood tests, scans, oncology visits, pharmacy arrangements, and recovery days structured participants' calendars and limited spontaneity.	"Everything is built around chemo now. Family visits, birthdays, even groceries have to fit into the treatment calendar."
Emotional weariness of continuing	Several participants described becoming tired of being a patient, tired of hospitals, tired of explaining symptoms, and tired of maintaining strength for others.	"People say I am strong, but sometimes I am just tired of being strong. I am tired of being brave every three weeks."

Waiting and uncertainty	Participants found waiting for scan results, bloodwork, treatment decisions, and evidence of response psychologically draining. Uncertainty intensified treatment fatigue.	"The hardest part is waiting to hear if it is working. You go through all of this, but you do not know if it is buying you time."
Ambivalence about treatment continuation	Participants described a conflict between wanting more time and fearing further deterioration from treatment. This ambivalence was more visible among those who had received several lines of therapy.	"I want to live, of course I do. But sometimes I ask myself, how much of this can I keep doing and still call it living?"
Burden on family caregivers	Treatment fatigue was also relational. Participants worried about the time, energy, and emotional burden placed on spouses, adult children, and other caregivers.	"My wife comes to every appointment. She says she wants to, but I see how tired she is. The treatment is happening to both of us in different ways."

The second theme demonstrated that treatment fatigue was not limited to physical fatigue after chemotherapy. It was a broader experiential state produced by repetition, uncertainty, dependency, and the emotional labor of continuing treatment in the context of advanced disease. Participants described chemotherapy as cyclical: preparing for treatment, receiving infusion, experiencing side effects, recovering partially, attending tests or appointments, and then beginning the cycle again. This repetitive pattern created a sense that life was being divided into treatment days, bad days, recovery days, and waiting days. Even participants who expressed gratitude for access to treatment described chemotherapy as intrusive and exhausting. Some participants viewed chemotherapy as a lifeline, while others experienced it as a force that consumed time, autonomy, and energy. The most difficult emotional tension involved the question of whether treatment was preserving life or reducing the quality of the time that remained. This tension did not mean that participants rejected chemotherapy. Rather, it showed the complexity of decision-making in metastatic cancer, where hope, fear, side effects, family expectations, clinical recommendations, and personal values were continuously negotiated. Treatment fatigue therefore emerged as a multidimensional construct involving the body, emotions, relationships, healthcare routines, and future uncertainty.

Table 4

Theme Three: Quality of Life as a Shifting and Negotiated Concept

Subtheme	Description of participants' experiences	Representative quotation
Redefining normal life	Participants compared life before cancer with life during metastatic disease, but many gradually developed a revised definition of normal that included treatment, limitations, and adaptation.	"Normal is not what it used to be. Now a normal day is a day when I can shower, eat something, and sit with my family without feeling completely sick."
Loss of role and independence	Participants described distress related to reduced ability to work, provide for family, manage household tasks, drive, travel, or participate in previous social roles.	"I was always independent. Losing that is one of the hardest parts. It is not only the cancer; it is who you become because of it."
Preserving family connection	Relationships with spouses, children, grandchildren, and close friends were central to quality of life. Participants valued time with family even when symptoms limited participation.	"Seeing my grandchildren gives me a reason to keep going. I may not be able to play like before, but just being there matters."
Social withdrawal and embarrassment	Symptoms such as bowel urgency, fatigue, stoma concerns, weight loss, and visible illness led some participants to avoid social situations.	"I stopped going out as much because I do not want people to see me like this, and I do not want to worry about my stomach the whole time."
Balancing survival and suffering	Participants evaluated quality of life in relation to treatment burden, symptom control, independence, and the possibility of meaningful time.	"More time is important, but I want time where I can still be myself. I do not want all my time to be hospital time."
Valuing small moments	Many participants identified small experiences as central to quality of life, including drinking coffee, walking outside, sleeping well, watching television with family, or having a low-symptom day.	"A good day is simple now. No nausea, a little walk, my daughter visiting. That is enough."
Fear of future decline	Participants worried about disease progression, loss of function, becoming a burden, uncontrolled symptoms, and the point at which treatment might no longer help.	"I try not to think too far ahead, but it is there. I worry about when I cannot manage at home anymore."

The third theme indicated that quality of life was not a static concept for participants. Instead, it was continuously redefined in response to disease progression, treatment effects, physical limitations, family needs, and personal values. Before diagnosis, quality of life was often associated with independence, work, travel, physical activity, and social participation. After metastatic disease and chemotherapy, participants described a more restricted but often more intentional understanding of quality of life. For many, quality of life meant being able to remain at home, communicate clearly with clinicians, spend time with loved ones, maintain some control over daily routines, and avoid uncontrolled suffering. Participants did not necessarily equate quality of life with being symptom-free, because

most had accepted that some level of symptom burden was now part of life. However, they distinguished between tolerable and intolerable suffering. Tolerable suffering was described as discomfort that still allowed meaningful interaction and personal dignity, whereas intolerable suffering involved severe fatigue, uncontrolled gastrointestinal symptoms, pain, mental fog, or dependence that erased the possibility of meaningful activity. This distinction was important because it shaped how participants thought about treatment continuation. The findings suggest that quality of life among patients with metastatic colorectal cancer receiving chemotherapy is best understood as a negotiated balance between survival, symptom burden, autonomy, relational connection, and preservation of self.

Table 5

Theme Four: Coping With Uncertainty and Maintaining Control

Subtheme	Description of participants' experiences	Representative quotation
Information-seeking and preparation	Participants used information from clinicians, personal experience, written materials, and other patients to anticipate side effects and prepare for treatment cycles.	"I learned what happens on day two, day three, day four. Knowing the pattern helps me feel less helpless."
Selective optimism	Participants tried to remain hopeful while avoiding unrealistic expectations. Many described hope as necessary but fragile.	"I am hopeful, but I am not pretending everything is fine. I just need enough hope to get through the next treatment."
Practical adaptation	Participants adjusted diet, rest, clothing, transportation, social plans, and household routines to manage symptoms and conserve energy.	"I plan everything now. I rest before appointments, I pack extra clothes, I eat differently, and I do not make promises I may not keep."
Reliance on family support	Family members provided transportation, emotional reassurance, help with meals, medication management, household work, and communication with healthcare providers.	"My family keeps me going, but I also feel guilty because they have had to change their lives around my cancer."
Trust in healthcare professionals	Participants valued clinicians who listened, explained clearly, acknowledged suffering, and treated them as individuals rather than only as patients on a regimen.	"When the nurse remembers what happened last cycle and asks about it, I feel like I am not just another appointment."
Boundary-setting and conserving energy	Some participants learned to decline visits, reduce obligations, limit stressful conversations, and protect recovery time after chemotherapy.	"I had to learn to say no. Before, I felt guilty. Now I know my energy is limited, and I have to choose where it goes."
Personal reflection and meaning-making	Participants reflected on mortality, priorities, faith, family legacy, unfinished goals, and the meaning of time.	"Cancer made everything smaller and bigger at the same time. Smaller because I live day by day, bigger because the people I love matter more than anything."

The fourth theme showed that participants were not passive recipients of disease and treatment burden. Although metastatic colorectal cancer created profound uncertainty, participants used multiple strategies to maintain a sense of control. Control was rarely described as control over cure or disease progression. Instead, it was expressed through practical preparation, symptom tracking, treatment routines, communication with clinicians, emotional boundaries, and prioritization of meaningful activities. Information helped many participants reduce fear because it allowed them to recognize patterns in their symptoms and anticipate difficult days. However, too much information, especially about prognosis or disease progression, could also become overwhelming. Participants therefore often practiced selective engagement with information, wanting enough knowledge to make decisions without becoming consumed by worst-case possibilities. Family support was central, but it was emotionally complex because gratitude was often accompanied by guilt. Participants wanted support but did not want to become burdensome. Similarly, trust in healthcare professionals was a major source of stability, especially when clinicians acknowledged the cumulative nature of chemotherapy and invited honest discussion about side effects and quality of life. Across the interviews, coping was not presented as simple positivity. It was a disciplined and ongoing effort to live with uncertainty, protect energy, accept help, preserve identity, and make treatment decisions that remained consistent with personal values.

Figure 1

Conceptual Representation of the Interrelationship Between Symptom Burden, Treatment Fatigue, Coping Processes, and Quality of Life Among Patients With Metastatic Colorectal Cancer Receiving Chemotherapy

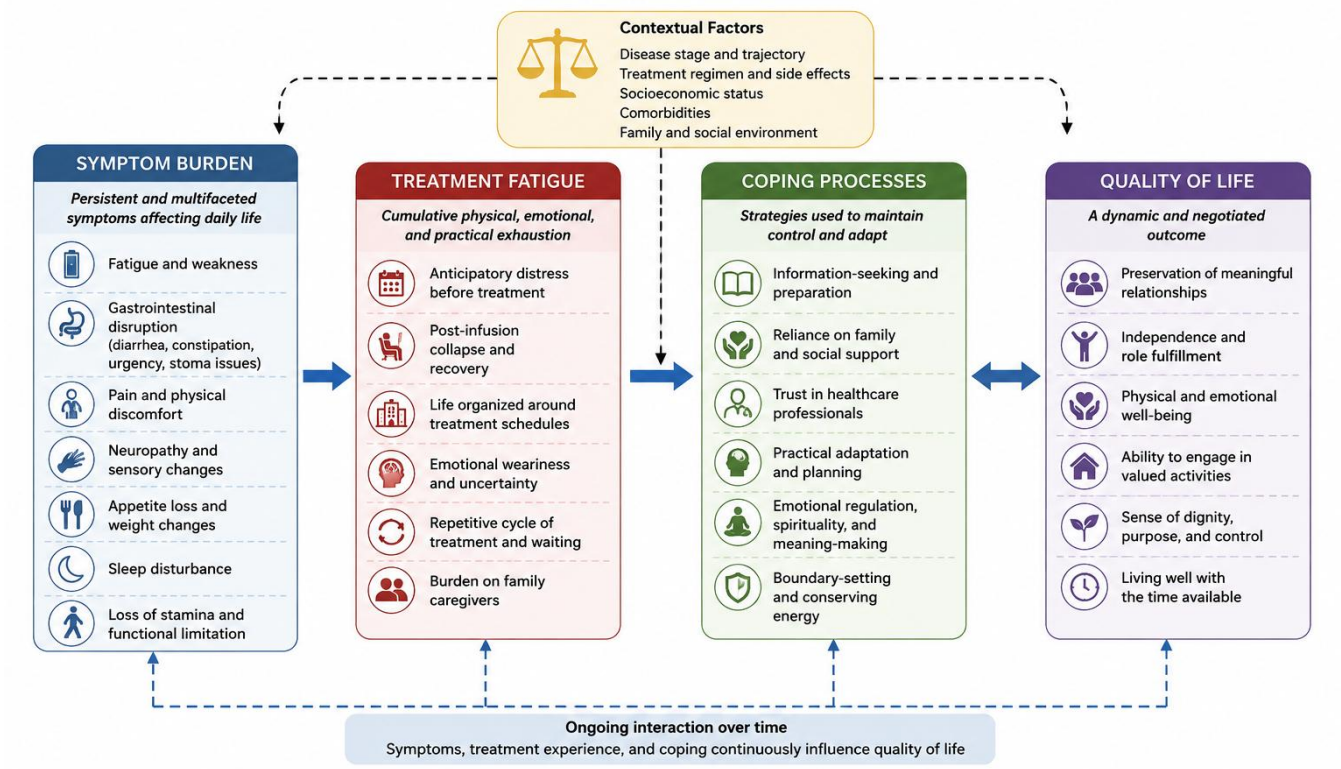


Figure 1 illustrates the central interpretive finding of the study: symptom burden, treatment fatigue, coping, and quality of life were not separate experiences but dynamically connected components of living with metastatic colorectal cancer during chemotherapy. Symptom burden directly affected quality of life through fatigue, gastrointestinal disruption, pain, neuropathy, sleep disturbance, appetite changes, and functional limitation. Treatment fatigue intensified this effect by adding the cumulative strain of repeated chemotherapy cycles, medical appointments, waiting periods, and emotional uncertainty. Coping processes influenced the relationship between burden and quality of life by helping participants preserve a sense of control, prepare for side effects, communicate needs, protect limited energy, and maintain meaningful relationships. However, coping did not remove suffering; rather, it helped participants manage suffering in ways that allowed some continuity of identity and daily meaning. The figure therefore represents quality of life as a continuously negotiated outcome shaped by the balance between disease-related symptoms, treatment-related exhaustion, personal adaptation, relational support, and the perceived value of continuing chemotherapy.

Overall, the findings revealed that patients with metastatic colorectal cancer receiving chemotherapy experienced their illness as a continuous negotiation between endurance and preservation of quality of life. Participants did not describe chemotherapy only as a medical intervention, but as a recurring structure that reorganized time, relationships, bodily awareness, emotional energy, and expectations for the future. Symptom burden was immediate and embodied, treatment fatigue was cumulative and existential, and quality of life was reconstructed around dignity, connection, control, and meaningful time. Although participants reported considerable suffering, they also demonstrated adaptive capacity through planning, selective optimism, reliance on family and healthcare professionals, and redefinition of what constituted a good day. These findings emphasize that the clinical assessment of patients with metastatic colorectal cancer should extend beyond tumor response and treatment tolerance to include the lived burden of symptoms, the cumulative fatigue of ongoing therapy, and the patient's own evolving definition of acceptable quality of life.

4. Discussion

The present study explored the lived experiences of symptom burden, treatment fatigue, and quality of life among patients with metastatic colorectal cancer receiving chemotherapy in Canada. The findings showed that participants experienced metastatic colorectal cancer as a continuous and cumulative condition that reorganized their physical functioning, emotional life, family roles, treatment routines, and expectations for the future. Four major themes were identified: living in a body dominated by symptoms, chemotherapy as a repetitive and exhausting life cycle, quality of life as a shifting and negotiated concept, and coping with uncertainty while attempting to maintain control. These themes suggest that patients' experiences cannot be adequately understood by separating disease symptoms from treatment side effects or physical fatigue from psychological distress. Instead, symptom burden, treatment fatigue, coping processes, and quality of life were dynamically connected and mutually reinforcing.

The first major finding was that patients experienced symptom burden as persistent, multifaceted, and disruptive to daily life. Fatigue, gastrointestinal disturbance, pain, neuropathy, sleep problems, appetite changes, and functional limitation were not perceived as isolated symptoms; rather, they formed an interconnected burden that shaped participants' sense of bodily reliability and personal autonomy. This finding is consistent with prior work identifying symptom burden and functional impairment as central determinants of quality of life in stage IV and metastatic colorectal cancer (Feizpour et al., 2023; Frank et al., 2020; Refay et al., 2024). The disease conceptual model developed for metastatic colorectal cancer similarly highlights that patients experience both salient symptoms and broad impacts on daily activity, emotional well-being, social participation, and role functioning (Guillemin et al., 2022). The present findings extend this literature by showing how patients interpret symptoms as cumulative and relational: gastrointestinal urgency limits social confidence, fatigue restricts independence, pain increases awareness of disease progression, and neuropathy undermines practical functioning in everyday tasks.

Fatigue emerged as the most dominant and disabling symptom in this study. Participants described fatigue as a profound bodily shutdown that was not relieved fully by rest and that structured their ability to participate in family, social, and treatment-related activities. This supports evidence that fatigue is strongly associated with outcomes in advanced cancer and should be treated as a clinically meaningful concern rather than a secondary or expected complaint (Mo et al., 2021). Findings also align with research showing that fatigue in metastatic colorectal cancer has general, physical, and psychological dimensions, with network relationships that may require targeted coping strategies rather than one-dimensional management (Grégoire et al., 2025). In addition, the present study confirms that treatment-related fatigue in oncology is closely connected to age, comorbidity, treatment exposure, and functional vulnerability, as described in oncogeriatric literature (André et al., 2022). For participants in this study, fatigue was not merely a symptom but a condition through which cancer was felt, anticipated, and negotiated.

The second major finding was that chemotherapy was experienced as a repetitive and exhausting life cycle. Participants described treatment fatigue through anticipatory distress, post-infusion collapse, repeated appointments, waiting for scan results, emotional weariness, and ambivalence about continuing treatment. This finding is consistent with the broader metastatic colorectal cancer literature, which shows that systemic treatment may improve disease control while also producing adverse effects and quality-of-life consequences that require careful interpretation (André et al., 2021; Moisuc et al., 2023; Musoro et al., 2020). Evidence regarding chemotherapy, targeted agents, and later-line options has emphasized the importance of balancing efficacy, toxicity, and patient-centered outcomes (Bragagnoli et al., 2021; Choi et al., 2022; Jannesar et al., 2024; Rais et al., 2024). The present qualitative findings add that patients experience this balance not as an abstract clinical calculation but as a lived cycle of treatment, decline, partial recovery, uncertainty, and renewed treatment.

The ambivalence expressed by participants about treatment continuation is particularly important. Many participants valued chemotherapy because it represented time, hope, and active disease management, yet they also questioned how much treatment burden could be endured while preserving meaningful quality of life. This finding resonates with discussions of systemic treatment holidays, where oncologists and patients may consider breaks from therapy to reduce cumulative toxicity, restore functioning, or protect quality of life (Kreines et al., 2021). It is also aligned with palliative care principles in colorectal cancer, which emphasize symptom relief, communication about goals, psychosocial support, and treatment decisions that reflect patient values (Caponero, 2021). The current findings show

that even when patients continue chemotherapy willingly, they may simultaneously experience emotional exhaustion and uncertainty about whether treatment is extending life in a way that remains personally meaningful.

The third major finding was that quality of life was experienced as a shifting and negotiated concept. Participants did not define quality of life solely as absence of symptoms, tumor response, or survival duration. Instead, they described it through preservation of dignity, independence, family connection, role continuity, meaningful activity, and control over daily life. This finding is consistent with research demonstrating that quality of life in colorectal cancer is multidimensional and influenced by physical, psychological, and social factors (Feizpour et al., 2023; Frank et al., 2020; Tamura, 2021). It also supports the importance of interpreting quality-of-life instruments in relation to clinically and personally meaningful change, as emphasized in work on minimally important differences for the EORTC QLQ-C30 among patients with advanced colorectal cancer receiving chemotherapy (Musoro et al., 2020). The present study suggests that patients may accept some symptom burden if they can still preserve relational closeness, autonomy, and meaningful time, but severe fatigue, uncontrolled gastrointestinal symptoms, pain, and dependence may shift suffering from tolerable to unacceptable.

Sleep disturbance and circadian disruption were also embedded in participants' accounts of fatigue and quality of life. Participants reported disrupted nights due to pain, bowel urgency, anxiety, and treatment effects, and they described poor sleep as intensifying daytime fatigue and emotional vulnerability. This finding aligns with evidence that circadian disruption contributes to cancer- and treatment-related symptoms and may affect physical and psychological well-being (Amidi & Wu, 2022; Kisamore et al., 2024). Studies on circadian rhythm disorders in advanced cancer and the role of circadian, hormonal, and sleep rhythms in cancer progression further support the relevance of sleep-wake regulation in the experience of advanced disease (Gouldthorpe et al., 2023; Jagielo et al., 2023). Interventions such as night-simulating eyeglasses and melatonin-related approaches have been explored in relation to circadian rhythms and quality of life, indicating that sleep and biological rhythm may be meaningful targets for supportive oncology care (Block et al., 2022; Ginzac et al., 2020).

The fourth theme showed that patients actively used coping strategies to preserve a sense of control. Participants relied on information-seeking, practical preparation, selective optimism, family support, trust in healthcare professionals, boundary-setting, and meaning-making. This supports evidence that resilience, anxiety, depression, and quality of life are closely related among patients with colorectal cancer undergoing chemotherapy (Tamura, 2021). It also aligns with intervention-oriented research suggesting that fatigue and functioning may be improved through psychological, behavioral, and supportive strategies. Online hypnosis and cognitive behavioral therapy have been proposed to reduce fatigue in patients undergoing chemotherapy for metastatic colorectal cancer, and broader integrative therapeutic approaches have been reviewed for improving functioning and quality of life in cancer patients (Baussard et al., 2022; Iliescu et al., 2024). The present findings suggest that supportive care interventions should not only target symptom reduction but also help patients anticipate treatment cycles, communicate needs, conserve energy, and maintain personally valued activities.

Physical function and rehabilitation were also relevant to participants' descriptions of quality of life. Loss of stamina, reduced mobility, and dependence on others were among the most emotionally difficult consequences of metastatic disease and chemotherapy. Evidence indicates that exercise can be safe, feasible, and beneficial for patients with colorectal cancer when appropriately tailored, and physical activity may reduce cancer-related fatigue among colorectal cancer survivors (Geng et al., 2023; Singh et al., 2020). Baseline and 12-week findings from individuals with metastatic cancer enrolled in an exercise study also support the relevance of physical fitness and symptom-related outcomes in advanced cancer populations (Shallwani et al., 2025). Although the present study was not an intervention study, participants' narratives suggest that preserving mobility, strength, and daily activity may be central to maintaining identity and quality of life. Evidence from postoperative rehabilitation after colorectal cancer surgery and from chemotherapy-related muscle deconditioning in other cancer populations further supports the clinical importance of early attention to function and physical capacity (Mallard et al., 2022; Nusca et al., 2021).

Age, nutritional vulnerability, and treatment tolerance also help explain the findings. Some participants described weakness, appetite changes, weight loss, altered taste, and difficulty maintaining energy, which are consistent with literature on micronutrient deficiencies and nutritional concerns among patients with gastrointestinal cancer (Turkiewicz et al., 2023). The experience of older patients requires particular attention because treatment decisions in

metastatic colorectal cancer must account for frailty, comorbidities, functional reserve, and patient goals. Current discussions of colorectal cancer management in older adults and evidence regarding oxaliplatin-based first-line chemotherapy in elderly patients with metastatic colorectal cancer emphasize that therapeutic decisions must balance efficacy and safety (Fan et al., 2025; O'Donnell et al., 2024). The present findings reinforce that treatment tolerance should be assessed not only through laboratory values or adverse event grading but also through patients' lived capacity to eat, sleep, move, interact, and recover between cycles.

5. Conclusion

Finally, the findings should be understood within the broader context of evolving systemic, genomic, complementary, and integrative oncology. Precision approaches and systemic treatments for hereditary cancer syndromes have expanded therapeutic possibilities, while traditional Chinese medicine, Viscum album therapy, and other complementary approaches continue to be examined in relation to treatment support and quality of life (Hasanov et al., 2022; Liu et al., 2020; Thronicke et al., 2022). Emerging discussions of exercise, quercetin, cognition, and cancer pathways further illustrate the growing interest in supportive strategies that extend beyond tumor-directed treatment (Lei, 2025). However, the present study demonstrates that regardless of therapeutic innovation, patients continue to encounter metastatic cancer through ordinary yet profound experiences: exhaustion, bowel disruption, pain, waiting, family dependence, loss of spontaneity, and attempts to live meaningfully with uncertain time. These findings therefore support a patient-centered model of metastatic colorectal cancer care in which symptom burden, treatment fatigue, and quality of life are assessed as interconnected clinical priorities.

6. Limitations & Suggestions

This study had several limitations. First, the sample included 24 patients receiving care in oncology settings in Canada, and although data saturation was achieved, the findings may not represent the full diversity of patients with metastatic colorectal cancer in different provinces, rural regions, cultural groups, languages, healthcare systems, or socioeconomic contexts. Second, participants were required to be physically and cognitively able to complete an interview, which may have excluded patients with very severe symptom burden, advanced functional decline, or near end-of-life conditions. Third, the study relied on self-reported experiences, and although this was appropriate for the qualitative design, participants' accounts may have been influenced by recall, emotional state, treatment timing, or willingness to discuss sensitive issues such as fear, dependency, bowel symptoms, and treatment ambivalence. Fourth, the cross-sectional interview approach captured experiences at one point in the treatment trajectory and could not fully show how symptom burden, treatment fatigue, and quality of life change across disease progression, treatment transitions, treatment breaks, or end-of-life care.

Future research should examine the experiences of patients with metastatic colorectal cancer longitudinally in order to understand how symptom burden, treatment fatigue, coping, and quality of life evolve across different chemotherapy cycles, treatment lines, scan results, treatment interruptions, and transitions to palliative or end-of-life care. Studies with larger and more diverse samples are needed to compare experiences across age groups, gender, ethnicity, language, rural and urban residence, socioeconomic status, treatment regimen, metastatic site, and caregiver availability. Future mixed-methods research could combine qualitative interviews with validated symptom, fatigue, sleep, psychological distress, resilience, and quality-of-life measures to clarify how patient narratives correspond to clinical indicators. Additional studies should also include family caregivers and oncology professionals to explore how treatment fatigue is recognized, communicated, and managed within shared decision-making. Intervention studies are recommended to test supportive approaches that target cumulative fatigue, gastrointestinal disruption, sleep disturbance, emotional exhaustion, and practical treatment burden in ways that are feasible for patients with advanced disease.

Clinical practice should treat symptom burden, treatment fatigue, and quality of life as interconnected aspects of metastatic colorectal cancer care rather than as separate concerns. Oncology teams should routinely ask patients not only whether side effects are present, but how symptoms affect daily routines, independence, family roles, emotional strength, willingness to continue treatment, and perceptions of meaningful time. Assessment should include fatigue, sleep, gastrointestinal symptoms, pain, neuropathy, appetite, mobility, emotional distress, caregiver burden, and the patient's own definition of acceptable quality of life. Clinicians should create space for honest conversations about treatment ambivalence without interpreting such

discussions as refusal of care. Supportive care should be introduced early and should include symptom management, nutritional guidance, physical activity or rehabilitation when appropriate, psychological support, practical planning for chemotherapy cycles, caregiver support, and palliative care involvement focused on comfort, dignity, and goal-concordant decision-making. A patient-centered approach requires recognizing that successful treatment is not defined only by disease control but also by the preservation of autonomy, relational connection, and meaningful living during the time available.

Acknowledgments

We would like to express our appreciation and gratitude to all those who cooperated in carrying out this study.

Declaration of Interest

The authors of this article declared no conflict of interest.

Ethical Considerations

The study protocol adhered to the principles outlined in the Helsinki Declaration, which provides guidelines for ethical research involving human participants.

Transparency of Data

In accordance with the principles of transparency and open research, we declare that all data and materials used in this study are available upon request.

Funding

This research was carried out independently with personal funding and without the financial support of any governmental or private institution or organization.

Authors' Contributions

All authors equally contributed to this article.

References

Amidi, A., & Wu, L. M. (2022). Circadian Disruption and Cancer-And Treatment-Related Symptoms. *Frontiers in Oncology*, *12*. https://doi.org/10.3389/fonc.2022.1009064

André, L., Antherieu, G., Boinet, A., Bret, J., Gilbert, T., Boulahssass, R., & Falandry, C. (2022). Oncological Treatment-Related Fatigue in Oncogeriatrics: A Scoping Review. *Cancers*, *14*(10), 2470. https://doi.org/10.3390/cancers14102470

André, T., Amonkar, M. M., Norquist, J. M., Shiu, K.-K., Kim, T. W., Jensen, B. V., Jensen, L. H., Punt, C. J., Smith, D., García-Carbonero, R., Sevilla, I., Fouchardière, C. d. l., Rivera, F., Élez, E., Díaz, L. A., Yoshino, T., Cutsem, E. V., Yang, P., Farooqui, M. Z., & Le, D. T. (2021). Health-Related Quality of Life in Patients With Microsatellite Instability-High or Mismatch Repair Deficient Metastatic Colorectal Cancer Treated With First-Line Pembrolizumab Versus Chemotherapy (KEYNOTE-177): An Open-Label, Randomised, Phase 3 Trial. *The Lancet Oncology*, *22*(5), 665-677. https://doi.org/10.1016/s1470-2045(21)00064-4

Baussard, L., Cousson-Gélie, F., Jarlier, M., Charbonnier, É., Vigouroux, S. L., Montalescot, L., Janiszewski, C., Fourchon, M., Coutant, L., Guerdoux, E., & Portalès, F. (2022). Hypnosis and Cognitive Behavioral Therapy With Online Sessions to Reduce Fatigue in Patients Undergoing Chemotherapy for a Metastatic Colorectal Cancer: Rational and Study Protocol for a Feasibility Study. *Frontiers in psychology*, *13*. https://doi.org/10.3389/fpsyg.2022.953711

Block, K. I., Gyllenhaal, C., Grutsch, J. F., Block, P. B., Kazlausky, T., Blask, D. E., Carome, E. F., Reynolds, J., Huff, D. F. Q., & Hrushesky, W. J. (2022). Advanced Cancer Patients in a Randomized Clinical Trial of Night-Simulating Eyeglasses Observed to Have a Normal 24-H Circadian Rhythm During Chemotherapy. *Sage Open Medicine*, *10*. https://doi.org/10.1177/20503121221100137

Bragagnoli, A. C., Araújo, R. L. C., Ferraz, M. W. S., Santos, L. V. d., Abdalla, K. C., Comar, F., Santos, F., Oliveira, M. A. d., Carvalheira, J. B. C., Cárcano, F. M., & João Paulo da Silveira Nogueira, L. (2021). Metformin Plus Lrinotecan in Patients With Refractory Colorectal Cancer: A Phase 2 Clinical Trial. *British Journal of Cancer*, *124*(6), 1072-1078. https://doi.org/10.1038/s41416-020-01208-6

Caponero, R. (2021). Palliative Care in Colorectal Cancer. https://doi.org/10.5772/intechopen.93513

Choi, Y. J., Choi, C.-Y., Rhie, S. J., & Shin, S. (2022). Safety Assessment on Serious Adverse Events of Targeted Therapeutic Agents Prescribed for RAS Wild-Type Metastatic Colorectal Cancer: Systematic Review and Network Meta-Analysis. *International journal of environmental research and public health*, *19*(15), 9196. https://doi.org/10.3390/ijerph19159196

Fan, S., Zhao, Z., Wang, H., & Niu, W. (2025). Efficacy and Safety of Oxaliplatin-Based Chemotherapy as First-Line Treatment in Elderly Patients With Metastatic Colorectal Cancer: A Meta-Analysis. *Frontiers in Oncology*, *15*. https://doi.org/10.3389/fonc.2025.1567732

Feizpour, C. A., Turk, A., & Mohanty, S. (2023). Quality of Life Outcomes in Stage IV Colorectal Cancer. *Clinics in Colon and Rectal Surgery*, *37*(02), 102-107. https://doi.org/10.1055/s-0043-1761476

Frank, F., Hecht, M., Loy, F., Rutzner, S., Fietkau, R., & Distel, L. (2020). Differences in and Prognostic Value of Quality of Life Data in Rectal Cancer Patients With and Without Distant Metastases. *Healthcare*, *9*(1), 1. https://doi.org/10.3390/healthcare9010001

Geng, L., Li, X., Guo, L., Zhang, R., & Yue, S. (2023). The Content and Effectiveness of Physical Activity for Cancer-related Fatigue Among Colorectal Cancer Survivors: Systematic Review and Meta-analysis. *Nursing Open*, *10*(7), 4274-4285. https://doi.org/10.1002/nop2.1725

Ginzac, A., Dubois, S., Hager, M.-O., Kwiatkowski, F., Passildas, J., Biau, J., Abrial, C., Mouret-Reynier, M. A., Thivat, É., & Durando, X. (2020). Quality of Life for Older Patients With Cancer: A Review of the Evidence Supporting Melatonin Use.

Aging Clinical and Experimental Research, *32*(12), 2459-2468. https://doi.org/10.1007/s40520-020-01532-0

Gouldthorpe, C., Power, J., & Davies, A. (2023). Circadian Rhythm Disorders in Patients With Advanced Cancer: A Scoping Review. *Frontiers in Oncology*, *13*. https://doi.org/10.3389/fonc.2023.1240284

Grégoire, C., Cousson-Gélie, F., & Baussard, L. (2025). Network Structures of General, Physical and Psychological Fatigue in Patients With Metastatic Colorectal Cancer: Implications for Targeted Coping Strategies. *International Journal of Clinical and Health Psychology*, *25*(2), 100590. https://doi.org/10.1016/j.ijchp.2025.100590

Guillemin, I., Darpelly, M., Wong, B., Ingelgård, A., & Griebsch, I. (2022). Development of a Disease Conceptual Model of Patient Experience With Metastatic Colorectal Cancer: Identification of the Most Salient Symptoms and Impacts. *Journal of Cancer Survivorship*, *18*(3), 761-771. https://doi.org/10.1007/s11764-022-01279-9

Hasanov, E., Pimentel, I., Cruellas, M., Lewis, M. A., Jonasch, E., & Balmañà, J. (2022). Current Systemic Treatments for the Hereditary Cancer Syndromes: Drug Development in Light of Genomic Defects. *American Society of Clinical Oncology Educational Book*(42), 808-824. https://doi.org/10.1200/edbk_350232

Iliescu, M. G., Stanciu, L.-E., Uzun, A.-B., Cristea, A.-E., Motoașcă, I., Irsay, L., Iliescu, D., Vari, T., Ciubean, A. D., Caraban, B. M., Ciufu, N., Azis, O., & Ciortea, V. M. (2024). Assessment of Integrative Therapeutic Methods for Improving the Quality of Life and Functioning in Cancer Patients—A Systematic Review. *Journal of clinical medicine*, *13*(5), 1190. https://doi.org/10.3390/jcm13051190

Jagielo, A. D., Benedict, C., & Spiegel, D. (2023). Circadian, Hormonal, and Sleep Rhythms: Effects on Cancer Progression Implications for Treatment. *Frontiers in Oncology*, *13*. https://doi.org/10.3389/fonc.2023.1269378

Jannesar, K., Roosta, Y., Masoudi, N., Asghari, R., Rasouli, J., & Soraya, H. (2024). Anti-Cancer Effect of Memantine as Adjunctive Therapy in Metastatic Colon Cancer: A Pilot Randomized Controlled Clinical Trial. https://doi.org/10.1101/2024.09.01.24312896

Kisamore, C. O., Kisamore, C. A., & Walker, W. H. (2024). Circadian Rhythm Disruption in Cancer Survivors: From Oncogenesis to Quality of Life. *Cancer Medicine*, *13*(20). https://doi.org/10.1002/cam4.70353

Kreines, F. M., Will, E., Margolis, B., Winkel, A. F., & Boyd, L. R. (2021). Give Me a Break: Oncologists' Perception of Systemic Treatment Holidays. *European Journal of Gynaecological Oncology*, *42*(6), 1099. https://doi.org/10.31083/j.ejgo4206160

Lei, P. (2025). Potential Roles of Exercise and Quercetin in Modulating Cancer Pathways and Cognitive Function. *Phytotherapy Research*, *39*(8), 3613-3647. https://doi.org/10.1002/ptr.70016

Liu, N., Wu, C., Jia, R., Cai, G., Wang, Y., Zhou, L., Ji, Q., Sui, H., Zeng, P., Xiao, H., Liu, H., Huo, J., Feng, Y., Deng, W., & Li, Q. (2020). Traditional Chinese Medicine Combined With Chemotherapy and Cetuximab or Bevacizumab for Metastatic Colorectal Cancer: A Randomized, Double-Blind, Placebo-Controlled Clinical Trial. *Frontiers in Pharmacology*, *11*. https://doi.org/10.3389/fphar.2020.00478

Mallard, J., Hucteau, E., Schött, R., Trensz, P., Pflumio, C., Kalish-Weindling, M., Favret, F., Pivot, X., Hureau, T. J., & Pagano, A. F. (2022). Early Skeletal Muscle Deconditioning and Reduced Exercise Capacity During (Neo)adjuvant Chemotherapy in Patients With Breast Cancer. *Cancer*, *129*(2), 215-225. https://doi.org/10.1002/cncr.34533

Mo, J., Darke, A. K., Guthrie, K. A., Sloan, J. A., Unger, J. M., Hershman, D. L., O'Rourke, M. A., Bakitas, M., & Krouse, R. S. (2021). Association of Fatigue and Outcomes in Advanced Cancer: An Analysis of Four SWOG Treatment Trials. *Jco Oncology Practice*, *17*(8), e1246-e1257. https://doi.org/10.1200/op.20.01096

Moisuc, D. C., Marinca, M. V., Matei, A. M., Popovici, L., & Cianga, P. (2023). The Impact of Bevacizumab and Chemotherapy on Quality of Life in Metastatic Colorectal Cancer Patients. *Healthcare*, *11*(4), 591. https://doi.org/10.3390/healthcare11040591

Musoro, J., Sodergren, S. C., Coens, C., Pochesci, A., Terada, M., King, M., Sprangers, M. A. G., Groenvold, M., Cocks, K., Velikova, G., Flechtner, H. H., & Bottomley, A. (2020). Minimally Important Differences for Interpreting the EORTC QLQ-C30 in Patients With Advanced Colorectal Cancer Treated With Chemotherapy. *Colorectal Disease*, *22*(12), 2278-2287. https://doi.org/10.1111/codi.15295

Nusca, S. M., Parisi, A., Mercantini, P., Gasparrini, M., Pitasi, F. A., Lacopo, A., Colonna, V., Stella, G., Cerulli, C., Grazioli, E., Tranchita, E., Santoboni, F., Latini, E., Trischitta, D., Vetrano, M., Visco, V., Pavan, A., & Vulpiani, M. C. (2021). Evaluation of a Post-Operative Rehabilitation Program in Patients Undergoing Laparoscopic Colorectal Cancer Surgery: A Pilot Study. *International journal of environmental research and public health*, *18*(11), 5632. https://doi.org/10.3390/ijerph18115632

O'Donnell, C., Hubbard, J. M., & Jin, Z. (2024). Updates on the Management of Colorectal Cancer in Older Adults. https://doi.org/10.20944/preprints202404.0689.v1

Rais, T., Riaz, R., Siddiqui, T., Shakeel, A., Khan, A., & Zafar, H. (2024). Innovations in Colorectal Cancer Treatment: Trifluridine and Tipiracil With Bevacizumab for Improved Outcomes – A Review. *Frontiers in Oncology*, *14*. https://doi.org/10.3389/fonc.2024.1296765

Refay, S., Khwsky, F. E., El-Housseni, G., Rostom, A. Y., & Sayed, I. E. (2024). Quality of Life of Colorectal Cancer Patients: A Cross-Sectional Study, Alexandria, Egypt. *Journal of the Medical Research Institute*, *45*(1), 1-12. https://doi.org/10.21608/jmalexu.2024.347539

Shallwani, S. M., Culos-Reed, S. N., Courneya, K. S., Williamson, T., Sellar, C. M., Lau, H., Joy, A. A., Easaw, J. C., Audoin, M., Pituskin, E., & McNeely, M. L. (2025). Baseline Characteristics of Individuals With Metastatic Cancer Enrolled in the Alberta Cancer Exercise Study and 12-Week Findings for Symptom-Related and Physical Fitness Measures. *Current Oncology*, *32*(10), 560. https://doi.org/10.3390/curroncol32100560

Singh, B., Hayes, S. C., Spence, R. R., Steele, M. L., Millet, G. Y., & Gergelé, L. (2020). Exercise and Colorectal Cancer: A Systematic Review and Meta-Analysis of Exercise Safety, Feasibility and Effectiveness. *International Journal of Behavioral Nutrition and Physical Activity*, *17*(1). https://doi.org/10.1186/s12966-020-01021-7

Tamura, S. (2021). Factors Related to Resilience, Anxiety/Depression, and Quality of Life in Patients With Colorectal Cancer Undergoing Chemotherapy in Japan. *Asia-Pacific Journal of Oncology Nursing*, *8*(4), 393-402. https://doi.org/10.4103/apjon.apjon-2099

Thronicke, A., Schad, F., Debus, M., Grabowski, J., & Soldner, G. (2022). ≪b> Viscum Album</I></B> L. Therapy in Oncology: An Update on Current Evidence. *Complementary Medicine Research*, *29*(4), 362-368. https://doi.org/10.1159/000524184

Turkiewicz, J., Garcia, M., Li, Z., & Surampudi, V. (2023). Micronutrient Deficiencies in Patients With Gastrointestinal

Cancer: To Treat or Not to Treat. *Nutrition in Clinical Practice*, *38*(4), 749-760. https://doi.org/10.1002/ncp.11025